

Exploring the Prevalence and Primary Care Management of Common Mental Disorders in the Falkland Islands

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Declaration

I declare that the work in this thesis is entirely my own unless otherwise acknowledged.

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Date: 6 December 2024

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Abstract

Aim: The aim of this study was to explore the prevalence and management of common mental disorders within primary care in the Falkland Islands.

Background: Understanding population mental health in remote and rural communities is a global public health priority. With no previous community-based prevalence studies in the Falkland Islands and no understanding of the challenges faced by primary care practitioners managing common mental disorders within this remote island community, this study seeks to inform clinical practice and inform public health policy and initiatives.

Methods: A multi-method approach with two separate studies was employed, combining findings from an adult population postal survey and semi-structured interviews with primary care practitioners.

The population sample consisted of 979 respondents, representing 39% of the adult population. Interviews with seven primary care practitioners, three GPs and four nurse practitioners, were analysed applying thematic synthesis of themes from the literature to develop a framework of overarching themes.

Findings: The prevalence of common mental disorder in the Falkland Islands is 12%, or one in eight for depression and anxiety and one in ten for PTSD. Prevalence varies in association with the demographic characteristics of the population. The study found that primary care practitioners do not routinely screen for the range of disorders, so misdiagnosis and missed opportunities to diagnosis exist. Hazardous alcohol intake is more prevalent in men and is associated with common mental disorder. Low level drug abuse is prevalent in one in twenty of the population.

Conclusion: Population subgroups emerge at greater risk of common mental disorder, particularly linked to gender and age range. Community based health surveillance in the Falkland Islands is a valuable tool understanding the community and improving public mental health. Implementing routine screening in primary care practice would improve the detection of common mental disorders and associated alcohol or drug use.

Confirmation of Ethics Approval

I confirm that ethical approval was sought via the University of Stirling General University Ethics Panel (GUEP) and was approved (Reference number GUEP 116).

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Chapter 1: Introduction to the Falkland Islands

1.1 Introduction

The rationale for conducting research on common mental disorders in the Falkland Islands is described within this chapter. This includes the history and heritage of the Falkland Islands as a United Kingdom Overseas Territory (UKOT), the economic growth, public service provision and population characteristics to provide context to the community. My clinical background, professional and personal interests in mental health are described. Finally, a description of each chapter within the thesis.

1.2 Background

Remote and rural communities face unique challenges in maintaining population mental health and this is widely recognised by the World Health Organization as a global public health concern (WHO 2021). Within the United Kingdom (UK), efforts to map population mental health and service provision in rural areas is developing, yet population health and provision within United Kingdom Overseas Territories (UKOTs) remains relatively unknown (Walker et al. 2022). Walker et al. (2022) found in a study of six small island developing states including UKOTs, that no population data on mental health burden. This study explores the prevalence of common mental disorders in the Falkland Islands.

1.3 Mental health in remote and rural communities

Evidence suggests that lower rates of depression and higher rates of alcohol misuse and suicide are found in rural areas in Europe and the UK, yet, there is sparse evidence to support whether this generalisation is relevant for the Falklands population (Ayuso-Mateos et al. 2001, Hatch et al. 2012). The Falkland Islands Morbidity Study in 1982, a review of paper medical records in 1979, estimated lower rates of neurotic conditions, '28.3 per 1000 population', one third lower than the UK, and higher rates of alcohol dependence, '13.2 per 1000 population', twice as high as UK estimates (King and Bleaney 1982, p. 537). Although King and Bleaney's study (1982) appears to support UK and European

findings, the accuracy of these findings in predicting population prevalence is questionable for three reasons: firstly, generalising population prevalence from general practice medical records review although popular in the 1970s, is no longer considered best practice as medical records reflect clinician diagnosed conditions and risk bias due to poor record keeping and they do not account for undiagnosed or missed diagnosed mental disorder in the general population (Singleton et al 2003). The work of Singleton et al 2003 in sampling postcodes not practices enabled identification of untreated mental disorder. Secondly, public mental health surveillance methodologies are now refined and include active participation from a wide sample of representative respondents, rather than subjective categorisation of general practice attendees (Singleton et al. 2003). Finally, a study conducted 40 years ago is not representative of the current population. John, McGregor, Fone, Dunstan, et al. (2016) and Larvin, Peckham and Brady (2019) recognise the value of analysing medical records in primary care settings to identify the prevalence of common mental disorders, therefore King and Bleaney's study (1982) is a benchmark in mapping public health in the Falkland Islands in the late 1970s. The need to identify prevalence of common mental disorders in the Falklands remains a research priority (Walker et al. 2022).

1.4 The role of general practice in managing common mental disorders

The role of primary care practitioners in screening and treating common mental disorders is an interest for many authors, as there is limited access to treatment in rural areas (Alexander and Fraser 2008, Jorm, Patten, Brugha and Mojtabai 2017, Gullifer and Carey 2021). The National Institute for Health and Care Excellence (NICE 2011a) Clinical Guideline 123 aimed to improve detection of common mental disorder within primary care, improve access to psychological therapies and the appropriate use of pharmacological treatments. Although the NICE CG123 has been superseded by individual guidelines for specific disorders, primary care practitioners have a pivotal role in screening, assessing, educating and managing common mental disorders (Kendrick and Pilling 2012). Basu (2022) argues that rural services aim to implement best practice guidelines which are often designed for urban areas with more resources (Gullifer and Carey 2021,

Walker et al. 2022). Understanding the views of primary care practitioners in the Falkland Islands, will help understand public mental health and access to mental health treatment.

1.5 Community health: morbidity and mortality

Public health surveillance is important to understand the extent of the disease burden and make informed decisions on preventative measures and resourcing treatment (Mackereth, Brown and Learmouth 2015, McClean et al. 2020). Research on population health in the Falklands is limited but includes a study on the incidence of cancer, Swerdlow, Elsby and Qiao (2001), a study on dental health, Jones and Walters (2015). Three studies had specific reference to the mental health in the islands namely, the King and Bleaney study (1982), Michael, Fear and Hacker-Hughes (2007) on the mental health of serving military personnel in the Falkland Islands; while Rimicans and McInerny (2018) describes an overview of devising and implementing mental health legislation in the Falklands. None of the studies address the prevalence of common mental disorders.

The impact of common mental disorders on population health and the global disease burden is substantial with high morbidity, levels of disability and premature deaths (Eaton and Fallin 2019). The World Health Organization (WHO) (2017) estimated that one in five days were lost to common mental health globally and an estimated 7.5% of all years lived with disability attributed to common mental disorder (p. 5). Marmot (2010) highlighted co-morbidities between common mental disorders and life-limiting lifestyle behaviours such as smoking, drug and alcohol use (p. 54) and non-communicable diseases such as cardio-vascular conditions, obesity and type 2 diabetes (p. 52). In addition, the correlation between all mental disorders and completed suicide is substantial, where an estimated '87.3%' of those who have died are estimated to have a diagnosis of mental disorder (McLean et al. 2008, p. 25).

1.6 The rationale for conducting a study on common mental disorders in the Falkland Islands

As a mental health practitioner in the islands, identifying the prevalence of common mental disorder in the Falklands population was a public health and a clinical concern. The most frequently found common mental disorders are depression and anxiety disorders. WHO (2017) estimate that 4.4% of the world's population suffer from depression and 3.4% suffer from an anxiety disorder, although prevalence may vary between regions (p.4). No such prevalence figures exist for the Falkland Islands and therefore this is a strong justification for this study.

1.7 The Falkland Islands a remote and rural community: defining remote and rural

The Falkland Islands are a remote archipelago of over 700 islands in the South Atlantic Ocean. The main populated islands are East Falklands and West Falklands, although many smaller islands are also inhabited. The Falklands are located approximately 8,000 miles from the UK and 300 miles by sea from South America.

The Falkland Islands are sparsely populated with the majority of the population living in Stanley, while the remainder live in the small settlements, farms and island communities collectively referred to as 'Camp' (derived from 'campo', the local term for the countryside), or reside at Mount Pleasant Complex military base (Spruce and Blake 2011). The Scottish Clinical Peripherality Index based on population density, defines a population of less than 3,000 living more than an hour away from a population of 10,000 as extremely remote and rural, therefore living in any location in the Falkland Islands meets this criterion (Swan, Sivasubramaniam and Godden 2008, p. 6).

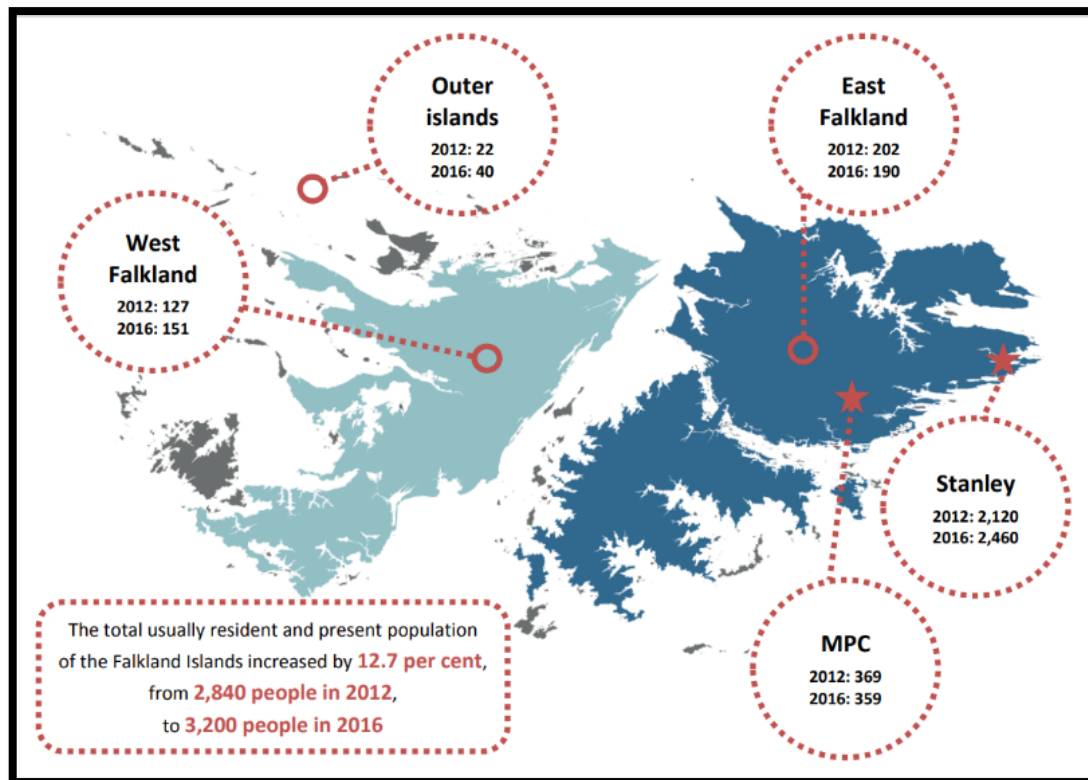


Figure 1.1: Falkland Islands population 2016 (Falkland Islands Census, 2017, p. 17)

Gulliver and Carey (2021) note that demographic changes in remote and rural communities have a more profound impact on health and wellbeing (p. 35). The Falkland Islands Government (FIG) (2017) Census in 2016 stated that working aged adults account for 71% of the population, with the median age in the Falklands being 38.3 years (p. 19). Working age adults includes the transient workforce, who are 823 Work Permit Holders (WPH) and their dependents (FIG 2017, p. 21). The Falklands also have an ageing population similar to the UK, where residents over 65-year-olds account for 10.5% of the population (p. 21). In addition, 26.5% of the population live in one person households, and 9.6% live in 'non nuclear households' defined as 'where residents are not related to each other' (Falkland Islands Government Census 2017, p. 23, Office for National Statistics 2020). Socio- economic and socio-environmental factors such as living alone and experiencing loneliness, or having access to privacy and adequate housing, may cause stress and be risk factors in developing common mental disorders (Marmot 2010). Identifying the mental health needs of population subgroups within remote and rural communities is therefore a research priority (Gullifer and Carie 2021, Kelly et al. 2011).

1.8 Defining mental health and common mental disorder

WHO (2021) offer a broad definition of mental health, 'a state of wellbeing in which an individual realises their own abilities, can cope with the normal stresses of life, can work productively and is able to make a contribution to their community' (p.1). The Adult Psychiatric Morbidity Survey (APMS) 2014 define common mental disorders as those that occur most frequently in any population, including depression and anxiety disorders, namely, Generalised Anxiety Disorder (GAD), panic disorder, phobias and Obsessive-Compulsive Disorder (OCD) and common mental disorder not otherwise specified (NOS) (McManus et al 2016).

Das-Munshi et al 2007 found that in the UK co-morbidity within common mental disorders was high, such as mixed anxiety and depressive disorder or Post Traumatic Stress Disorder (PTSD), where one in six adults with PTSD had a common mental disorder such as depression (Das-Munshi et al. 2008, Fear et al. 2014 in McManus et al. 2016 p.108). Furthermore, in the UK psychiatric morbidity study, comorbidity with concurrent alcohol or drug misuse disorders was also common, with an estimated prevalence of one in six for alcohol dependence (p. 240) and one in two for drug dependence (Drummond et al. p. 240; Roberts et al. p. 267, in McManus et al. 2014). PTSD, alcohol and drug use disorders were included due to the strong association and co-morbidity found with common mental disorders across population studies.

1.9 Common Mental Disorders

Depressive disorders, anxiety disorders, PTSD, alcohol use disorders and drug use disorders are included within this study and are defined as follows.

1.9.a Depression

Depression is defined as 'characterised by absence of positive affect, low mood and a range of associated emotional, cognitive, physical and behavioural symptoms' where severity depends on the intensity of symptoms, the duration of

the disorder and 'the impact on personal and social functioning' (NICE 2022, p. 7).

1.9.b Anxiety

Anxiety Disorders are defined as a broad range of disorders including GAD, social anxiety and panic disorder, OCD and body dysmorphic disorder (BDD), characterised by physical (e.g. heart racing, sweating, tremor) emotional (e.g. fear, guilt), cognitive (e.g. anticipatory and post event negative processing, self-deprecation ruminations) and behavioural (e.g. avoidance, safety seeking) symptoms (NICE 2014).

1.9.c Post Traumatic Stress Disorder (PTSD)

PTSD, including Complex PTSD, is defined as having particular features including 're-experiencing, avoidance, hyperarousal, negative alterations in mood and thinking, emotional numbing, dissociation, emotional dysregulation, interpersonal difficulties and negative self-perception' (NICE 2018, p. 6). Traumatic events associated with PTSD can be single, multiple or a series of negative events, including war and conflict -related events, physical or sexual assault or abuse, threats to physical integrity, work-related exposure to trauma, including remote exposure, serious health problems including childbirth experiences, torture, threats to loved ones, traumatic death of a loved one (Benjet et al. 2016, Koenen et al. 2017).

1.9.d Alcohol Use Disorders

Alcohol Use Disorders (AUDs) are defined as 'a pattern of alcohol consumption that causes health problems directly related to alcohol' (NICE 2011b, p. 4) AUDs are considered as harmful or hazardous use of alcohol, above the recommended 14 units per week, this includes alcohol dependency, a serious medical condition characterised by 'craving, tolerance, preoccupation with alcohol and continued drinking in spite of harmful consequences' (NICE 2011b, p.4). Estimating global AUDs is challenging as alcohol is a banned substance in many regions of the world, therefore an unlicensed product.

1.9.e Drug Use Disorders

Drug use disorders include a harmful 'pattern of continuous, recurrent or sporadic' drug use or 'drug dependence' (WHO 2020, p. 4). Also, may be referred to as substance use disorders, defined as the use of a substance for a purpose not consistent with legal and medical guidelines, for example non-medical use of a prescription medication or the recreational use of illegal or other psycho-active substances (WHO 2020). Estimating the global prevalence of drug or substance use disorders is challenging due to the illicit and illegal nature of drugs in many countries.

1.10 A multi-disciplinary approach to public health

The Ottawa Charter for Health Promotion defines pre-requisites for health as 'peoples' basic needs being met, their rights and freedoms valued, stability in their way of life honoured' (WHO 1986). Donaldson and Rutter (2018) define public health as '*Protecting and improving the health of the whole population.... a broader focus to understanding and engaging with many factors (societal, behavioural, environmental) that promote or undermine health*' (p. 4). This study aimed to identify some of the factors that contribute to shape the mental health of the Falklands population, to improve public mental health and clinical practice in the Falklands. The interrelatedness of public health in rural communities also explains why as a community mental health nurse practitioner, public mental health and primary care practice was a focus for study.

1.11 Brief history of the Falkland Islands

British history within the islands dates to 1592, when John Davis, a Britain explorer mapped the islands (FIG; Our Islands Our History 2016). The Falkland Islands were named in 1690 after the 5th Viscount Falkland and First Lord of the Admiralty, Anthony Cary (1656 – 1694) (twickenham-museum.org.uk), and are not connected to Falkland Palace in Fife, Scotland, although mail has been known to arrive in Fife, instead of the islands in the South Atlantic. The Falkland Islands offered seafarers safety when travelling around Cape Horn. Whaling, sealing and livestock farming drove both the economy and population surge, as

migrants were encouraged to live in the islands throughout the 1700 and 1800s. No indigenous population existed within the islands prior to colonisation, although France, Spain, Britain, and Argentina laid claim to the islands during the period of colonisation. By the time of Charles Darwin, naturalist, and Vice Admiral Robert Fitzroy's, famous visit on The Beagle in 1833, a small British population were resident within the islands. Stanley became the capital of the Falkland Islands in 1842, chosen by the First Governor, Richard Clement Moody, due to its 'sheltered yet accessible harbour' (Our Islands, Our History 2016, FIG 2021, p. 4). Stanley was awarded Platinum Jubilee City status by Her Majesty the Queen on 20 May 2022 (FIG 2022).

1.11.a Economic growth and population expansion in the Falkland Islands

With growth in the economy, the population increased between 1851 to 1901, from 287 to 2272 residents (FIG Census report 2001). The opening of the Panama Canal in 1914 reduced shipping trade, but cattle and sheep farming maintained the Falklands population's livelihood. By 1982 when the Falkland Islands, South Georgia and the South Sandwich Islands, its neighbouring United Kingdom Overseas Territories became renowned due to the Argentine invasion and the war that ensued by the UK to liberate the islands, the population had reduced to 1820 residents. By 1986 and the establishment of the 150mile Falklands Interim Conservation Zone, the sale of fishing licenses to international fishing companies boosted the economy and the population, generating on average £20 million per year for the first 20 years and still providing 63.6% of the Gross Domestic Product (GDP) (FIG 2013, FIG 2021). In addition, tourism, with over 50,000 cruise ship tourists and 1,500 land-based tourists per annum in 2016, was established as a backbone of the economy, until the Covid 19 pandemic. The GDP had grown between 2007 to 2018 by 8.3% per annum, to £254.7 million and the Falklands 'could be ranked fifth (richest) country in the world by GDP per capita', however, with earnings generated by temporary incoming workers leaving the islands, plus the income inequalities, where 10% of the population earn the highest share of income, the impact is that health inequalities exist (FIG 2021, p.7).

Income inequalities defined as ‘the unequal accumulation of wealth’ and ‘unequal distribution of annual income’ indicate that although the average income of Falklands residents could be between £50K and as high as £90K, based on GDP, the average earnings are £26,300, and this figure alone does not take account of those on minimal wage, set at the Living Wage of £7.13 per hour, or £14,830.40 per annum, with an estimated 33% of the Falklands population earning below the minimum wage (FIG 2021, p. 42). Social inequalities within the population are expected to be less due to the high level of spending on public services (FIG 2021, p. 7).

1.11.b Public administration in the Falkland Islands

As a United Kingdom Overseas Territory (UKOT) the Falkland Islands are a Commonwealth member and maintain British sovereignty. Self-governed and financially independent except for defence and some external affairs, public administration including legal and court services, housing, education, police, health and social care provision, based on a model of national public services similar to the UK, with local ordinances (laws) and policies in place to support professional standards and practice. For example, the Mental Health Ordinance (2010) mirrors the principles of UK mental health laws, although the application of the ordinance and role of Approved Professionals, namely Approved Practitioners and Approved Doctors varies from the UK mental health laws to account for the remoteness of the islands and lack of specialist services, with General Practitioners and non-specialist registered adult nurses taking a lead role, normally reserved for psychiatrists and approved mental health social work practitioners and nurses (Rimicans and McInerny 2018, Walker et al. 2022). Another example is the Falkland Islands Constitution 2008 which includes the European Convention on Human Rights articles and protects the rights of people (FIG 2011).

1.12 Demographic Characteristics of the Falklands population

The Falkland Islands have a diverse international population which reflects economic development in the islands. Although predominately descendants of

British emigrants, descendants from South American and Norway reflect the farming, seafaring, whaling and sealing industries (Our Islands, Our History FIG 2012). Immigration to the islands within the past 40 years reflects the development of new industries namely, the tourist, fishing, retail and service industries to support the community, including a landmine disposal project following which, many Zimbabweans made the islands their home (Rawlinson, The Guardian 2020). Over 60 different national identities were recorded in the government census in 2016, with people originating from St Helena, Chile, Peru, Brazil, New Zealand, Australia, US, the Philippines, Russia, Germany, Albania and Zimbabwe, speaking a range of community languages other than English (Census 2016, FIG 2021). Evidence suggests that people with diverse cultural and ethnic backgrounds may be at greater risk of developing common mental disorders due to racism, discrimination, socio-economic pressures, yet they may be reluctant to seek help for a variety of reasons including stigma and socio-economic inequalities (Fernando et al. 2009, Hatch et al. 2012,).

1.13 Lifestyle factors, co-morbidity and the socio-economic impact of change

The dynamic between individual behavioural lifestyle choices and provision of the means for people to achieve and maintain good health is a public health concern. The Falkland Islands Government (FIG) aimed to invest how best to enable the community to enjoy a healthy lifestyle, concern reported in the literature (FIG 2017, Cuthbertson, Albrecht and Loveridge, 2017). Non communicable disease (NCDs) namely, inactivity, unhealthy dietary intake, harmful consumption of alcohol and smoking accounting for 70% of the morbidity and mortality rate in the Falklands, yet alcohol is inexpensive to buy and fresh produce, such as imported fruit and vegetables are expensive (FIG 2020). Although alcohol and tobacco consumption are reported in the Falkland Islands Census 2016, and the Health and Wellbeing Survey 2018, the association between alcohol consumption, tobacco consumption, substance use and common mental disorder has not previously been explored or reported.

1.14 The impact of the conflict

A legacy of the Falkland Islands community is the Argentine invasion in 1982 and the deployment of the British military to defend and liberate the islands. Accounts of the Falklands conflict from residents' personal experience are found in the literature, Smith (1984) recounts the impact of the 74 days of Argentine occupation from an islander's viewpoint, while Stevens (2017) describes the impact before, during and after the war. In addition to the impact of those lives lost during the conflict, the long term damage on the non-fatal casualties of the 1982 war is recognised as 'disproportionately traumatic', with high suicide rates among veterans (Robinson 2013, p. 97). Robinson suggests that the emerging diagnoses of PTSD in the 1980s helped explain the impact of war on veterans who frequently described the origins of their trauma to 'situations at odds with their training', however, the impact of war on the Falkland Islands population who like any civilian population were unprepared for the invasion is not yet explored (Robinson 2013, p. 98).

In addition, to the likelihood of historic community trauma, the Falklands like many other countries, are facing the reality of generational trauma through the impact of adverse childhood experiences such as domestic abuse, exposure to parental alcohol and drug use, neglect, paternal mental illness, separation and loss, plus, physical, sexual and emotional abuse, on population mental health (Bellis et al. 2016).

1.15 Health Service Provision within the Falklands Islands

With a Gross Domestic Product of over £254.7 million, healthcare in the islands is of a high standard. In addition to the PHCT, hospital and community-based health and social services, a wide range of clinical specialists visit the islands funded by the Falklands government. The services and the budget are not unlimited and the Falkland Islands have a reciprocal health agreement with the UK for National Health Service (NHS) treatment. In certain circumstances transfer to the UK for treatment is not the first option, therefore medical treatment may be sought in South America when emergencies arise or when timely diagnosis in the best interest of the patient.

1.16 Mental health service provision in the Falkland Islands

The provision of mental health services in the islands has developed within the past 25 years. Previously mental health care consisted of a GP led service where those identified as requiring further mental health assessment could be offered consultation, diagnosis and advice from qualified mental health military personnel. This service offered limited continuity of care due to the transient nature of military personnel postings to the islands (Michael et al. 2007). In 1996 a full time Community Psychiatric Nurse was employed and received a mixed reception due to stigma associated with mental health problems (Harding-Price 1997). Thereafter, a Health Visitor completed a diploma in person centred counsellor and was employed as a Health Promotion Counsellor, viewed as a less stigmatising title. I was employed in 2003 and established a mental health service, successfully gaining funding for 2 additional mental health nurses. By 2017 mental health service provision had evolved to the employment of three full time Community Psychiatric Nurses (CPNs), plus the Visiting Consultant Psychiatrist who co-ordinated specialist clinics for forensic psychiatry, older peoples' mental health, general psychiatry clinics plus inpatient admissions if required. Child and Adolescent Mental Health (CAMHS) was provided by Clinical Psychology and Specialist Consultant Psychiatrists through a contract with the Michael Rutter Centre, South Lambert and Maudsley NHS Trust (SLAM). In addition, the Visiting Consultant Psychiatrist provided remote support, clinical advice, and case management, if required. Outpatient clinics were provided within the islands annually or biannually. Furthermore, a Clinical Psychology Service was establishing within the islands, with a school nurse and health visitor supporting the mental health needs of children and young people within the islands.

With no specific inpatient mental health unit, the GP and adult nurse led 28 bed ward in King Edward VII Memorial Hospital, Stanley provides health care for all residents and visitors to the Falkland Islands, including those people with acute mental health needs.

1.17 Investment in mental health promotion and community development, Team Tranquil the Falkland Islands' mental health charity

Public health and mental health promotion in the Falklands are not new initiatives. The Falkland Islands Government Health of the Nation directive in the early 2000s lead to the development of specific health reports including *The Alcohol Strategy: One for the Road*, the *Dental Health Strategy: The Tooth Report* and the first *Mental Health Strategy for the Falkland Islands* published in 2006 (Team Tranquil, 2022). *The Mental Health Strategy* was devised by a voluntary working group of residents with a personal or professional interest in mental health, including carers, parents, community group leaders, public and private sector employees including the District Nurse and the Community Psychiatric Nurse. With no published data to inform decisions, mental health concerns were identified through discussion with representatives of community groups and services, this information was then used to develop recommendations including: public mental health promotion, developing awareness of mental health issues in the community using multi-media, promoting good mental health in the community, establishing out of hours voluntary support for people, and reducing stigma across the community and within the workplace. Team Tranquil became a registered charity in 2007 by founder members of the strategy group to implement those recommendations. The group recognising that public mental health required a broader public health approach. Also, that recommendations were not purely a government concern, rather that implementation could not take place without community ownership and involvement. Many existing services in the Falklands community, including World Mental Health Day events; the Samaritans Free Helpline (now funded by the telecommunications company), All Ability Play area and winter workshops, stem from the work of Team Tranquil and those Falklands residents with an active interest in improving mental health in their own community.

Parallel to community health promotion, investment in programmes of continuing professional education and public mental health awareness programmes are in place in the Falkland Islands to support public services; these include suicide prevention training for all primary care practitioners (STORM Skills Training,

2019), training on the therapeutic management of emotional distress and behaviour that challenges for all ward and primary care practitioners (CALM, 2022), also Mental Health First Aid across government and the community. Implementation of these professional education and community awareness programmes demonstrates considerable investment to improve mental health in the islands by the Falklands government, plus the dedication of practitioners and residents to improve mental health in the islands. This study will complement existing endeavours to improve public mental health in the Falklands.

1.18 Clinical background and personal and professional interest in the Falkland Islands

As a specialist practitioner in community mental health nursing and a psychological therapist, I have maintained an active interest in mental health practice, policy, systems of practice and professional education throughout my career. Having completed my psychiatric nurse training in Forth Valley College of Nursing and Midwifery in 1989, I gained experience as a mental health nurse in urban and rural areas of Scotland. With experience in acute mental health wards and day hospital services, my career was then predominately community and primary care-based. It was apparent to me that mental health services varied greatly within urban and rural areas.

I moved to the Falkland Islands in 2003 to work as a Senior Community Psychiatric Nurse, with no previous experience of the islands or the people. My experience in Argyllshire prepared me for the transition to rural living, and the appeal of rural work and a generalist approach to mental health care was a welcomed challenge. There were numerous strands to my work in the Falklands, working closely with my primary care colleagues, developing and delivering programmes of professional education, devising mental health legislation, developing policies and strategies, facilitating Acorns community social evenings, co-founding the mental health charity Team Tranquil, plus, advising on patient safety features in the new admission suite in the hospital ward. With all of these extended roles in addition to a full clinical caseload, mental health nursing

practice in the Falklands was busy but enabled me to make a real difference to the community where I lived.

Maintaining my own professional development lead me back to the University of Stirling in 2014 and the clinical doctorate programme. My previous experience of academic research was completing a qualitative study for a Masters in Education at the University of Stirling 2000. I was keen to embark on a different challenge and contribute to the Falklands community. My studies on the clinical doctorate programme which began in September 2014, lead me to consider population mental health as the starting point in the journey, as the uniqueness of the Falkland Islands population and their mental health needs had never been explored. Parallel to questions about population health, my interest in professional education and working beside my primary care colleagues encouraged me to explore and understand my colleagues experiences better, what it is like to practice in the Falkland Islands and manage common mental disorders and how this reflects on the role of the community mental health nurse.

1.19 Summary: Rationale for the study

The prevalence of common mental disorders within the adult population of the Falkland Islands has not been studied. This study will add to the research knowledge and determine whether prevalence in the Falklands is comparable with UK or global prevalence.

Furthermore, following review of the literature, exploring the experiences of primary care practitioners in the Falklands in managing common mental disorders determines whether there are any unique challenges that exist in the provision of treatment.

The study questions are to:

1. Identify the prevalence of common mental disorder within the Falkland Islands population
2. Consider if the prevalence of common mental disorder in the Falklands is comparable with global, European or UK averages.

3. Explore how common mental disorders are managed by primary care practitioners in the Falkland Islands
4. Identify any barriers or facilitating factors that may exist that influence primary care practitioners' clinical practice.

Consider if the experience of primary care practitioners in the Falklands resonates with the experience of their colleagues in other settings.

1.20 Thesis Guide

Chapter 2 provides a scoping review of the literature and explores what is known about the prevalence of common mental disorders in adult populations in national and international surveys. What is known about the prevalence of common mental disorders in rural populations and finally, how prevalence studies have been measured in surveys. Mapping current knowledge with a view to identify gaps in the literature.

Chapter 3 provides a scoping review of the literature exploring primary care practitioners' experiences of screening and managing common mental disorders within their practice and what is known about the barriers and facilitating factors that influence their practice in rural areas. Charting current knowledge and identifying gaps within the literature.

Chapter 4 describes the methods and design of the study. Devising a survey questionnaire, devising a semi-structured interview schedule for primary care practitioners and recruitment of the samples. This includes the ethics and the challenges of implementing research within the Falkland Islands. Also, a reflective account of learning and the selection and application of methodologies applied in the study.

Chapter 5 presents findings from the adult population survey, including an analysis plan for the prevalence study of common mental disorders within the Falkland Islands. Demographic characteristics are compared with the FIG Census Report (2016) to provide context to the study findings.

Chapter 6 presents the findings from interviews with primary care practitioners. Key themes identified by participants are presented including basic demographic information. Anonymity of the respondents interviewed within the study sample are maintained throughout.

Chapter 7 summarises and synthesises the findings from both studies, discussing key findings, reflecting on the outcomes, and sets out recommendations for future research, public mental health practice, clinical practice and professional education.

Chapter 8 provides a discussion of the thesis, summarising the thesis, including a reflective account of the strengths, challenges and limitations of conducting this research and my learning as a clinical doctorate student.

Chapter 2: A scoping review of the prevalence of common mental disorders, alcohol and drug use disorders within national and international surveys

2.1 Introduction

This chapter presents the findings from a scoping review of the literature and narrative synthesis of systematic reviews and primary studies and on the prevalence of common mental disorders in adult populations globally and in the UK. The rationale for a scoping review is to map the types and breadth of evidence available on the prevalence of common mental disorders and identify gaps in current knowledge globally, in Europe, the UK and UKOTs, to better understand the global overview of prevalence. Munn et al. (2018) advocate that scoping reviews are better conducted in areas of investigation where a research question requires a broad scope. This scoping review aims to identify:

2.2 Literature review questions

1. What is known about the prevalence of common mental disorders within the adult population based on national and international surveys?
2. How has prevalence of common mental disorders been measured in national and international surveys?
3. What is known about the prevalence of common mental disorders within adult populations in remote and rural populations?
4. What is known about the prevalence of common mental disorders within the adult population in the Falkland Islands?
5. What gaps exist in the literature on the prevalence of common mental disorders?

2.3 Literature search protocol

Scoping reviews are useful for mapping knowledge, identifying gaps, clarifying concepts and examining research methods (Munn et al. 2018). Applying a structured search strategy to the literature review with the Population,

Investigation (Incidence), Comparison and Outcome (PICO) model to identify prevalence studies enables focus and promotes transparency in the methods and contributes to academic rigor (Cooke et al. 2012). Cochrane (2023) recommend applying PICO across the three stages of a literature review, namely the protocol stage, the synthesis of included studies focused on answering the literature questions and finally, applying PICO in the review of included studies (Cochrane 2023). A search of PROSPERO determined that no systematic reviews on the global prevalence of common mental disorders were registered, however a global prevalence study of anxiety disorders was registered in 2013 (see Table 2.1).

2.4 Selecting a time frame for the literature search

The timeframe set for the literature search was initially five years, 2011 to 2016, the recommended cut-off by Cochrane to determine contemporary relevant published literature for the review, however this review was revised and updated during the conduct and write-up of the thesis and now includes years 2011 – 2022.

Table 2.1: Search framework PICO: Prevalence of Common Mental Disorder

PICO Search framework: The prevalence of common mental disorders based on national and international surveys 2011 – 2022			
	Search terms	Inclusion criteria	Exclusion criteria
Population	General adult population	Male and female adults, 16 +	Specific population groups or subgroups.
Investigation/ Interest	Common Mental Disorders Common Mental Health Disorders,	Depression, anxiety, PTSD, alcohol use disorders, drug use disorders,	Developmental Disorders, dementia, serious mental illness
Comparison	Prevalence of Common Mental Disorders	National and international surveys using standardised sampling methods and protocols Cross sectional or longitudinal studies, case control	Qualitative studies Case series/ reports, reviews and cohort studies
Outcome	Mapping global prevalence, UK prevalence, remote and rural communities.	Systematic reviews and meta-analysis of global, European and UK studies. Plus, UK national primary studies.	Other regions of the world. Narrative discussion and expert opinion

The online databases PubMed (Medline), Web of Science Core, the Cumulative Index to Nursing and Allied Health (CINAHL), the Institutional Repository for Information Sharing (IRIS)WHO were searched for systematic reviews and primary and studies as these databases have good efficacy in public health research (McClellan et al. 2020, p. 187). Inclusion and exclusion criteria for prevalence studies, shaped the search enquiry, which included Boolean phrases and Medical Subject Headings (MeSH) terms which were devised based on best available evidence (Wilczynski et al. 2007). A search for WHO global reports on common mental disorders, alcohol use, and drug use was conducted. Search terms, MeSH terms and databases are presented in Appendices 1, 2 and 3.

2.5 Abstract Screening

Screening was undertaken by only one reviewer; therefore, the risk of bias is acknowledged. The Preferred Reporting Items for Systematic Review and Meta-Analysis (PRISMA) described how seventeen duplicate articles were removed. With 301 articles removed by titles and abstracts, 210 articles were reviewed, 78 articles did not include any common mental disorder as defined for the purpose of this thesis, namely, anxiety, depression, PTSD, or, report alcohol and drug use disorders, i.e., prevalence of ADHD and depression. A further 98 articles sampled specific population groups, i.e., refugees or students, and were not in a cultural or economic region similar to the Falkland Islands, i.e., rural India, regions of Africa, China and South East Asia. An additional 3 articles were excluded as they were discussion articles and not systematic review or primary studies on prevalence. 25 published articles were reviewed, plus 2 WHO reports, 2 UK national survey reports and 2 websites reporting prevalence in Scotland. Statistical analysis in all studies have reported confidence levels at 95% or above.

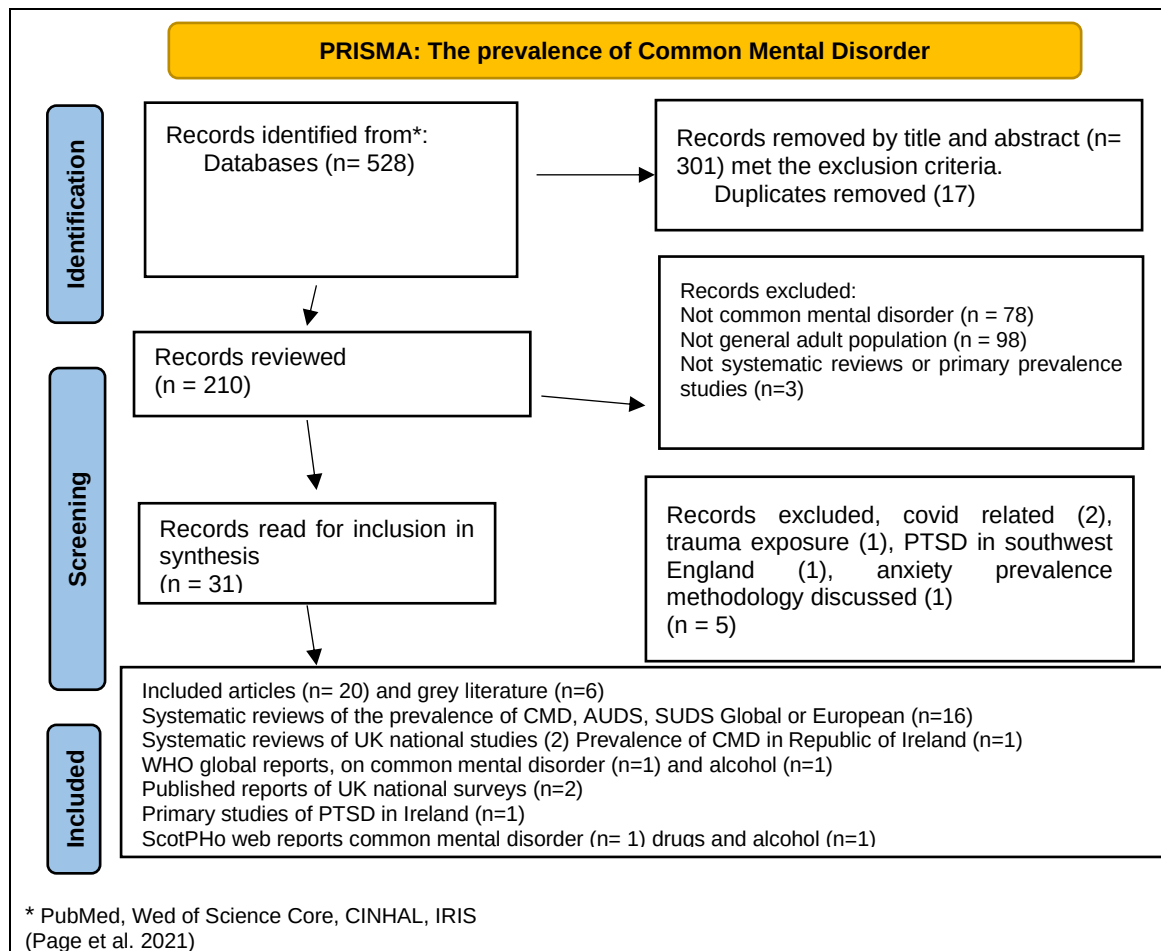


Figure 2.1: PRISMA the prevalence of common mental disorders

Quality appraisal was applied to assist the process and facilitate critique of the literature. This is presented in Appendix 4: The Joanna Briggs Institute Critical Appraisal Checklist (JBI) for articles reporting prevalence studies was applied to appraise the literature (Munn et al. 2015). The JBI offers guidance on sampling, measurement and analysis, plus guidance for reducing bias in statistical analysis, managing low response rate, and inclusion of a rationale for the selection of the papers. The 31 reports identified were appraised with this checklist and (n=5) studies were excluded as reported in the PRISMA, as 2 articles were covid related, O'Connor, et al. (2021) and Richter, Riedel-Heller, and Zurcher (2021) one described trauma exposure but not prevalence, Benjet, et al. (2016), one article was not a national study, i.e., PTSD in south west England, Cowlshaw, Metcalf, Stone, et al. (2020) and one article discussed prevalence methodology for anxiety disorders, but not the prevalence of anxiety, Bandelow and Michaelis (2015).

Conducting a scoping review as a novice researcher, I sought guidance on ways to appraise the quality of the literature. The risk of bias is acknowledged; however, I sought guidance from Greenhalgh (2019) enabling me to appraise the quality of the literature, highlighting strengths and weaknesses, following the guidance from Greenhalgh's checklist for the appraisal of systematic review or meta-analysis..

2.8 Data extraction and analysis

Systematic reviews are considered the highest quality evidence in public health in that they limit bias and distil a large quantity of evidence (Greenhalgh 2019). Systematic reviews remain prone to bias in the form of, 'clinical heterogeneity' which is differences found in the demographics variables within the sampled population; 'statistical heterogeneity', difference in the direction of the study and how this influences statistical analysis, such as income or gender and common mental disorder; and finally, 'methodological heterogeneity' bias within the study design (McClean, Bray, de Viggiani et al. 2020, p. 196). An example of clinical heterogeneity in findings from the World Mental Health Surveys (WMHS) where the composition of the sampled countries and regions has changed since 1998. Kessler, Aguilar-Gaxiola, Alonso, et al. (2009) describe 26 countries sampled in the WMHS namely, America (6), Europe (10), Middle East (4), Africa (2) Asia/Pacific (4), with a clear bias towards westernised countries in America and Europe. In comparison, McGrath, Lim, Plana-Ripoll et al. (2020) describe 29 WMHS in 27 countries, categorised by high, medium or low-income countries, of which they state only 19 of the surveys were nationally representative (McGrath et al. 2020,p.2). These biases are acknowledged in the narrative review of the studies. Although all prevalence studies report a confidence level of 95% adding statistical validity to their findings (Dancey and Reidy 2017).

Meta analysis, meta regression, Bayesian meta-regression or re-analysis are statical analysis of combine studies are reported in 15 studies, study 1, 2, 3, 4, 5, 6, 8, 9, 13, 14, 15, 16, 18, 19 and 20 (see Appendix 5). Predominately articles which report on the Global Burden of Disease and odds ratio (OR). Meta-analysis within observational studies such as the Global Burden of Disease Study or the

World Mental Health Surveys run the risk of 'residual confounding' factors, which are bias due to random sample size and a lack of control groups (McClean, Bray, de Viggiani et al. 2020, p. 195). Greenhalgh (2019) describes 'lumpers', those who aim to statistically combine findings from different studies to reach consensus and 'best estimates' such as those reported in Wittchen et al. 2011 study on brain disorders in Europe (Greenhalgh 2019, p. 132). By comparison, 'splitters' are those who present differences as they are, thus highlighting potential bias that may result from studies of a different nature (Greenhalgh 2019, p. 132). For the purposes on this scoping review the risk of bias in meta-analysis studies is acknowledged, yet the focus remains on the prevalence of common mental disorders within the adult population based on national and international surveys and, how prevalence is measured within surveys.

Cross-sectional studies are studies that statistically analysis results between studies and generate a better understanding of associations within variables, such as gender or age (Greenhalgh 2019). Cross sectional studies are reported in 5 studies, study 7, 10, 11, 12 and published report 25. Cross-sectional studies contain potential for bias as the findings may simplify findings, thus inferring and implying the strength of associations, yet not accounting for the differences found, therefore statistical and methodological heterogeneity may result (McClean, Bray, de Viggiani, et al. 2020). Reporting statistical significance validates findings from cross sectional studies. All studies report 95% confidence level. Although the focus of the literature question is the prevalence of common mental disorder, highlighting groups within the population sampled found to be at greater risk has relevance for the thesis studying population mental health in the Falkland Islands, i.e., the question of population prevalence is inseparable from the nuances of who within a given population is at greater risk and why this may be.

Finally, one national primary study is included, study 17. Although primary studies are considered low in the hierarchy of evidence-based research, this study is relevant for this scoping review as it reports PTSD in Ireland a comparison of national results with the World Mental Health Survey findings (Hyland, et al. 2020).

2.9 Results – study characteristics

The scoping review includes 26 articles, consisting of 20 published articles and 6 grey literature publications on the prevalence of common mental disorder. Of the 26 articles, 16 are systematic reviews, study 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 13, 14, 15, 16, 19 and 20 (see the Appendix 5). Data extraction applies the PICO framework, namely Population, sample characteristics, methods of Investigation, Condition and Outcomes or findings (PICO) to address the literature review questions (see Appendix 5). In addition, Appendix 6 summarises the aims, methods, findings, strengths and weakness of the included studies.

2.10 Results – key findings

Comparison between national and international studies is discussed to address each of the literature review questions on the global, European, UK prevalence of common mental disorder, depression, anxiety, PTSD, alcohol and drug use disorders. Each section is presented with a table of key findings. Plus, there is a summary at the end of the chapter.

2.10.a The prevalence of common mental disorders within the adult population based on national and international surveys

The global prevalence of common mental disorder are reported in four systematic reviews, Richter, et al. (2019), Baxter, et al. 2014, Steel, et al. (2014) and Volkert, et al. (2012), and is estimated as between 18.1% and 36.1% (Richter et al. 2019, Baxter et al. 2014, Steel et al. 2014, Volkert et al. 2012). These reviews span seven continents, across 63 countries, with 827 673 to 1, 035 697 people sampled, within between 42 studies and 173 World Mental Health Surveys (Richter et al. 2019, Baxter et al. 2014, Steel et al. 2014, Volkert et al. 2012). This prevalence rate varies between studies, and these studies suggests that between one in five people, or one in three people globally, will develop a common mental disorder. Often generalised as, a prevalence rate of one in four people estimated to have experienced a common mental disorder across their lifespan.

Definitions of common mental disorder also vary between studies, plus the dominance of European, North American and Westernised countries is evident

in the literature. Plus, sample size and characteristics vary from adults to inclusion of adolescents. Establishing global prevalence, with longitudinal analysis of surveys from 1990 until 2014 indicate that contrary to some reports, such as the World Health Organization report on a global epidemic common health disorders (2017), there is minimal increase in the global prevalence of common mental disorders, and that any increases found can be accounted for by population expansion, ageing and an increase in health surveillance (Richter et al. 2021, Whiteford et al. 2013). For example, in Canada the prevalence of common mental disorders had not changed across 11 national surveys between 1994 and 2012, with similar findings for the Australian prevalence rate between 1997 – 2007 (Jorm, et al. 2017).

The estimated prevalence rate for common mental disorder within Europe based on three systematic reviews was between one in eight (McGrath, et al. 2020, Volkert, et al. 2013) and one in three, with a pooled prevalence of 35.2% (95% CI, 30.7-39.9%) in one study, (Steel et al. 2014). Incidence is reported to vary due to the economic factors within high, medium or low income countries Steel et al. (2014). For example, the UK was found to have higher rates of common mental disorder than other European countries at 27.4% (Wittchen et al. 2011, WHO 2017). This UK rate is similar to other English-speaking countries, US, Australia and Canada, which Jorm, et al. (2017), reports as 18.9% (Jorm et al. 2017, p. 92). However, Eastern European countries are underrepresented in these European systematic reviews.

In the UK, national surveys conducted in England and Scotland, report the estimated prevalence of common mental disorder in 2014 as 18.2% (95% CI, 17.1-19.3) Bebbington, et al. (2020), or one in six people. This rose to one in five if substance use disorders were included. In the Republic of Ireland, a primary study reports the median prevalence rate for common mental disorders in 2014 was 19.1% (95% CI, 3.7-38.9%) (McCombe, et al. 2018). While in Scotland, the prevalence rate of common mental disorder was estimated at 18% in 2012/ 2013, with 1 in 8 men, or 13%, and 1 in 5 women or 18% scoring GHQ with a score of 4+ (Wilson, et al. 2016).

Table 2.2: The prevalence of common mental disorder within national and international surveys

The prevalence of common mental disorders	
Wittchen et al. 2011	2005 best estimate of prevalence 27.4% 2011 best estimate 38.2% mental disorder each year (p668) Estimate 1 in 3 women Estimate 1 in 4 men (p. 669), Europe
Whiteford et al. 2013	Prevalence of all mental disorder and substance use disorders combined 7.4% (p. 5)
Volkert et al. 2013	Current prevalence of mental disorder in Europe, older people 55 years plus, 3.29%; Lifetime prevalence 16.52% (p. 347)
Baxter et al. 2014	Crude increase in prevalence 36% Prevalence higher in women (p. 509) Depression common in current conflict countries, Anxiety in post conflict countries (p. 514)
Steel et al. 2014	12 months prevalence 17.6%, High Income Countries 17.5% English speaking 19%, Lifetime prevalence 29.2%; High Income Countries 33.2% English speaking 39.7% (p. 484); Females higher prevalence of mood and anxiety disorders. Males higher prevalence of common mental disorders and substance use disorders (SUDs); (p. 486) Comorbid common mental disorder and substance use disorder 18.1% (p. 483)
Spiers et al. 2016	Prevalence of common mental disorders in England 1993 - 14.3% Prevalence of common mental disorders in England 2000 – 16% Prevalence of common mental disorders in England 2007 – 16% (p. 150)
Jorm et al. 2017	Prevalence of common mental disorder in England has not decreased with treatment. 1993 prevalence - Men 10.9%/ Women 18.9% 2007 prevalence - Men 11.8% / Women 18.9% (p. 92) Global Burden of Disease; Depression 2 nd ; Anxiety 9 th
Bebbington and McManus 2020	All common mental disorders in England 2000 17.6%; 2007 17%; 2014 18.2% (p. 56) Prevalence of common mental disorder estimated 1 in 6 Prevalence of common mental disorder and substance use disorder 1 in 5 Prevalence of common mental disorder and developmental disorder 1 in 4 (p. 55)
Glantz et al. 2020	Lifetime of common mental disorder and alcohol use disorders 43.9% (p. 1)
McGrath et al. 2020	Comorbidity of common mental disorders and another mental disorder 12.1% (p. 1) Comorbidity increase pervasive across all types of mental disorder (p. 6).
Wilson et al. 2016	Prevalence of common mental disorder in Scotland estimated at 15% Prevalence in men 13% or one in eight, and in women 18% or one in five. (p. 23) Remote and rural areas estimated at 10%. Urban areas estimated prevalence is 17%
McManus et al. 2016	Estimated prevalence of common mental disorder in England is 15.7% or one in six with symptoms. Estimated prevalence of severe symptoms of common mental disorder is 8% - 1 in 12 (p. 38)

2.10.b Depressive Disorders

The global prevalence of depression is reported in three systematic reviews with an estimated prevalence of 4.4% and 7.5% (Baxter, Scott, Ferrari, et al. 2014, Steel, Marnane, Iranpour, et al. 2014, WHO 2017). A further systematic review suggests that depression accounts for as much as 40% of all mental disorders in the global burden of disease (Whiteford, Degenhardt, Rehm, et al. 2013). Similar

to the studies reporting prevalence for common mental disorder, the breadth of surveys included in the systematic reviews which report depression include the World Mental Health Organization surveys spanning several decades, however anomalies exist as the sample size and age range varies, with a bias towards westernised countries.

The European estimated prevalence rate of depression is one in fourteen, reported in one systematic review (Wittchen, Jacobi, Rehm, et al. 2011) while another study comparing four westernised countries reports a prevalence rate of one in five (Volkert et al. 2013). Higher prevalence rates of depression are also reported in the Republic of Ireland of between one in six, and higher if comorbid PTSD, to one in four (Hyland et al. 2020).

Meanwhile, in the UK prevalence of depression is reported in England as between one in twenty five, and one in thirteen (Spiers et al. 2016, McManus, Bebbington, Jenkins and Brugha, 2016), while in Scotland, prevalence is reported as 13% in men and 18% in women, equivalent to one in eight men and one in five women (Wilson, Kellock, Adams and Landsberg, 2016).

Table 2.3: The prevalence of depressive disorders

The prevalence of depressive disorders	
Wittchen et al. 2011	Best Estimate depressive disorders in Europe 6.9% (p. 666)
Whiteford et al. 2013	Global prevalence of depression estimated at 40.5% of mental disorder (31.7-49.2) (p. 4)
Volkert et al. 2013	Westernised countries prevalence of depressive disorders in those 55 years and above, 19.47% (p. 339), Lifetime prevalence 16.52% (p. 339)
Baxter et al. 2014	Estimated global prevalence of depression 1990 – 4.4% Estimated global prevalence of depression 2005/2010- 4.4% (p. 506)
Steel et al. 2014	Pooled global 12 months prevalence of depression 5.4%, Lifetime prevalence 9.6% (p. 486)
Spiers et al. 2016	Adults (18 years +) in England in 1993 prevalence of depression in men 8.3%, in 2007 increased to 10.2%; Prevalence of depression in 1993 in woman 10.4%, increasing in 2007 to 12.9% (p. 154)
McCombe et al. 2018	Estimated prevalence of depression in Ireland 17.1% Urban areas 17.6% Rural areas 15.1% (p. 86)
Hyland et al. 2020	Depression estimated prevalence in Republic of Ireland 15.2% Comorbid depression and PTSD 25.5% Comorbid depression and complex PTSD 67.1% (p. 654)
Corcoran et al. 2020	Estimated global point prevalence of depression in women was 14.4% and men 11.5% (p. 1046). Women in low income countries where income inequality is high, measured by self-reported instruments 22% (p. 1047).
McManus et al. 2016	Prevalence of depression in England 3.3% in adults (p. 49)
World Health Organization	Estimated global prevalence of depression is 4.4% - estimate 7.5% (p. 8) Estimated global prevalence of depression Women is 5.1%

(WHO) 2017	Estimated global prevalence of depression in men 3.6%
ScotPHO 2022	Estimated prevalence of depression in Scotland 25 per 1000 or one in forty

2.10.c The prevalence of anxiety disorders

The estimated global prevalence of anxiety disorders is reported in six systematic reviews, Baxter, et al. (2014), Steel, et al. (2014), Remes, et al. (2016), Ruscio, et al. (2017), Yang, et al. (2021) and McGrath, et al. (2020), and one global report, WHO (2017). The global prevalence of anxiety is reported as between 2.3% - 16.6% in earlier studies, namely, Baxter et al. (2014), Steel, et al. (2014), Ruscio, et al. (2017) and the WHO study (2017), to an increased prevalence of between 10.5% to 16.6% in more recent studies (Hyland et al. 2020, Mc Grath et al. 2020, Yang et al. 2021). Variance in the global prevalence of anxiety is accounted for by different sampling methods, age ranges of the samples, instruments, population growth and demographic changes, although low, middle and high income countries and regional variation are acknowledged (Baxter et al. 2014, WHO 2017).

The European prevalence of anxiety disorders is reported in two systematic reviews, namely Wittchen et al. 2011 and Volkert et al. 2013 as between 2.3% and 14%. The prevalence rate of anxiety disorders in the UK and Ireland is estimated at 5.9% in England (McManus et al. 2016), 11.3% in Ireland (Hyland et al. 2021), and 14% in Scotland (ScotPHO 2022).

Table 2.4: The prevalence of anxiety disorders

The prevalence of anxiety disorders	
Wittchen et al. 2011	Best Estimate European prevalence of anxiety disorders is 14% (combined panic + agoraphobia + Social anxiety + Generalised Anxiety Disorder) (p. 656)
Volkert et al. 2013	Prevalence of anxiety in Western Europe 2.3%; Lifetime prevalence 6.36% (p. 345)
Baxter et al. 2014	Global prevalence of anxiety disorders in 1990 estimated as 3.8% Global prevalence of anxiety disorders in 2005 and 2010 estimated as 4.0% (p. 506)
Steel et al. 2014	Global pooled estimate of anxiety disorders within 12 months 6.7% Global pooled lifetime estimate 12.9% (p. 486)
Remes et al. 2016	Global prevalence of anxiety, one year estimate 10.6% Lifetime estimate 16.6% (p. 3). Estimated prevalence in 1990 was 3.8% increasing in 2010 to 4%. Prevalence in women are twice as high than men 5.2-8.7% (p. 4) Anxiety related to trauma and anxiety related to physical illness are increasing in prevalence (p. 6)

	Vulnerable sub groups: Older people carers, People who self-harm, pregnant women, LGBT (p. 7)
Ruscio et al. 2017	Global prevalence of Generalised anxiety disorder (GAD) Lifetime prevalence 3.7% High income countries estimated prevalence 5% 81% Lifetime comorbidity 81% with depression and mood disorders (p. 465) Female, younger and not married/ partner associated with GAD (p. 471) Lower education, lower income and unemployed/ disability (p. 471). Onset predominately in adulthood. Longitudinal studies, WMHS
McCombe et al. 2018	Estimated anxiety disorders in older adults aged 55 years plus in Ireland 11.3% Adults who live in urban areas 12.9% Adults who live in rural areas 5.4% (p. 86) Ireland
Hyland et al. 2020	Estimated prevalence of anxiety disorders in the Republic of Ireland 10.5%. Co morbidity PTSD + Generalised Anxiety Disorder (GAD) 25.5% Complex PTSD + GAD 49.4% (p. 654)
McGrath et al. 2020	Global estimated prevalence of GAD 28.2%, followed by depression between 5 to 15 years later 46.9% (p. 7)
Yang, Fang, Chen et al. 2021	Global prevalence of anxiety disorders 45.82 million cases global; 301.39 million DALY 28.68 2019; 1-14 50% increase since 1990 (p. 1) women 1.6 times more likely to develop anxiety disorder (p. 5) Bullying victimisation related to anxiety disorders 7.07% (p. 4)
McManus et al. 2016	Prevalence of anxiety disorders in England 5.9% (p. 38)
World Health Organization (WHO) 2017	Estimated global prevalence of anxiety disorders in women 4.6% Estimated global prevalence of anxiety disorders in men 2.6%
ScotPHO 2022	Estimated prevalence of anxiety disorders in Scotland 38 per 1000 or 14%

2.10.d Post Traumatic Stress Disorder (PTSD)

Two systematic reviews map the global prevalence of PTSD. Koenen et al. (2017) review of 26 World Mental Health Surveys, spanning 24 countries estimated that the lifetime global prevalence of PTSD within adults aged 18 years was 3.9% within the general population.

In Westernised countries, a similar prevalence of between 1.26% and 2.5% was found by Volkert et al. (2013) in a review of 25 studies of people aged 50 years and older. Whereas, a primary study in the Republic of Ireland, a country exposed to conflict, was estimated to have a prevalence rate of one in eight (Hyland et al. 2020). In the Irish study, Complex PTSD was estimated at 7.7%, associated with exposure to multiple traumas, often across the lifespan (Hyland et al. 2021, p. 649). Koenen et al. (2017) also found high global prevalence of PTSD of 5.6%

among populations exposed to trauma (p. 345). Meanwhile, the prevalence of PTSD within England in the Adult Psychiatric Morbidity survey was 4.4% (Fear et al. in McManus, et al. 2016).

Table 2.5: The prevalence of Post Traumatic Stress Disorder

The prevalence of Post Traumatic Stress Disorder (PTSD)	
Volkert et al. 2013	Prevalence of PTSD in older people aged 50 years plus in westernised countries 1.26% (95% CI 1.00 – 2.36%) Lifetime prevalence 2.5% (p. 345) n= 51,236) 25 studies
Koenen et al. 2017	Global prevalence of PTSD in adults (18 years and older) 26 World Mental Health Survey cross nationally in 24 countries is 3.9% Prevalence of PTSD in trauma exposed countries is 5.6% (p. 2260) (n= 71,083) Socially disadvantaged, younger female, on lower income and less educated were factors associated with risk of lifetime PTSD (p. 2260).
Hyland et al. 2020	Prevalence of PTSD in adults aged 18 years and over in the Republic of Ireland estimated at 12.1% (p. 655) Estimated 80% of Irish adults exposed to one trauma (p. 654). Complex PTSD 7.7%, or 1 in 8 Irish adults (p. 649) Primary study (n = 1200) Co morbidity PTSD + Generalised Anxiety Disorder (GAD) 25.5% Complex PTSD + GAD 49.4% (p. 654)
Fear et al; in Mc Manus et al. APMS England 2016	PTSD Civilian Checklist score 20 > Prevalence of PTSD in England estimated at 4.4% (p. 107) (n= 7500) 16 years + Six times more likely to have mental or emotional problem (p. 108)

2.10.e Alcohol Use Disorders

The global prevalence of alcohol use disorders is reported in three systematic review, namely, Whiteford et al. 2013, Lai et al. 2015 and Glantz et al. 2020, and one global World Health Organization report (2018). The breadth of surveys and data extends from 22 to 89 countries, Lai et al. (2015) and Whiteford et al. 2013, to 193 WHO member states, however, a further risk of bias in reporting, is that alcohol consumption is illegal in some countries, therefore will be under reported, this should be taken into account. The global prevalence of alcohol use disorders is estimated at between 8.6% and 10.2% in high income countries (Glantz et al. 2020).

The European prevalence of alcohol use disorders is reported in two systematic reviews and is estimated at between 3.4% to 11.7% for lifetime prevalence in Westernised countries, which includes 15 European countries (Wittchen et al.

2011, Volkert et al. 2013). The European prevalence can be further sub-grouped into 5.1% harmful use and 3.7% alcohol dependence (WHO 2018, p. 51). In Ireland, the prevalence rate of alcohol use disorders in a study of medical records was reported as 3.8% in urban areas and 4% in rural areas (McCombe et al. 2018, p. 86).

In England, Drummond et al. in McManus et al. (2016), report that 16.6% of all adults consumed alcohol at hazardous levels, with 27.9% of all men between 16 and 65 years identifying as hazardous drinkers, a decline from 2000 and 2014. (2016).

Table 2.6: The prevalence of alcohol use disorders

Prevalence of Alcohol Use Disorders (AUDs)	
Wittchen et al. 2011	European prevalence of alcohol use disorders, best estimate 3.4% (p. 666); 27 EU member countries + 3 Switzerland, Iceland and Norway Northern and Western European countries, not UK 2005 - 2010 (n= 247.5 million); Sample aged 14 years and older
Whiteford et al. 2013	Global Disability Adjusted Years (DALYs) Dalys 9.6% (7.7-11.8) (p. 4) 58 studies on alcohol use
Volkert et al. 2013	Prevalence of alcohol use disorders in 4 western countries is 0.96% Lifetime prevalence of alcohol use disorders is 11.71% (p. 345) From 15 countries; 2 North America and 13 European
Lai et al. 2015	Global comorbid alcohol use, anxiety and mood disorders in those aged 15 years plus has increased by 40% (p. 7); 22 countries
McCombe et al. 2018	Prevalence of alcohol use disorders in adults aged 55 years or older in Ireland 3.8% (p. 84); Urban areas 4%; Rural areas 2.9% (p. 86)
Glantz et al. 2020	Global prevalence of alcohol use disorders in adults, aged 18 years and older, Life time prevalence 8.6% (0.7 – 22.7%) 12 month prevalence 2.2% (0.1-5.9%) (p. 9) Low Income countries 9.9%; Middle Income countries 7.2%; High Income countries 10.2% (p. 11) Prevalence in men 14.1% Prevalence in women 3.4% (p. 11) World Mental Health surveys (n=29) conducted in 27 countries.
Drummond et al. in McManus et al. APMS England 2016	Prevalence of hazardous levels of alcohol consumption in England 16.6%. Prevalence for men 27.9% (p. 239) AUDIT score 8 > harm/hazard AUDIT score 20 > dependent
World Health Organization 2018	Prevalence of alcohol use disorders in Europe 8.8% Harmful consumption 5.1% Dependence 3.7% (p. 72) Global prevalence of Heavy Episodic Drinking, 60 grams > once per month 18.2% in those aged 15 years and older 26.5% (p. 51) 193 WHO member states, sample (n=3000 million) Risk of comorbid common mental disorder doubles and suicide risk increases by 37 times after heavy use (p. 10) Regional and per country, 200 alcohol related indicators, Harm per litre

2.10.f Drug use disorders

The prevalence of drug use disorders, referred to in some studies as substance use disorder is reported in five systematic reviews, Whiteford et al. (2013), Steel et al. (2014), Lai et al. (2015), Remes et al. (2016) and Degenhardt et al. (2019). These studies are based on the World Mental Health Surveys and Global Burden of Disease surveys. Similar to alcohol use, drug use is under reported due to the illegal status of drugs, therefore, there is an absence of data from many countries, this is acknowledged in the literature. The global prevalence of substance use disorders was estimated at between 3.5% to 11.8% (Whiteford et al. 2013, Steel et al. 2014, Degenhardt et al. 2019). Substance use disorders were reported in Degenhardt, et al. (2019) as usually preceded by a mental disorder in mid teen years to early twenties or co-morbid mental disorder, although an explanation is not given (Degenhardt et al. 2019, p. 109). While Lai, Cleary, Sitarthan and Hunt (2015) report a strong association between depression, anxiety disorders and substance use (p. 1).

The European prevalence of substance use disorders is reported in two systematic reviews, Wittchen, et al. (2011), Volkert, et al. (2013) and is estimated at between 0.1% to 1.8% in older studies. This prevalence rate increases to between 2.5% to 4.8%, in middle to high income countries (Degenhardt et al. 2019). In Ireland, one study reports prevalence, McCombe, et al. (2018) the prevalence rate was 3.8%, with patients in urban settings having a higher ratio or any disorder including substance misuse (p. 86).

In England, Roberts, in McManus, et al. (2016) reports that the prevalence of substance use disorders, particularly dependence was estimated at 3.1%, as many young men, up to 52.9%, between the ages of 25 years and 34 years have used drugs (p. 2).

In Scotland, the prevalence was estimated at 1.62%, within those who use drugs, heavy drug use was predicted prevalence of 13.1% for males and 6.5% for females (ScotPHO, 2019). These figures do not account for Scotland having the highest rate of drug related deaths in Europe in 2020, with 1,339 deaths of mostly young men, from urban deprived areas.

Table 2.7: The prevalence of substance use disorders

The prevalence of substance use disorders (SUDS)	
Wittchen et al. 2011	Best Estimate of drug use disorders in Europe 0.1% – 1.8% (opioid + cannabis) (p. 666) Aged 14 years plus (n= 247.5 million).
Whiteford et al. 2013	Estimated global prevalence of substance use disorders 7.7-11.8 (p. 4) 17258 country years of data, seven regions, does not sub-Saharan Africa
Volkert et al. 2013	Prevalence of substance use disorders in aged 50 years and above in Westernised countries 0.34%, with a life time prevalence of 0.19% (p. 339) (n= 51,236) 25 studies; Meta analysis
Steel et al. 2014	Pooled global prevalence of drug use disorders within 12 month 3.8%, with an estimated life time prevalence of 10.7% (p. 486) N = 827 673 Meta-analysis 1980 - 2013 174 WMHS surveys Across 63 countries, Asia, Europe, Oceania, Sub-Sahara Africa, Caribbean, Latin America, North Africa/ Middle East, North America
Lai et al. 2015	Global co morbidity between anxiety, mood disorders and substance use disorders has increased in prevalence to 42% between 1990- 2014 (p. 7) (n= 504,319) 7 Europe, North America, Aged 15 years, 22 studies, 16 countries Belgium, Italy, Spain, France, South Korea, Germany, Netherlands, USA, Singapore, Mexico, Britian, Brazil, Thai, Australia, Canada, Puerto Rico
Remes et al. 2016	Global addiction and comorbid anxiety 2% to 67% (p. 4); All ages International Synthesis of 48 reviews
McCombe et al. 2018	Estimated prevalence of substance use disorders in adults aged 55 years and above in Ireland is 3.8% Estimated prevalence of substance use disorders in adults 55 years and above in urban areas of Ireland is 4.6% Estimated prevalence of substance use disorders in adults aged 55 years and above in rural areas of Ireland is 0.9% (p. 86) 2015 (n= 74261)
Degenhardt et al. 2019	Life time global prevalence of Illicit drug use in adults (18 years and over), estimated at 24.8% (1.3 -66.8%) (p. 105) Prevalence of drug use disorders in lower income countries was 0.9%. Prevalence of drug use disorders in middle income countries was 2.5% Prevalence of drug use disorders in high income countries was 4.8% Lifetime prevalence across countries was 3.5% (p. 105) 12-month prevalence of drug use disorders was 0. 7% (p. 106) Onset mid-teens, more men than women, co morbid mental disorder precedes the onset of drug use disorders, importance of identifying a clinical profile to plan services (p. 110), 2001 – 2015 (n= 90,093), 25 countries 27 WMH surveys from 25 countries
Roberts et al. Chapter 11 in McManus et al. 2016 Adult Psychiatric Morbidity Study England	Prevalence of substance use disorders dependence in England those 16 years and over is estimated at 3.1% (p. 266). Use of drugs 35.4% men and 22.6% women had taken drugs in England (p. 266). Estimated 52.9% of young men between the ages of 25-44 years more liable to use drugs (p. 267) 1993-2014 (n= 7500)
ScotPHO 2022	Drug use in Scotland estimated in those 15 years to 64 year in 2012 – 2013 to be 1.74% Estimated prevalence among males 15 to 64 years in 2018 to 2019 was 1.85%. Estimated prevalence among females 15 to 64 years in 2018 to 2019 was 0.82%. Urban areas show greater prevalence of opioid dependence.

2.10.g Comorbidity within common mental disorders

Comorbidity within common mental disorders and comorbid alcohol use disorders or substance use disorders is reported in twelve studies, nine international studies, Whiteford, et al. (2013); Steel, et al. (2014), Lai, et al. (2015); Remes, Brayne, van der Linde, and Lafortune (2016); Rucsio et al. (2017), Degenhardt,

et al. (2019); Glantz, et al. (2020), McGrath, et al. (2020), Corcoran et al. (2021). Plus, three studies on prevalence in the UK namely, the English survey, McManus et al. (2016), the Scottish Survey, Wilson, et al. (2016) and one article on prevalence in England, Bebbington and McManus(2020).

The global prevalence rate of common mental disorders and comorbid alcohol use disorders or substance use disorders varies widely from between 7.4% in Whiteford, et al. (2013) to 67% in Remes, et al. (2016) (see Table 2.8). The general finding is that comorbidity is pervasive across all types of common mental disorder (McGrath et al. 2020). That under reporting of alcohol and substance use disorders in many countries, plus the over-representation of European and Westernised countries, may account for the wide variation in prevalence and high co-morbidity in Westernised countries.

In addition, the prevalence of PTSD and comorbid anxiety or depressive disorders is reported in two studies, namely Hyland, et al. (2020) and Corcoran, et al. (2021). In Hyland et al. (2020) Irish study, a prevalence rate for PTSD and generalised anxiety disorder (GAD) is reported as up to 25.5% and 49% for those with complex PTSD. Corcoran et al. (2021) reports that women in high risk groups including those with PTSD had a greater risk of having co-morbid depression.

In the UK, the prevalence rate of common mental disorders and comorbid alcohol use disorders or substance use disorders is reported as one in five adults, with up to one sixth of those with dependency reporting a comorbid common mental disorder (Robert, in APMS England 2016, p. 108).

Co-morbid anxiety and depressive disorder are reported as 'common mental disorder – Not otherwise specified' (CMD-NOS) or as mixed depression and anxiety disorder (MADD) in the Adult Psychiatric Morbidity Survey, England 2014. The global prevalence of comorbid anxiety and depressive disorders or mood disorders are reported between 7.4% and 63% (see Table 2.8) (Steel, et al. 2014, McGrath, et al. 2020). While in the UK studies, comorbidity between common mental disorders are recognised as the most prevalent mental disorder with between 7.8% and 14% of all common mental disorders reported across the UK

(Wilson et al. 2016, McManus et al. 2016, ScotPHO 2022). In addition, Bebbington and McManus report up to 25% or 1 in 4 people have a comorbid developmental disorder (p. 55).

Table 2.8: The prevalence of comorbidity within common mental disorders, alcohol use and drug use disorders

Co- morbidity within common mental disorders, alcohol use and substance use disorders	
Whiteford et al. 2013	Global prevalence of all mental disorder and substance uses disorders combined 7.4% (p. 5)
Steel et al. 2014	Global comorbid common mental disorder and substance use disorder 18.1% (p. 483). Lifetime prevalence 29.2% High Income Countries (HIC) 33.2% English speaking countries 39.7% (p. 484) Females higher prevalence of mood and anxiety disorders. Males' higher substance use disorders (p. 486)
Lai et al. 2015	Global comorbidity between anxiety, mood disorders and substance use disorders has increased in prevalence to 42% (p. 7) OR 1.532 (p. 7) 1990 – 2014 Aged 15 years. Bias towards western countries
Stansfeld, Clark, Bebbington, King, Jenkins and Hinchliffe (chpt 2) in 2016 APMS England Robert et al. Chpt 11	Cis-R score of 12 or more warrants primary care recognition (p. 42), 1 in 6 or 15.7% A quarter of those with comorbid alcohol or drug dependence receive treatment for emotional or mental health (p. 240). Comorbid chronic physical condition and common mental disorder 37.6% or 1 in 3. (p. 324). Six time more likely to have alcohol dependency and a mental or emotional problem (p. 108)
Remes et al. 2016	Global estimated addiction and comorbid anxiety prevalence between 2% to 67% (p. 4) All ages.
Ruscio et al. 2017	Global lifetime comorbid anxiety 81% (0.7%) with mood disorders 63% (0.9%) and other anxiety disorders 51.7% (0.9%).
Degenhardt et al. 2019	Global prevalence of Illicit drug use in adults (18 years and over), estimated at 24.8% (1.3 -66.8%) (p. 105) Comorbid mental disorder precedes the onset of drug use disorders, importance of identifying a clinical profile to plan services (p. 110) 2001 – 2015 (n= 90,093)
Bebbington and McManus 2020	UK England estimated prevalence 1 in 5 comorbid common mental disorder and substance use disorders. Plus, 1 in 4 comorbid common mental disorder and developmental disorder (p. 55)
Glantz et al. 2020	Global lifetime prevalence of common mental disorder and alcohol use disorders 43.9% (p. 1)
McGrath et al. 2020	Global prevalence of a comorbidity common mental disorder with another mental disorder 12.1% (p. 1). Comorbidity increase pervasive across all types of mental disorder (p. 6)
Hyland et al. 2020	Prevalence of PTSD in Republic of Ireland 12.1% (p. 655) Complex PTSD 7.7% (p. 649), Primary study (n = 1200). Co morbidity PTSD + Generalised Anxiety Disorder (GAD) 25.5% Complex PTSD + GAD 49.4% (p. 654)
Corcoran, Marinescu, Vogelsang et al. (2021)	Adult women had a higher risk of depression within 'high risk' sampling, including those with PTSD (p. 1052). Women 18 years + (n= 218 035)
ScotPHO 2022)	Any neurotic disorder in Scotland estimated 141 per 1000 of the population. Mixed depression and anxiety most prevalent in 68 cases per 1000 adults 6% Estimated prevalence of comorbid anxiety and depression in women 17%

2.10.h Demographic factors associated with common mental disorder, gender, age and race

Women are reported as having greater prevalence of common mental disorder in all global and national studies as reported in Dalgard et al. (2006). Higher rates of anxiety and PTSD found among women globally may be attributed to gender inequality, financial insecurity and exposure to more traumatic adverse life events (Koenen et al. 2017, Yang et al. 2021).

Men are reported as having higher proportion of alcohol and drug misuse disorders in all studies. Furthermore, members of the Lesbian, Gay, Bisexual, Transgender (LGBT) community are reported being at risk of developing common mental disorder (Remes Brayne, van der Linde, and Lafortune 2016). Under reporting within the LGBT community, may be accounted for by lack of inclusion through binary sex and gender coding within the survey methodologies.

Common mental disorder originating in childhood and adolescent are reported in seven studies, particularly anxiety disorders (Wittchen et al. 2011, Whiteford et al. 2013, Steele et al. 2014, Lai et al. 2015, Ruscio et al. 2017, Degenhardt et al. 2019, Yang et al. 2021). The onset of anxiety in childhood or teenage years is a predictor for common mental disorder in adulthood, plus PTSD is more prevalent in younger women (Yang et al. 2021, Steel et al. 2014, Koenen et al. 2017, p. 2260). Furthermore, working aged adults aged between 30 years and 65 years, have higher prevalence of common mental disorder across all studies, with depression and anxiety peaking during these years. The decline of common mental disorder in older adults over 70 years of age is reported in the some studies, yet, contested by others, who estimate that up to 28.9% of those over 80 years of age are at risk of depression (McCombe et al. 2018). Finally, black women living in England are reported as having greater risk of prevalence of common mental disorder, particularly depression (Stanfeld et al. in APMS England 2016, p. 57).

2.10.i Social-economic inequalities associated with common mental disorders, alcohol use and substance use disorders

Socio-economic inequalities are reported in eight global studies as associated with higher prevalence of common mental disorders with low income countries, or social disadvantage within medium and high income countries from unemployment, debt, housing, neighbourhood deprivation, adverse childhood experiences, bullying, trauma, low educational attainment, relationship instability, financial instability and co-morbidity (Wittchen, Jabobi, Rehm et al. 2011, Steel, Marnane, Iranpour, Chey et al. 2014, Remes, Brayne, van der Linde and Lafortune 2016; Rucio Hallion, Lim et al. 2017; Koenen, Ratanatharathorn, Ng et al. 2017; Degenhardt, Charlson, Ferrari et al. 2019, Hyland, Vallieres, Cloitres et al. 2020, Yang, Fang, Chen et al. 2021, Corcoran, Marinescu, Vogelsang et al. 2021. The English and Scottish national surveys both report social disadvantage as a risk factor associated with common mental disorder and alcohol or substance use disorder Wilson et al. 2016 and McManus et al. 2016).

2.10.j Common mental disorder and chronic physical ill health or health conditions

The shift of the global burden of disease to non-communicable disease is acknowledged by Whiteford et al. (2013), and 'cross cultural presentation of symptoms' (2013, p. 10), is acknowledged as not always detected by a linear definition of physical or mental disorder. The prevalence of chronic physical disease and comorbid common mental disorder, as defined by Remes et al. (2016) reports rates of comorbidity as follows: cardiovascular disease 10.9%, cancer and anxiety between 15% and 23.5%, rising to 79% in later stages, respiratory disease 32-57%, diabetes 15 to 73% (Remes, Brayne, van der Linde and Lafortune 2016, pp. 6–7). 'Doctor diagnosed health conditions' and General Health Questionnaire (GHQ 12) score of four or more, are reported in the Scottish Health Survey 2016 as follows, high blood pressure 19%, diabetes 15%, angina 25%, asthma 20%, Chronic Obstructive Pulmonary Disease (COPD) respiratory disorder 35% (Scottish Health Survey 2017 p. 60).

2.11 Methodologies used in the measurement of common mental disorders in national and international surveys

To address the second literature question, how have the prevalence of common mental disorders been measured in national and international surveys, a comparison of the included studies indicated that the gold standard for population mental health surveys is the use of structured diagnostic clinical interviews which require specially trained clinicians or researchers to administer. Clinical interviews with trained interviewers are the standard methodology used within sixteen studies, namely; Volkert, et al. 2013; Steel et al. 2014, Lai et al. 2015; Spiers, Qessam, Bebbington et al. 2016, Remes, Brayne, van der Linde and Lafortune 2016; Jorm, Patton, Brugha and Mojtabai 2017; Richter, Wall, Bruen and Whittington 2019; Rucsio Hallion, Lim et al. 2017; Koenen, Ratanatharathorn, Ng et al. 2017; Degenhardt, Charlson, Ferrari et al. 2019; Hyland, Vallieres, Cloitre et al. 2020; McGrath, Lim, Plana-Ripoll, Holtz et al. 2020; Bebbington and McManus 2020; Glantz, Bharat, Degenhardt et al. 2020; and Corcoran, Marinescu, Vogelsang et al. 2021. Plus the Adult Psychiatric Morbidity Survey England and the Scottish Health Survey 2016.

Validated self-reported screening instruments as the primary or secondary component of the methodology are reported in eight included studies (see Table 2.9).

Table 2.9: Self-reported symptoms questionnaires

Self-reported symptom questionnaires	
Baxter, Scott, Vos and Whiteford 2014	General Health Questionnaire (GHQ)
Remes, Brayne, van der Linde and Lafortune 2016	Generalised Anxiety Disorder Scale (GAD)
Jorm, Patton, Brugha and Mojtabai et al. 2017	Kessler Psychological Distress Scale (K10), Patient Health Questionnaire (PHQ)
Hyland, Vallieres, Cloitre et al. 2020	International Trauma Exposure Interview, Patient Health Questionnaire -PHQ-9 Generalised Anxiety Disorder GAD-7
Corcoran, Maricescu, Vogelsang, Cho Kim et al. 2021	Centre for Epidemiological Studies- Depression Scale
Wilson, Kellock, Adams and Langberg 2016 Scottish Health Survey 2014	General Health Questionnaire GHQ-12 Alcohol Use Disorders Identification Test AUDIT
McManus, Bebbington, Jenkins, Brugha et al. Chpt 2 2016	Alcohol Use Disorders Identification Test AUDIT Post Traumatic Stress Disorder Civilian Checklist PCLC-C
ScotPHO 2022 Report on Scottish Health Survey 2020	General Health Questionnaire GHQ - 12

2.12 The prevalence of common mental disorders within adult populations in remote and rural areas

To address the third literature review question, what is the prevalence of common mental disorders within adult populations in remote and rural populations. Only three studies report on regional variation, namely the Scottish Health Survey 2014 in Wilson et al. (2016), and the Scottish Health Survey and Prevalence of Problem Drug Use in Scotland 2015/2016 Estimates in ScotPHO 2022, plus McCombe et al. (2018) in the Republic of Ireland 2018. Higher prevalence of common mental disorder and alcohol and substance use disorders are reported in urban areas (see Table 2.10).

Table 2.10: Urban and rural variation reported in studies

Urban and Rural variation	
Wilson et al. 2016	Prevalence of common mental disorder in Scotland estimated at 15% Remote and rural areas estimated at 10%. Urban areas estimated prevalence is 17%
McCombe et al. 2018	Estimated prevalence of depression in Ireland 17.1% Urban areas 17.6% Rural areas 15.1% (p. 86) Estimated prevalence of anxiety in Ireland 11.3% Urban areas 12.9% Rural areas 5.4% (p. 86) Estimated prevalence of alcohol use disorders in Ireland 3.8% Urban areas 4% Rural areas 2.9% Estimated prevalence of substance use disorders in Ireland 3.8% Urban areas 4.6% Rural areas 0.9% (p. 86)
ScotPHO 2022	Drug use in the urban central and west coast account for 60% of all drug use in Scotland (p. 11)

2.13 The prevalence of common mental disorder within the adult population in the Falkland Islands

To address the fourth literature review question, no studies on the population of the Falklands were found except the 1979 review of medication records by King and Bleaney (1982). King and Bleaney (1982) report lower rates of neurotic conditions, 28.3 per 1000 population, one third lower than the UK, and higher rates of alcohol dependence, 13.2 per 1000 population, twice as high as UK estimates (King and Bleaney 1982, p.537). No other contemporary studies were found on prevalence of common mental disorder.

2.14 Chapter summary

This chapter set out to provide a scoping review and synthesis of the literature including systematic reviews, primary studies and grey literature and on the prevalence of common mental disorders, alcohol and drug use disorders in adult populations globally, within Europe and within the UK. The aim was to identify current knowledge and gaps in the literature.

Common mental disorders within the adult population based on national and international surveys remain highly prevalent with between one sixth and one third of the general adult population estimated to have a disorder in their life span. Variation in prevalence rates can be attributed to public mental health surveillance, with over representation of Westernised countries, therefore the true global prevalence may be hidden.

Anxiety disorders are reported with a global prevalence of between 2.3% and 16.6% and depressive disorders are reported at between 6.9% and 19%. There is increased evidence of co-morbid common mental disorders and anxiety, depression or PTSD. The prevalence of PTSD remains consistent globally, with between one in twenty people expected to experience PTSD in their lifespan. The prevalence of PTSD increases with exposure to trauma, including adverse childhood experiences, with an increased prevalence to one in eight of the population noted in some countries exposed to trauma.

The prevalence of alcohol use disorders varies greatly across the globe, but English speaking countries with similar cultural backgrounds have consistently higher levels of hazardous or harmful use of alcohol, with between one in six and one in four people drinking alcohol at levels deemed unsafe by public health recommendations, especially prevalent in men. The prevalence of drug use disorders is elusive due to the illegalities in surveillance, monitoring and reporting of drug use; however, it is estimated that between one in twenty of the adult population have problematic drug use, especially prevalent in men. Under reporting in countries where alcohol or drug use is illegal may help explain the wide variation between countries.

Comorbid alcohol or drug use disorders and common mental disorders are reported of high prevalence between 7.4% and 67%. This wide variation in prevalence rate, may in part be explained by the definition of common mental disorder, where common mental disorder- not otherwise specified, or mixed anxiety and depressive disorder, warrants a higher prevalence rate than either disorder alone. Furthermore, comorbidity of common mental disorder with an pre-existing common mental disorder are reported of high prevalence in the UK up to 14%.

Demographic factors which are associated with a higher prevalence of common mental disorder include gender, age, race, urban location and income. Furthermore, social deprivation, level of education, chronic physical health conditions are factors associated with increased prevalence.

The prevalence of common mental disorders has been measured in national and international surveys applying clinical structured interviews and self-reported measures. The prevalence of common mental disorders in rural populations compared with urban populations is that prevalence is considered higher in urban areas.

2.15 Implications

The review of the literature suggests that common mental disorders, alcohol and substance use disorders remain a global public health concern. That the body of knowledge on the prevalence of common mental disorders is extensive in many regions of the world, with a bias towards Westernised countries, yet is also limited for other regions and smaller nations. Many countries are underrepresented, those nations with possibly less resources for public health surveillance or where public mental health is not a priority.

Furthermore, the literature suggests that geographical variation, from urban, rural or remote rural settings, is rarely accounted for within national and international surveys. The implications are that the true prevalence of common mental disorders remains unknown within many communities who are

underrepresented. No studies were found on the prevalence rate of common mental disorders in UKOTs or the Falkland Islands.

As a remote and rural island community little is known about the prevalence of common mental disorder, alcohol and substance use disorders within the Falkland Islands. The need to map prevalence to inform public mental health policy and service provision within this community is a justification for this study.

Chapter 3: A scoping review of the screening and management of Common Mental Disorders in Primary Care

3.1 Introduction

This chapter presents the findings from a scoping review of the literature on primary care practitioners experience of screening and managing common mental disorders. This chapter explores the qualitative literature through conducting a structured search, appraising the studies and the themes that have emerged. Then synthesising these themes to address the literature review questions below and to identify any gaps in the literature.

1. What are primary care practitioners' perceptions of screening and managing common mental disorders in primary care practice?
2. What are the perceived challenges for primary care practitioners when screening and managing common mental disorders?
3. Are there any differences between urban, rural and remote rural primary care practitioners' experiences in the management of common mental disorders?

3.2 Literature search protocol

A scoping review was conducted applying Arksey and O'Malley's (2005) methodology, as scoping reviews are useful to map evidence across a broad range and type of literature, provide a descriptive summary and identify gaps in the literature. Furthermore, Pham et al. (2014) found that out of 344 scoping reviews identified in their review of scoping reviews, 74% addressed health topics, which require both depth and breadth (Pham, Rajic, Grieg., et al. 2014, p. 371). Applying a structured approach promotes transparency, credibility, dependability and confirmability, key ingredients for academic rigor in qualitative studies (McClellan, et al. 2020, p. 153). This review protocol has been structured using the Population, Exposure and Outcome (PEO) search strategy. PEO is widely used in qualitative research as it offers a broad structure to identifying and

exploring relationships between phenomena (Munn, et al. 2018). In this review, the population is primary care practitioners; exposure, is the relationship between primary care practitioners and their practice in management of common mental disorders; and finally, outcomes refer to the perceptions and experiences of primary care practitioners in the management common mental disorders.

The initial literature search was five years, namely 2011 until 2016. This timeframe coincided with the publication of the NICE Guidelines (2011a) for the identification of common mental disorders and pathways to care in 2011 (Kendrick and Pilling, 2012). The revised literature search was extended to 2022 for the write up of the thesis. Online databases PubMed (MEDLINE), PsychINFO, Web of Science and Cumulative Index to Nursing and Allied Health Literature (CINHAL) were searched for primary qualitative studies and systematic reviews of qualitative studies, as these databases have good efficacy for health-related qualitative studies (Brownson, Baker, Leet and Gillespie, 2011, McClean, Bray, de Viggiani et al. 2020).

Inclusion and exclusion criteria are presented in Table 3.1, with search terms (including Medical Subject Heading terms (MeSH) terms and Boolean operators) in Appendix 7, while the database search is reported in Appendix 8..

Table 3.1: Population Exposure and Outcome (PEO) literature search framework (Munn et al. 2018)

PEO framework: PHCT management of common mental disorder in general practice 2011-2022			
	Search terms	Inclusion Criteria	Exclusion Criteria
Population	PHCT practitioners working within the general practice setting/ primary care	UK studies, European, Australia and US studies, published in English	Countries which are culturally different from the UK and Western healthcare practice Not in English language
Exposure	Identification/ Screening/ treatment/ management of CMD in primary care practice	GP practices/ primary care Depression, anxiety and PTSD	Hospital settings/ emergency care/ specific population sub groups such as adolescents
Outcomes	Perceptions/ experiences/ attitudes of PHCT practitioners towards managing/ screening and treatment of CMD Output: evidence based practice barriers and facilitating factors, clinical guidelines for CMD	Peer reviewed studies Qualitative studies Mixed methods studies (which include a qualitative study) Systematic reviews of qualitative studies	Evaluation of IAPTs, or other specific treatment for CMD such as pharmacology Quantitative studies

In total, 232 articles were screened by title and abstract, of which 56 studies did not focus on common mental disorder, but reported Serious Mental Illness, ADHD and dementia screening; 74 studies included primary care practitioners working with specific population subgroups based on comorbidity with specific medical conditions, such as diabetes, pain management, or population groups such as adolescents or children or older people; 30 studies evaluated implementing professional education on the treatment of common mental disorder for primary care practitioners with no qualitative content or analysis; 41 studies were not in a comparable setting with the UK, 15 articles focused solely on patient experience of treatment for common mental disorder, and finally seven articles were quantitative surveys of primary care practitioners' experience. Ten studies were screened as full text of which, four studies were excluded and six studies, five primary qualitative studies and one systematic review are included in this scoping review. The Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) illustrates the screening process (Page, Mckenzie, Bussuyt, Boutron et al. 2020). A summary of the ten studies screened by full text is found in Appendix 9, while a summary of the six included studies is found in Appendix 12.

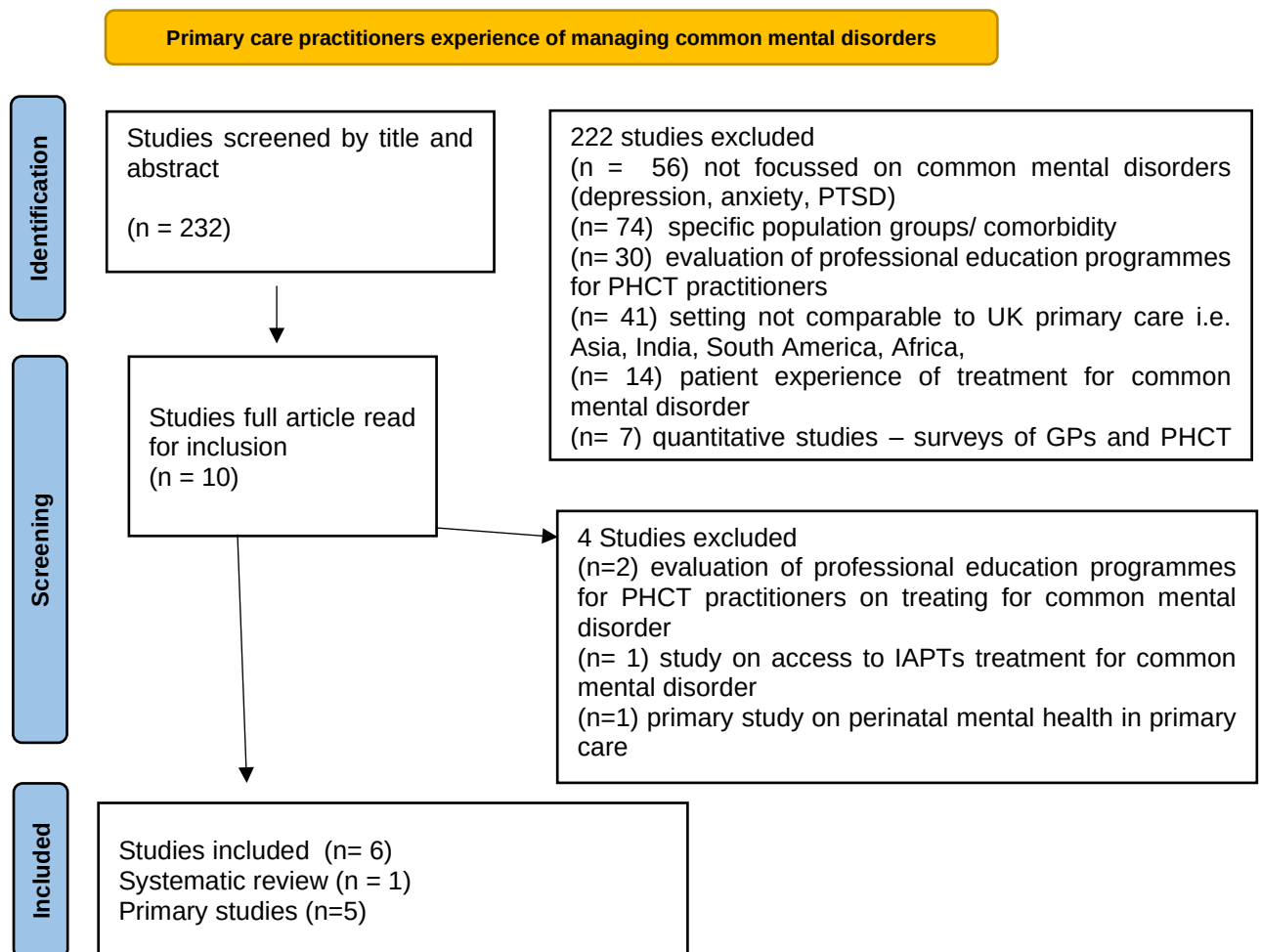


Figure 3.1: PRISMA: primary care practitioners experience of managing of managing common mental disorders

3.3 Reviewing the qualitative studies

The Critical Appraisal Skills Programme (CASP) checklist was applied to appraise the quality of the five qualitative studies (see Appendix 10) and the systematic review (see Appendix 11) (CASP 2024).

In addition to CASP checklists, reviewing the quality of the five primary studies is guided by Greenhalgh checklist for qualitative studies (2014) which critiques the research question and the fit of a qualitative approach to address the question, transparency within the sample selection, namely characteristics and selection process. Thereafter, an explanation of the researcher's perspective and how this may have influenced the study, with a detailed description of the methodology and analysis, plus quality control measures, such as who was involved and what

system if any was applied in the analysis and formulation of the results. Finally, are the findings credible, do they have clinical implications, are the conclusions justified and are they transferable to other clinical settings (Greenhalgh 2014, p. 249). The systematic review of UK qualitative studies Barley, Murray, Walters and Tylee (2011) is appraised with Greenhalgh's checklist for systematic reviews (see Appendix 11).

3.4 Data extraction methods

Data extraction applies the Population, Exposure and Outcome (PEO) framework to address the literature review questions. Outcomes are then presented as author identified themes, while the quality of the studies is further appraised applying Greenhalgh 2014 (See Appendix 12). Comments note distinctions between urban and rural settings, the use of screening questionnaires for common mental disorder in primary care and concurrent drug or alcohol disorders.

3.5 Synthesis of the literature

The literature is primarily summarised using a narrative approach and addressing each of the research questions posed above, the experience of primary care in managing common mental disorders; the perceived challenges of managing common mental disorders and, any differences in their experiences found across rural and urban practice. This fits with the scoping review methodology. However, the gaps identified in the literature in relation to the lack of focus beyond depression in primary care and the lack of knowledge of remote and rural primary care practitioner experiences, indicated that a qualitative exploration of primary care practitioner experiences in the Falkland Islands would form part of this thesis. To that end, I wanted to conduct a synthesis of the themes in the literature that would be more in line with an 'integrated qualitative evidence synthesis', where data or themes are aggregated to use this knowledge to help in the analytical insights of my own proposed dataset.

This synthesis involved integrating the thirty-six themes identified in the five primary studies and the systematic review. Thematic synthesis required coding the analytic themes described in the six studies, condensing and recoding those themes through the ‘translation of concepts’ into new themes (Thomas and Harden 2008., p.5). This is different from the second approach to qualitative evidence synthesis, the ‘interpretive synthesis’ which involves an inductive approach to interpreting the data, as described by Noblit and Hare (1988), but is more commonly conducted using meta-ethnography.

The secondary approach to synthesising the qualitative data from the studies is an unusual addition to a scoping review and more in line with a qualitative evidence synthesis. However, there are examples of scoping reviews which have also added or embedded a separate qualitative evidence synthesis (Paterson, Leduc and Maxwell et al. 2024). This afforded me the opportunity to expand my evidence and qualitative skills without sacrificing the conduct of the scoping review at the same time. To further enhance my evidence synthesis skills, I also used this an opportunity to conduct a quality appraisal of the included papers, a further element which is not usually conducted as part of a scoping review. This allowed me to comment on themes if they were derived from poor quality studies. The results of the quality appraisal are presented in Appendices 12 and 13.

A narrative summary of the scoping review studies is presented in Appendix 14, followed by my integrative qualitative evidence synthesis. Thereafter the literature review questions, namely, the experience of primary care practitioners in screening and managing common mental disorders, perceived challenges and finally, identify differences between rural or urban primary care practice, are addressed before the concluding chapter summary.

3.6 Narrative review of the qualitative studies

In total, two primary studies were found which were based in the UK, namely, Geraghty, Beavis, Williams et al. (2019), and Karasz, Dowrick, Byng et al. (2011) although the latter also includes samples from the US and the Netherland. Neither focus on rural or urban differences found in primary care practice,

therefore, two Canadian studies, Fleury, Imboua, Aube, Farnad et al. (2012) and Roberge, Hudon, Pavilanis, Beaulieu et al. (2016), plus one Australian study were included namely, Chakraborty, Dermentzis, Brynath et al. (2020). In addition, one UK systematic review of 17 studies by Barley, Murray, Walters and Tylee (2011) is included, a systematic review which includes seven qualitative studies published between 2001 and 2007 (Barley et al. 2011).

Study one: Geraghty, Santer, Beavis, Williams et al. (2019) is a qualitative study exploring GPs' perceptions of the distinctions between emotional distress and depression. The study was conducted in Wessex area of England and the authors targeted practices with different sizes of practice and deprivation index. Twenty-one GPs were sampled across 19 practices, the practice size ranged from 3400 to 17,829 and median range of deprivation was 14.1. Eleven GPs described an urban practice setting, while ten GPs described a rural practice setting. The median length of experience practicing as a GP was 16 years, and GPs' mean age was 45 years old.. Furthermore, twelve males and nine females were interviewed. Eight themes were identified to differentiate emotional distress from depression (see Appendix 12).

The study suggested that GPs' perceptions of depression showed no clear distinction between symptoms of emotional distress that what was construed as proper or biological depression that occurs independent from life events. The study suggests development of a framework that considers complexity and duration, not just a simplistic assessment of symptoms and screening scores, i.e., a full psycho-social assessment as recommended in NICE guidelines is required (2011a). The use of language and how concepts are co-constructed within GP patient consultations is a recommendation for further research. Applying screening tools such as the Patient Health Questionnaire (PHQ) or Generalised Anxiety Disorder questionnaire (GAD) did not influence outcomes, did not predict formal diagnosis or treatment, therefore, GP's screening, assessment and diagnosis of depression did not adhere to clinical guidelines. The strengths of this study are that the sample characteristics, methods and analysis are described, however, limitations are that the authors do not indicate what percentage of GPs in the Wessex catchment area were sampled, therefore the findings may not be

transferable to other settings. The study claims to target a sample in ten rural and eleven urban primary care practice areas but describes the sample and results as 'relatively homogenous' with no distinctions between urban and rural localities (p. 6).

Study two: Karasz, Dowrick, Byng, Buszewicz et al. (2012) is a study of two datasets from the UK, one from the US and one from the Netherlands on doctor and patient interactions and the influence of these conversations on diagnosing and treating depression. Applying a micro analysis approach, 30 transcripts of doctor and patient conversations were analysed. The authors do not distinguish between urban or rural practice settings in any country. The authors describe the gender, nationality and age of patients, but not describe the characteristics of the doctors. Five themes were identified in this study (see Appendix 12).

The findings suggest that doctor patient communications are outcome orientated, often directed by the patient with the doctor following the social cues in both the content and implied beliefs in that conversation. Clinical guidelines for the management of depression were not fully implemented. Psychological therapies considered the first line treatment for mild to moderate depression were not considered in the study, where the focus was on medication alone. Beliefs about depression influence both patients' and doctors' interactions and the decision-making process about whether treatment is offered or not. For example, if patients articulate their symptoms as an effect of social circumstances, then treatment is not offered. Being attuned to their patients' beliefs about depression, was a major factor to predict treatment being offered. A strength of this study is the use of doctor and patient interactions in the transcribed interviews, not only opinions. Also, UK data is included in the study, although only 10 out of the 30 transcribes were UK based. A limitation of the study is that no demographic characteristics of the doctors are included in the study. Risk of bias is possible due to the small sample size, 30 transcripts, extracted from a large multi-national secondary qualitative data available (n= 3710).

Study three: Fleury, Imboua, Aube, Farnad and Lambert (2012) is a mixed methods study combining a questionnaire and interview with 60 GPs practicing

within five regions of Quebec, Canada. GPs characteristics are given for gender, thirty-one females and twenty-nine male doctors, and the average age of the sample was between 45-59 years of age. The study states that 75% of the sample worked in more than one setting, up to four settings. Practice characteristics were not included and there is no reference to urban or rural practice settings. Five themes were identified in the study (see Appendix 12).

The findings suggest that twenty percent of all patients had a mental disorder, 35% of those with a common mental disorder and 52% of those with a serious mental disorder also had a co-morbidity physical disorder and, or a substance use disorder (p. 5). The study also suggests that clinician factors, namely GPs personal characteristics, interest in mental disorder and knowledge of disorders, were facilitating factors in treating mental disorders. System barriers including clinical settings, were lack of treatment options available, lack of a single point of access to services, long waiting times for treatment were obstacles. Shared care arrangements between primary care and secondary mental health services were considered underdeveloped (p. 10). Recommendations for improvements include practical changes to the timing and frequency of appointments. Improving access to appointments, having a stepped-care interprofessional approach to treatment. A strength of the study is that although urban and rural practice settings were not identified in the characteristics, differences in rural practice were highlighted within the themes. Limitations of the study are lack of description of the range of comorbid mental disorders, physical disorders and substance use disorders. Furthermore, the study does not critique the limitations within the study, there is no discussion of the interviewers' influence. Outcomes may not be transferable to other clinical settings.

Study four: Roberge, Hudon, Pavilanis, Beaulieu et al. (2016) is a qualitative study of the perceived needs of patients with common mental disorder and chronic disease in Quebec, Canada. Ten patients and eighteen multi-disciplinary practitioners were selected from three practice settings. This included ten doctors, six nurses, one psychologist and one social worker. 83% were female, the average age of participants was between 30 – 39 years of age and 56% had over ten years of experience in their profession. Two settings were described as

urban with 12,000 patients and semi-urban with 10,000 patients. The third setting was described as an urban hospital setting with 30,000 patients. Four themes were identified in the study (see Appendix 12). A strength of the study is the inclusion of nurses. Furthermore, there are many useful insights into an increasing problem of comorbidity. A limitation of the study is that the findings within the Canadian health care system may not be transferability to other settings.

Study five: Chakraborty, Dermentzis, Brijnath, Ivey and Mazza (2020) is a qualitative study of GPs clinical challenges in diagnosing and managing work related common mental disorder in Australia. Participants were purposively sampled by geographic location and snowballing, out of 29,000 GPs, twenty-five were interviewed, and forty-one health professionals. The gender of the sample is not described, but ages range 28 to 69 years, and they were from all territories except the Australian Capital Territory. Practice settings were described as nine rural practices, with between 10,000 and 100,000 population, and sixteen metropolitan practices with over 100,000 population. The gender of participants is not described. Eight themes were identified in the study (see Appendix 12).

Recommendations include separating the GP role from the occupational management role. Having clear procedures and time frames for managing work related mental health issues, developing ways to talk about mental health and co-morbid physical health problems. Rural practice had the advantage of GPs' knowing the community and the workplace. A strength of the study is the differences found between rural practice and urban practice as a focus of the study. A limitation of the study is that the primary focus of the study is the management of work related common mental disorder in Australia, which may have limited relevance for management in other countries. Plus, there are inconsistencies in the findings between this study and other studies, as this study does not report that dual diagnosis of common mental disorders and substance misuse is prevalent (p. 8).

Study 6: Barely, Murray, Walters and Tylee (2011) is a systematic review of UK GPs and practice nurses' attitudes towards the management of depression.

Twenty-seven studies are included in the review, with seven qualitative studies and ten quantitative studies. The sample includes 2,738 GPs and 476 nurses with characteristics of gender, age and length of professional experience reported. There is no description of rural or urban practice settings. The study describes twenty-six first order constructs, which were reconfigured into seven second order constructs or themes (see Appendix 12). The findings suggest clinician factors influence managing depression including understanding, attitudes, training, stigma and reluctance to talk about depression. Similarly, system barriers which influence managing depression include lack of interprofessional working and limited access to services. Furthermore, patient barriers include attitudes and stigma, that impede the management of depression in primary care. Co-morbid physical illness and depression was recognised as a research interest and stepped or collaborative care suggested as a way forward. The management of depression was recognised as a complex clinical issue, with depression seen as both a clinical disorder and a psycho-social consequence of life experiences. A strength of the study is that it is a UK study, and it acknowledges the researchers influence on the selection and synthesis of studies. A limitation is a risk of bias in the selection of included studies, ie .only those that considered the ‘whole depression management process’ were included (p.7), this is acknowledged in the study. Furthermore, there is no indication of rural or urban practice settings identified in the study.

3.7 Thematic synthesis of themes from the included studies

Thematic analysis and synthesis use both inductive and deductive coding based on key concepts emerging within the literature. The process of recoding enables interpretation and meaning to emerge as core concepts beyond the descriptive themes identified in the primary studies (see Appendices 14 and 15).

Thematic synthesis carries a risk of bias, due to the risk of transferring concepts into new concepts “where they do not belong”, especially as interpretation was conducted by one reviewer (Figure 3.2, Thomas and Harden 2008, p. 8). Transparency in the process is required to validate interpretation. For example,

the analytic theme, *Understanding and diagnosing depression when it is viewed as a response to life events*, was devised from eight themes from four studies.

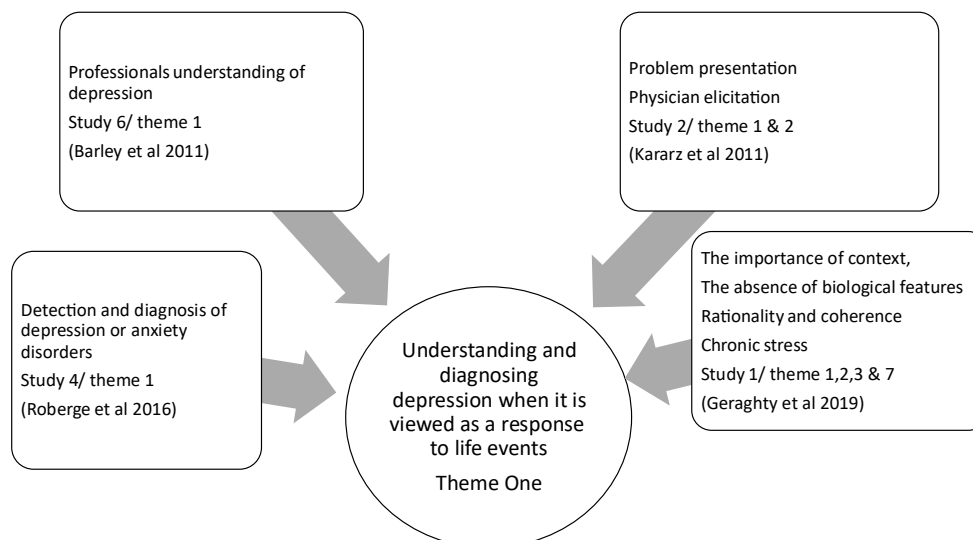


Figure 3.2: Example of thematic synthesis applied within this literature review (Thomas and Harden 2008)

In addition, condensing similar themes across the six studies to give meaning, was challenging as some descriptive themes contained many concepts that related to other themes. For example, ‘physician elicitation’ in Karasz et al. (2011) (Figure 3.3), relates to doctors’ conversations and enquiries about their patients’ symptoms, however, physician elicitation also described the social concept of depression, the medical model of depression and the impact of each model on diagnosis and treatment, therefore, access to treatment. Furthermore, the impact of patients’ discussions with their GPs in influencing the outcome of consultations, the implications of clinical guidelines, enquiring about no more than three symptoms when the clinical recommendation is five symptoms, plus, stigma experienced by both patients and their GPs in the language they use within their interactions to talk about mental health. These concepts overlap with themes from other studies, which are synthesised into the twelve themes (see Appendix 13).

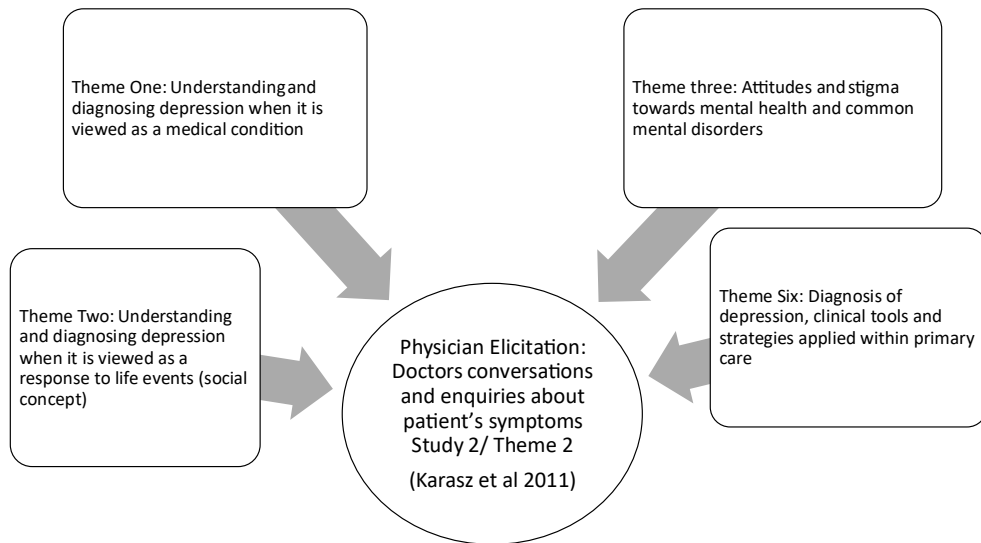


Figure 3.3: Example of a descriptive theme (Karasz, 2011) and how this relates to four other themes found in the literature

3.7.a Theme 1: Understanding and diagnosing depression when viewed as a response to life events

This theme was identified within four studies. Where GPs' perception of symptoms associated with emotional distress in response to life events is normalised and this then impacts the offer of treatment for depression (Karasz et al. 2011, Geraghty et al. 2019, Roberge et al. 2016, and Barley et al. 2011).

3.7.b Theme 2: Understanding and diagnosing depression when viewed as a medical condition

Three studies describe a medical model of depression. The medical view of depression is seen to positively influences treatment, yet in contrast, differentiating between emotional distress and clinical depression is seen as a challenge, questioning the concept of depression as a clinical disorder (Geraghty et al. 2019, Karasz et al. 2011, Barley et al. 2011).

3.7.c Theme 3: Attitudes and stigma towards mental health and common mental disorders

Five studies describe stigma. That negative attitudes towards common mental disorder are a deterrent in both help seeking and help giving. Patients' own stigma, and fear of being labelled by their GP inhibits discussion, while clinicians'

reluctance to talk about mental health is a barrier to treatment (Karasz et al. 2011, Geraghty et al. 2019, Chakraborty et al. 2020, Roberge et al. 2016 and Barley et al. 2011).

3.7.d Theme 4: Liaison between PHCT professionals in the management of common mental disorders

Four studies reported collaborative working within the PHCT. That splitting clinical roles to manage patient care and working more closely with practice nurses may be a more effectively strategy when providing treatment (Geraghty et al. 2019, Roberge et al. 2016, Barley et al. 2011 and Chakraborty et al. 2020).

3.7.e Theme 5: Liaison between PHCT and secondary care services in the management of common mental disorder

Access and collaboration in shared care arrangements with secondary care services was discussed within four studies, with ineffective access routes, long waiting times, ineffective communication and lack of access to specialist advice given as concerns (Fluery et al. 2016, Chakraborty et al. 2020, Roberge et al. 2016 and Barley et al. 2011).

3.7.f Theme 6: Diagnosis of depression, clinical tools, and strategies for primary care practice

Four studies describe diagnostic tools and algorithms for assessment criteria. With the selection, use and interpretation of screening questionnaires, use of structured clinical assessment criteria, plus management strategies including scheduling appointments, planned follow up as issues (Karasz et al. 2011, Fluery et al. 2016, Geraghty et al. 2019 and Chakraborty et al. 2020).

3.7.g Theme 7: Treatment for common mental disorders – Psychological Therapies

Three studies describe lack of access to psychological therapies (Fleury et al. 2016, Geraghty et al. 2019 and Barley et al. 2011).

3.7.h Theme 8: Treatment for common mental disorders – Pharmacology

All six studies, refer to medication as a treatment for common mental disorder, while concerns about poly-pharmacy are also raised.

3.7.i Theme 9: Treatment for common mental disorders – Psychoeducation, self-help, and group therapies

Two studies describe other means of treating common mental disorders through psycho-education, or access to other therapies, neither study suggests the effectiveness of other forms of treatments (Karasz et al. 2011 and Barley et al. 2011).

3.7.j Theme 10: The role of clinical guidelines in managing and treating common mental disorders in primary care

All six studies refer to an awareness of clinical guidelines yet suggest inconsistent adherence to clinical guidelines. While Chakraborty et al. (2020) suggests that guidelines are challenging to implement when dealing with complex patients with co-morbidity and polypharmacy.

3.7.k Theme 11: Managing common mental disorders in rural primary care practice

Three studies report rural practice in the Canadian and Australian context. Lack of access to specialist services was seen as an incentive to develop mental health competencies in three studies. Plus, advantages were knowing the community, which contrast with the challenges of managing professional and personal boundaries in a small community (Fleury et al. 2016, Roberge et al. 2016, Chakraborty et al. 2020).

3.7.l Theme 12: Managing common mental disorders and co-morbid medical conditions

This theme was identified in three studies, recognising comorbidity as a clinical concern, and recommended more research into older patients with multi co-morbidities. Fleury et al. (2016), describes 35% of patients with common mental

disorder also having physical ailments, and that GPs treated both mental and physical disorders in 90% of all cases. Chakraborty et al. (2020) describes the challenge of discussing mental health and physical health, concluding that there is a gap in published clinical tools to support GPs in managing multi-morbidity. That with an ageing population and chronic physical disease, co-morbidity was expected. Polypharmacy was a specific concern for treatment of multiple conditions (Geraghty et al. 2019, Fleury et al. 2016 and Chakraborty et al. 2020).

3.8 Addressing the literature review questions

Having synthesised and recoded the themes that have emerged from the literature. The final section of the chapter addresses the three literature review questions as follows:

3.8.a Question One: What are primary care practitioners perceptions of screening and managing common mental disorders in their practice?

PHCT practitioners' expectations of their role in managing common mental disorder were discussed in three studies with both negative and positive perceptions expressed (Fluery et al. 2012, Barley et al. 2011, Geraghty et al. 2019). Time constraints and a high patient workload negatively influenced GPs' perceptions of their role in detecting and treating depression (Geraghty et al. 2011, Fluery et al. 2012). Both Geraghty (2011) and Fluery (2012) highlight GP's and positive perceptions of their role in detecting and treating common mental disorder as either routine treatment in primary care or as an extended role, this influenced decisions and outcomes. Dealing with emotional distress was considered as a valued role, with listening and signposting viewed as core function within that role (Geraghty et al. 2019, Fluery et al. 2012, Barley et al. 2011). In contrast, dealing with emotional distress was seen as an additional role for some GPs, where the context of the emotional distress was a factor, i.e., when managing a patient with cancer, dealing with emotional distress was an accepted role, whereas, in other circumstances GPs viewed themselves as 'far too busy to deal with upset' (Geraghty et al. 2019, p. 5).

Roberge et al. (2016) raised the challenge of chronic disease management and co-morbidity with common mental disorder, where the risk of mis-diagnosis and missed diagnosis increased. For example, when patients were in the 'grey zone' presenting with both physical health problems warranting immediate attention which detracts from paying attention to the 'nuances' of mental health needs (Roberge et al. 2016, p. 6). Furthermore, working in a rural practice where a conflict of interest may arise, when living in close proximity and treating a patient for a work-related illness, while being friends with the employer, is an additional challenge (Chakraborty et al. 2020, p. 7).

3.8.a.i Consultation and interaction between primary care practitioners and their patients

The importance of PHCT and patient interactions was raised in three studies (Karasz et al. 2011, Barley et al. 2011 and Roberge et al. 2016). Reluctance to ask or talk about mental health, lack of emotional literacy to express their needs, the need to develop trust and rapport before asking about mental health and the impact of stigma and beliefs about mental health, all impacted on the direction of the consultation and the decisions made (Karasz et al. 2011, Barley et al. 2011, Roberge et al. 2016). GP interactions with their patients are described as goal orientated and patients who do not describe their symptoms clearly were found to have different treatment outcomes, with situational presenters not being offered treatment (Karasz et al. 2011).

Patients' reluctance to talk to GPs about their mental health was found in four studies where stigma and negative beliefs about mental disorders affect patients willingness to talk (Barley et al. 2011, Roberge et al. 2016, Geraghty et al. 2019, Chakraborty et al. 2020). If patients chose not to talk about their mental health and practitioners chose not to ask about their patients' mental health, the risk of missed diagnosis of common mental disorder remains high. Karasz et al. (2011) found that GPs only asked about three symptoms or less, not five symptoms as recommended in the DSM criteria (Karasz et al. 201, p. 4).

3.8. a.ii Beliefs and attitudes towards the diagnosis of common mental disorder

Distinguishing clinical depression from the social construct of depression or emotional distress in response to life events was raised in three studies, Geraghty et al. 2019, Barley et al. 2011 and Chakraborty et al. 2020. Beliefs about depression influenced how people presented and the way that PHCT practitioners perceived and applied their clinical judgement. For example, Geraghty (2019) reports negative descriptions such as 'frequent fliers' referring to repeat attenders with mental disorder and 'shit life syndrome' referring to people living with deprivation and low income (p. 5).

Conceptualisation of depression and diagnosis varies within studies and the continuum of symptoms from emotional distress to clinical disorder is interpreted both objectively and subjectively. For example, classification of depression as a cluster of symptoms may create confusion rather than simplify the recognition of depression, due to the severity of symptoms on the continuum, and the context of the patient's presentation, whether symptoms present in the context of current life stress. Clusters of symptoms as a diagnostic tool may also miss those who are asymptomatic, as identified in Karasz et al. (2011). Within the 30 transcribes in Karasz et al (2011) situational presenters, those who related their symptoms to a life event, were offered medication two out of eleven times, while mixed presenters, those who spoke about symptoms and life events were offered medication in six out of ten occasions, by comparison, symptom presenters, who spoke only about symptoms, were offered medication in eight out of nine occasions (Geraghty et al. 2021, Karasz et al. 2011, p. 3). Overall, studies found that practitioners were confident with detecting common mental disorders using clinical intuition, but few clinicians used clinical tools (Fleury et al. 2012).

3.8.a.iii Screening and diagnosis of Common Mental Disorder

Lack of screening, inconsistent screening and reluctance to screen were raised in four studies (Karasz et al. 2011, Roberge et al. 2016, Geraghty et al. 2019 and Chakraborty et al. 2020). Furthermore, the appropriateness of screening instruments and interpretation of results as a measure of severity was questioned

in several studies, especially where mild depression occurred or, where a situational crisis would generate a temporary high score. Roberge et al. 2016 raised the issue of similar symptoms presenting in chronic disease and common mental disorder such as fatigue or insomnia, noting that symptoms can be masked, be covert, 'welcome to the wonderful world of the grey zone' (C12_FMU_1,MD, Roberge et al. 2016, p. 6) and that the physical condition often gets the attention and focus within the consultation (p. 5). Annual reviews which include a mental health screening and forming long term clinician and patient relationships were proposed as ways to improve detection.

3.8.a.iv *Implementing Clinical Guidelines*

Challenges around implementing Clinical Guidelines (CG) were raised in two studies, with lack of knowledge and additional training needs cited (Chakraborty et al. 2020, Barley et al. 2011). Two studies noted that GPs and practice nurses' skills and awareness of common mental disorder varied greatly from limited knowledge, training and involvement, to nurses taking the lead where co-morbid chronic disease management existed (Fleury et al. 2012, Barley et al 2011). Clinical guidelines have not achieved clarity in the role of primary care practitioners especially in dealing with patients' emotional distress, life problems, chronic stress, mild symptoms and comorbid health conditions (Geraghty et al. 2019, Karasz et al. 2011). Treatment options for managing common mental disorders can be limited and are perceived as unhelpful by both patients and GPs alike (Chakraborty et al. 2020, Roberge et al. 2016). In general, the impression is that common mental disorders remains poorly understood and are worthy of further exploration.

3.8.a.v *Treatment: medication, psychosocial and psychological therapies*

GPs' negative perceptions of the efficacy of prescribing medication to treat depression, and patients' negative perceptions were highlighted in three studies (Fluery et al. 2012, Roberge et al. 2016, Chakraborty et al. 2020). Polarised opinions about anti-depressants where they are viewed by both clinicians' and patients' as either the last resort, or the easy option were found. Furthermore,

GPs questioned when to prescribe medication and what to prescribe (Chakraborty et al. 2020). Roberge et al. 2016 also raises the issue of reluctance to prescribe to patients' with poly-pharmacy to reduce risks of drug interactions.

Limited availability for psychosocial and psychological treatment options was reported in four studies, namely, Barley et al. 2011, Fluery et al. 2012, Roberge et al. 2016, Chakraborty et al. 2020. Plus the acceptability of treatments offered was discussed by Roberge et al. 2016. The way services are offered, such as walk in clinics only with no capacity to take on patients, lengthy waiting times, constraints on time and self-referral were perceived as barriers to treatment (Barley et al. 2011; Fluery et al. 2012).

3.8.a.vi The interphase between primary care and mental health services

A poor relationship between primary and secondary care services and lack of interprofessional collaboration was highlighted in three studies, Barley et al. 2011, Roberge et al. 2016, Charkaborty et al. 2020. Whether seeking access to psychological therapies, advice on medication or a psychiatric opinion, the lack of access to secondary care was seen a problem. Roberge et al. 2016 describe where patients may wait up to seven months to be seen or not seen at all 'unless in a crisis' (p. 7).

3.9 Summary of primary care practitioners' experiences of screening and managing common mental disorders

Primary care practitioners' perceptions of screening and managing common mental disorders are based on predominately GPs views of depression, not practice nurses or other practitioners. Furthermore, other common mental disorders such as anxiety are not found in the literature. Although evidence of screening and managing common mental disorder confidently is conveyed by the GPs within the studies, in contrast, uncertainty remains around understanding depression, screening, diagnosing and talking about common mental disorders with their patients (Geraghty et al. 2019, Karasz et al. 2011). GPs initiating conversations, acknowledging personal held beliefs about the concept of depression and the efficacy of treatment, plus, patient beliefs about the construct

of depression in the context of their lives and stigma around having a mental disorder, are complex psycho-social interactions. Furthermore, that following clinical guidelines in the screening, diagnosing and treatment of common mental disorder remain a challenge within primary care (Barley et al. 2011, Karasz et al. 2011).

3.9.a Question two: What are the perceived challenges for PHCT practitioners when screening and managing common mental disorders found within clinical practice: barriers and facilitating factors

Primary care practitioners perceive challenges within their clinical practice when screening and managing common mental disorders. These challenges are presented as barriers and facilitating factors to address the second question. Suggestions identified to counteract these challenges are described below:

3.9.a.i Barriers

Barriers include practitioners' knowledge and experience of managing common mental disorders, which is found in five studies, namely, Barley et al. 2011, Karasz et al. 2011, Fluery et al. 2012, Geraghty et al. 2019 and Chakraborty et al. 2020. Wide variation is found between primary care practitioners who have a 'keen interest' and value their treatment of common mental disorders (Fluery et al. 2012, p. 5) and those who do not share those views 'far too busy to deal with people who are upset' (Geraghty et al. 2019, p. 5).

Knowledge, experience and interest in managing common mental disorders are influenced by clinician's attitudes, stigma and views about the concept of depression as a medical or social construct are found across five studies (Barley et al. 2011, Geraghty et al. 2011; Karasz et al. 2011; Roberge et al. 2016; Charkaborty et al. 2020). The inherent concept of depression as a clinical condition is considered complex, especially when physical health conditions are considered parallel to symptoms of common mental disorders.

Patients' own self-stigma, with a reluctance to be labelled as having a mental illness, plus, their inability to identify and articulate their mental health concerns

were further factors which influenced consultation outcomes. These barriers were identified in four studies (Barley et al. 2011, Karasz et al. 2011, Roberge et al. 2016, Charkaborty et al. 2020).

Clinicians' lack of knowledge of clinical guidelines and how to apply them was identified in three studies (Barley et al. 2011, Karasz et al. 2011 and Roberge et al. 2016). With inconsistent use of screening tools and inconsistent application of diagnostic criteria, enquiring about three symptoms not five as recommended (Barley et al. 2011 (Karasz et al. 2011). Lack of clinical knowledge is in contrast to a low uptake of training when it was available (Barley et al. 2011).

Lack of access to secondary services, specialist advice, psycho-social and psychological therapies and long waiting lists on accessing treatment are identified in four studies (Barley et al. 2011, Fluery et al. 2012, Geraghty et al. 2019, Chakraborty et al. 2020). Knowing when to refer to secondary services was another barrier (Roberge et al. 2016). Shared care between primary care and secondary care was considered underdeveloped (Fluery et al. 2012 and Chakraborty et al. 2020), while frustration at long waiting times and crisis management only was noted (Roberge et al. 2016).

3.9.a.ii *Facilitating factors*

Facilitating factors include, PHCT practitioners interest in common mental disorders identified in three studies (Barley et al. 2011, Fluery et al. 2012 and Geraghty et al. 2019. For example, GPs report valuing their role as a 'neutral sounding board' (Geraghty et al. 2019, p. 5). In addition, adopting a patient-centred holistic approach to patient care (Karasz et al. 2011 and Fluery et al. 2012). Nurses were seen to take more time with the patient and show an interest in common mental disorders (Barley et al. 2011 and Roberge et al. 2016), although this is not strongly supported as a finding within the other four studies.

Collaboration within the primary care team in the management of common mental disorders is an emerging theme which is proposed in Chakraborty et al. 2020, with the recommendation to improve patient care by separating the treatment and care co-ordinator roles.

Time management strategies for managing primary care clinics are proposed by Fleury et al. 2012, suggesting variation within the clinic by the complexity of patients seen, plus considering timing appointments for patients with complex needs at the start or end of the clinic.

Finally, the value of listening as a skill, using counselling skills and signposting to other services are recognised in five studies (Barley et al. 2011, Karasz et al. 2011, Roberge et al. 2016, Geraghty et al. 2019 and Chakraborty et al. 2020). This implies that knowing the patient and the community, developing rapport supports the ability to detect the 'nuances' and 'subtle, indirect clues' (Roberge et al. 2016, p. 6).

3.10 Summary of perceived challenges, barriers and facilitating factors within clinical practice

Combined five barriers are presented which included clinicians' knowledge and experience, clinicians' interest, attitude and stigma, patients' stigma and reluctance to talk about mental health, clinicians' lack of knowledge on clinical guidelines and inconsistent approach to managing common mental disorder.

As previously identified, the focus is on depression rather than other common mental disorders, though anxiety disorders and comorbid alcohol or substance misuse are noted as co-morbidities within two studies, namely Roberge et al. 2016, and Fleury et al. 2012. Clinician variables within the samples in the included studies, service variables between UK, European, Canadian and Australian primary care practice, patient variables and variations within the included studies research questions, aims and purpose are acknowledged as confounding factors.

3.10.a Question three: Are there any differences between urban and rural PHCT practitioners experiences in the in managing common mental disorders?

Three studies describe rural primary care practice in the inclusion criteria, Fleury et al. (2011) describes Canadian practice, Geraghty et al. (2019) describes English practice, while Chakraborty et al. (2020) describes Australian practice. Geraghty et al. (2019) reports that although ten rural practices were included in

the study there was 'relative homogenous' in practice in the South East of England, this is acknowledged as having limited transferability (Geraghty et al. 2019, p. 6).

'Frequent exposure' to mental disorder in rural practice was seen to promote a professional interest in continuous medical education on mental disorder, and the development of confidence in psycho-social skills (Fleury et al. 2012, p. 5). Not having access to a psychiatrist in rural practice was also seen as an influencing factor in promoting the development of skills and knowledge in managing common mental disorder in Fleury et al. (2012). Clear clinical practices with use of DSM-IV screening criteria, awareness of the range of treatment options and offering seven follow-up appointments with on average 24-36 minutes with each patient was recommended by Fleury et al. 2012 (p. 6).

Minimal onward referrals to community-based services or secondary services was noted in both Fleury et al. (2011) and Chakraborty et al. (2020), with lack of access to services and patient choice noted. Referral processes were perceived as 'ineffective, burdensome and bureaucratic' and a single access point to secondary and specialist services was perceived as more satisfactory system of practice (Chakraborty et al. 2020, p. 7). While having a stepped-care interprofessional approach to treatment viewed as more helpful.

Conflict of interests due to interpersonal relationships within small rural communities was noted by Chakraborty et al. (2020). Rural GPs saw separating the roles of treatment and coordinator as more helpful (Chakraborty et al. 2020, p. 6).

3.11 Summary of differences found in rural primary care practice

As previous, the focus remains on depression or mental disorder and not the range of common mental disorders. Rising to the challenge of treating mental disorder through necessary or exposure, having clear clinical practices in place, not depending on secondary services and being mindful of the nuances of

working and living in a small rural community are all cited as differences in rural practice.

Furthermore, the two studies which identify differences in rural practice, are not UK based studies. Therefore, have limited transferability to UK and UKOT's primary practice. There is no distinction between rural and extreme remote and rural practice.

3.12 Summary of the literature

The literature review has shown that the screening and management of common mental disorders in primary care practice remains a clinical concern. That perceptions of the clinicians' roles, consultation and collaboration between clinicians and their patients, attitudes and understanding towards common mental disorders, screening and diagnosis, implementing clinical guidelines, treatment and the interaction between primary care and secondary care services are all key issues of clinical concern and research interest.

Furthermore, although examples of good clinical practice exist in the literature, challenges exist within primary care practice in the screening and management of common mental disorders, including clinicians' lack of knowledge and experience in managing conditions, in some cases lack of interest, lack of knowledge on clinical guidelines and inconsistent approach to managing common mental disorders.

Rural primary care practice has shown that the challenge of treating mental disorder with limited access to mental health services and resources has seen clinicians' develop their clinical skills and practices, and understand working and living in rural communities.

The literature had shown a bias towards depression and no other common mental disorders, co-morbidities, including physical illness or alcohol or drug misuse. Furthermore, the studies focus heavily on GPs participation in studies, when nurses and allied health professionals working within primary care are rarely

sampled. Finally, there is a gap in the literature on rural clinical primary care practice in the UK and UKOTs.

3.13 Chapter conclusion

Screening and managing common mental disorders in primary care practice is a contemporary research topic, where clinicians' roles and interactions with their patients, underlying beliefs about common mental disorders, and implementation of clinical guidelines are all key factors which influence the process and outcome.

Challenges within primary care include clinicians' knowledge, experience, interest and inconsistent application of clinical guidelines. Rural practice has shown that the challenge of managing mental disorder in relative isolation from secondary services can result in clinicians' professional development and extending their capacity to manage mental disorder in small communities.

Synthesis the thirty-six themes identified within the included studies into twelve analytic themes demonstrates consistency and allows distillation of the findings and recommendation from the included studies. Although evidence of screening and managing common mental disorder confidently is conveyed by GPs within the studies, in contrast, uncertainty remains around understanding depression, screening, diagnosing and talking about common mental disorders with their patients. GPs initiating conversations, acknowledging personal held beliefs about the concept of depression and the efficacy of treatment, plus, patient beliefs about the construct of depression in the context of their lives and stigma around having a mental disorder, are complex psycho-social interactions. Furthermore, following clinical guidelines in the screening, diagnosing and treatment of common mental disorder remain a challenge within primary care.

The literature had focussed on the management of depression within primary care, with no other common mental disorders, such as anxiety, or co-morbidities, such as alcohol and drug misuse. Furthermore, the studies focus heavily on GPs participation in studies, where the range of primary care practitioners such as Practice Nurses, Advanced Nurse Practitioners and Health Visitors and allied health professionals working in primary care are rarely sampled.

Gaps in the literature are evident in the management of common mental disorders in primary care, comorbidities and management in remote and rural practice. Conducting a qualitative study within the Falkland Islands, sampling a broad range of primary care practitioners with the aim of better understanding the challenges faced by them in managing common mental disorders would contribute to the body of knowledge that exists. Furthermore, conducting research in the Falkland Islands as one of the fourteen UK Overseas territories, may have far reaching implications as learning about clinical practice in this remote location may influence practice in other small nations.

3.14 Critical reflection on the literature reviews

As a novice researcher applying academic criteria to my field of study was a new experience, beyond searching the data base, quality appraisal of studies and synthesis was new learning. My previous experience of devising a literature review to inform research for a master's degree was a narrative review considered by my academic supervisors to be extensive enough for the purpose of the study.

This study set out to conduct mixed methods research, initially considering sequential mixed methods study design, where in this case, the quantitative research would inform the qualitative study, however on reflection, this was unachievable as the studies ran parallel to each other within a nine-month period. Also, the studies address different populations groups, two separate literature reviews and two separate studies were conducted. This will be explored further in chapter four and eight.

Starting with the prevalence of common mental disorder in the Falkland Islands, knowing from initial enquiry that there were no previous studies on prevalence except the 1982 study by King and Bleaney, yet, at the same time recognising that studying this small island community was the backdrop of a wealth of national and international prevalence studies, Booth (2006) and Booth, Papaioannou and Sutton (2012) highlight the need for precise questions and clear structure in the formulation of the research methods. Lack of structure in the process of

conducting the research and poor decision making, lead to challenges in synthesising the literature and producing a replicable study. Best practice guidance from Cochrane (2023) helped to restructure and frame each literature review, with support from my academic supervisors. The nuances of quality appraisal and synthesis of the literature have been shaped by insightful guidance by Greenhalgh (2015), plus studying various methods for synthesis. Adapting Thomas and Harden (2008) thematic synthesis using a priori codes has augmented my pragmatic approach to this study, using my clinical experience of working with my primary care colleagues in managing common mental disorders and my knowledge and understanding of clinical guidelines.

Chapter 4: Methods

4.1 Introduction

This chapter describes the rationale for the methods used within the study. The study aimed to improve public mental health within the remote and rural community of the Falkland Islands, by identifying the prevalence of common mental disorder within the adult population in the Falklands, thereafter, to understand the challenges faced by primary care practitioners in managing common mental disorders within their practice in this unique community.

Part one, describes the methods applied in the prevalence study; part two, describes the methods applied in the qualitative study exploring primary care practitioners of managing common mental disorder, while part three, discusses the theoretical framework applied in this multi-methods study. A reflective account discussing the strengths and limitations of the methods is then provided. Critical reflection is explored further in Chapter 8, discussion, which provides an overview and appraisal of the study.

4.2 Part 1 – methods prevalence study

The literature review found no evidence on the prevalence of common mental disorders in the Falklands, which prevents comparison to UK or global prevalence rates. Informed by the literature review of national and international prevalence surveys, the gold standard for population mental health surveys is the use of structured diagnostic clinical interviews which require specially trained researchers to administer, this was not feasible in a small-scale study conducted by one student.

4.3 Rationale for a postal survey

A population postal survey was chosen to identify the prevalence of common mental disorder in the adult population of the Falklands for several reasons. Firstly, to enable public participation in a way that ensured consent and anonymity for participants. Secondly, to sample the population in a standardised

method for the collation and analysis of data (McClean, Bray and de Viggiani et al. 2020). An audit of medical records was rejected because records report identified cases of common mental disorder, rather than prevalence in the general population, when it is known that mental disorders are frequently under estimated (Hatch, Woodhead, Frissa et al. 2012). Furthermore, as governance and data protection had changed, the use of sensitive patient data requires transparency and consent for research purposes which was prohibitive for a small-scale study by a student researcher (Royal College of Nursing 2022, NHS Health Research Authority 2022).

4.4 Accessing the sample for the mental health survey

The postal survey aimed to sample an estimated 2,481 adult residents in the Falklands. Finding a method to access the adult population required planning and use of local knowledge. Accessing the adult population by placing survey questionnaires in public places such as the Post Office and the library was rejected, due to the risk of poor uptake. For example, many Falklands residents living in camp make infrequent journeys to Stanley, and do not access the Post Office routinely as their mail is flown to them and held in a central location, usually within the settlement store, therefore Camp residents would have been excluded from participating in the survey. Providing a personalised invitation (Appendix 16) and posting survey questionnaires (Appendix 17) to every adult was designed to maximise inclusion, minimised duplication of results, while maintaining the anonymity of participants. The challenge of survey fatigue was addressed through planning the timing of the survey launch (Edwards, Roberts, Clarke et al. 2010). The postal survey was planned for autumn, April 2017, after the busy agricultural and tourist summer season.

Sampling algorithms were rejected and a general adult population survey chosen due to the small size of the adult population in the Falklands and the high risk of sampling bias and non-sampling errors occurring (McClean, Bray and de Viggiana et al. 2020). Bernard et al. (2010) recognise that scaling up public health interventions and initiatives in hard to reach populations is recognised as a costly, yet valuable use of resources (Bernard, Hallett, Lovita et al. 2010). Yet, the

‘complex and context-sensitive’ nature of public health initiatives requires scaling up to achieve meaningful outcomes and improve public health (MacDonald, Pauly and Wong et al. 2016, p. 9). Furthermore, as over 80% of Falklands residents live in Stanley, a representative random sample may have generated insufficient data from the other residents to generalise findings (FIG Census 2016). An anonymised postal health survey was the preferred option due to the wide geographic spread of the population within the islands.

Identifying a comprehensive population directory of adults living in the Falklands was challenging. The electoral roll, maintained by the government registrar, includes residents who are Falkland Island Status holders (FIS) a pre-requisite for registering to vote, but excludes temporary residents, Work Permit Holders (WPH) and their dependents and long term residents with Permanent Residence Status (PRP), who are not entitled to vote. The electoral roll also has anomalies, those who can register to vote but choose not to. In conclusion, focussing on a sample based on the electoral roll would exclude sections of the population.

The Falkland Islands Government Policy Unit have a comprehensive population directory for census purposes which is a mandatory legal requirement. The directory includes all transient workers who are work permit holders, however, access to this list was deemed unethical as it contradicts the terms of reference for the census. Accessing the transient workforce was a challenge, with over 1000 transient workers applying for work permits in 2014 and over 800 identified in the census.

The commercial telecommunications provider telephone directory was cross referenced with the electoral roll to identify adult residents. In addition, a register of government employees, was shared with permission from Human Resources, Falkland Islands Government. This list was cross referenced with the previous lists to identify a list of adult residents. These sources were time sensitive, so did not necessarily give a true account of current residency. As an additional access point, private employers were contacted and many agreed to distribute questionnaires to their own employees and sub-contractors, this included the Falkland Islands Company who employ a significant proportion of Filipino, St

Helenian and South American employees and Safeline, a demining company who employed mainly Zimbabweans contractors. Similarly, permission was sought from the Senior Medical Officer at Mount Pleasant Complex to distribute survey questionnaires among the civilian personnel, this included distributing questionnaires to private companies including Interserve, Sodexo, the Navy, Army and Air Force Institutes (NAAFI), and British International Helicopters (no evidence of correspondence is available as this would constitute a security breach).

Table 4.1: Population sample inclusion and exclusion

Table 1: population sample inclusion and exclusion criteria	
INCLUSION	EXCLUSION
Falklands residents 18 years >	< 18 years old
Temporary residents Work Permit Holders (WPH)	Prison population
Includes civilian WPH Falklands residents at the military base	Military personnel and dependents

The prison population, less than 10 residents in 2017 in Her Majesty's Prison Stanley (HMPS) were excluded as the mental health needs of prisoners represent a specialist population group. Long-term residents in the hospital ward and sheltered housing residents were invited to participate in the survey as they could opt in. It was deemed that those people living with cognitive, sensory or functional impairment, would either opt out, or seek assistance to participate in the survey. Validation of survey results involved accurate reporting of the findings, accounting for those who did not participate in the survey to determine how representative the survey findings were of the adult population.

4.5 Survey design – devising a questionnaire

The design of the survey questionnaire was informed by the Cochrane review (2007) methods to increase response to postal questionnaires (Edwards, Roberts, Clarke et al. 2007). Edwards et al. (2007) and Mallen et al. (2008) recommended using colour, larger font size and thicker 100g paper, to encourage a response. The use of closed questions and brief cost free validated

psychometric screening instruments, all reduced costs and made it easier to analyse the survey data (Beidas, Stewart and Walsh et al. 2015). Clark et al. (2021) suggest that a postal survey offers a means to communicate sensitive information and can reduce stigma. Questionnaires, invitation letters and stamped addressed envelopes were issued. Returning the questionnaire ensured informed consent and voluntary engagement, key quality indicators of transparency (Connors, Krupnikov and Ryan 2019).

Inclusion of a pen was to encourage a response (Bell, Clark, Fairhurst et al. 2016). Furthermore, Robinson et al. (2014) advocate that health related products promote, in this case, mental health (Robinson, Tansil, Sokler et al. 2014).

In the absence of diagnostic interviews, validated screening instruments offered a baseline measurement (McClean, Bray and de Viggiani et al. 2020). In addition, for demographic characteristics, social and environmental factors, elements of the English NHS Care Quality Commission (2017) Community Mental Health Survey 2014 to 2017, the Falkland Islands Government Census 2016, the England Health Survey 2016 (2018), the Scottish Health Survey 2014, the Tasmanian Health Survey 2014, and the Norway Survey (Statistics Norway 2014) were incorporated with the free to use validated questionnaires to devise the questionnaire. Questions from Tasmanian and Norwegian health surveys were included as they both have a remote and rural focus which is absent from UK based surveys. All sources are acknowledged.

The survey was structured from general demographic questions to sensitive personal information about lifestyle and mental health. The questionnaire was presented in six sections as follows:

- Section 1 - About you
- Section 2 - Social Support & Contacts
- Section 3 - Work & Commitments
- Section 4 - Activities & Community Involvement
- Section 5 - Health & Lifestyle

- **Section 6 - Mental Health & Wellbeing**

The aim was to create a questionnaire that avoided jargon and was easy to follow. Furthermore, as a Spanish version of the survey was also produced, it had to be easy to translate. The questionnaire was devised to report not only mental health prevalence but report data for future public health initiatives in the Falklands community. The breadth of data collated in the questionnaire ensured that the findings would inform and educate the community, that community-based participation in the research project was both ‘an outcome and an effective strategy’ to shape future initiatives (WHO 2002, p. 17, NICE 2017, quality standard 148). A whole systems approach to community-centred public health, requires ‘community- based participatory research’, identifying needs, and working together to develop solutions (South, 2015, p. 25). It was never the intention to explore the full range of health related outcomes, health inequalities and social -environmental factors within this thesis, as it is beyond the scope of this thesis, where the focus remains common mental disorders. (Appendix 17; survey questionnaire)

4.5.a Demographic characteristics reported in the study

Section one, “About You” questions were replicated from the Falklands Census 2016; namely, sex, marital status, age range, length of residence in the Falkland Islands, immigration status, national identify and educational attainment, allowing future cross comparison with the Falklands Census 2016 for the larger data set (2016). Section two, “Social Support and Contacts” and section three, -“Work and Commitments” included place of residency and employment status for comparison with the Census results. Section five, “Health and Lifestyle” contained questions about self-rated health, plus screening for alcohol use disorders and drug abuse.

4.5.b Alcohol Use Disorders Identification Test (AUDIT)

The Alcohol Use Disorders Identification Test (AUDIT) is a 10 item self-screening questionnaire widely used in population health surveys, (Bohn, Babor and

Kranzler 1995, Lundin et al. 2015), (Appendix 17, questions 17 to 25). Inclusion of the AUDIT was replicated from the English and Scottish Health Survey (Public Health England 2016, Gray, Leyland, Currie et al. 2016). The AUDIT has a minimum score of 0 and a maximum score of 40. The AUDIT is used to determine hazardous alcohol use, dependency symptoms and harmful alcohol use (WHO 2001). AUDIT Question 4 'How often during the last year have you found that you were not able to stop drinking once you had started?' in the dependency domain, was missed in error from the questionnaire when the survey was printed. This error was discussed with my academic supervisors and considered to not affect the results of the findings as the lower and upper threshold for scoring the AUDIT is between zero and forty. An AUDIT score of 8 out of 40, indicates the risk of hazardous drinking, while an AUDIT score of 8 to 15 indicates a moderate level of alcohol use, an AUDIT score of 16 or more indicates significant harmful alcohol use and finally, an AUDIT score of 20 plus indicates possible severe alcohol problems and alcohol dependence (Babor et al. 2001). An audit score of 8 or above was applied within the study to indicate hazardous alcohol use, so the threshold was not affected by the missing question.

4.5.c Drug Use Questionnaire (DAST-10)

The Drug Use Questionnaire (DAST-10) was included to establish a baseline for understanding the prevalence of drug misuse within the Falkland Islands; questions 30 to 39, pp. 10-11. The DAST-10 is a 10 item self-administered screening questionnaire used in general practice and public health surveys to determine drug use (French, Roebuck, McGeary et al. 2001, Skinner 1982). The term drug includes prescribed and over the counter medication used for non-medical use, in addition all classes of drugs, except alcohol and tobacco. The cut of scores for the DAST-10 range from 0 to 10, however, a low threshold cut-off of one or above was applied within the study to indicate drug use.

Section six, " Mental Health and Wellbeing" contained questions from six separate screening instruments, however for the purpose of the thesis, the screening measures to identify common mental disorder are addressed, Patient

Health Questionnaire (PHQ-9), the Generalised Anxiety Disorder Questionnaire (GAD-7), the Abbreviated Post Traumatic Checklist (PCLC-6).

4.5.d Patient Health Questionnaire (PHQ-9)

The Patient Health Questionnaire (PHQ-9) is a 9-item self-administered screening questionnaire widely used in clinical practice and within research to screen for depressive symptoms; questions 11 to 19, page 13 (Kroenke and Spitzer 2002, Costantini et al. 2021, Levis, Benedetti and Thombs 2019). The PHQ-9 translates well into Spanish with no loss of meaning (Munoz-Navarro, Cano-Vindel, Medrano et al. 2017^a). The PHQ is widely used in primary care and population health surveys and demonstrates high specificity and sensitivity. The PHQ9 does not diagnose depression, it indicates symptoms of depression and should not be used as a diagnostic tool alone. For this survey the cut-off scores follow clinical 'caseness' as defined by the NHS IAPT service and a score of 10 or above indicated depressive symptoms (NHS England 2024). Cut of scores for the PHQ9 are as follows:

1 – 9 indicates mild depression, while 10 – 21 indicates moderate or severe symptoms.

A safeguard to recognise and respond to the risk of those reporting feelings of suicide or self-harm was the inclusion of signposting advice. Question 19, 'thoughts that you would be better off dead, or of hurting yourself in some way?', was followed by signposting to Team Tranquil plus the Freephone Samaritans 51515 help line.

4.5.e Generalised Anxiety Disorder (GAD-7)

The Generalised Anxiety Disorder (GAD-7) is a seven-item self-administered screening assessment tool that is recommended for research and clinical practice (Spitzer et al. 2006, Lowe et al. 2008). Anxiety disorders may be concurrent with other common mental disorders and impair levels of daily functioning with or without depressive symptoms. Each statement is scored from 0 to 3, so the GAD-7 score ranges from 0 to 21. The cut-off scores are 8 or above indicates moderate

anxiety, while 14 or above indicates severe anxiety. Anxiety scores are reported as 8 or above in the survey findings (NHS England, 2018, p. 16). The GAD 7 also translates into Spanish (Munoz-Navarro et al. 2017^b).

4.5.f Post Traumatic Stress Disorder Checklist Civilian Abbreviated (PLCL-6)

Adverse life events such as accidents or being victim or witness to an assault, commonly provoke physiological changes such as insomnia and anxiety, psychological changes such as hypervigilance and behavioural changes such as avoidance (Cook, Spinazzola, Ford et al. 2005). Post-Traumatic Stress Disorder (PTSD) may develop and this frequently occurs with other common mental disorders including depression or substance misuse (Spoont, Williams, Kehle-Forbs et al. 2015, Resick, Monson and Chard 2016). The Post Traumatic Stress Disorder Checklist Civilian Abbreviated (PCL-C 6) is a six item measure devised for use in primary care, questions 1 to 6 on page 14 of the survey questionnaire (Lang and Stein 2016). The PCL-C may be used in general population studies (Freedy, Steenkamp, Magruder et al. 2010, Han, Wong, et al. 2016). The PCLC-6 also translates into Spanish. Each item is rated from 0 to 5. The PCLC-6 scores range from 0 to 30. The cut-off scores for the PCLC-6 are as follows: 0- 13, suggests low indication of post- traumatic stress, where as 14- 30, is suggestive of possible symptoms of post-traumatic stress. A screening measure alone would never be used to diagnosis PTSD, but they are routinely used in screening within clinical mental health practice.

Inclusion of the PCLC-6 is defended, as although treatment for PTSD remains within tier three and tier four specialist services, the detection and management of PTSD remains within primary care. Furthermore, the high level of adverse events and exposure to trauma in the general population makes it worthy of inclusion. Furthermore, evidence suggests that the prevalence is underestimated and could be as high as 15% (Cowlshaw et al. 2020).

Table 4.2: Validated screening questionnaires included in the survey

Validated screening questionnaires included in the survey		
Instrument	Characteristics	Comment
Alcohol Use Disorders Identification Test AUDIT World Health Organization 2021	10 questions (9 in survey) Self-administered: 16+ years English/ Spanish versions validated free license	Included/ reported
Drug and Substance Use Questionnaire (DAST 10) Skinner 1982	10 questions Self-administered 16 + English/ Spanish versions validated for use Free license	Included / reported
Patient Health Questionnaire (PHQ-9) Kroenke et al. 2001	9 questions Self-administered: 18 years + English/ Spanish versions validated for use unlicensed	Included/ reported
Generalised Anxiety Disorder (GAD-7) Spitzer RL, Kroenke K, Williams JBW and Lowe B 2006	7 questions Self-administered:18 years + English/ Spanish versions validated for use unlicensed	Included/ reported
Abbreviated Post-traumatic stress disorder Checklist (PCL-C) Lang AJ and Stein MB 2005	6 item self-reporting measure Self-administered: 18 years + English/ Spanish versions validated for use Free to use, cite authors	Included/ reported

4.6 Data security and management

As the data contains sensitive information, data is used only for the purpose it was intended. Electronic data will be disseminated to the Falkland Island Government public health unit. Robson (2015) recommends keeping data no longer than is necessary, deemed to be ten years for questionnaires in the absence clear existing guidelines in the Falklands (Robson 2015). Paper copies of the survey questionnaire are held securely for 10 years 2017 - 2027. Electronic data is held on the University of Stirling server and by the student in accordance with the policies of the university.

4.7 Data analysis

Descriptive and inferential statistics are calculated using IBM Statistical Package for the Social Sciences (SPSS) 26 software. Co-relation rather than causation is reported in this observational study. Findings report measures of frequency which include the count and the percentage, also missing data. Measures of central tendency are reported as the mean for comparison across the data. Confidence levels are considered significant at 95%, an accepted margin in prevalence

studies (McClean et al. 2020). Measures of dispersion are reported as standard deviation and standard residuals in the tables. Descriptive and inferential statistics were calculated using parametric tests suitable for a large data set. Parametric tests which analyse the normal distribution between the mean, applying the one sample independent t-test at 95% confidence level for gender and include chi-square, degree of freedom and p value, are reported to indicate the strength of relationship between variables (Dancey and Reidy 2017). To investigate associations, standardised residuals were used to indicate association between variables, at 5% significance levels. Validated questionnaires were analysis according to the cut-off scores indicated for each measure.

Descriptive analysis of the data from the self-reported measures is presented for the sample population. Comparison of the distribution between groups for gender, age, immigration status, namely temporary and permanent residency, place of residency and educational attainment are reported, as these variables were identified in the scoping review of the prevalence literature as determinants of mental health. Comparison with the broader literature is essential in the discussion chapter following the results.

Parametric tests are used to test the null hypothesis, due to the large sample size (Dancey and Reidy 2017). Pearson's Chi Square with the p-value set at 0.05, tests the probability of obtaining the same results if the null hypothesis was true (Dancey and Reidy 2017). The null hypothesis is that there is no difference between the prevalence of common mental disorders, and alcohol and substance use within the sample populations' age, gender, residency status or place of residency. Standard residuals value of 1.98 were reported to identify any outliers. Standard residuals observe a ratio between the observed count and the expected count when the chi square value is set at 0.05, while the confidence level is set at 95%, to estimate the percentage of obtaining the same results if there was a further sample of the same population.

As the study describes nominal categorical variables, not ordinal variables, only T-tests of differences between the binary variable sex was possible. Furthermore,

as non-parametric tests are generally used for small sample sizes of 30 or less, they were not applicable for the study, however, Fishers Exact Test and Cramer's V test are reported in some results, as they are applied to test the measure of association between two nominal variables, where 0 implies no association, 0.1 or less a weak association, 0.1-0.3 a moderate association, 0.3-0.5 a strong association and, 1 implies a complete association.

4.8 Missing Data

Missing data is reported in each result to reduce bias in the findings before generalisations are reported.

4.9 Methods: Part 2 – qualitative study

The literature review identified a gap in the knowledge of primary care practitioners experience of managing common mental health disorders in their practice. There were few UK studies or studies of remote and rural primary care practice. Furthermore, studies focused on doctors' experience with few nurse practitioners included in studies and the focus was predominately on depression and not other common mental disorders.

4.10 Rationale for semi-structured interviews

One to one semi-structured interviews were chosen as the most appropriate qualitative method as semi-structured interviews offer a quick replicable approach while enabling 'rich insight' into complex phenomena (McClean et al. 2020, p. 128). Group interviews and focus groups were rejected as primary care practitioners are a difficult to access sample population within a busy rural practice. Closed questions alone within a structured telephone or face to face interview would risk not generating rich data. Silverman (2015) argues that semi-structured interviews with standardised closed and open questions offer consistency, reliability and flexibility in research (Silverman 2015).

4.10.a Design of the semi-structured interview schedule

The purpose of the semi-structured interviews was to determine primary care practitioners' professional roles and educational experience, as well as, explore their understanding and experience of managing common mental disorders (Bullock 2016).

Kallio et al. (2016) describes the stages in developing a semi-structured interview guide as 'identifying pre-requisites, which implies a clear purpose, as outlined above, thereafter, 'using existing knowledge' based on identified gaps in the literature are also addressed (Kallio, Pietila, Johnson and Kangasniema 2016, p. 2954). Piloting the interview guide was omitted due to insufficient time as an individual researcher with limited resources. The other stages as outlined by Kallio et al (2016) include devising a semi-structured interview guide covering the main themes and follow up questions and then presenting the interview guide are addressed below.

The interview schedule was designed to be brief and to be conducted one-to-one, rather than telephone interview, so was limited to twelve questions. Asking closed questions enabled interviewees to give brief responses, yet also open questions such as Question 5, What do you understand by the term common mental disorders?, enabled respondents to describe their experience in their own words.

Interview schedule for Primary Health Care Team Practitioners

- 1.What is your occupation
- 2.How many years have you been in this role ?
- 3.How long have you been working here within the Falkland Islands ?
- 4.Have you completed any specific qualifications or training in mental health ?
- 5.What do you understand by the term Common Mental Disorders ?
- 6.How do you identify Common Mental Disorders in your practice ?
- 7.Do you use any screening tools or instruments to identify Common Mental Disorder ?
- 8.Could you describe any treatments that you are aware of for Common Mental Disorder ?
- 9.Could you describe any type of treatment that is available here within the islands ?
- 10.In your opinion, what might help you provide treatment and care for people presenting with CMD within the islands ?
- 11.In your opinion, what might positively influence the provision of treatment for CMD within the islands ?
- 12.In your opinion, what barriers to you perceive that may negatively influence the provision of treatment for CMD ?

Figure 4.1: Interview schedule for Primary Health Care Team practitioners

Nine questions were non-threatening questions, enquiring about practitioners' knowledge and experience, while the latter three questions sought opinions, thereby using the 'funnelling' interview guide technique to illicit thicker description of a more complex nature (McClellan et al. 2020, p. 129).

4.11 Recruitment of participants in the sample

Primary care practitioners were colleagues, who were known to the interviewer. The invitation letter (Appendix 16) stated the study aims, the role of the interviewee and affiliation with the University of Stirling. To preserve the anonymity of the participants. Gender, length of experience working in the Falkland Islands and length of professional career are presented within ranges, to avoid attributing specific characteristics to any individual respondent. Excluded were national identity, country of origin and country where respondents had received their professional education to maintain anonymity. On reflection, this was an oversight to not include some reference to the country where practitioners completed their professional qualification, as it is relevant to the study in

demonstrating the diverse range of health professionals who practice in the Falkland Islands.

As a mental health nurse practitioner working within the health service, knowing the participants had both benefits and drawbacks. Initially gaining ethical approval by the government and management team was easier to achieve as an insider. Aburn et al. (2021) describes the benefits of being an insider researcher as having easier access to the sample and having an established rapport which enables a flexible relaxed approach when conducting interviews (Aburn, Gott and Hoare 2021). In contrast, the challenges of being an insider were assumptions about being perceived as an expert testing, rather than enquiring about participants knowledge about mental health.

4.12 Sampling Strategy: purposive sampling

Purposive sampling was applied, as achieving sufficient representation of the sample population was an important aspect of the study. Achieving quality in purposive sampling is possible if the sample size is sufficient to meet the aims and purpose of the study (Malterud, Siersma and Guassora 2016). Malterud et al. (2016) describe five criteria which should be achieved to validate sample size in qualitative research as follows:

‘Is the sample sufficient to meet the aims of the study?’, the aim was to interview ten primary care practitioners; ‘Is the sample specificity achieved?’, Bryman (2015) argues that quality sampling occurs on more than one level, not only sufficient quantity, but also representative of the total sample population (Bryman 2015, p. 375). Primary care professionals with a mix of genders, profession background and length of work experience of the Falklands community were invited; ‘Is there use of an established theory?’, the literature review was synthesised using thematic analysis, Thomas and Harden (2008) and framework synthesis of emerging themes against a priori themes identified in the literature (Carroll, Booth, Leaviss and Rick 2013, p. 1471); finally, ‘Is the quality of dialogue sufficient?’ All interviews were transcribed and reported in the study outcomes.

4.13 Steps to address sampling bias

The sample of practitioners did not include midwives, or pharmacists or unregistered practitioners due to the fact that registered nurses working in primary care and General Practitioners comprised the majority of the primary health care team. In addition, a recognised feature of rural health care Gullifer and Carey (2021) is that many practitioners work across services, providing inpatient, community and primary care services. With prior knowledge and experience of the way that care is provided in the Falklands, selecting practitioners who worked primarily in the primary care setting was a priority.

4.14 Conducting the interviews

Interviews were offered at the practitioners' preference, in the practitioners' offices or in a consultation room, to ensure that they were comfortable with the arrangements. Interviewees were given written copies of the invitation letter and the aims of the interviews were discussed verbally. All interviewees were aware of the postal survey and reported to have received their questionnaires. All participants were offered an opportunity to see the transcript of the interview. On reflection, this was not achievable due to time taken to process the data from the survey, plus transcribing the interviews. Several practitioners had left their posts in the Falklands within six months of the interviews taking place.

4.15 Ethics and informed consent

Ethical approval was sought via the university of Stirling General University Ethics Panel (GUEP) and was approved (Reference number GUEP 116).

Ethics and informed consent are inseparable concepts within qualitative social research (McClellan et al 2020). Robson (2015) describes poor research practice as lack of informed consent where researchers may have hidden agendas, or where participants may feel pressurised to participate, or disclosing participants identities even in error, plus the acknowledgement of the impact of research. Having ethical guidelines made explicit, avoiding the use of participants names, anonymising information such as gender, nationality and reference to countries

where participants completed their professional qualifications set clear ethical boundaries. Furthermore, consent processes were in place to clarify the storage of audio- recordings and transcribed data, stating who can access the transcribes and for publication how anonymity will be maintained (See Appendix 18; consent form example). The invitation letter to practitioners to participate in the study was sent in advance.

Written consent was obtained prior to audio recording of the interviews. All interviewees were reminded that they could stop the interview and recording at any point. Furthermore, that participants could withdraw their consent to participate in the study.

4.16 Data analysis: interpretive qualitative evidence synthesis and framework analysis

Integrating qualitative synthesis and framework analysis allowed the identification of a priori themes developed in the scoping review, to assist categorising primary data in the qualitative research (Dixon-Woods2011). Thematic qualitative synthesis was applied in the literature review of primary care practitioners' management of common mental disorders to distil the thirty six author identified themes found in the literature review into twelve themes. Initial coding involved selective coding from the interviews, identifying key words, phrases and concepts used within the narrative of the interviews. The frequency of terms being used by participants were recorded and this was useful for descriptive analysis to establish the context of participants experience and commonalities or differences that existed, an approach endorsed by Sandelowki (2010). Thereafter, framework analysis was used to identify and explore broader concepts within primary care practice and public mental health. All audio recorded interviews were transcribed by the interviewer. This was an opportunity to gain familiarity with the data. It also gave an opportunity to reflect and consider opportunities missed within the interviews, when further prompts could have created thicker description.

4.17 Part 3 – rationale for a multi-method study

This section describes the rationale for a multi-methods study, the research paradigm guiding this approach and a reflective account of the methods.

4.17.a Rationale for a mixed multi methods approach

Mixed methods and multi methods approaches are suitable when studying complex problems that require a holistic approach (Daly and Cranwell 2001). Public Health England (2015) endorse a 'community-centred approach' to improve population health and reduce inequalities (South 2015, p. 6). This approach requires partnership within communities and service providers engaging with research initiatives. South (2015) advocates that the benefits of community-centred approaches 'promote health at an individual level, develop networks at a community level and inform public health and services at an organisational level' (South 2015, p. 32).

Hesse-Biber et al (2015) argue that conducting a concurrent study, with the quantitative study embedded within the qualitative may help to, 'gain more complex understanding of the research problem' (Hesse-Biber et al. 2015, p. 9). Hesse-Biber et al. (2015) and Pluye and Hong (2014) suggest that a concurrent, embedded multi method approach enables a holistic approach to complex problems and allows sub population groups to be identified to generate future research.

Multi-methods studies are a popular method in community-centred public health as they can add depth and breadth, in this case, to the subject of common mental disorders in the Falklands. Adopting a community-centred public mental health approach, where the community of practitioners and members of the Falklands community actively participate, also allows generating an evidence-base suitable for this unique extreme remote and rural community.

Dans et al. (2011) proposes a litmus test for public health studies, 'Is the burden of illness high?' Yes, Non-Communicable Disease within the Falklands would meet this criteria; 'Do tests predict illness, therefore lead to self-diagnosis?'; No,

all questionnaires selected are non-specific, designed for the general public and do not encourage self-diagnosis; 'Is early treatment more effective than late treatment?', Yes, the identification of early signs of common mental disorder and associated drug and alcohol use and risk behaviours are a recognised preventative measure within public health (Mackereth et al. 2015) (Dans et al 2011, p. 236). Finally, 'Are diagnostic tests and treatment safe?' Yes, screening questionnaires are validated for use in general population screening programmes; and 'Does the cost of screening commensurate for the potential benefit?' Yes, within the Falkland Islands there is a call for action to address non-communicable disease and improve health for all. This study in its broadest sense, will provide big data and is an investment in public health for the benefit of the Falklands community.

4.17.b Analysis for the quantitative and qualitative phase of the study

Parallel analysis is used within the discussion chapter, combining the findings from the quantitative survey about the prevalence of common mental disorders, alcohol and drug use, with descriptive statistics from the survey findings. These two outcomes from the quantitative study are then combined with the findings from the quality evidence synthesis and framework analysis from the interviews, with the aim of exploring prevalence and clinical primary care practice to build new insights and understandings of this complex health issue.

Tashakkori, Teddlie and Johnson (2010), describe an outcome of mixed methods research to establish a connectedness, to then synthesis and generate 'meta-inferences' or new knowledge (p. 266). On reflection, although this was an aspiration, this was not an achievable outcome, as the study addresses two different aspects of common mental disorder, with two separate sets of research questions and explores the inter-related domains but separate fields of clinical practice and public mental health. Although this a limitation of the study, the multi-method approach does explore and produce new learning which is then placed in the broader context of the Falklands community and primary care practice. On reflection, adapting the questions in the questionnaire to enquire about barriers to accessing treatment would have been valuable.

Bergman (2011) describes how balancing qualitative and quantitative phases of a research project can present as a 'resource competition' with a dominance and a bias towards either component (p. 273). The requirement to adopt a mixed methodology, giving priority or equal weighting to the two phases of the study is circumvented in a multi-method approach. Schwandt and Lichy, in Hesse-Biber and Johnson (2015) argue that attempts to improve public health or clinical practice through research, often fall short as 'narrow', standalone interventions with a 'static view' of the world (p. 593). They argue that systems thinking approaches to public health research and clinical practice generate more meaningful knowledge and outcomes.

A pragmatic approach to the philosophical paradigm debate combining both positivism and constructivism underpins this multi-method study design. On a general level, mixed methods and multi methods combine both positivism in the pursuit of factual knowledge that is deductive through testing hypothesis, also constructivism that is inductive in the exploration of the social interpretation of knowledge (Bryman 2015). Public health research does not conform to a deductive approach, where an objective outside research determines how knowledge is constructed by studying the population through testing hypotheses (Bowling 2014). Similarly, public health research does not conform to a purely inductive approach, where subjective inside research shapes the formation of knowledge through subjective interpretation (Bowling 2014). Deductive and inductive reasoning in the formation of new knowledge is complimentary in the practice of public health research and the community centred approach (McClean et al. 2020).

Schwandt and Lichy argue that multi-methods methodology offers a "practical utility" which is a pragmatic approach to research, in that it is "implementable", with "real world use" for the researcher, or to put it simply, it "works" (p. 590). Analysis is achieved through triangulation, which may be confirming or complimentary, where information is generated and used to "compensate" for a gap or weakness in either methodology (McClean et al. 2020, p. 167).

4.18 Reflective account

The Falklands was considered a green field for conducting any health research, which although offering a wealth of opportunities, also has significant limitations and challenges. Finding a study design that fitted with the resources available and my capacity as a full-time clinician and a design that was acceptable for the community, was a challenge. For example, focussed groups and direct interviews with those with lived experience would not have been acceptable, due to lack of anonymity in an island community. Through the clinical doctorate programme, exploring mixed methodology, I struggled to find a methodology that aligned with my study. I was not aware of multi-methods and dismissed my approach as poorly conducted mixed methods. On reflection, and after more reading, I now see my approach to the study in a new light. As a clinician, I was not familiar with the breadth and depth of public health research and theories. Learning more about the community centred public health approach and multi-methods study designs, has encouraged me to reflect and reappraise my work and learning as a doctorate student, still as a novice, but hopefully now a more informed novice. Although different research questions and populations were studied, Hesse-Biber (2015) argues that 'conducting two or more research projects rigorously and completely in itself within one study, can achieve a comprehensive whole' (p. 589). I aspired to achieve this, by generating new original knowledge on this remote island community, producing recommendations for clinical practice, workforce development and public health policy, a holistic approach can be achieved.

Chapter 5: Mental health survey findings

5.1 Introduction

The aim of the survey was to estimate the prevalence of common mental disorders within the adult population of the Falklands and test the null hypothesis that there is no difference to be found between the prevalence of common mental disorders in the adult population of the Falklands, based on age, gender, residency status and place of residence.

5.2 Data analysis questions

The study is observational and explores relationships between a range of dependent variables, as follows; the Patient Health Questionnaire, nine item measure (PHQ-9), the Generalised Anxiety Disorder questionnaire, seven item measure (GAD-7), the Post Traumatic Checklist, six item measure (PCLC-6), the Alcohol Use Disorders Identification Test, 10 item measure (AUDIT) and the Drug Abuse Screening Test, ten-item measure (DAST) and independent variables, demographic characteristics of the Falklands adult population sample, as follows: sex, age, marital status, place of residency, employment, immigration status and educational attainment.

The research questions for the study were as follows:

- 1) What is the prevalence of common mental disorders within the adult population of the Falklands?
 - a. What is the prevalence of self-reported depression within the Falklands?
 - b. What is the prevalence of self-reported anxiety disorders within the Falklands?
 - c. What is the prevalence of self-reported PTSD symptoms within the Falklands?
- 2) What is the prevalence of self-reported hazardous alcohol use in the Falklands?

- 3) What is the prevalence of self-reported drug use in the Falklands?
- 4) Is there an association between drug or alcohol use and common mental disorders in the Falklands?

The findings presented for the sample apply the cut-off scores for the self-reported measures described in Table 5.1

Table 5.1: Screening measures and cut-off scores

Screening measures	Cut-off scores
Patient Health Questionnaire (PHQ-9)	➤ 10 or above out of 27 Moderate or severe symptoms
Generalised Anxiety Disorder (GAD-7)	➤ 8 or above out of 21 Moderate or severe symptoms
Post-traumatic stress Checklist (PCLC-6)	➤ 14 or above, out of 30 Experiencing difficulties with PTSD
Alcohol Use Disorders Identification Test AUDIT	➤ 8 or above Hazardous or harmful alcohol use
Drug Abuse Screening Test (DAST 10)	➤ 1 or above Low level of risk of drug abuse

5.3 Respondent numbers

In total, there were 979 respondents. Out of the 2,800 questionnaires distributed 1026 survey forms were returned, however 47 forms were rejected due to missing two or more key demographic data, namely; sex, age, place of residency or immigration status.

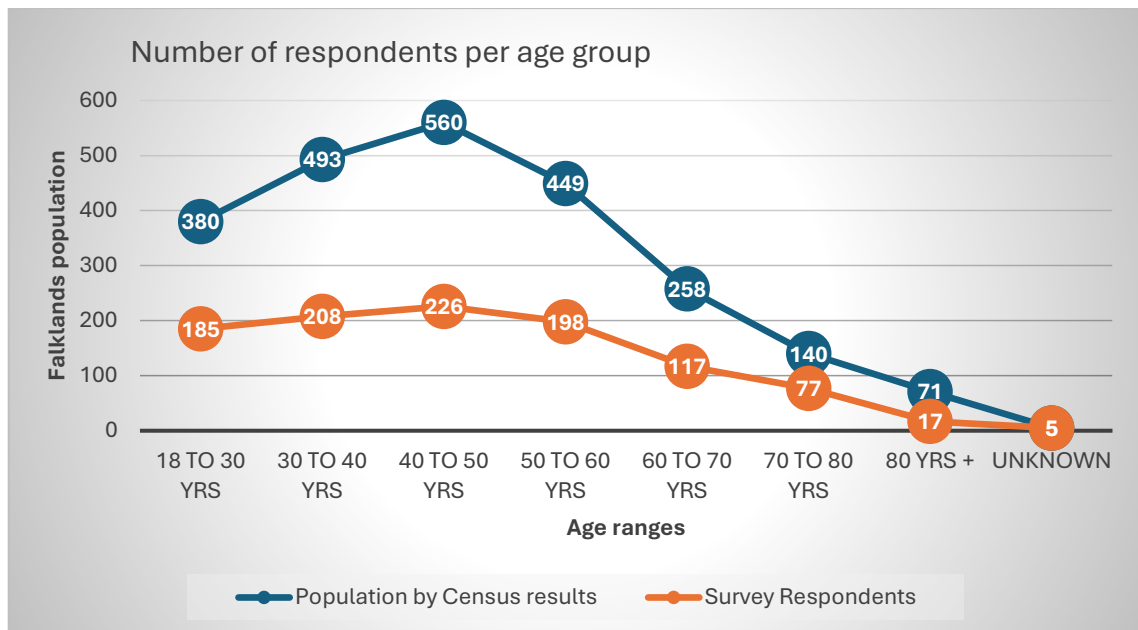


Figure 5.1: Number of respondents per age range compared to Falklands population census 2016 (n=119) respondents

The age range of respondents varied within the age groups as follows: 19% of survey respondents were aged between 18 to 30 years; 21% were aged between 30-40 years; 23% of respondents were aged between 40 to 50 years; 20% of respondents were aged between 50 to 60 years, 12% of respondents were aged between 60 to 70 years, 8% of respondents were aged between 70 to 80 years of age; 2% were aged 80 years or older. The Falklands Census (2016) reports that the mean age of the Falklands population is 38 years old (p. 6). By comparison, the survey respondents have a median age of 40 – 50 years (see Table 5.2).

Table 5.2: Demographic characteristics of respondents by sex, age, marital status, place of residency, employment, immigration status and educational attainment

	Female	Pearson χ^2	P value	Male	Total	Pearson χ^2	P value
Number of respondents					979		
Sex (%)	(n= 560) ^a 57%			(n= 418) ^a 43%	(n = 979) ^b		
Age range (%)	(n = 560) ^a			(n= 419) ^a	(n = 979) ^b		
• 18 – 30 years	(n=95) 17%			(n=40) 10%	(n= 135)		
• 30 – 50 years	(n=232) 41%	167.152	<.001	(n=202) 48%	(n= 434)	86.803	<.001
• 50 – 70 years	(n=176) 31%			(n=139) 33%	(n=315)		
• 70 years +	(n=57) 10%			(n=37) 9%	(n = 94)		
Marital status (%)	(n= 556) ^a			(n= 415) ^a	(n= 971) ^b		

• Married or living with a partner	(n= 414) 58%	40.020	<.001	(n=267) 64%	(n = 588)	11.381	<.001
• Single / Never married	(n=138) 29%			(n=83) 20%	(n=221)		
• Separated/ divorced/ widowed/ other	(n=95) 17%			(n=64) 16%	(n=162) ^b		
Place of Residency (%)	(n= 558) ^a			(n= 416) ^a	(n= 974) ^b		
• Stanley	(n= 471) 84%	61.142	<.001	(n=318) 76%	(n = 789)	75.334	<.001
• Camp	(n= 52) 9%			(n=45) 11%	(n = 97)		
• MPC/ other	(n=35) 6%			(n=53) 13%	(n = 88)		
Employment Status (%)	(n= 559) ^a			(n= 416) ^a	(n= 975) ^b		
• Employed	(n=445) 81%	294.105	<.001	(n=347) 83%	(n=792)	230.085	<.001
• Retired	(n=57) 10%			(n=48) 12%	(n=105)		
• Not in paid employment	(n=48) 9%			(n=18) 4%	(n=66)		
Immigration Status (%)^c	(n=560) ^a			(n=418) ^a	(n= 979) ^b		
Permanent: Falkland Islander, FIS or PRP	(n=452) 81%	61.142	<.001	(n=250) 60%	(n= 702)	75.334	<.001
Temporary: WPH / VPH/ exempt	(n=108) 19%			(n=168) 40%	(n= 276)		
Educational Attainment (%)	(n= 556)			(n= 416)	(n=972)		
No qualifications	(n=115) 21%	384.756	<.001	(n=74) 18%	(n=189)	277.670	<.001
0 level/ GCSE/ School leaving certificate	(194) 35%			(n=159) 38%	(n=353)		
Further Education/ A level/ Degree/ professional/ vocational/ tertiary	(n=232) 42%			(n=180) 43%	(n=412)		

a. The number of respondents who provided a response, including 1 respondent who defined themselves as 'Other'.

b. The total number of respondents within each category including 'other'

c. Falkland Island Status =FIS, Permanent Resident Permit = PRP, Work Permit Holder = WPH and dependents, Visitor Permit Holder = VPH, Exempt from immigration regulations

In total, 57% of the survey respondents identified as female (n=560) and 43% as male (n=418). This contrasts with the general population where males represent 53% (n=1687) of the population, while females represent 47% (n=1449) (FIG, p. 6).

5.4 The prevalence of depression within the Falkland Islands

The sample of respondents who completed the Patient Health Question, 9 item measure (PHQ-9) consisted of female respondents (n=554) 58% and male respondents (n=413) 42%. In total, 99% of the sample (n=967). The mean PHQ-9 score was 3.98 (SD= 4.66) indicating a score of < 9, mild symptoms. The standardized residuals are reported at 5% significance level. The findings indicates that sex and symptom severity are not independent from each other.

5.4.a Sex and self-rated depression

The mean score for females was 4.48, (SD= 4.81), while the average score for males was 3.30, (SD=4.36). An independent t-test was conducted to determine if there was any significant variation found between females and males within the sample, $t(965) = -3.908$, $P < .001$). This finding indicates that there was no difference between females and males mean scores.

There are significantly less females without symptoms of depression than expected since the standardized residual is $(-2.1 < 1.96)$. There are significantly more females with moderate symptoms of depression or above than expected as the standard residual is $(2.2 > 1.96)$ at 5% significance. Plus, there are significantly more males without symptoms, with standardized residual is $(2.25 > 1.96)$ and less males with moderate symptoms or above than expected, since the standardized residual is $(-2.5 < -1.96)$.

One in eight, or 13% of sample met the criteria for depressive disorder based on self-reported symptoms. The findings indicate that 71% ($n = 704$) of respondents completed the PHQ-9 questions and scored between 1-27 on the PHQ9 questions. For those 704 respondents who completed the PHQ9 questions, the mean score is 5.47) (CI 95%, 5.13-5.82), which indicates no significant depressive symptoms within the sample. An independent t-test was conducted to determine if there was any significant variation found between females and males within the sample, $t(965) = -3.908$, $P < .001$. This finding indicates that there was no difference between females and males mean scores.

Applying the PHQ-9 cut-off score of 10 and above to define a potential clinical level of depressive symptoms, in total 128 survey respondents or 13% (CI 95%, .293862, Upper CI 95% - 4.275267; Lower CI 95% - 3.687543) of the sample report having potential clinical levels of depressive symptoms. Standard deviation 4.658966 indicating good representative value to the mean. In total, 28% ($n = 264$) of the sample reported no depressive symptoms, this was lower for females 23% ($n = 125$), than for males 34% ($n = 139$). Females were three times more likely than males to report depressive symptoms. Of the 13% of the sample who self-reported a potential clinical level of depressive symptoms, scoring 10 or above

on the PHQ9 scale questions, the findings indicate that women represent three out of four of the sample (72%) (CI 95% 1.5714 – 1.7143) (n= 92). By comparison one out of four men (28%) or (n= 36) (CI 95%; 1.6955 – 1.8786) report higher scores for depressive symptoms. $P < 0.007$ value $r = 0.79$. Co-relation between sex and PHQ-9 at 0.01 level.

5.4.b Sex, age range and self-rated depression

The mean PHQ score for respondents aged 18 years to 30 years was 5.23, (SD= 4.92), while the average score for respondents aged 30 years to 50 years was 3.96, (SD= 4.67), and, those respondents aged 50 to 60 years 3.68, (SD= 4.70), finally those respondents 70 years or older 3.26, (SD 3.65). Female respondents who reported moderate or severe symptoms of depression with a PHQ-9 score of >10 , were as follows, 18 years to 30 years 24% (n=23), 30 to 50 years, 18% (n=41), 50 years to 70 years, 12% (n=21) and those respondents who were 70 years of age or over 13% (n=7). The findings indicate that there is an association between the sex of respondents and the age range of respondents, particularly, females 18 years to 30 years and a PHQ-9 score of > 10 .

Table 5.3.: PHQ-9 scores $10 >$ by sex and age range

PHQ score $10 >$ sex	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
Female	23 (24%)	41 (18%)	21 (12%)	7 (6%)	22.2	<.001
Male	3 (8%)	16 (8%)	16 (12%)	1 (3%)		

Table 5.4: PHQ-9 scores $10 >$ by sex and marital status

PHQ score $10 >$ sex	Single/ Never married	Married Co- habiting	Separated Widowed divorced	χ^2	P value
Female	23 (24%)	41 (18%)	21 (12%)	22.2	<.001
Male	3 (8%)	16 (8%)	16 (12%)		

5.4.d Place of residency and self-rated depression

In total, 99% of respondents (n= 965) completed both the PHQ-9 and indicated their place of residency (Table 5.4). The mean score for respondents who live in Stanley was 4.05, (SD 4.74), while the mean PHQ-9 score for respondents who live in Camp was 4.46, (SD 4.63), and finally, the mean score for those who reside at Mount Pleasant Complex (MPC) and others was 2.73, (SD 3.52). The findings show that 85% (n=108) of respondents who report PHQ-9 score of 10 > lived in Stanley. Stanley is the main place of residence in the Falklands where 2,524 (or 75%) of the population live. Camp residents represent 11% of respondents (n=14), while MPC residents represent 5% (n= 6) of those who self-report moderate depressive symptoms or above. All Falklands residents would be categorised as living in an extreme remote and rural setting, therefore the finding is inconclusive.

Table 5.3: PHQ-9 score 10> by sex and place of residency

PHQ score 10 > sex	Stanley	Camp	MPC or other	χ^2	P value
Female	80 (17%)	10 (19%)	1 (3%)	21.3	<.001
Male	28 (9%)	4 (9%)	4 (8%)		

5.4.e Employment and self-rated depression

In total, 98% of respondents (n=955) completed the PHQ-9 measure and indicated their employment status (Table 5.5). The Falklands Census 2016 had 5 categories for employment status, namely employed, unemployed, retired and not working, semi-retired and working occasionally and not working for other reasons. The survey had only 3 categories, employed, retired and not in paid employment. A fourth category semi-retired emerged at the data input phase and those respondents who indicated semi-retired status were incorporated into the paid employment category. In total, 81% of respondents were in employment (n=793). The pattern reflects the Falklands Census 2016, that the majority of working aged adults are in employment. The Falklands enjoy low levels of unemployment, of less than 1% of the population (FIG 2016, p. 8).

The mean PHQ-9 score for respondents who were employment was 4.01, (SD 4.66), while the mean score for retired respondents was 3.12, (SD 3.95), and, those not in paid employment was 4.24, (SD 5.39). PHQ-9 scores of 10 > were higher for females in employment at 17% or one in six, while the score for males not in employment were higher at 22% or one in five males.

Table 5.4: PHQ-9 score 10 > by sex and employment status

PHQ score 10> sex	Employed	Retired	Not in paid employment	χ^2	P value
Female	76 (17%)	5 (9%)	5 (11%)	19.7	<.001
Male	29 (9%)	3 (6%)	4 (22%)		

5.4.f Immigration status and self-reported depression

In total, 967 respondents completed both the PHQ-9 and the question on immigration status (Table 5.6).

The mean PHQ score for permanent residents was 4.51, (SD 4.93), while, the mean score for temporary residents was 2.65, (SD 3.56). Females who are permanent residents report PHQ scores of 10 > at 19%, or one in five.

Table 5.5: PHQ-9 scores 10 > by sex and immigration status

PHQ score 10> sex	Permanent Resident	Temporary Resident	χ^2	P value
Female	83 (19%)	28 (11%)	22.2	<.001
Male	9 (8%)	8 (5%)		

5.4.g Educational attainment and self-reported depression

In total, 96% of respondents completed the PHQ-9 measure and reported their educational attainment (n= 945) (Table 5.7). The mean score for respondents who reported no qualifications was 4.57, (SD 5.15), while, those who attained O levels/ GCSEs, or school leaving certificates was 3.79, (SD 4.53), finally, the mean score for those respondents who report to have attained further education

was 3.88, (SD 4.67). Female respondents with no formal qualifications report higher PHQ-9 scores 10 > at 19% or one in five.

Table 5.6: PHQ scores 10 > by sex and educational attainment

PHQ score 10 > sex	No qualifications	O levels GSEs certificate	^a Further education	χ^2	P value
Female	22 (19%)	28 (15%)	40 (17%)	19.7	<.001
Male	10 (14%)	13 (8%)	12 (7%)		

a. Further education, A level, degree, professional, vocational, tertiary qualification

5.5 The prevalence of anxiety within the adult population

The sample of respondents who completed the Generalised Anxiety Disorder – 7 item measure (GAD-7) consisted of female respondents (n=555) 58% and male respondents (n=412) 42% of the sample (n=967). In total (n = 967) respondents completed the GAD-7 questions with a mean score of 2.98, (SD 3.96) (95% CI, Upper CI 95% – 3.233605; Lower CI 95% - 2.73337).

5.5.a Sex and self-rated anxiety

The GAD-7 cut-off score of 8 > was used within this study to determine those respondents who self-reported with significant symptoms of anxiety. The mean score for females was 3.40, (SD= 4.01), while the average score for males was 2.41, (SD=3.83). An independent t-test was conducted to determine if there was any significant variation found between females and males within the sample, $t(965)=t-3.840$, $P<.001$. This finding indicates that there was no difference between females and males mean scores.

5.5.b Sex and age range and self-rated anxiety

The mean GAD-7 score for respondents aged 18 years to 30 years was 4.00, (SD= 4.57), while the mean score for respondents aged 30 years to 50 years was 3.07, (SD= 3.85), and, for those respondents aged 50 to 70 years was 2.74, (SD= 4.04). Finally the mean score for respondents aged 70 years of older was 1.85, (SD=2.70). Respondents who reported GAD-7 score of 8>, were highest in females aged 18 years to 30 years, 24% (n=22), or one in four, and 30 to 50

years, 16% (n= 36), or one in seven (Table 5.8). The findings indicate that there is an association between the sex and the age range of respondents.

Table 5.7: GAD-7 scores 8> by sex and age range

GAD-7 score 8>	18-30	30-50	50-70	70	χ^2	P
sex	years	years	years	years +		value
Female	22 (24%)	36 (16%)	22 (13%)	5 (9%)	17.585	<.001
Male	4 (10%)	21 (10%)	11 (8%)	1 (3%)		

5.5.c Marital Status and self-rated anxiety symptoms

In total, 98% (n=961) of respondents completed both the GAD-7 measure and indicated their marital status (Table 5.9). The mean GAD-7 score for single/never married was 2.85, (SD 3.67), while the mean score for married/ co-habiting respondents was 2.97, (SD 4.02). Finally, the mean score for respondents who were separated/ divorced or widowed was 3.19, (SD 4.2). The Chi-square revealed a link between females and married or living with a partner, one in five χ^2 (23.3), P= <.001.

Table 5.8: GAD-7 scores 8> by sex and marital status

GAD-7 score 8>	Single/ Never married	Married Co- habiting	Separated Widowed divorced	χ^2	P
sex					value
Female	16 (12%)	59 (19%)	10 (10%)	17.585	<.001
Male	10 (11%)	18 (7%)	10 (16%)		

5.5.d Place of residency and self-rated anxiety

In total, 965 respondents completed both the GAD-7 and indicated their place of residency (Table 5.10). This was complex as a proportion of the population occupy two properties, one in Stanley and one in Camp. The mean score for respondents in Stanley was 3.02, (SD 4.01), those in Camp was 3.62, (SD 4.01), and MPC mean score was 1.89, (SD 3.96). The highest GAD-7 scores are found in females living in Camp and in Stanley.

Table 5.9: GAD-7 score 8> by sex and place of residency

GAD-7 score 8> sex	Stanley	Camp	MPC ^a or other	χ^2	P value
Female	72 (15%)	13 (25%)	1 (3%)	18.487	<.001
Male	28 (9%)	3 (7%)	6 (11%)		

^a Mount Pleasant Complex = MPC

5.5.e Employment and self-rated anxiety

In total, 955 respondents complete the GAD-7 and indicate their employment status (Table 5.11). The mean score for those employed was 3.06, (SD 3.97), and those retired was 1.93, (SD 3.13), finally, the mean score for those not in paid employment was 3.26, (SD 4.69). There is a strong link between females and employment (χ^2 (2) = 23.8, P= <.001). There is also a weak link between males who are not in paid employment (χ^2 (2) = 3.41, P = .181).

Table 5.10: GAD-7 scores 8 > by sex and employment status

GAD-7 score 8> sex	Employed	Retired	Not in paid employment	χ^2	P value
Female	75 (17%)	2 (4%)	5 (11%)	19.7	<.001
Male	29 (9%)	3 (6%)	5 (28%)		

5.5.f Immigration status and self-rated anxiety

In total, 967 respondents completed both the GAD-7 measure and the question on immigration status (Table 5.12). The mean GAD-7 score for permanent residents was 3.39, (SD 4.18), while, the mean score for temporary residents was 1.94, (SD 3.13). The Chi square revealed a link between females who are permanent residents or one in six (χ^2 (2) = 12.5, P = .002).

Table 5.11: GAD-7 score 8> by sex and immigration status

GAD-7 score 8> sex	Permanent Resident	Temporary Resident	χ^2	P value
Female	78 (17%)	25 (10%)	18.9	<.001
Male	8 (8%)	12 (7%)		

5.5.g Educational attainment and self-rated anxiety

In total, 96% of respondents completed the GAD-7 measure and reported their educational attainment (n= 945) (Table 5.13). The mean score for respondents who reported no qualifications was 3.00, (SD 4.24), while, those who attained O levels/ GCSEs, or school leaving certificates was 2.63, (SD 3.46), finally, the mean score for those respondents who report to have attained further education was 3.26, (SD 4.21). There is a weak link between females and no formal qualifications ($\chi^2 (2) = 2.35$, $P=.308$). There is also a strong link between sex and O level/ GCSE/ school leaving certificate report higher ($\chi^2 (2) = 12.9$, $P=.002$).

Table 5.12: GAD-7 scores by sex and educational attainment

GAD-7 score 8 > sex	No qualifications	O levels GCSEs certificate	^a. Further education	χ^2	P value
Female	20 (18%)	24 (13%)	40 (17%)	19.850	<.001
Male	7 (10%)	12 (8%)	17 (10%)		

^a Further education, A level, degree, professional, vocational, tertiary qualification

5.6 The prevalence of PTSD in the Falklands

The sample of respondents who completed the Post Traumatic Checklist – 6 item (PCLC-6) measure with was (n=963) or 98% of the sample. Clinical Significant symptoms of PTSD for the PCLC-6 are set at a score of 14 >. The sample consisted of 58% female respondents (n=554), and 42% male respondents (n=409)

5.6.a Sex and self-rated PTSD

The mean score for females was 9.04, (SD= 3.99), while the mean score for males was 8.55, (SD=4.25). An independent t-test was conducted to determine if there was any significant variation found between females and males within the sample, $t(961)=t-1.846$, $P=0.99$. This finding indicates that there was no difference between females and males mean scores.

5.6.b Age range and self-rated PTSD

The mean PCLC-6 score for respondents aged 18 years to 30 years was 9.19, (SD 4.18), while the mean score for respondents aged 30 years to 50 years was 8.65, (SD 4.02), and, those respondents aged 50 to 70 years was 9.09, (SD 4.44), finally the mean score for respondents aged 70 years of older was 8.30, (SD 2.98) (Table 5.14). Respondents who reported PCLC score of 14>, were highest in females aged 18 years to 30 years, 19% (n=18), or one in four, and 30 to 50 years, 12% (n= 27), or one in seven. Followed by males aged 50 to 70 years, 16% (n=22), or one in six. The findings indicate that there is an association between the sex and the age range of respondents.

Table 5.13: PCLC-6 score 14> by sex and age range

PCLC-6 score 14 > sex	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
Female	18 (19%)	27 (12%)	20 (11%)	6 (11%)	2.58	.275
Male	4 (10%)	17 (8%)	22 (16%)	2 (5%)		

5.6.c Marital Status and self-rated PTSD

In total, 957 respondents completed the PCLC-6 measure and reported their marital status.

The mean score for single respondents was 8.45, (SD 3.75), and for married/ cohabiting respondents was 8.86, (SD 4.14). Meanwhile, for separated/ divorced or widowed respondents, the mean score was 9.30, (SD 4.44) (Table 5.15).

Table 5.14: PCLC-6 score 14 > by sex and marital status

PCLC-6 score 14> sex	Single/ Never married	Married Co- habiting	Separated Widowed divorced	χ^2	P value
Female	16 (12%)	41 (13%)	13 (14%)	17.585	<.001
Male	6 (7%)	26 (10%)	13 (20%)		

5.6.d Place of Residency and self-rated PTSD

In total, 962 respondents completed both the PCLC-6 and indicated their place of residency (Table 5.16). Once again, a proportion of the population occupy two properties, one in Stanley and one in Camp and identify with both. The mean score for respondents in Stanley was 8.95, (SD 4.15), while those in Camp was 9, (SD 4.03), and the MPC mean score was 7.65, (SD 3.62). There is a weak link found between females and living in Camp (χ^2 (1)= 5.34, P .069).

Table 5.15: PCLC-6 scores 14> by sex and place of residency

PCLC-6 score 14> sex	Stanley	Camp	MPC ^a or other	χ^2	P value
Female	59 (13%)	10 (20%)	2 (6%)	18.487	<.001
Male	35 (11%)	3 (7%)	7 (13%)		

^a Mount Pleasant Complex =
MPC

5.6.e Employment status and self-rated PTSD

In total, 951 respondents complete the PCLC-6 measure and indicate their employment status (Table 5.17). The mean score for those employed was 8.83, (SD 4.10), and those retired was 8.54, (SD 3.81), finally, the mean score for those not in paid employment was 9.43, (SD 4.72).

Table 5.16: PCLC-6 score 14> by sex and employment status

PCLC-6 score 14> sex	Employed	Retired	Not in paid employment	χ^2	P value
Female	60 (14%)	4 (7%)	6 (13%)	1.86	.394
Male	36 (10%)	5 (10%)	4 (22%)		

5.6.f Immigration status and self-rated PTSD

In total, 963 respondents completed the PCLC-6 measure and indicated their immigration status (Table 5.18). The mean PCLC-6 score for permanent residents was 9.20, (SD 4.30), while, the mean score for temporary residents was 7.91, (SD 3.41).

Table 5.17: PCLC-6 score 14 > by sex and immigration status

PCLC-6 score 14 > sex	Permanent Resident	Temporary Resident	χ^2	P value
Female	60 (13%)	11 (10%)	18.9	<.001
Male	31(12%)	14 (8%)		

5.6.g Educational attainment and self-rated PTSD

In total, 96% of respondents completed the PCLC-6 measure and reported their educational attainment (n= 945) (Table 5.19). The mean score for respondents who reported no qualifications was 9.14, (SD 4.49), while, those who attained O levels/ GCSEs, or school leaving certificates was 8.40, (SD 3.70), finally, the mean score for those respondents who reported to have attained further education was 9.08, (SD 4.26). Female respondents with no formal qualifications report higher PCLC-6 scores 14 > at 15% or one in six.

Table 5.18: PCLC-6 scores 14 > by sex and educational attainment

PCLC score 14 > sex	No qualifications	O levels GCSEs certificate	^a . Further education	χ^2	P value
Female	17 (15%)	17 (9%)	35 (15%)	3.359	.186
Male	9 (12%)	15 (9%)	21 (12%)		

a. Further education, A level, degree, professional, vocational, tertiary qualification

5.7 The prevalence of hazardous alcohol use and drug abuse

In total, 842 respondents completed the Alcohol Use Disorder Identification Test, ten-item measure (AUDIT), while 939 respondents completed the Drug Abuse Screening Test (DAST) a ten-item measure. The cut-off score for the AUDIT was

8 > to indicate the risk of hazardous alcohol use. The cut of score for the DAST was 1> to indicate risk of drug abuse.

5.7.a Sex, alcohol use and drug abuse

Of the 86% of the respondents who completed the AUDIT measure (n= 842), females account for 58% (n=485) and males account for 42% (n=357) of the sample. The mean score for females was 4.61, (SD= 3.96), while the mean score for males was 6.03, (SD=4.88). An independent samples t-test was conducted to determine if there was any significant variation found between females and males within the sample, $t(840)=t-4.680$, $P<001$. This finding indicates that that there is an association between sex and alcohol use.

Of the 96% of the respondents who completed the DAST measure (n= 938), females account for 57% (n= 532) and males account for 43% (n=407) of the sample. The mean score for females was 0940, (SD= .366), while the mean score for males was .189, (SD=.788). An independent samples t-test was conducted to determine if there was any significant variation found between females and males within the sample, $t(937)=t-2.460$, $P<001$. This finding indicates that that there is an association between sex and drug use.

5.7.b Age range, alcohol use and drug use

The mean AUDIT score for respondents aged 18 years to 30 years was 7.266, (SD 4.58), while the mean score for respondents aged 30 years to 50 years was 5.35, (SD 4.02), and, those respondents aged 50 to 70 years was 4.56, (SD 4.28), finally the mean score for respondents aged 70 years of older was 3.41, (SD 3.48) (Table 5.20). Respondents who reported an AUDIT score of 8>, were highest in females aged 18 years to 30 years, 38% or one in three, and 30 to 50 years, 17%, or one in six. Males aged 18 to 30 years had the highest prevalence of alcohol use at hazardous levels, with 54% or one in two, plus, for those male respondents aged 30 to 50 years, 33% or one in three, and those aged 50 to 70 years, 28%, or one in four. The findings indicate that there is an association between the sex and the age range of respondents.

Drug use who scored DAST 1 > were most prevalent in those aged 18 to 30 years for both female, 38%, one in three, and male 54%, one in two. Males report higher DAST scores across the age range.

Table 5.19: AUDIT score 8 > and DAST-10 scores 1 > by sex and age range.

AUDIT score 8 > sex	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
Female	32 (38%)	37 (17%)	17 (11%)	2 (6%)	38.3	<.001
Male	19 (54%)	55 (33%)	35 (28%)	6 (20%)		
DAST score 1 > sex	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
Female	12 (13%)	13 (6%)	8 (5%)	4 (8%)	5.53	.509
Male	4 (10%)	14 (7%)	8 (6%)	2 (6%)		

5.7.c Marital status, alcohol and drug use

In total, 836 respondents completed the AUDIT measure and reported their marital status (Table 5.21). The mean score for single respondents was 6.59, (SD 4.94), and for married/cohabiting respondents was 4.87, (SD 4.16). Meanwhile, for separated, divorced or widowed respondents, the mean score was 4.46, (SD 4.19).

In total, 933 respondents completed the DAST-10 measure and reported their marital status. The mean score for single respondents is .246, SD .922), and for married/cohabiting respondents was .107, (SD .465). Meanwhile, for separated/divorced or widowed respondents, the mean score was .067 (SD .322).

Table 5.20: AUDIT score 8 > and DAST-10 score 1 > by sex and marital status

AUDIT score 8 > sex	Single/ Never married	Married Co- habiting	Separated Widowed divorced	χ^2	P value
Female	16 (12%)	41 (13%)	13 (14%)	17.585	<.001
Male	6 (7%)	26 (10%)	13 (20%)		
DAST-10 score 1 > sex	Single/ Never married	Married Co- habiting	Separated Widowed divorced	χ^2	P value
Female	14 (10%)	17 (6%)	3 (4%)	17.585	<.001
Male	7 (8%)	17 (7%)	4 (7%)		

5.7.d Place of residency, alcohol use and drug use

In total, 840 respondents completed both the AUDIT and indicated their place of residency (Table 5.22). The mean score for respondents in Stanley was 8.95, (SD 4.15), while the mean score for those in Camp was 9, SD 4.03), and in MPC the mean score was 7.65, (SD 3.62). There is a link found between males and living in Stanley and MPC (χ^2 (1)= 5.34, P.069).

In total, 930 respondents completed both the DAST-10 and indicated their place of residency. The mean score for respondents in Stanley was .1397, (SD .619), while the mean for those in Camp was.0753, (SD .303), and MPC mean score was.1647, (SD .553). The results of Fisher's exact test (p=.269) does not indicate a significant association between sex, drug use and residency in Camp.

Table 5.21: AUDIT score 8 > and DAST-10 score 1> by sex and place of residency

AUDIT score 8>	Stanley	Camp	MPC^a or other	χ^2	P value
sex					
Female	77 (19%)	9 (19%)	2 (7%)	37.544	<.001
Male	84 (32%)	13 (31%)	18 (38%)		
DAST score 1>	Stanley	Camp	MPC^a or other	χ^2	P value
sex					
Female	32 (7%)	2 (4%)	3 (9%)	5.536	.269
Male	20 (6%)	4 (9%)	4 (8%)		

^a Mount Pleasant Complex =
MPC

5.7.e Employment status, alcohol and drug use

In total, 834 respondents completed the AUDIT measure and indicated their employment status (Table 5.23). The mean score for those employed was 5.35, (SD 4.32), and those retired was 3.87, (SD 4.33), finally, those not in paid employment was 5.39, (SD 5.84). There is a link between sex, high risk alcohol use and employment (χ^2 (2)= 34.14, P<.001).

In total, 930 respondents completed the DAST-10 measure and indicated their employment status. The average score for those employed was (M=.131,

SD.522), and those retired was (M=.102, SD .818), finally, those not in paid employment was (M=.2344, SD .886).

Table 5.22: AUDIT score 8> and DAST-10 score 1> by sex and employment status

AUDIT score 8>	Employed	Retired	Not in paid employment	χ^2	P value
sex					
Female	78 (19%)	3 (8%)	7 (19%)	37.652	<.001
Male	99 (33%)	9 (23%)	7 (50%)		
DAST-10 score 1>	Employed	Retired	Not in paid employment	χ^2	P value
sex					
Female	32 (7%)	2 (4%)	5 (11%)	19.7	<.001
Male	29 (9%)	3 (6%)	5 (28%)		

5.7.f Immigration status, alcohol use and drug use

In total, 842 respondents completed the AUDIT measure and reported their immigration status (Table 5.24). The mean AUDIT score for permanent residents was 5.44, (SD 4.49), while the mean score for temporary residents was 4.6, (SD 4.2). The Chi square revealed a link between sex, alcohol use and permanent residents (χ^2 (2) = 17.6, P = <.001) and temporary residents (χ^2 (2) = 31.045, P = <.001).

In total, 939 respondents completed the DAST-10 measure and reported their immigration status. The mean DAST-10 score for permanent residents was .1159, (SD .495), while the mean score for temporary residents was .1842, (SD .776). The Chi square revealed a link between females who are permanent residents or one in six (χ^2 (2) = 12.5, P = .002).

Table 5.23: AUDIT score 8> and DAST-10 score 1> by sex and immigration status

AUDIT score 8>	Permanent Resident	Temporary Resident	χ^2	P value
sex				
Female	80 (21%)	8 (9%)	38.38	<.001
Male	79 (35%)	36 (28%)		
DAST score 1>	Permanent Resident	Temporary Resident	χ^2	P value

sex	Resident	Resident		
Female	30 (7%)	7 (7%)	5.531	.063
Male	14 (6%)	14 (9%)		

5.7.g Educational attainment, alcohol and drug use

In total, 822 respondents completed the AUDIT measure and reported their educational attainment (Table 5.25). The mean score for respondents who reported no qualifications was 5.07, (SD 4.99), while those who attained O levels/ GCSEs, or school leaving certificates was 5.2, (SD 4.36), and, finally, the mean score for those respondents who report to have attained further education was 5.37, (SD 4.29).

In total, 918 of respondents completed the DAST-10 measure and reported their educational attainment. The mean score for respondents who reported no qualifications was .0977, (SD .351), while, those who attained O levels/ GCSEs, or school leaving certificates was .1, (SD .436), finally, the mean score for those respondents who report to have attained further education was .18, (SD .761).

Table 5.24: AUDIT score 8> and DAST-10 score 1> by sex and educational attainment

AUDIT score 8 >	No qualifications	O levels GCSEs certificate	^a Further education	χ^2	P value
sex					
Female	12 (14%)	37 (21%)	39 (19%)	38.497	<.001
Male	25 (36%)	37 (31%)	52 (32%)		
DAST-10 score 1 >	No qualifications	O levels GCSEs certificate	^a Further education	χ^2	P value
sex					
Female	8 (8%)	9 (5%)	19 (8%)	5.361	.542
Male	6 (9%)	13 (8%)	8 (5%)		

a. Further education, A level, degree, professional, vocational, tertiary qualification

5.8 Summary of the findings

To summarise, based on sex, age range, marital status, place of residency, immigration and educational attainment, there is homogeneity within prevalence rates for common mental disorder and associated alcohol and drug use within

the Falkland Islands population, this can be seen in the comparison of the mean scores across the data. It can be argued that the survey respondents at 39% of the adult population are representative of general adult population of the Falklands, however caution must be taken on any interpretation or inference with low numbers, particularly in the 18 to 30 years and over 70plus age ranges due to risk of error by chance or bias. See Tables 5.26 and 5.27 below.

The findings suggest that approximately one in eight adults have significant symptoms of depression, this is less than the estimated global prevalence of one in four (25%) and UK prevalence of one in six (16%), however, this prevalence level aligns with the European estimated prevalence for depression at 12% (WHO 2017, p. 8). This estimate does not take account of sex and age range, as the range varied from 3 to 12 percent for females and 12 to 24% for males. Four out of five respondents who reported moderate levels of depressive symptoms (n= 105) were in employment. In summary, higher levels of self-reported depressive symptoms are found in female residents of working age living in Stanley, however, males have higher prevalence of depression, particularly, young males between 18 and 30 years of age, where prevalence is one in four. This is the same age range where hazardous alcohol use is found at 50% of all respondents.

Anxiety has a global prevalence rate of 4% or one in 40 (WHO 2017), which increases in the European region to a prevalence rate of up to 14%, or 1 in 7, and a UK prevalence rate of up to 11% or one in nine. The survey findings that one in eight respondents in the sample reporting moderate symptoms of anxiety is similar to the European prevalence for anxiety disorders. When sex and age are taken into account, younger females show higher prevalence of anxiety at one in four.

The prevalence of PTSD is estimated at up to 3.9% globally, yet as high as 5.6% in communities exposed to trauma and 4.4% in the English Health study. The findings suggest that the prevalence of PTSD in the Falklands is approximately 12% or, one in eight adults. When sex and age are taken into account, younger females have a prevalence rate of one in five and males aged between 50 and 70 years have a prevalence rate of one in six.

Hazardous alcohol use in Westernised countries has a prevalence rate of up to 11.7%, while in England 16% of all adults consume hazardous levels of alcohol. The findings suggest that the prevalence of hazardous alcohol use is 21% or one in five adults. However, there is variation for sex and age range, and the prevalence rate for males aged 18 to 30 years was 54% or one in two. Males are consistently higher prevalence for hazardous alcohol consumption than females, except younger females who have a prevalence rate of one in three.

Drug use in the Falklands is estimated at one in twenty adults, with minor variation when sex and age range are taken into account, rising to one in ten for younger men. The prevalence rate for drug use in Westernised countries is similar to the Falklands at 4.8% in high income countries. There is a link between increased prevalence in alcohol and drug use and common mental disorders, that would require further specialist analysis

Table 5.25: Common mental disorders in the Falklands by sex and age range: female

	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
PHQ-9 score >10	23 (%)	16 (8%)	16 (12%)	1 (3%)	22.2	<.001
GAD-7score >8	23 (24%)	36 (16%)	22 (13%)	5 (9.3%)	18.9	<.001
PCLC-6 score 14 >	18 (19%)	27 (12%)	20 (12%)	6 (11%)	2.58	.275
AUDIT score 8>	32 (38%)	37 (17%)	17 (11%)	2 (6%)	38.38	<.001
DAST-10 score 1>	13 (6%)	13 (6%)	8 (5%)	4 (8%)	.5.531	.509

Table 5.26: Common mental disorders in the Falklands by sex and age range: male

	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
PHQ-9 score >10	3 (8%)	16 (8%)	16 (12%)	1 (3%)	22.2	<.001
GAD-7score >8	4 (10%)	21 (10%)	11 (8%)	1(3%)	18.9	<.001
PCLC-6 score14 >	4 (19%)	17 (8%)	22 (12%)	2 (5%)	2.58	.275
AUDIT score 8>	19 (54%)	55 (33%)	35 (28%)	6 (10%)	38.38	<.001
DAST-10 score 1>	4 (10%)	14 (7%)	8 (6%)	2 (6%)	.5.531	.509

All Falklands residents would be categorised as living in an extreme remote and rural setting, therefore limited findings are attributed to place of residency or immigration status for this study. The results indicate that demographic characteristics including place of residency, marital status, immigration status, employment and education attainment have no strong link to common mental disorder or associated alcohol and drug use. The results do suggest that gender and age range have stronger links to common mental disorder and alcohol or drug use.

The results indicate that all adults of working age in the Falkland Islands have higher prevalence of common mental disorders and associated alcohol and drug use similar to the global, European and UK findings.

Chapter 6: The management of common mental disorders by primary care practitioners

6.1: Introduction

This chapter presents the findings from interviews with primary care practitioners working in the Falkland Islands on their management of common mental disorders. The purpose of the interviews with primary care practitioners was to gain insight into their perceptions of managing common mental disorders in the Falklands and identifying any enabling factors or perceived barriers in their experience. The interviews were also an opportunity to explore practitioners background experience and training in mental health and understanding of common mental disorder.

The findings are presented based on the framework of analytic themes identified in the synthesis of the literature on primary care practitioners' management of common mental disorders in primary care practice. The findings are categorised in four broad themes, namely, of 'identification of common mental disorders', 'treatment for common mental disorders', 'perceived barriers in managing with common mental disorders' and 'perceived enablers in managing common mental disorders'. These four themes shape the summary of the findings. Reflective commentary is presented in the text in italics (Table 6.1).

Table 6.1: Qualitative evidence synthesis; a priori themes recoded into overarching themes adapted from Thomas and Harden 2008

A priori themes (n= 12)	Overarching Themes (n=4)		A priori themes (n=12)
Theme 1: Understanding and diagnosing depression when it is viewed as a response to life events Theme 2: Understanding and diagnosing depression when it is viewed as a medical condition Theme 3: Attitudes and stigma towards common mental disorders Theme 4: Liaison between PHCT professionals in the management of common mental disorders. Theme 5: Liaison between PHCT and secondary care services in the management of common mental disorder Theme 6: Diagnosis of depression, clinical tools and strategies applied in primary care practice	Theme One: Identification of common mental disorder • Recognition of common mental disorder • Screening for common mental disorder • Assessment of common mental disorder Theme Three: Perceived Barriers in managing common mental disorder • Stigma (internal and external) • Confidentiality and trust • Working in a close community • Lack of patient choice • Lack of specialist services in the islands • Low income as a barrier to accessing services • Isolation • Work culture; having the time to attend clinics • Vulnerable groups: older people, carers, Camp residents, complex health, multi morbidity, contractors and their families	Theme Two: Treatment for common mental disorder • Cognitive behaviour therapy • Medication (anti-depressants) • Community mental health nurses • Specialist advice • Online CBT • Group CBT • Exercises Referral • Mental health charity Theme Four: Perceived enablers in managing common mental disorder • Continuing professional development/ in service training • Team work with mental health practitioners • Remote access to specialist services by email/ phone/ • Telemedicine/ video consultation • Public health promotion • Mental health awareness in schools • Extending patient choice • Public policies: public health strategy/ Camp Strategy (island wide/ across government services)	Theme 7: Treatment for common mental disorders - Psychological Therapies Theme 8: Treatment for Common Mental Disorders – Pharmacology Theme 9: Treatment for Common Mental Disorders- psycho-education, self help and group therapies. Theme 10: The role of clinical guidelines in managing and treating Common Mental Disorders in primary care Theme 11: Managing Common Mental Disorders in rural primary care practice Theme 12: Managing Common Mental Disorders and co-morbid medical conditions

	• Time constraints (primary care practitioner and patient interaction) • Lack of policy on the management of common mental disorder • Lack of policy (public health/ community wide)	• A community resource or Hub in Camp • Policies to enhance treatment compliance • Creative ways to engage the community	
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6.2 Participants Profile

Seven primary health care professionals gave consent to participate in the interviews for this study. All seven participants were working in primary care in the Falklands. Age was not requested or noted at the interview, nor nationality or country of birth, to protect the anonymity of participants. Interview schedule questions one, two and three pertain to participant's profile (Table 6.2).

Table 6.2: Profile of interview participants: occupation, sex, years qualified and experience of working in the Falkland Islands

Interviewees	Occupation	Gender	Professional Years qualified	Falklands Experience
Participant 1	Medical doctor	male	28 years	1 year
Participant 2	Nurse practitioner/ Health Visitor	female	12 years	1 to 2 years
Participant 3	Nurse practitioner/ Advanced Nurse Practitioner	female	20 years	17 years/ 2 years ^a
Participant 4	Medical doctor	female	16 years	12 years
Participant 5	Nurse practitioner/ Practice Nurse	female		3 – 4 years
Participant 6	Medical Doctor Occupational Health role	male	15 years	3 – 4 years
Participant 7	Nurse Practitioner/ Advanced Nurse Practitioner/ Occupational Health	female	28 years / 6 years ^b	25 years
^a current post				
^b current role				

As a rural medical doctor, the role encompasses duties beyond primary care clinics, this includes medical cover for Accident and Emergency / Casualty and medical cover for the hospital ward within the Falklands. This is similar practice to other rural medical practice (Diggle 2003). The average length of participants professional experience in their chosen career was 18 years of practice. Some nurse participants had changed professional role following completion of

additional professional qualifications and training. Two participants had changed role more than once. Participants presented as mature and experienced.

6.2.a Preregistration, post registration and Continuing Professional Development Qualifications in mental health issues

Identifying participants background education and experience in managing common mental disorders was relevant to provide context. Questions 4 and 5 of the interview schedule asked participants about any pre-registration, post registration and Continuing Professional Development (CPD) on mental health (Table 6.3).

Table 6.3: Sample professional occupation and education or training in mental health

Interviewees	Occupation	Basic Level training	Advanced Level training	Continuing Professional Development	Inservice Training
Participant 1	Medical doctor	no	no	no	Yes (FI) MH Law (1/2 day) TMAV (2 days)
Participant 2	Nurse practitioner/ Health Visitor	Yes	No	no	Yes (UK) 2 day course Post/ ante natal mental health
Participant 3	Nurse practitioner/ Advanced Nurse Practitioner	Yes Advanced Nursing Practice	Yes Post registration on CMD	Yes Dementia counselling	Yes (FI) TMAV (2 days)
Participant 4	Medical doctor	no	no	no	Yes (FI) MH law (1/2 day) TMAV (2 days)
Participant 5	Nurse practitioner/ Practice Nurse	No	No	No	Yes (FI) MH law (1/2 day) TMAV (2 days)
Participant 6	Medical Doctor Occupational Health role	No	Yes, Post-grad certificate on CMD	Yes	No
Participant 7	Nurse Practitioner/ Advanced Nurse Practitioner/ Occupational Health	No	No	No	No
MH law – half day training on the Mental Health Ordinance Therapeutic Management of Aggression and Violence – 2 day/ 12 hour training on theory, de-escalation					

Two out of the seven practitioners interviewed had completed some form of mental health training in their professional education post-registration. One doctor and one nurse practitioner had completed mental health education, both were at university level; one as a component of an advanced nursing practice course, while the doctors training was an elective certificate course. The description by P.3, '*identification, screening and assessment*' and P.3 and P6, both referencing anxiety and depression, imply that the focus was on common mental disorders.

Reflective practice: On reflection, it would have been very useful to learn more about the content and length of the courses on mental health and whether some form of assessment to accredit learning was required.

6.2.b Continuing Professional Development (CPD) in mental health issues

Five participants had completed some form of in-service CPD in mental health in the Falklands, while one participant described completing a 2-day course on post-natal and ante-natal mental health at a previous NHS trust in the UK. The CPD provided in the Falklands included in-service training on the Mental Health Ordinance, a 4 hour mandatory training which is a requirement for recognition as an Approved Professional in the Falkland Islands, either an Approved Doctor or Approved Nurse (Rimicans and McInerny 2018). Furthermore, management of aggression and conflict resolution training, either offered as a three day training course to staff working in the ward or casualty, which all GPs would have attended (18 hours CPD) or, a two day course for those working in primary care, all nurse practitioner should have attended (12 hours CPD) to ensure a universal approach to keeping staff and patient safe when managing emotional distress, behaviour that challenges and trauma (NICE 2015 NG 10).

The literature suggests that the provision of short courses of in-service CPD for primary care practitioners on mental health issues, predominately mental health emergencies is common, with 'up to 50%' of GPs in a Canadian study has attended short courses on mental disorders (Fleury et al. 2012, p. 8). The need to support practitioners to 'upskill' in their management of common mental

disorders through the provision of CPD in mental health issues is widely recognised in the literature, in Australian, Canadian, German, UK, Ireland and the United States (Barley et al. 2011; Conn et al. 2017; Ellis and Philip 2010, p. 3; Fleury et al. 2012; Noonan et al. 2018; Scheerder et al. 2011). The evidence also suggests that primary care practitioners with an interest in mental health will gravitate towards CPD on mental disorders, while those who do not have an interest will not seek training (Ellis and Philip 2010; Fleury et al. 2012).

6.2.c Lack of mental health training as core educational content across medical and nurse registration curriculum

Six out of the seven participants reported that they had not received any core curriculum content on mental health in their pre-registration education. One participant described how they had not undertaken any education in mental health in their pre-registration or post-registration education, that in the country where they complete their medical training, *'psychiatry is a different subject altogether'* (P1) and is not a component of the course curriculum or practice placements, unlike the time served placements of trainee GPs in the UK (England et al. 2017).

The one participant who did undertake mental health content in their professional education was completing a post-registration advanced nursing practice master's degree course. This finding suggests that all seven participants had completed no mental health content in pre-registration education for either medical or nursing participants. Furthermore, that there was no consistent post registration, or inservice CPD for primary care practitioners in the Falklands, that was applicable for all.

Professional qualifications and experience varied greatly between different regions of the globe, and there was no established baseline core mental health content (Ellis and Philip 2010; Gullifer et al. 2021). Nationality and identification of the country where primary care practitioners completed their professional qualifications were not recorded. Although all practitioners were registered with UK professional bodies, there was no consistency in exposure to common mental

disorders or education in the management of common mental disorders evident in the findings.

6.3 Overarching Theme One: Identification of Common Mental Disorders

6.3.a Recognition of Common Mental Disorders ‘*straightforward ... common garden conditions*’

Question five of the interview scheduled asked interviewees what they understood by the term common mental disorders. Participants described disorders which would be categorized under the broad heading of common mental disorders and also symptoms of common mental disorders. The findings suggest that the term common mental disorders was familiar to the primary care practitioners in this study. All seven participants referred to depression, while six participants referred to anxiety and three referred to PTSD and stress, which demonstrate familiarity of common mental disorders. Finally, one participant referred to Post Natal depression and one participant referred to phobias and obsessive-compulsive traits.

Familiarity with common mental disorders was also inferred by one participant who described common mental disorders as ‘*straightforward*’ and ‘*common garden conditions*’ (P 5). In contrast, one participant spoke about postpartum psychosis, an uncommon and serious mental illness, “*Psychosis, I’ve only witnessed that once postnatally, she changed, noticeably changed, we knew something serious was wrong, we managed to get her to a unit” It is very rare, but it does happen*” (P7). Whether common mental disorder in the broader encompassing NICE definition is known or understood by all participants is not clear (NICEa 2011).

Reflection: I noted that no participants asked for further explanation of the term common mental disorders. My perception is that this demonstrating familiarity with the term. That all seven participants referred to depression and six referred to anxiety, indicated familiarity. I did not prompt for more details to define the concepts of depression, anxiety, PTSD or stress, as this may have detracted from

the focus of the interviews, not to test knowledge or competency in defining common mental disorders but encourage discussion and levels of understanding about management of common mental disorders in primary care.

6.3.b Symptoms to describe common mental disorders: '*not doing as much*'

Two participants described their understanding of the term common mental disorders by describing symptoms which may be attributed to common mental disorders. This reflects the findings from literature where description of symptoms may be more apparent in the way patients present and what primary care practitioners perceive as changes in their patients' presentation (Barley et al. 2011; Geraghty et al. 2019). The most frequent symptoms referred to by participants were '*tearfulness*', '*low in spirits*', '*isolation*' '*worrying about everyday matters*' and '*not doing as much*' (P 2, P 7). Both participants who described common mental disorders in terms of symptoms of common mental disorders were nurse practitioners.

Identifying symptoms of common mental disorders is relevant for accurate detection. Whether symptoms are identified by practitioners or described by patient themselves can influence recognition of common mental disorders. Evidence suggests that patients' reluctance to talk about common mental disorders symptoms and clinicians' reluctance to ask about symptoms contribute to poor detection of common mental disorders (Karasz et al. 2012; Noonan et al. 2018; Roberge et al. 2016). Furthermore, talking about symptoms can lead to challenges differentiating between symptoms of emotional distress and symptoms of common mental disorders, perceptions of true biological depression, as opposed to life events, or even symptoms of chronic disease (Wittchen, Hans-Ulrich et al 2003, Roberge et al 2016, Geraghty et al. 2019;).

6.3.c Identification of Common Mental Disorders

Question six asked interviewees how they identified common mental disorders in their practice. A range of responses were given. The most common way reported by four participants was by spending time talking to patients (P1, P2, P5, P6).

While the second most common way to identify common mental disorders reported was clinicians recognising the signs of common mental disorders (P3, P7).

6.3.d Spending time talking to the patient

Four participants described spending time talking with the patient about mental health as the key method of identifying common mental disorders in clinical practice. The nature and content of those discussions was not explored further but one participant described using patient education about mental health as an introduction and preparation for any further exploration of mental health.

'We usually use the time at the clinic to discuss what happens, and talk about baby blues, then have that discussion' ... [pause] 'how that can lead to depression later. So, hopefully parents know, that if they feel any strange feelings they can come to me'.

(P 2)

Promoting mental health through education prompting open discussion about common mental disorders is supported as good practice in the literature (Chakraborty et al. 2020; Conn et al. 2017; Geraghty et al. 2019; Karasz et al. 2012; NICE 2011a).

The literature suggests that the content of those patient–clinician interphase discussions is of central important in the detection and recognition of common mental disorders. Karasz et al. (2012) identified in a UK, US and Netherlands study of doctor-patient interactions found that discussions tend to be 'outcome orientated', and that signs of common mental disorders can easily be overlooked if biological symptoms are not described, or if the patient is describing life events affecting their mental health (Karasz et al. 2012, p. e55). Furthermore, reluctance by clinicians or patients to talk about mental health or if either lacks ability to talk about mental health, can negatively impact on the detection of common mental disorders (Alexander and Fraser, 2008; Barley et al. 2011; Karasz et al. 2012; Lessard et al. 2015; Roberge et al. 2016). Emotional literacy, which can be defined as the ability to recognise, understand and articulate feelings is

recognised as an acquired skill that may be taught in Step 2 psychological therapies or taught in Mental Health First Aid training (Boyd et al. 2019; Morgan et al. 2018).

6.3.e Recognising the signs of common mental disorders: ‘Not their usual self’

Two participants described recognising the signs and symptoms of common mental disorders. Those signs and symptoms included that participants are already familiar with, which encompasses ‘*body language*’, and ‘*how they communicate*’ and patients ‘*not being right, their usual self*’ (P5). These descriptions are not descriptions of symptoms but signs of emotional distress. Conversations about mental health are recognised in the literature as pivotal in the identification of common mental disorders, however clinicians’ and patients’ communication about common mental disorders has challenges i.e. from different views on what common mental disorders are, the social implications of having a common mental disorder and the social construct of depression as a clinical disorder or reaction to a life event (Geraghty et al. 2017; Karasz et al. 2012; Maxwell 2005).

Two participants described working with patients with complex health, ‘*patients presenting with other problems*’ (P 6) where the primary focus was not mental health but where there may be an undiagnosed common mental disorder, and a ‘*need to figure it out if there is any hidden mental health issues*’ (P4). This challenge of undetected common mental disorders is recognised in the literature, in the homogeneity of symptoms such as fatigue which may be present in chronic disease and common mental disorders, plus knowing the patient which implies continuity of care, plus the implications of a diagnosis or ‘label’ (P3) (Karasz et al. 2012; Roberge et al. 2016; Thomas et al. 2020).

Reflection: Noted a missed opportunity to seek further clarity about what signs and symptoms of common mental disorders interviewees were talking about and what ‘*figuring it out*’ meant for that interviewee. Also, whether it was harder for those PHCT practitioners with less experience of the Falklands community to

identify common mental disorders in their practice in the Falklands, without prior knowledge of the patient (Alexander and Fraser, 2008).

6.3.f Screening for common mental disorders in clinical practice: ‘Not on a sheet’ or questionnaires

Six methods of screening for common mental disorders were described by participants. Using a structured clinical assessment and algorithm ‘*in my head*’ (P4) was cited by one participant.

I use the MICES GAP, Mood, Interest, Concentration, Energy, Sleep, G is for something, A for Appetite and P for suicide. According to DSM 4, if I am right, Mood and interest are two major (symptoms) and you should differentiate between major and minor. (P4)

In contrast, five screening questionnaires were cited by participants which were; the Patient Health Questionnaire – 9 (PHQ-9) the most common screening tool cited by three participants, followed by the Edinburgh Post Natal Depression Scale (EPNDS) referred to by two participants, the Alcohol Use Disorders Identification Test (AUDIT) and Fast Alcohol Screening Test (FAST) cited by one participant and the Whooley Questions cited by one participant. The finding that the screening forms most frequently cited by practitioners in the Falklands are designed to screen for depression, is supported by the literature that suggests that primary care practitioners are more accustomed to screen for depression than any other form of common mental disorder (Rogers et al. 2021). The risk of using one measures alone, is that screening is focussed on one disorder only and evidence suggests that diagnosis of concurrent common mental disorders with depression is a ‘coin toss’ with misdiagnosed and undetected rates as high as 50% (Rogers et al. 2021, p. 883). Furthermore, studies suggest that patients who present with anxiety disorders and PTSD have those disorders undetected within primary care (Cowlshaw et al. 2020, NHS England 2020, p. 26). Finally, risk of self-harm or suicide are self-assessed by patients using the PHQ, but require follow up by a clinician if assessing for common mental disorders,

acknowledging the strong association between common mental disorders and risk of suicide (McLean et al. 2008; Stickley and Koyanagi 2016).

6.3.g Inconsistent recording of screening outcomes: ‘to be seen to be doing that’

Inconsistent recording of the outcomes of the screening questionnaires was identified. Three interviewees responded that they used to use screening questionnaires as templates but no longer used them due to changes in the electronic medical records system and lack of familiarity with the new system. This finding is supported in the literature, that inconsistent recording leads to misdiagnosis and poor detection of common mental disorders, also inconsistent care if information is not monitored or shared with primary practice (Barley et al. 2011; Chakraborty et al. 2020; Rogers et al. 2021).

One participant responded that not only was changes in the medical records system a reason to stop using screening questionnaires, but they acknowledged having ‘*drifted off*’ (P6) from using them. The same participant described ‘*talking through the questions*’ (P6), so this implied using screening questionnaires but it is not clear that they are recording the outcomes.

6.4 Summary – Identification of common mental disorders

The findings suggest that the participants demonstrate familiarity with common mental disorders, both the range of mental disorders and some of the key symptoms that may present to indicate common mental disorders. Participants approach identifying common mental disorders through cues such as body language, and discussing mental health with their patients, plus screening for common mental disorders indicates knowledge and skills. The emphasis on depression as the main common mental disorders screened for in primary care to the detriment of concurrent common mental disorders is supported in the literature. That when depression is focussed on, other forms of common mental disorders such as anxiety disorders or PTSD, comorbid alcohol or substance misuse disorders are overlooked and remain undetected (Barley et al. 2011; Das-Munshi et al. 2008; Rogers et al. 2021; Whiteford et al. 2013).

The clinician-patient relationship is a key component of detection and management of common mental disorders, yet studies agree that ‘intuition with few clinical tools’ is an insufficient approach to the recognition and management of common mental disorders in primary care (Fleury et al. 2012, p. 9). Lack of a formal system for screening common mental disorders and recording the outcomes, is an obstacle to continuity of care, that the onus cannot be on the patient describing their mental health concerns, practitioners need guidance to ask the right questions. Structured clinical assessment of mental health is good practice, but it is not common practice within primary care. Using validated methods for detecting common mental disorders is a benchmark of good clinical practice, especially when an estimated 20% of all GP visits are mental health related (Fleury et al. 2012). A further concern is the need to screen for risk of self-harm and suicide when assessing mental health in general practice. It could be argued that PHCT practitioners are comfortable with managing depression, but not all common mental disorders.

6.5 Overarching Theme Two: Treatment of Common Mental Disorders

Questions eight and nine in the interview schedule were similar, and asked participants about their general knowledge of treatment for common mental disorders and then awareness of what treatment was available in the Falkland Islands. The responses overlapped and on reflection the questions could have been better phrased such as: what treatment for common mental disorders were you aware of before coming to work in the islands?

6.5.a Talking Treatment for Common Mental Disorders: ‘*psychotherapy is very important*’

Five participants described talking treatments, namely counselling, psychotherapy or Cognitive Behaviour Therapy (CBT), while two participants referred to group therapy or specialist units. Further assessment by a mental health practitioner or seeking specialist advice was mentioned by three interviewees and finally, online CBT and guide self-help was mentioned by one interviewee.

A range of talking therapies, the first line treatment for most common mental disorders, with described, but no distinction was made between types of talking treatments or the appropriateness of a particular treatment for what type of common mental disorder (Boyd et al. 2019). '*All sorts of complicate things out there*' (P7) implies awareness of a range of talking treatments available.

Reflection: this lack of description may reflect the way the question was phrased or lack of prompts. Asking, 'Do you know what type of treatments are helpful for any specific common mental disorders?', may have generated a different response. All seven participants demonstrated an awareness of treatment for common mental disorders.

6.5.b Medication as a treatment for Common Mental Disorders: '*a good range of medication*'

All seven participants described antidepressants as a treatment for common mental disorders. The finding that medication was cited by all participants as the most commonly known treatment for common mental disorders is supported by the literature (Alexander and Fraser, 2008; Barley et al. 2011; Fleury et al. 2012; Karasz et al. 2012). Furthermore, all participants described medication as a treatment for common mental disorders in the Falklands. Anti-depressant medication, including SSRIs, Tricyclics and atypical anti-depressants and anti-psychotic medication for treatment were described by one participant (P1). The preference for prescribing antidepressants as a first line or second line treatment option within this study was found, however views varied as expressed below, including patient preference and a limited range of access to psychological therapies:

Sometimes people don't want medication, and they say that straight away. (P4)

Furthermore, there is some indication of a joint approach to treatment combining medication and psychological therapy, this was made by three participants.

We have referral to your service and medication. (P6)

Reliance on medication as a first line treatment for common mental disorders in the Falklands could be determined by audit and comparison with other practices. The literature suggests contrasting evidence from increased reliance on medication due to lack of alternative forms of treatment in rural areas in Australia (Alexander and Fraser, 2008), to low prescribing rates found in rural areas in a Scottish study (Morrison et al. 2009).

6.5.c Referral on to the Community Mental Health Nurses: ‘excellent access to well qualified CPNs’

Seven participants describe access to mental health nurse practitioners, the CPN service, in the Falklands as a treatment for common mental disorders. Furthermore, comments of ‘*good support from our CPNs*’ (P1) and ‘*excellent access*’ (P5) demonstrate positive appraisal of access to the service. Four participants describe CBT, two participants describe counselling, and one participant describes group work, namely, the Alcohol Support Group, as treatments available in the Falkland Islands. The implication is that CBT is provided by the mental health nurse practitioners, yet it is unclear whether the CPNs are qualified to provide this treatment. Furthermore, onward referral would be considered a second line stepped intervention in the NHS England IAPT competences and referral pathway, not a first line intervention in primary care (NHS England 2024).

Reflection: Whether the same response, praising the community mental health nursing service would have been generated if an external interviewer were conducting the study is a relevant question.

In contrast to referral to the mental health nurse practitioners as a first line intervention in primary care for common mental disorders, one participant later describes the complex cases managed by the CPNs:

When I think about the complex cases, the complex people, we on the shop floor are protected from that, because you’re dealing with it (CPNs), you’re fire fighting. (P 5)

The implication is that the mental health nurse practitioners were caring for people with complex needs in the Falklands community. The ongoing discussion about expectations of mental health nurses' role and purpose in primary care services is highlighted, to focus on the needs of those people with complex mental disorder or treat common mental disorders, this can create confusion for mental health nurses and their primary care colleagues alike (Secker, et al. 2000). The creation of clinical guidelines and IAPT has not resolved this debate, especially not in rural primary care services (Ferenchick et al. 2019; Kendrick 2000).

6.5.d Specialist Advice

Contrasting views on the accessibility of remote specialist advice and services were cited, with one participant perceiving the availability of specialist support as more than adequate;

'We get very comprehensive advice and guidance' (P5)

and two participants viewing the provision of specialist services as being less than adequate,

'We don't have psychologists and we don't have psychiatrists'.

(P1)

Comparison with access to specialist mental health services in other UKOTs would be an appropriate way to measure availability and access (Walker et al. 2022).

6.5.e Access to online CBT and mental health resources

The use of telemedicine and accessing online resources, whether guided self-help or talking therapies was cited by one participant. On-line CBT was recommended particularly for patients who lived in remote settlements or countryside known as Camp. This was an attempt to offer patient choice by accessing psychological therapies in a different mode, however, the same

participant recognises that they do not yet know if this was acceptable for the patient or accessible for the patient due to the prohibitive costs for internet.

Online CBT and mental health resources are described as both as a good alternative for patients living remotely, and a '*substitute for good access to face-to-face mental health services in the UK*' (P 5), which was then perceived as '*not good*'. The impression is that online services are considered as possibly both, a good alternative to face to face in person mental health talking therapies, but potentially a poor second option. The literature suggests that remote service provision does not impact services negatively and may increase patient choice (Capobianco et al. 2023).

6.5.f Group work/ group CBT

Community treatment for alcohol and patient education was delivered individually or in group format to increase support and reduce isolation. This evidence-based alcohol awareness programme was cited by one participant as a treatment option (NICE 2011b).

6.5.g Exercise Referral

Exercise Referral as a treatment for common mental disorders was described by one participant (P6). Prescribed exercise, an evidence-based treatment for depression and other common mental disorders was available in the Falklands (Tomlinson-Perez et al. 2022). Barriers to prescribed exercise referral programmes include access to an exercise referral practitioner, the timing of sessions, the cost and the location (Morgan, F. et al. 2016). In addition, shared knowledge of the range of treatments within the primary care team, including exercise referral, and referral pathways to access services may have been an issue of concern, but this was not explored further in the interview, and on reflection was a missed opportunity.

6.5.h Mental health charity

Team Tranquil the Falklands mental health charity was described, yet the role of what this charity provided by way of treatment for common mental disorders or

support for people with common mental disorders in the Falklands was not described.

6.5.i Summary – Treatment for Common Mental Disorders

A range of available treatment for common mental disorders in the Falklands were cited by participants. The two core treatments are medication and referral on to the community mental health nurses. It is unclear whether it is appropriate use of the mental health service as a first line treatment. Other services including online CBT, community alcohol treatment programmes, the role of the local mental health charity and exercise referral are not cited by more than one participant. The impression is that the range of available treatment options is not well understood or shared within the primary care team. The primary care team knowing what mental health resources are available is a pre-requisite for effective treatment of common mental disorders (Fleury et al. 2012).

6.6 Theme Three: Perceived barriers in the management of Common Mental Disorders in the Falkland Islands

Question 12 asked participants their opinion about perceived barriers to the management of common mental disorders in the Falklands. A wide range of responses were given effecting systems of practice, patient management, professional education and the culture of the Falklands community which were perceived as impacting the management of common mental disorders. These responses are categorised into six key areas:

- Stigma – external and internal, structural and systemic
- Working and living in a close community, confidentiality and trust
- Patient choice: accessible and acceptable treatment
- Socio-environmental and cultural barriers
- Gaps in Continuing Professional Education and Inservice training as a barrier to managing common mental disorders
- Policy gaps in managing common mental disorders

6.6.a Stigma in a rural community: external, internal and structural stigma ‘being labelled’

Stigma was raised as a barrier by five participants. This can be conceptualised in different levels, from community stigma (or external stigma) negative attitudes or perceptions of mental disorder in the public arena, personal stigma (or internalised stigma) personal views, shame and stigma about common mental disorders or treatment, to structural stigma (or systemic stigma), often unseen obstacles put in place by service providers such as referral processes (Schomerus and Angermeyer 2008, Barley et al. 2011;; Schomerus et al. 2018).

i. Community stigma

Community stigma refers to the effect of living in a close community and public perceptions of being ‘labelled’ (P3) or receiving treatment for a mental disorder:

I think the fact that we are such a small community make our confidentiality, doctor-patient, CPN confidentiality, that much more difficult. (P1)

In a large community it's not the same as in a small community ... if you are a teacher, for example, and you're going to see the CPN, and you walk into their office ... I think from that perspective people may be reluctant to discuss issues that we have. (P1)

The literature supports this finding that community stigma is a barrier to help seeking for common mental disorders and accepting treatment for common mental disorders (Barley et al. 2011; Karasz et al. 2012). The impact of being labelled with a common mental disorder such as occupational health, sharing the reason for absence from work or trying to live a normal routine while signed off are recognised, plus, treating both the employee and the employer, where the clinician may have an existing personal relationship (Chakraborty et al. 2020).

ii. *Internal stigma: 'but it is really hard to just say, I am feeling really bad'*

Patients' own internalised sense of stigma, shame and perceptions of common mental disorders were cited as barriers for help seeking and receiving treatment, for example:

Sometimes the person is not willing to try psychotherapy, they don't want to go, or take medication. (P3)

Also,

Taboo ... trying to persuade people that they might get some benefit from talking therapy, they might get some help. (P1)

Patients' beliefs and attitudes towards common mental disorders are apparent in the reluctance to accept treatment as illustrated in the above examples. Similarly, patients' perception of the clinician's role and perceived priorities and time constraints, may prevent them from bothering the clinician to ask for help (Roberge et al. 2016).

One participant described that patients may feel ashamed if they feel they are not coping:

If you have a supportive family, it can feel like it's lovely, lovely, lovely, but it is really hard to just say, I am feeling really bad, and I feel that I don't love this baby. That is really hard, if there is an aura, and an expectation that it is really wonderful. (P2)

Another participant described exploring beliefs about common mental disorders and treatment with medication with a patient, in taking medication for a common mental disorder:

they feel that they are failing if they can't cope, they have a huge issue taking medication'... 'I always say to people, if it was a

chest infection and they were offered anti-biotics, would they take it, and they say yes ... So, why is it, any different?' (P4)

Fear of being labelled, fear of dependence on others or fear of dependence on medication can all be further barriers to treatment for common mental disorders, as can views about the social causes of depression, real depression versus the emotional distress brought about by life experiences (Schomerus et al 2018, Geraghty et al. 2019;).

iii. Structural stigma – 10 minute appointments: 'it's unfair for the patients and its' unfair to the doctors' (P1)

Structural stigma includes the way services are delivered and the systems of practice, this includes the previous example of a patient being reluctant to go for help if attending the clinic was the only available option to access services. Also the way clinics are set up:

You can't deal with a patient with a mental health problem in 10 minutes. (P 1)

Short appointments limit the opportunity for practitioners to explore problems, but are also perceived as barriers by patients who may not wish to waste GPs' time (Alexander and Fraser, 2008; Deveugele et al. 2002; Iacobucci, 2019; Irving et al. 2017; Karasz et al. 2012). Chronic disease management and multi-morbidity can add additional pressure to clinic time,

We have excessive work with chronic disease management. (P6)

Both patients and PHCT practitioners may prioritise medical conditions and this may lead to common mental disorders being undetected and not explored. Furthermore, the blurring of symptoms between common mental disorders and medical conditions, such as fatigue, can enable common mental disorders to remain hidden (McGrath et al. 2020; Roberge et al. 2016).

6.6.a.ii *Stigma within the Primary Health Care Team – ‘you could quite happily go through your whole career and if you are not interested, you won’t know and you won’t understand it’*

Primary care practitioners’ own professional and personal interests and perceptions can influence the recognition, treatment and management of common mental disorders, for example:

Not all doctors are interested and to be fair don’t have the same experience or training in dealing with mental health problems’.

(P1)

The literature supports these findings that attitudes and beliefs of PHCT practitioners may be a barrier to diagnosing, managing and treating common mental disorders (Barley et al. 2011; Karasz et al. 2012; Maxwell 2005). Social or situational presenters were offered treatment on 2 out of 11 occasions, in comparison to symptom presenters who were offered treatment 8 out of 9 times in one study, while stigma associated with giving a diagnosis of common mental disorders was recognised in another study (John et al. 2016; Karasz et al. 2012 p. e58).

6.6.b Confidentiality: Working and living in close community

The importance of confidentiality in a small community was a common theme voiced by five participants. This reflected both a pragmatic approach to living and working in a small community, from patients having, ‘*no anonymity*’ (P4), which is expected to situations where confidentiality can be difficult to maintain, ‘*saying no one is going to know*’ (P5). This lack of confidentiality and anonymity can be a barrier to treatment for common mental disorders and may refer to patients perceived environmental safety of going to the clinic for treatment, or collecting medication from pharmacy, or being seen leaving the clinic.

Unfortunately, due to a close community, sorry to say, sometimes the person does not like to access the psychotherapy support team. It is not a deficit of the team, just working in a closed small community. (P6)

Also, PHCT practitioners' own perceptions of the service and clinic, '*what goes on in this place ... it's hard to get an environment where you can trust to be safe*' (P7). This reflects the literature where mistrust in a small community can be a barrier to accessing services (Chakraborty et al. 2020; Gullifer et al. 2021).

6.6.c Lack of patient choice

Patient choice was raised by all participants whether informed choice about medication or referral to the CPNs or other ways of accessing treatment.

6.6.c.i Reliance on medication as a treatment: 'don't just reach for the Fluoxetine'

Medication had previously been cited by all participants as treatment for common mental disorders, changing practice so that GPs do not prescribe anti-depressants as a first line treatment was cited by two participants:

It might be the quick thing in clinic, when you are running half an hour late, and you haven't got time to get into it. "But it is not the right thing to do." We've all done it. (P1)

In some cases, to take the burden off the supporting team, we do sometimes give anti-depressants. (P 6)

The prescription of medication as a first line treatment which is contrary to clinical guidelines in the treatment of common mental disorders, plus the potential differences in the approach to treatment with PHCT practitioners educated in countries outside of the UK are recognised in the literature (Alexander and Fraser, 2008; Barley et al. 2011; Karasz et al. 2012; Morrison et al. 2009).

6.6.c.ii The role of registered mental health nurses as a barrier to treatment for Common Mental Disorders

In contrast to the notion of referral to mental health nurses in the Falklands as a first line treatment for common mental disorders, perceptions of what mental health nurses should or could be providing may be a barrier to onward referral. This can be based on previous experience of mental health services, or based

on patient outcomes, or the quality of relationships with mental health service practitioners within the team can influence referral patterns (Barley et al. 2011):

I had some experiences with psychiatry and it was negative for my patient. So, I'd prefer to refer to psychology. (P1)

Also, recognition of the development of multi-faceted role of mental health nurses in primary care and rural health care. In many countries the PHCT are not familiar with the role of mental health nurses in the community:

When I come from we're not exposed to CPNs in the way you guys work, you play such a huge role. (P1)

Or in another example the expectation of mental health nurses to plug the gap and meet all mental health needs in the community,

When the post (CPN post) was created, we needed a CPN, we needed those skills, but then, it's like, if we have a CPN, there can't be any mental health problems, like we've done something about it, we've addressed them. But it's not like that. (P7)

The role of registered mental health nurses in rural primary care services, the capabilities and competences required by nurses and foremost, questions around patient choice are raised in these statements (Finley, 2020). Finally, ways to access services can be a barrier:

People with long term illness and disability, where getting out is a problem ... it could do with more resources and improvement. (P7)

6.6.d Socio- environmental and cultural barriers

Several barriers were described by participants which may be associated with living in a remote island community, these were isolation and loneliness, low

income as a barrier to accessing resources and the work culture in the Falklands as a barrier to accessing health care.

6.6.d.i Isolation and loneliness

Isolation and loneliness was described by three participants, in relation to older people or those living with a disability but also for families and those looking after young children as below:

'Because everybody sees the joy of children, having a baby is not a lonely experience, but if you are here on your own. But it can be a lonely experience. If you have a supportive family, it can feel like it's lovely, lovely, lovely, but it is really hard to just say, I am feeling really bad, and I feel that I don't love this baby. That is really hard if there is an aura and an expectation that it is really wonderful.' (P2)

For contractors and their families, a further concern about isolation was highlighted:

Like fathers splitting up, with young children, if you are far away from your family. Things like if you have got children and you have no one to baby sit, it restricts your social network, you are unable to go out. Also though, sometimes parents hang together a bit more, because they know they are in the same situation.
(P2)

Patients who present with life problems, such as family breakdown, are less likely to have common mental disorders recognised or treated (Geraghty et al. 2019; Karasz et al. 2012). Loneliness is strongly associated as a risk for common mental disorders (Mann et al. 2022; Stickley and Koyanagi 2016).

6.6.d.ii Low income as a barrier to accessing treatment for Common Mental Disorders

The inaccessibility of online resources due to the cost of the internet was cited by one participant:

Online websites and mental health resources 'a lot of people said they didn't want to do it, for a number of reasons, it was using up too much of their internet. (P 5)

The literature supports these findings that low income and internet poverty may prohibit access to services (Thomas et al. 2020). Low income can also restrict access to other services, making phone calls to the health service or other services. Many residents in the Falklands do not have a landline and depend on pay as you go mobile phone credit.

6.6.d.iii Work culture attend health clinics: 'trying to tie it in with the finishing time at the end of the day. It's different'

One participant described the perceived pressure that parents may experience returning to work, where attending clinics and groups can be a struggle.

There is that expectation here, the parents feel that there is pressure to go back to work. Often you might think, I don't know if it too soon. If there is good bonding, but then again maybe, I don't think parents feel so isolated, if there is a sharedness, maybe there don't feel the pressure of going back too soon. If other family are there to help. (P2)

Also, differences in attendance by different population sub-groups:

A lot of my sessions during the week, a lot of local parents will attend, so like the baby massage sessions, sometimes up to 20 will be attending, a mixed group, really good, yet the reading sessions in the local library, and nursery rhymes, there isn't that many local people go to that, but maybe they that they are all fine with their own networks, they just don't want to go to things like that. (P2)

It's totally voluntary, so perhaps it might be that people who are here temporary, if their partner works, or maybe they do part time

work, maybe just different experiences of what child services are about, different models, different lifestyles, or different expectations. But getting time off for parents who are at work is challenging..... 'it's a different flow or pattern, like a busy week, yet a longer dinner hour in which nearly everybody who working stops in the middle of the day. (P2)

Interpretations of the differences in attendance between local resident families and contractor's families extended to the nature and reason for health appointments, not just the timing of clinics:

It's difficult, the employers would probably let them (parents) have time off to go to an appointment with you (CPNs) or the physio (physiotherapist) or a GP appointment, but would they let them have time off to attend a parenting group, or a baby massage class? Probably not. Do you see what I mean?

Even immunisations, there is a lot we have to do, a lot more than I used to do. We use to turn up with the equipment and just issue the appointment and they (the parents) would take it up. But not here. I don't think it's the motivation of the parents, it's trying to tie it in with the finishing time at the end of the day. It's different. (P2)

Common mental disorders are more prevalent in working age adults in the Falklands and other population, plus for those providing childcare for children in their own household.

6.7 Gaps in Continuing Professional Development (CPD) and Inservice training as a barrier to managing Common Mental Disorders in the Falklands: ‘if we can’t make time now, we will never do it’

The need for in-service education on mental health was highlighted by five participants, from informing new primary care practitioners of services available to keeping up to date with current practice.

Something could be done to help doctors understand what treatments are available. (P1)

... in the past, we have been desperately pushed for staff ... We need to set standards. We need to share that training, ... I get fed up with doctors saying we never do any training, but it shouldn’t be down to (one person) others need to share that, not just complain. We all need to accept responsibility for that. (P5)

The literature supports developing primary care practitioners in rural practice with emergency responses to psychiatric emergencies and treatment for common mental disorders, dissemination and implementation of clinical guidelines and developing their skill sets such as screening, assessment and psycho-social skills (Conn et al. 2017; Ellis and Philip 2010; Rogers et al. 2021; Whitton et al. 2021). Attitudes to managing mental disorders were worse when practitioners felt isolated and ill-prepared (Fluery et al. 2012).

6.7.i Policy gap in managing Common Mental Disorders: ‘we have inertia’

The gap in policy for managing common mental disorders was noted by several participants.

With the right attitude of all the staff involved ... for our doctors and nursing staff. thinking about the range (of treatments for common mental disorders) that are available. (P1)

Ensuring the best care for the patients by keeping the PHCT informed of treatment options available was highlighted, also ensuring safe practice through implementing policy (Barley et al. 2011; Chakraborty et al. 2020; Noonan et al. 2018).

Monitoring compliance and noncompliance in treatment is very important. From the doctor's point of view we have inertia, we need to identify and take action. (P6)

Reasons for having a robust policy for managing common mental disorders included having a changeover of GPs on a regular basis:

'There is a lot of locum doctors, so knowledge of the person and their condition and having continuation of follow up appointments, unless the case has been handed over to someone, it can be lost'. (P6)

If a DNA (did not attend) appointment ..., there is no specific policy here to follow up the person who DNAs. Following the DSM criteria. From mild to severe, people on the mild scale take responsibility, but people on the other side, we should be doing a lot more. (P6)

The need for policy on the screening, assessment, treatment and follow up procedures for common mental disorders within primary care practice is supported in the literature (Barley et al. 2011; Noonan et al. 2018; Rogers et al. 2021).

Managing common mental disorders and multi-morbidity in complex cases is increasingly common place with up to 35% of patients presenting with multi-morbidity in one study Fleury et al. (2012) and comorbid common mental disorders and substance use disorders as high as 36.1% in another study Kessler et al. (2009), clear policies are required (Roberge et al. 2016). The pressure of managing chronic disease was acknowledged by one participant ' We have

excessive work with chronic disease management' (P6). This pattern of an increase in the burden of chronic disease in primary care, reflects the aging population in the Falklands. In addition, the association between multi-morbidity across the lifespan and early onset common mental disorders is widely recognised and highlights another rationale for policy and management of an at-risk group for further episodes of common mental disorders (Baxter et al. 2014; Kessler et al. 2009; Whiteford et al. 2013).

6.8 Theme Four: Enabling factors that may enhance the management of Common Mental Disorders in the Falklands

Interview questions ten and eleven both enquired about ways to enhance the current service offered by the participants for managing common mental disorders and any other opinions on what may positively influence treatment for common mental disorders in the Falklands. The range of responses were categorised into four key areas for improving mental health:

- extending patient choice
- improving practice policy
- 6. developing Continuing Professional Development (CPD) opportunities
- devising and implementing public policy to promote mental health

All participants cited the need for more resources, but there was no unanimous hierarchy of what kind of resources would help most.

6.8.a Extending patient choice: '*having choices and a range of options*'

Extending and enhancing the range of treatment choices in remote and rural primary care practice is supported in the literature from mode of treatment delivery to stepped care in accordance with NICE guidelines (Boyd et al. 2019; Thomas et al. 2020). The need to extend patient choice was noted by several participants, from '*finding ways of engaging people*' and '*having choices to offer*' (P 7), generally recognising that although a service was offered there were '*many areas and gaps that we could build on*' (P7). Extending patient choice was also

cited as a way to minimise stigma, encourage engagement in treatment for common mental disorders and meet the needs of population sub-groups.

Sometimes the person does not like to access the psychotherapy support team. It is not a deficit of the team, just working in a closed small community. Having choices and arrange of options would be good. Plus, telephone CBT. (P6)

I think ... when we get the elderly care facility, it would be good to offer care for elderly dementia and carers, that would be positive. But, we have such limited resources ... but more resources, resources are stretched. (P7)

6.8.b Improving practice policies to enhance the management of Common Mental Disorder: ‘the team approach is best’

Improving practice policy for the management of common mental disorders requires matching best practice for screening, assessment, treatment, monitoring and evaluating the care given (Kendrick and Pilling 2012). Collaboration in care was cited by several respondents, citing collaboration within the primary care team, collaboration between primary care and mental health nurses in the islands and collaboration with mental health professionals who provide remote services to the islands.

The doctor should help out if the person is coming up with any weird symptoms, screening should be done at every opportunity. Screening should be done especially for those at high risk of chronic disease, diabetes, especially malignant cancer. Full support to cover mental health issues, there should be more screening. (P4)

You guys are back up (Community Psychiatric Nurses) that has been really valuable, we can listen to your opinion ... I think the team approach is best. (P1)

A good supportive team ... and good screening within primary care at every available opportunity, that would help out. (P 5)

Collaboration and shared care for the management of common mental disorders are recognised as key elements of best practice (Fleury et al. 2012; NICE 2011a; NICE 2014; NICE 2018; Noonan et al. 2018).

A universal model of service provision was cited by one participant,

Try to offer services that are not shown as immediately being shown as being offered for someone who is depressed....the model I'm trying to do, ... I tend to offer universal service to anyone who wants support. Not directly target specific groups. (P2)

Making services available to all is a productive way of engaging the public in rural communities, however, monitoring and auditing is required to ensure that a blanket approach is reaching the target population (Eaton and Fallin 2019; Noonan et al. 2018).

6.8.c Continuing Professional Development/ Inservice Training on Common mental disorders: beyond 'instinctive' training is 'absolutely vital'

Several participants requested more training in mental health issues including training on evidence-based practice on screening, assessment and treatment. Upskilling PHCT practitioners in rural practice is well supported by the literature (Barley et al. 2011; Chakraborty et al. 2020; Kendrick 2000; Kendrick and Pilling 2012; Noonan et al. 2018).

More inhouse training is absolutely vital, not just on the Mental Health Ordinance, but what we need to do, what is the evidence base behind it. (P1)

Awareness is the most important thing, the fact that we don't just willy-nilly put people on medication at the drop of a hat. (P1)

More training, definitely. Mental health would have come into ... my health visitor training ... not my general nurse training. It's almost instinctive, as you learn as you go, but it's nothing tangible. (P2)

6.8.d Public Policies: mental health promotion across the islands community

In addition to practice policies for managing common mental disorders, public health policy and rural health policy supported by government endorsed strategies were called for by several participants. Participants recognised that primary care practice alone cannot effect change, that funding and resource allocation were essential (Prince et al. 2007; Richter et al. 2021; Walker et al. 2022).

Public health issues, public health awareness, common signs and symptoms and asking them to get medical attention. Particularly for the elderly. Also, for carers... high risk groups.' 'For children, the school nurse, the health visitor, the school staff and teachers (they) should be aware of the common symptoms. This is for initial prevention of common mental disorder. (P3)

Fundamental resources like transport allowance or access to vehicles to enable primary care practitioners or mental health nurses to provide home visits for Camp residents was essential,

Funding for increased transport allowance for camp visits. We didn't get the increase we asked for, but maybe a Hub somewhere would be good.... But you can't match going and seeing people in their own homes, ... You get much more out of seeing people in their home environments. (P6)

6.7.e Finding creative ways to engage the community in promoting mental health: ‘get the communication going’

Finally, mental health promotion was cited by several participants as an important way to inform the general population and engage the public in talking about mental health and common mental disorders. Media campaigns were cited by several participants and are supported in the literature (Dyer et al. 2021; Mackereth et al. 2015)

Like using the media, more publicity, get the communication going. Like when Prince Harry talked about bereavement, the media talked about it, people listened ... things like that have a big effect, that might help. (P2)

... the British media, there has been more about mental health, depression, bereavement, the normal processes, adjusting to change ... here, things have moved on ... so more positively. But still people struggle with mental health, to get help for their mental health, where they would get help for like, a broken arm. So, normalising treatment, normalise disorders, making it less stigmatising for people ... it's got to be openly discussed with people ... We need to prevent people's own discrimination and reduce the stigma Improving public perception is so important. (P4)

In addition to health promotion through the media in the Falklands, the example below describes active engagement with the community, interacting and learning from the Falklands population what matters to them about their mental health.

A campaign to take away the stigma ... I wonder, in such a small population ... perhaps a multi-agency approach to try and make it more a shared experience help to de-stigmatise mental health ... asking like, what is the key points, like the survey, asking what it means to the island. (P3)

6.8 Summary

A wealth of professional knowledge and experience on managing common mental disorders exists within the Falklands primary care practitioners as demonstrated by the responses of the study participants. Gaps in shared knowledge about the management of common mental disorders and gaps in clinical practice and policy are evident in the findings. Through thematic analysis based on the framework of themes identified in the literature, four overarching themes emerge namely:

Theme One, the identification of common mental disorders in the Falkland Islands which includes processes for the recognition, screening and assessment of common mental disorders. The findings suggest that there was knowledge of assessment and screening processes, but that practice varied greatly between study participants and there was recognition that the systems of practice did not encourage the best patient outcomes (Kendrick and Pilling 2012). Furthermore, in talking about common mental disorders the focus remains primarily on depression, which may then overlook, anxiety disorders, PTSD, or co-morbid substance misuse disorders. This focus on depression is replicated in the literature.

Theme two, the treatment of common mental disorders in the Falkland Islands; includes the availability and use of medication, access to talking therapies and the range of other treatments and supports for common mental disorders. The findings suggest that a range of psycho-social interventions are available in the Falklands, but this range of treatment is not widely known within the primary care team and patient choice and access to treatments is a concern shared by most survey participants. Furthermore, the use of medication as a first line treatment for common mental disorders is recognised as not following national guidelines. In addition, the interphase between the primary care team and the community mental health nurses' contrasts between being viewed as first line treatment, or second line treatment with or without the use of medication.

Theme Three, the barriers in managing common mental disorders in the Falkland Islands, which includes stigma, working in a close community, confidentiality and trust, lack of patient choice, socio-environmental and culture barriers, lack of CPD to inform and educate primary care practitioners and policies to guide the management of common mental disorders. The findings suggest the need for clear policies in place for managing common mental disorders and monitoring treatment compliance. Plus, the challenges faced by primary care practitioners working in a remote and rural community, understanding and responding to perceived mental health needs, engaging with Falklands population and offering treatment for common mental disorders in ways that promote choice.

Theme four, enabling factors to help manage common mental disorders in the Falkland Islands include extending patient choice, improving practice policies to enhance the management of common mental disorders, providing collaborative care within the primary care team, with the mental health nurses and remote specialists, developing a programme of CPD and in-service training on common mental disorders for primary care practitioners, promoting mental health across the islands and engaging the public to promote mental health and in doing so reduce stigma. The findings suggest that participants recognise a range of ways to improve mental health and the management of common mental disorders beyond clinical practice to public mental health.

The implications of these findings will be discussed further in the next chapter with recommendations for practice, policy and further research.

Chapter 7: Synthesis of the Findings

7.1 Introduction

This chapter integrates the findings from the quantitative study on prevalence of common mental disorder and the qualitative study on primary care practitioners experience of managing common mental disorders in the Falkland Islands. As a multi-method study, the aim of synthesis is to gather a richer understanding of common mental disorders in the Falklands.

7.2 The prevalence of common mental disorder in the Falkland Islands in the context of UK, European and Global prevalence

7.2.a The prevalence of depression and anxiety

The findings from the mental health survey are that one in eight working aged adults in the Falklands report moderate symptoms of depression or anxiety.. This prevalence rate is less than the global prevalence rate of one in four, but comparable with European and UK estimates of one in six. The literature suggests that mixed anxiety and depression or Not Otherwise Specified (NOS) with sub threshold symptoms for either disorder, is the more prevalent common mental disorder in the UK (Remes et al. 2016; Yang et al. 2021).

Primary care practitioners in the Falklands acknowledge that screening for depression and anxiety is not consistent routine clinical practice, although NICE (2011a) guidelines for each disorder strongly recommend early detection in primary care.

7.2.b The prevalence of Post Traumatic Stress Disorder

The findings suggest that the prevalence rate of PTSD is one in eight, however, prevalence rates vary across gender and age to one in five for younger females and one in six for older males.

The global prevalence for PTSD is between one in twenty to one in thirty across the lifespan (Koenen et al. 2017). The prevalence of PTSD is expected to increase with exposure to trauma, including adverse childhood experiences, to one in eight of the population noted in countries exposed to trauma (Cowlshaw et al. 2020; Hyland et al. 2021). Known demographic characteristics associated with PTSD include, young age, female, not in employment, not married, less educated and those on a lower income, however, these associations do not hold true for the Falklands population where most working aged adults are employed (Koenen et al. 2017, p. 2266).

Primary care practitioners acknowledge that PTSD is a common mental disorder, yet there is no evidence of screening or a treatment pathway for those people presenting with PTSD. Once again, screening for PTSD in primary care is strongly advocated in the literature (Cowlshaw et al. 2020).

7.2.c Alcohol and Drug Use Disorders

The Falklands findings indicate that one in four males and one in six females use alcohol at hazardous levels. The prevalence of alcohol use disorders in English-speaking countries with similar cultural backgrounds to the Falklands, report similar higher prevalence of hazardous or harmful use of alcohol of between one in six and one in four. Hazardous alcohol use is especially prevalent in men (Glantz et al. 2020). This finding is an important public health concern and an opportunity to inform the public of the associated hazards which go beyond the risk of dependence and liver disease to cancer, cardio-vascular disease and associated common mental disorders (McGrath et al. 2017, Whiteford et al. 2013, Lai et al. 2015).

The prevalence of drug use in the Falkland Islands is estimated at between one in twenty to one in thirty of the population with a slightly higher prevalence in males (Degenhardt et al. 2019). The Falklands findings are comparable with global findings, with one in twenty adults reporting misuse of prescribed medication or other substances. Identifying the prevalence of drug use is challenging due to the illegal nature of most drug use. The anonymised nature of the Falkland survey has enabled light to be shed on this public health concern

and establishing a benchmark for future surveys. Identifying a drug use problem, requires establishing access to appropriate skilled practitioners and services to meet those needs.

Primary care practitioners suggest there is a lack of routine screening for hazardous alcohol use and noticeably no screening for drug abuse in primary care practice. This would suggest evidence of a potential hidden alcohol and drug use problem in the Falklands community and therefore, lack of a treatment pathway for addiction and provision of appropriate evidence-based treatments. The strong association between alcohol use, drug abuse and co-morbid common mental disorder gives clear direction to primary care practice to screen at every opportunity. There is lack of practice policy or guidelines, this is a policy gap in the Falklands.

A further finding is the risk of harm to self and suicide associated with common mental disorders and alcohol or drug use (McLean et al. 2008). Study participants did not express concerns about identifying the risk of self-harm or suicide, although evidence exists linking emotional distress and feelings of hopelessness to risk of suicide, “with or without a diagnosis” (Cole-King, Green, Gask, Hind, et al. 2013, p. 276). Lack of steps to ensure suicide mitigation within primary care practice highlight a further gap in practice and policy in the Falklands and public health concern.

Remote populations are susceptible to a greater impact from the global burden of disease. Non-communicable disease including common mental disorders, drug and alcohol use disorders, vary in prevalence within the regions of the world, based on socio-environmental and economic growth, ageing societies and lifestyle change, contribute to an estimated eight million deaths per year and ten years of life lost due to common mental disorders (Vos et al. 2012, p. 2164).

The increase in multi-morbidity, where multi-morbidity is no longer an exceptional presentation within primary care practice, demonstrates that improving population mental health remains a public health priority (Pratt et al. 2016; Walker, et al. 2015) Remote and rural communities have many protective factors,

such as a natural environment, with cleaner air, with less crime, less substance misuse and greater social cohesion, however, these protective factors can be offset by isolation, loneliness in an ageing population where poor physical and mental health often go hand in hand for those vulnerable individuals and groups.

7.3 Health inequalities

The literature provides evidence of population demographic characteristics that are recognised markers for those at higher risk of developing common mental disorders. These markers include, females, males for drug and alcohol disorders, Lesbian, Gay, Bisexual, Transgender and Queer (LGBTQ) communities. Yet, these sub-populations are not screened in primary care practice. Furthermore, vulnerabilities across the age ranges, such as PTSD being more common in younger people (Koenen et al. 2017), or alcohol and drug use in young males (Degenhardt et al. 2019) or older people with cognitive decline and common mental disorders are not routinely captured in screening programmes in primary care practice (McCombe et al. 2018). In addition, those living with a disability (Ruscio et al. 2017), those with developmental disorders or neuro-atypical (Bebbington et al. 2020), pregnant women (Remes et al. 2016, Noonan et al. 2018), those who have self-harmed (Remes et al. 2016) and, those exposed to domestic abuse, all carry greater risk of developing a common mental disorder or associated drug or alcohol use (Benjit et al. 2016).

In addition to population characteristics, social and environmental factors that may effect health status and outcomes, the post code lottery effect associated with disadvantage in communities is relevant for understanding public mental health in the Falklands context (Marmot 2010). Social determinants of health include carers, those exposed to trauma, those who are social and economically disadvantaged, and those not in employment (Remes et al. 2016, Benjit et al. 2016, Koenen et al. 2017, Corcoran et al. 2021, Cowlshaw et al. 2020). Furthermore, urban or rural living brings both strengths and constraints, where access to green spaces can be offset by social isolation (McCombe et al. 2018).

The literature suggests that variation in common mental disorders and population subgroups at risk, is found not only across and between countries, but within regions, postcodes and indeed at household level (WEICH et al. 2005, p. 30). The Falklands study exploring mental health prevalence in this unique community provides findings that can now inform practice, policy and public mental health in a more meaningful way than generalisations from UK and global findings.

If primary care practitioners' develop a heightened awareness of the range of demographic characteristics, health inequalities and social determinants of health that are associated with disorders, this may increase screening and detection of common mental disorders within their clinics, promote early detection and reduce risks, thereby improve public mental health. Finally, informing the Falklands population of this range of factors and risks, promotes public mental health awareness, self-detection and ownership of mental health (Forsman et al. 2015; Mackereth et al. 2015).

7.4 The identification of Common Mental Disorders in the Falkland Islands: enhancing systems of practice and policy

Identification of common mental disorders includes processes for the recognition, screening and assessment of common mental disorders. The findings suggest that there was acknowledgement of assessment and screening processes by study participants, but that systems of practice did not encourage best patient outcomes (Kendrick and Pilling 2012). The literature suggests that ways to improve identification of common mental disorders in primary care are universal screening for the range of common mental disorders, targeting those at increased risk including those patients with multi-morbidity (Barley et al. 2011; Fleury et al. 2012; Roberge et al. 2016).

Routine clinical audit is an effective means to measure the practice population and identify those at higher risk of common mental disorders (John et al. 2016; Lessard et al. 2015). Identifying those people who are prescribed long term medication for pain, in addition to those people already prescribed medication for

their mental health and multi-morbidity would be an effective way to enhance screening for common mental disorders.

Utilising electronic medical records systems effectively to record screening outcomes was evident in the literature and was noted by study participants to enhance practice, with the standardised use of templates in clinical practice (Rogers et al. 2021; Whitton et al. 2021). Consensus on the most appropriate screening tools to use in clinical practice, such as DSM assessment criteria, the PHQ-9, the GAD-7 and the AUDIT, would enhance detection of common mental disorders (Conn et al. 2017; Kernick et al. 2017; NICE 2011a; NICE 2011b).

In addressing time constraints within clinic appointments to avoid the ‘unfairness’ on the patients and clinicians attempting to manage common mental disorders in short appointment slot (P1), one study advocated one appointment slot for one clinical problem, while other studies recommend scheduling appointments to fifteen minutes for routine appointments and thirty minutes for those patients with complex needs (Fleury et al. 2012; Iacobucci 2019). Outside of the UK there is wide variation in the pressure on clinics, for example, the average number of patients seen per clinic in Germany was 70 patients per clinic, by comparison, in Scandinavian countries 20 patients may be seen per clinic (Deveugele et al. 2002).

Adoption of any change to current practice should be informed by the evidence base, not necessarily replicating UK practice when the model of frequent short appointments may not fit with patient needs in the Falklands. Wide variation exists in the way primary practice is delivered reflecting the systems of health care operating – private health care, coming into a national service, and direct access or onward referral (Irving et al. 2017). To address the pressure on appointments in the Falklands, monitoring the frequency of appointments for patients with multi-morbidity would help determine resource allocation and improve detection and screening for common mental disorders.

Self-referral was seen as a barrier by patients to engaging in treatment for common mental disorders in one study, Thomas et al. (2020), in contrast, self-

referral was viewed as an indication of community acceptance and the successful integration of the mental health service in the Falklands (P7). With contrasting evidence, no recommendations for referral processes are made, except patient involvement and participation in shaping and evaluating services should be demonstrated as a routine outcome and quality measure within primary care services (Hannan 2013).

7.5 The treatment gap for Common Mental Disorders in the Falkland Islands: Implications for clinical practice

Treatment for common mental disorders identified by study participants includes patient education, guided self-help, the use of medication, structured talking therapies, counselling and prescribed exercise. The standard clinical guidelines summarised below recommend moving from the ‘less intrusive’ and ‘most effective’ treatment first, before progressing to a higher step (NICE 2011a, p. 8, Richards et al 2012) (see Table 7.1).

Table 7.1: NICE guidelines 123: Common Mental Disorder Stepped model – pathway to care

NICE (2011a) Guidelines 123: Common Mental Health problems: identification and pathways to care Stepped care model: a combined summary for common mental health disorders	
Focus of the intervention	Nature of the intervention
Step 1	General Practice
for all known or suspected common mental health disorders	identification, assessment, psychoeducation, active monitoring, and onward referral within primary care
Step 2	Low Intensity (shared GP and secondary care)
Persistent symptoms of depression, anxiety, panic, OCD or PTSD	Self-help, computerised CBT, group-based peer support, structured physical activity (prescribed exercise), applied relaxation, medication, group or individual CBT/ EMDR, trauma focused CBT
Step 3	High Intensity (shared GP and secondary care)
Persistent symptoms as above, non-response to low intensity treatment, plus moderate to severe functional impairment	Psychological therapies as above, plus IPT for depression, ERP for OCD, and medication

	Support groups, rehabilitation programmes, education and employment support, referral for further assessment and interventions
NICE (2022), pp. 13-14, Figure 1 www.nice.org.uk/terms	

Evidence from the study and the literature suggest that medication is often used as a first line treatment, even though practitioners recognise it as not following national guidelines. (Karasz et al. 2012; Thomas et al. 2020). Furthermore, that onward referral to the mental health nurses is viewed as a first line treatment in the Falklands. A stepped approach to treatment following the steps recommended in the NICE (2011a) guidelines 123 would imply a robust and standardised process for patient education, active monitoring, guided self-help, problem solving and forward planning before referral to a mental health practitioner (Kendrick and Pilling 2012).

The findings suggest that a range of psycho-social interventions are available in the Falklands, but this range of treatment is not widely known by practitioners, therefore increasing patient choice and treatment options is a concern. Extending the range of psycho-social interventions would require investment in resources for professional education to enable primary care practitioners to deliver guided self-help, or investment in a programme of guided self-help and setting standards of care, such as robust follow up appointments for patients identified with common mental disorders who may at risk of poor compliance or risk to themselves (Conn et al. 2017; Fleury et al. 2012). NICE (2011a) CG123 aimed to improve treatment by empowering practitioners to talk about mental health with their patients, informing them of treatment choices, but this requires upskilling and support to hone psycho-social mental health assessment skills (Conn et al. 2017; Ellis and Philip 2010).

In addition, the interface between primary care practitioners and the community mental health nurses contrasts between being viewed as first line treatment for common mental disorders and also an enhanced referral and intervention if Step 2 or Step 3 treatment is required. Study participants stated that they wanted a '*range of choices*' to be available for their patients (P7), while another participant highlighted that reliance on referral to the local mental health service was an

obstacle to receiving treatment for common mental disorders, '*no offence, not a deficit in the team*' (P 5). Collaborative care extends patient choice if more mental health interventions are offered by the primary care practitioners, this takes account of patient preference and helps to de-stigmatise mental health care, if treating the patients' needs holistically (Roberge et al. 2016). Studies have shown that advanced nurse practitioners are popular with patients and are an under-utilised resource for mental health care, particularly early interventions such as self-management support, behavioural activation, psycho-education (Girard et al. 2017; Girard et al. 2021). Furthermore, experts suggest that GP training has not been updated in over thirty years, during this time mental health treatment and care has transformed, so calls for reform to include social prescribing and evidence-based practice for managing common mental disorders in primary care practice are overdue (England et al. 2017; Petersen et al. 2019).

7.6 Enhancing mental health in the Falkland Islands: implications for practice, public policy, strategy and community development

7.6 a Extending patient choice

Numerous ways to enhance patient choice have been discussed in the study this far, namely: promoting confidence and trust through clear policies for engagement and boundaries; reducing stigma through offering universal services where appropriate to do so; minimising systemic stigma, through choice of venues, choice of practitioner and mode of service delivery; i.e., telehealth and outreach services; working in partnership in delivering collaborative care within primary care and with the mental health practitioners; working with the culture in the Falklands and finding ways of meeting the health needs of the community including outreach and a community hub in Camp and reviewing the length of appointments to meet patient needs based on complexity. Kernick, Chew-Graham and O'Flynn (2017) argue that multimorbidity is as common as co-morbidity and requires a new approach, this is supported by the experience of doctors from other countries (Deveugele et al. 2002, Irving et al 2017). Iacobucci (2019) argues strongly that ten-minute consultations are a disservice to both

patients and their doctors, and an ineffective use of valuable resources in health care.

Furthermore, Schomerus et al (2018) highlights how lack of knowledge about the signs and symptoms of mental disorder, and how common mental disorder occurs within the population, prevents people seeking help. Komiti, Judd and Jackson (2006) suggest that stigma as a barrier to help seeking can be more pronounced in a rural context. In addition, perceived prejudice and discrimination that accompany stigma, prevent people self-identifying as having a mental disorder. Stigma is a complex issue requiring a public health approach.

As identified in the literature practitioner/ patient interactions are characterised by goal orientated discussion, therefore if enquiry about mental health needs are not articulated by either party, they will remain hidden needs (Karasz et al. 2012, Roberge et al. 2016). Furthermore, evidence suggests that handing patients a leaflet or form and expecting people to self-refer, does not necessarily promote the best patient outcomes (Fleury et al. 2012; Thomas et al. 2020). Resource allocation is challenging in health care settings, but no single practitioner can effect sustainable change unless supported by public services investment (Das., Naylor., and Maheed 2016; Prince et al. 2007; Naylor et al. 2012). Meeting the needs of vulnerable patient groups, with consistent proactive policies for the most vulnerable, requires funding through the Camp strategy for outreach work and public health strategy for health promotion, plus the mental health strategy for access to a range of services. Any new venture must be underpinned by configuring resources, informed by patient choice as the cornerstone of measuring quality care and giving authenticity to practice and policy (Mills and Hilberg 2019; Skerratt et al. 2017).

7.6.b Continuing Professional Development and Inservice training for primary care practitioners on common mental disorders

Upskilling primary care practitioners in their knowledge and skills in screening, diagnosis, assessing risk and treatment interventions is an essential need for practitioners to enhance the management of common mental disorders. Studies indicate that a wide range of professional education and Inservice training can

enhance treatment outcomes (Alexander and Fraser, 2008; Conn et al. 2017; Gensichen et al. 2009; Rogers et al. 2021). In addition to professional education on mental health law and violence prevention training aimed at managing psychiatric emergencies, studies such as Gensichen et al (2009) show that patient outcomes have improved when primary care practitioners are trained in depression or anxiety management interventions and case management, including further training on pharmacology, including side effects, interactions between medications used for common mental disorders and other health conditions, which can improve treatment compliance (Roberge et al. 2016).

The Mental Health First Aid course is already implemented in the Falklands, a one day training course for practitioners, as is STORM suicide mitigation training an intensive 3-day course on psycho-social skills for talking about risk, risk assessment strategies and safety planning, all of this has been implemented in response to completion of the doctorate studies and recognition of the need to upskill the PHCT (Cole-King et al. 2013; Morgan, Ross and Reavley 2018; STORM Skills Training 2019). A UK-based evaluated course on the management of common mental disorders for primary care practitioners was not found in the literature (Skerratt et al. 2017). This remains a training gap identified in this study.

Ellis et al. 2010, commented on the difficulties of attracting and retaining mental health nurses in rural and remote practice, a view supported by Alexander et al. (2008). Evidence suggest that rural and remote practice attracts mature, experienced registered nurses which a broad range of clinical experience and post registration academic and professional qualifications (MacKay et al. 2021). This recruitment and retention challenge can be transformed into a strength by devising and delivering CPD in rural practice to support practitioners (Conn et al. 2017; Ellis and Philip 2010). Changes in practice and positive attitudes to 'frequent fliers' were noted in one study (Conn et al. 2017, p. 4). Finally, providing training courses online as a pre-requisite to practice in the Falklands, outsourcing to specialists in mandatory training programme development, where this is appropriate to do so, such as for training in the electronic mental records system and use of templates for screening common mental disorders, informed by a practice policy and systems of practice.

7.7 Conclusion

This multi-methods study provides an original contribution to knowledge by providing insight into public mental health in the Falkland Islands from the perspective of community and insight into the management of disorders in primary care practice. Conducting the first national prevalence study of common mental disorders within the Falkland Islands establishes a benchmark to consider public health policy, practice and future research. While the findings from interviews with primary care practitioners contributes to the body of the global knowledge on the management of common mental disorders within remote and rural primary care practice. The implications of the findings generated in the study are relevant for the Falkland Islands, for other small nations including other UKOTs and other remote and rural primary care practices.

Chapter 8: Discussion

8.1 Introduction

This chapter will summarise and appraise the findings of the study, thereafter consider the strengths and limitations of both the research and the findings. Implications for policymakers, developing clinical practice, planning workforce development and recommendations for future research are discussed followed by a reflective account and critical appraisal of my learning as a clinical doctorate student.

8.2 Summary of the main findings

This study has shown that the prevalence of common mental disorders within the adult population of the Falkland Islands is high and is therefore a public health concern. Defining common mental disorders with the inclusion of PTSD, in addition to depression and anxiety was justified by both the similar prevalence rates found within the community across these disorders, but, also by primary care practitioners own experience, where PTSD was reported by the majority of the sample as an example of a common mental disorder.

Alcohol and drug use have an association with common mental disorders within the Falkland Islands population, similar to UK, European and global findings. Yet, screening for alcohol and drug use was not found to be routine practice in primary care in the Falkland Islands.

Population subgroups emerge from the survey findings that are similar but also different from the findings in other national surveys. For example, a similarity found between the Falklands survey and UK, European surveys, is the association between sex and age range and common mental disorder, alcohol or drug use. In contrast, the association between unemployment and common mental disorder found in many other national surveys, is not relevant for the Falkland Islands with less than one percent unemployment. Vulnerable population groups were also identified by primary care practitioners in the study

and include older people, people living in Camp and those with multi-morbidity or complex health needs. This finding is similar to findings in the scoping review.

Primary care practitioners identify many barriers which influence their practice. Barriers include stigma, internal or self and external or perceived stigma from others, confidentiality and trustworthiness, and working in a close community. These barriers are also found in the literature on the management of common mental disorders in primary care. These could be considered as environmental and social barriers.

Other barriers identified include lack of patient choice, lack of specialist services, time constraints, lack of policy on management of common mental disorders and lack of public health direction and policy. These barriers could be considered as clinical barriers. Similar constraints were found in the scoping review of primary care practitioners experience of managing disorders. Finally, low income and the work culture within the Falkland Islands was identified as a barrier in the provision of care or engaging people in activities or clinics. This appears to be a unique nuance of the Falklands culture.

Enabling factors identified in the study were developing programmes of professional education on management of common mental disorders, working more effectively with mental health practitioners, shared care and improving access to a range of services, thereby improving patient choice. Once again, these enablers were themes found in the scoping review. Furthermore, finding creative ways to engage with the community, promote public health in schools and across the islands community, supported by policies and strategies to aid direction and resources, were found in the study.

The thesis set out to provide insight into the prevalence and management of common mental disorder using a multi-methods approach. The quantitative study involved a postal survey of the adult population of the Falklands and generated a lot of valuable data, beyond the scope of this thesis. Errors were identified in the survey document in hindsight, furthermore, the nature of the questions could

have been formulated to reflect the questions on perceived barriers and enablers that were asked by primary care practitioner's experiences.

The initial presentation of the quantitative data in the first submission of the thesis, lead to unintentional, but nonetheless selective bias, as some and not all of the data was presented. Following discussion and advice with my academic supervisors, a focus on common mental health was maintained, as the volume of data generated in the study was beyond the scope of the thesis.

Selecting the literature for the scoping review generated a vast amount of national and international studies, learning how to narrow down the studies to contemporary studies within the five-year timeframe as advocated in Cochrane 2023, helped to focus the direction of the review. Appraising the quality of the studies was new learning as my previous understanding and interpretation of quantitative studies was weak.

The qualitative study using semi structured interviews with primary care practitioners, in hindsight, errors were found in missing key demographic characteristics, also, on reflection similarity within the questions asked, failed to generate detailed responses. This could have been avoided by testing out the questions in advance, with a pilot study.

The literature review using Thomas and Harden's approach to review and develop *a priori* codes thus condensing the themes, was a challenge for me to convey the decision-making process and rationale for the choices. On reflection, I could have used a software package like NVIVO to process the data from the literature review. This would have generated diagrams to illustrate the interconnectedness between the themes and across the themes.

The outcomes of the two studies do generate knowledge on the prevalence of common mental disorders and primary care practitioners experience working in the Falkland Islands. Earlier learning and enhanced understanding about mixed methods and multi-methods, then planning how to integrate the design of the

study and triangulate the outcomes of the study, would have enhanced the findings of the study.

8.3 Strengths of the research and findings

This study is the first prevalence study of common mental disorders in the Falkland Islands population. This study contributes to the body of knowledge on public mental health in the Falklands and is a benchmark for any future studies. Furthermore, this study contributes to British and Commonwealth research for other UKOTs and the body of knowledge on rural primary care practice on managing common mental disorders.

This study identifies clear recommendation to improve clinical skills and professional education for primary care practitioners working in remote and rural practice. Enhanced by the scoping review harnessing good practice strategies from Canada and Australia. This study provides evidence of ways to enhance practice policies on routine screening, thus enhance detection, early intervention and improve patient outcomes.

This study provides evidence for ways to consider reducing stigma across the Falklands community, extend patient choice in the service are delivered and enhance awareness of mental health and promote public mental health in the Falklands community, a role that goes beyond clinical practice.

The response rate to both the population prevalence survey and the interviews with primary care colleagues demonstrated engagement by the Falklands community and was sufficient to meet the aims of the study and add credibility to the findings. This is a strength of the study.

This study contributes to nursing research in practice by devising, conducting, implementing and appraising a multi- methods research project, with limited resources in this unique remote and rural community.

8.4 Limitations of the research and findings

The transferability of findings to other remote and rural populations is limited. The findings only represent the participants therefore transferability is compromised. Future replication of the study in the Falklands or another research population would help to validate the findings and the methodology.

There is a potential for bias and misinterpretation of the findings, through lack of a structured methodology in the study design, i.e. collecting two different types of data that do not address the same topic. Multi-methods are a more accurate description of the methodology used, with two separate studies within one project.

The data synthesis could have been improved by including survey questions around what helps or hinders adults from seeking help for their mental health in the Falklands. That would have helped to merge the data, synthesise and generate findings. Although, it could be argued, that with a lack of any prior mental health research, population health surveillance and interviewing primary care colleagues was a good place to start to open the discussion around common mental disorder in the Falklands.

Promoting inclusivity by including nonbinary coding for sex/ gender, even the inclusion of 'other' in the demographic characteristics would have promoted inclusion. However, the survey replicated the Falklands Census for several demographic questions including sex, age range and other key demographic factors.

The breadth of the survey questionnaire was cumbersome, and the findings generated from the survey will require further analysis and dissemination beyond the completion of the thesis. As an overenthusiastic, novice researcher, I was trying to glean as much information as possible, meanwhile, underestimating my capacity to process the volume of data and work involved in evaluating, synthesizing and producing a cohesive thesis. Restricting the thesis to report common mental disorder alone helped to manage the data.

Several errors were found in the survey questionnaire post distribution, namely, the omission of AUDIT question 10, however, the cut-off score of 8 or above was not affected. In addition, several errors were found in the interview schedule, namely age range was not noted. Plus, similarities between several questions failed to encourage rich descriptions from interviewees.

8.5 Recommendations

A wide range of recommendations emerged from the study, as follows:

8.5.a Implications for policy

Monitoring treatment compliance and enhancing continuity of care through robust practice policies in the management of common mental disorders is indicated. Clear policies for the management of those patients who fail to attend follow up appointments or collect prescriptions are required within primary care, taking account of perceived risk of self-harm, suicide or concerns around capacity. Minimising the risk of systemic stigma through the provision of patient informed services. Seeking service user input in decisions making may also be informed by audit of the service provision. The Falkland Islands like all UKOTs are affiliated with Public Health England, this connection could be utilised to invite the expertise of the Care Quality Commission (CQC) to evaluate primary care services and mental health services in the Falklands and other UKOTs, thus ensure that patients are consulted and services are reviewed by those who use them (Walker., et al. 2022). A CQC review could be adapted for the Falklands and other UKOTs. External review would be an effective way to set standards and set targets for future investment in services, to avoid those with mental disorders being an underserved population (Laidlaw, 2016, Pepler and Barber 2021).

8.5.b Implications for practice

Consistent routine screening within general practice for the range of common mental disorders, including alcohol use and drug use disorders is indicated to improve detection and early intervention. Self reported screening questionnaires

like the PHQ-9, GAD-7, PCLC-6, AUDIT and DAST or equivalent could be routinely completed at key interface points, such as patient registration, chronic disease management clinics and population health check clinics. Following clinical guidelines and auditing the use of clinical guidelines in routine clinical practice. Furthermore, improving the management of multi-morbidity in primary care practice could be achieved, by structuring clinics to support the screening, assessment and treatment of multimorbidity. If the NHS model is not meeting neither patient or practitioners needs, the Falklands could look to best practice in other remote rural communities, i.e. regarding the length of appointments, the frequency of follow up appointments to ensure effective monitoring of disorders and the treatment offered.

Also, enhancing shared care arrangements between primary care and mental health practitioners, promotes cohesion and consistency in patient care, and effective shared learning. Shared care is another way to work more effectively together, as both primary care and mental health practitioners have limited availability within demanding clinical practice, McLeod and Simpson (2017) identified the value of mental health nurses in primary care practice as poorly understood, yet, mental nurses' role contributed to the clinical effectiveness and efficiency of patient care.

8.5.c Workforce development

Developing the role of the primary care practitioners and registered mental health nurses in integrated rural practice through collaborative shared care, case discussion and shared supervision. Even when patient choice indicates that onward referral to the mental health service is neither indicated or sought, case discussion and supervision would enhance both primary care practitioners learning and patient care. Enhanced skills and shared learning in managing risk and decision making throughout treatment.

Devising, implementing and evaluating programmes of in-service mandatory training on common mental disorders as a pre-requisite for clinical practice in the Falklands. Mental Health First Aid, and STORM training for suicide prevention has already been implemented in the Falklands, as has training on the

management of aggression, and violence prevention. There is a deficit of training on the management of common mental disorders, including diagnostic tools, assessment and treatment options. For example, when to recommend guided self-help, which resources to signpost too and when to refer to mental health services.

Managing boundaries within a close community, by promoting confidentiality and trust through patient participation in how services are constructed and delivered is very important. Trauma informed care, offering patient choice and flexibility is a cornerstone of effective care and should be a cornerstone of workforce development and training. Care quality commission external audit of UKOTs would support the development of standards of care and clinical practice.

8.6 Future research

Replicating the mental health survey by incorporating a mental health component into any future anonymised health survey would provide longitudinal data and promote public mental health in the Falklands. A minimum of undertaking a community based mental health population survey every ten years would be an achievable goal. Keeping with the current minimal screening tools of PHQ-9, GAD-2, PCLC-6 or equivalent to identify common mental disorder, plus screening for alcohol and drug use. This survey could be devised and conducted by the Public Health Unit in the Falklands with support from the policy department who have expertise in conducting the Falklands Census. Relevant questions for future inclusion can be found in the Scottish National Rural Mental Health Survey report April 2017 (Skerratt et al. 2017). For example, 'If you could change one thing about mental health services in *the Falklands*, what would that be ?' (p.15).

Replicating the qualitative study and interviews with Allied Health Professionals (AHP) may produce different responses and encourage a multi-disciplinary approach to public mental health and clinical practice in the Falklands. For example, the role of non-medical prescribers, with screening, triage and onwards referral by Allied Health professionals.

Exploring the needs of vulnerable groups within the Falklands population, including those living with disabilities or sensory impairment, those with neurodevelopment disorders, carers, people experiencing cognitive impairment, and those living with mental illness are areas for future research. Focussed groups, or interviews with vulnerable groups would shape service development and delivery.

Exploring stigma and how stigma or perceived stigma may prevent Falklands residents accessing treatment. Stigma within rural island communities is identified as a barrier and public health concern, where anonymity is scarce and confidentiality is highly valued. Identifying ways to reduce stigma in the way services are devised and delivered is an important area of learning for the Falklands.

Evaluating the implementation of professional education provided to primary care practitioners and determining if the in-service training already provided, namely STORM Skills Training (2019) suicide mitigation and CALM violence prevention and Mental Health First Aid is sufficient to meet their training needs in providing both knowledge, practice and soft skills, for example, counselling skills and talking to patients about their mental health. Evaluating the impact of professional education on improvements in patient care is another area for future research.

Explore the experience of mental health nurse practitioners working in remote and rural communities to understand the range of clinical responsibilities and duties associated with this role, the perceived challenges and their value within the primary care team in improving patient care is an area for future research (Gullifer et al. 2021; Petersen et al. 2019; McLeod and Simpson 2017). The role of mental health nurses in primary care is poorly understood, yet their role in remote and rural communities where autonomous practice or working as part of a small remotely based team may bring additional challenges requires exploration. Insight into issues effecting the retention and development of the rural mental health nursing workforce is timely, for these hard to fill rural posts.

8.7 Critical reflection

My journey throughout the clinical doctorate programme has been enhanced by the advice and critical appraisal I have received. As a novice researcher and clinician, living and working in a remote islands' community, conducting these studies was a commitment.

The postal survey and semi- structured interview schedule were devised for the purpose of the study as there were no other study methods that could be replicated for the purposes of the studies. More attention to multi-method research synthesis would have enhanced the survey questionnaire questions and interview schedule and enabled triangulation of the data, particularly around perceived barriers and enablers to access services.

The scoping reviews that I conducted required a more robust approach to ensure rigor in the process and the results, both in the selection of studies and my critical appraisal skills of the selected studies. The process of external appraisal has enhanced my learning and understanding, on quality appraisal and synthesising knowledge to inform the next steps of the studies. I hope that my learning is demonstrated in the thesis.

My knowledge and understanding of statistics require further enhancement to, so basic statistical tests and demographic characteristics are reported. More thorough interrogation of the data may produce detailed results. This will be continuous learning. Living, working and studying in an isolated environment, with limited peer support available were challenges throughout my studies. I am still keen to develop greater knowledge and skills in this area.

A personal and professional goal for the clinical doctorate programme was to enhance my own clinical practice, academic knowledge and skills. I have not been disappointed. I was always mindful that as a specialist practitioner in community mental health nursing with an interest in professional education and clinical practice, I was investigating population health and my primary care colleagues, which was a stretch beyond my clinical role and experience. Also, that I was not directly investigating my own sphere of clinical practice. I resolved

this dilemma by considering the findings from the study which indicate that the scope of mental health nurses working in remote and rural practice is worthy of investigation. Remote and rural mental health nurses are a scarce and valuable resource, just like their primary care colleagues.

This study was concerned with identifying the prevalence of common mental disorder and exploring clinical practice within primary care, although combined, both studies main objectives were improving public mental health and enhancing patient care. The outcomes of the study suggest that an informed public and patient led approach would enhance mental health for all in the Falklands.

Overall, the findings generated by this study make an original contribution to public mental health surveillance within a previously overlooked population. Furthermore, the findings contribute to the body of knowledge on managing common mental disorders in the Falklands and in rural primary care practice in the UK. Finally, the findings from the study inform the general public, policymakers, and health care practitioners as stakeholders in improving public mental health in the Falklands.

Although the Falklands community is unique, the challenges faced by the population maintaining optimum mental health is not unique. Looking beyond UK practice to other remote and rural communities such as Australia, New Zealand, Scandinavia and Canada may better inform future clinical practice and research. Two responses to a question asked in the Scottish Rural Health review 2017, resonate with the conclusions from this study. The question was asked to people living with mental disorder in rural Scotland ‘What key message to you want to tell policy makers to help you manage your mental health in a rural setting?’ (Skerratt et al. 2017, p. 61), the two key responses were, mental illness is an invisible illness, made more invisible by being in a rural and remote setting. Users of mental health services must be listened to and respected.

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Appendices

Appendix 1: Search terms and MeSH terms for prevalence of Common Mental Disorders literature search

Search term for prevalence studies	MeSH descriptors
Epidemiolo*	Psychology
Prevalen*	Therapy
Depress*	Mental Disorder
Dysthym*	Mental Illness
Anxiet*	Anxiety Disorders
PTSD*	Mood Disorders
Post traumatic*	Depressive Disorders
Trauma*	Neurotic Disorders
Mental Disorder*	Alcohol Related Disorders
Psych*	Substance abuse
Surve	Trauma and Stress related Disorders
AND	Adjustment Disorders
OR	Stress Disorders
	Trends
	Diagnosis
	Prevention and control
	Cohort studies
	Incidence
	occurrence

Appendix 2: Databases: Prevalence of Common Mental Disorder in national and international surveys

PubMed	Web of Science Core *	CINHAL
Common mental disorder OR Common mental health disorder OR Mental Disorder or psychiat* AND Psychiatric Morbidity AND Population AND Prevalence or Epidemiology OR Incidence Filters AND Global health: English, Humans, peer reviewed, All adult from 2011- 2022		
373	273,402	10, 494
'General population' AND 'adult'		
	212,518	10,494
+ Depression OR Anxiety OR Post Traumatic Stress Disorder OR Alcohol Use Disorder OR Drug OR Substance Use Disorder		
293	298,840	451
	Highly cited papers 10,023 Exclusion criteria applied 8,821	
5 and Brit* or UK or United Kingdom, of Wales, or Ireland, or British Isles, or Scotland, or England = #7		
64	Analyses results – psychiatry 313	149
Island OR Remote OR Rural OR UK OR UK Overseas Territories		
-	-	-
f) Exclusion criteria:		

mental disorders: dementia, bipolar, schizophrenia, psychosis, personality disorders, eating disorders, specific population groups: children and adolescents, peri-natal, post-partum, military/ armed forces, students, incarcerated, prisoners, refugees, sex workers, homelessness, tobacco and smoking, older people Setting: inpatient, hospital, outpatient, prison comorbidity: intellectual disabilities, autism spectrum, epilepsy, neuro-developmental, medical condition/ disease – Human Immunodeficiency viruses (HIV), Hepatitis B, cancer, diabetes, respiratory disease, Hepatitis C, Covid 19		
32	-	12
De-duplication		
9	7	10
Plus, grey literature (3): Scottish Health Survey 2016, Scottish Public Health Observatory 2022, Adult Psychiatric Morbidity Study 2016, England		

Appendix 3: Databases: the prevalence of common mental disorders: Institutional Repository for Information Sharing (IRIS)/ World Health Organization (WHO)

World Health Organization Mental Disorder
510
Common Mental Disorder AND English
281
+ Depression OR Anxiety OR Post Traumatic Stress Disorder OR Alcohol Use Disorder OR Drug OR Substance Use Disorder - Exclusion criteria: mental disorders: dementia, bipolar, schizophrenia, psychosis, personality disorders, eating disorders, specific population groups: children and adolescents, peri-natal, post-partum, military/ armed forces, students, incarcerated, prisoners, refugees, sex workers, homelessness, tobacco and smoking. Setting: inpatient, hospital, outpatient, prison, comorbidity: intellectual disabilities, autism spectrum, epilepsy, neuro-developmental, medical condition/ disease – Human Immunodeficiency viruses (HIV), Hepatitis B, cancer, diabetes, respiratory disease, Hepatitis C, Covid 19,
2

Appendix 4: Joanna Briggs Checklist for prevalence studies

Appraisal Checklist for evaluating prevalence studies Joanna Briggs Institute checklist (Munn et al 2015)

Studies	A. Sampling Does the survey design yield a sample of respondents representative of a defined target population ?				B. Measurement Do the survey instruments yield reliable and valid measures of psychiatric disorder and other key concepts ?				C. Analysis Were special features of the sampling design accounted for in the analysis ?				Y/N	Comment/ reason for exclusion				
	Qu 1: Is the target population defined clearly ?	Qu 2: Was probability sampling used to identify potential respondents ?	Qu 3: Was the sample frame appropriate to address the target population ?	Qu 4: Were study participants sampled in an appropriate way ?	Qu 5: Was the sample size adequate ?	Qu 6: Were the study subjects and the setting described in detail ?	Qu 7: Do the characteristics of respondents match the target population ?	Qu 1: Was the condition measured in a standard, reliable way for all participants ?	Qu 2: Are the survey instruments reliable ?	Qu 3: Were valid methods used for the identification of the condition ?	Qu 4: Are the survey instruments valid ?	Qu 5: Are the data collection methods standardised ?	Qu 1: Was the data analysis conducted with sufficient coverage of the identified sample ?	Qu 2: Was there appropriate statistical analysis ?	Qu 3: Do the reports include confidence levels for statistical estimates ? (95% CI)	Qu 4: Was the response rate adequate, and if not, was the low response rate managed appropriately ?	In = Meets inclusion criteria/ Ex = does not fulfil criteria	
Witcher et al 2011	Y	Y	Y	Y	Y	N	NS	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	Range of brain disorders DALYs/ 14 yrs +
Whiteford et al 2013	Y	Y	Y	Y	NS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	NS	Comorbidity SUDs and CMD/Burden
Volkert et al 2013	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	CIS-R Older people Western countries
Baxter et al 2014	Y	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	NS	Anxiety/ depression Inc adolescents/ GHQ	
Strelle et al 2014	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	CIDI/ WHHS Global
Bandelow et al 2015	NS	NS	NS	N	N	N	N	N	N	N	N	N	N	N	N	N	EX	Compare methodology anxiety prevalence
Lai et al 2015	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	Odds ratio AUDs and DUDs and CMD
Spieris et al 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	CIS-R England
Remes et al 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	CIS-RAWHS global anxiety
Barcelo et al 2016	Y	Y	N	N	Y	Y	n/a	n/a	n/a	n/a	a	a	Y	Y	Y	Y	EX	Predictors traumatic events not CMD
Join et al 2017	N	n/a	Y	Y	NS	Y	N	a	a	Y	Y	Y	Y	Y	Y	Y	In	Systematic review countries: England
Koenen et al 2017	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	CIDI – global PTSD
Ruscio et al 2017	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	CIDI- global anxiety
Richter et al 2017	Y	Y	Y	Y	Y	Y	Y	NS	Y	Y	NS	Y	Y	Y	Y	Y	In	CIDI/ symptom and distress scales not stated
McCombe et al 2018	Y	N	Y	NS	NS	N	Y/N	Y	Y	Y	NS	Y	Y	Y	Y	NS	NS	Older adults Ireland Rural and Urban
Degenhardt et al 2019	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	In	Global Drug Use Disorders
Yang et al 2019	Y	Y	N	Y	Y	Y	NS	Y	Y	Y	Y	Y	Y	Y	Y	NS	NS	Anxiety Disorders/ Includes adolescents
Bebbington et al 2020	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	England All CMD Short report
Glantz et al 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	Global alcohol/ CIDI
Hyland et al 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	Ireland PTSD/ Complex PTSD primary study
McGrath et al 2020	Y	N	Y	Y	Y	N	N	Y	Y	Y	Y	Y	Y	Y	N	N	NS	General co-morbidity & CMD
Corcoran et al 2020	Y	Y	Y	Y	Y	Y	Y	NS	Y	Y	NS	Y	Y	Y	Y	Y	In	Women/ depression screening tools not stated
Richter et al 2021	Y	Y	N	N	Y	Y	Y	Y	N	Y	Y	Y	Y	Y	Y	N	EX	Covid 19 related
Cowlishaw et al 2021	Y	N	N	NS	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	EX	PTSD South West England/ primary study
O'Connor et al 2021	N	N	N	N	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	N	EX	Covid 19 UK
Wilson et al 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	GHQ 12/ Scotland Health Survey 2014
McManus et al 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	English Health Survey 2014
WHO 2017	Y	N	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	n/a	n/a	In	Global trends CMD
WHO 2018	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In	Global trends AUDs AUDIT
ScotPho 2022	Y	NS	Y	Y	Y	NS	Y	Y	Y	Y	Y	Y	NS	NS	NS	NS	In	Scotland SUDs
ScotPho 2022	Y	NS	Y	Y	Y	NS	Y	Y	Y	Y	Y	Y	NS	N	N	NS	In	Scotland /GHQ12

Legend: Yes=Y; No = N; Not sure = NS; Not Applicable for this study = N/A; Included = In; Excluded = Ex
Abbreviations: International Classification of Mental Disorders (ICD/ ICD-10); General Health Questionnaire (GHQ); Patient Health Questionnaire (PHQ-9); Generalised Anxiety Disorder Questionnaire (GAD-7); Disability Adjusted Life Years lost (DALYs) Composite International Diagnostic Interview (CIDI) Clinical Interview Schedule Revised (CIS-R).

Appendix 5: The global prevalence of Common Mental Disorder: PICO data extraction summary (2011 – 2022)

The global prevalence of Common Mental Disorder: PICO data extraction summary (2011 – 2022)										
Studies By date of publication 2011 -2022		Population/ Sample Characteristics	Investigation methodology (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety Disorders	PTSD	Alcohol Use Disorders (AUDs)	Substance Use Disorders (SUDs)
1	Wittchen et al 2011 <i>The size and burden of mental disorders and other disorders of the brain in Europe 2010</i> (European Neuropsychopharmacology 21, 655-679)	2005 - 2010 (n= 247.5 million) 14 +	ICD-10 DSM-IV Disability Adjusted Life Years (DALYs)	Systematic review Re-analysis 12 month prevalence 27 EU member countries + 3 Switzerland, Iceland and Norway	2005 27.4 % Best estimate 2011 38.2 % mental disorder each year (p668) Women 1 in 3 Men 1 in 4 (p. 669)	Best Estimate 6.9% (p. 666)	Best Estimate 14 % (combined panic + agoraphobia + Social anxiety + GAD)	-	Best estimate 3.4% (p. 666)	Best Estimate 0.1 – 1.8 % (opioid + cannabis) (p. 666)
2	Whiteford et al 2013 <i>Global burden of disease attributed to mental and substance use disorders: findings from the Global Burden of Disease Study 2010</i> (The Lancet, 13, 1-12)	1980-2010 (n= ?) ‘17258 country years of data’ Global, Asia, Australasia, Caribbean, Europe, Latin America, North Africa and Middle East, Sub-saharan Africa, Oceania, North America	DSM/ICD Disability Adjusted Years (DALYs) Years Lived with Disability (YLD) Years of life lost to premature mortality (YYL) Global Burden of Disease (GBD)	Systematic review Bayesian meta regression Countries (n= 126) Mental disorder (n= 85) Drug use (n= 98) Alcohol use (n = 58)	All mental disorder and SUDs combined 7.4% GBD (p. 5)	Dalys 40.5% (31.7-49.2) (p. 4)	Dalys 14.6 % (11.2-18.4) (p. 4)	-	Dalys 9.6% (7.7-11.8) (p. 4)	Dalys 10.9% (7.7-11.8) (p. 4)
3	Volkert et al 2013 <i>The prevalence of mental disorders in the older people in Western countries – a meta-analysis</i> (Ageing Research Reviews, 12, 339-353)	2000- 2011 (n= 51,236) Adults 50 yrs + 25 studies	Clinical Interview CIDI/ DSM	Systematic review meta regression analysis Egger method From 15 countries; 2 North America 13 European	Current prevalence of mental disorder 3.29 % Lifetime prevalence 16.52% (p. 347)	Current 19.47 % (p. 339) Lifetime prevalence 16.52 % (p. 339)	GAD Current prevalence 2.3 % Lifetime prevalence 6.36% (p. 345)	Current prevalence 1.26% (95% CI 1.00 – 2.36%) Lifetime prevalence 2.5% (p. 345)	Current 0.96 % Lifetime 11.71% (p. 345)	Current prevalence 0.34% Lifetime prevalence 0.19% (p. 339)
4	Baxter et al 2014 <i>Challenging the myth of an ‘epidemic’ of CMD: trends in the global prevalence of</i>	1990 – 2010 (n = not stated) No age limits	DSM/ ICD Symptom scale- GHQ	Bayesian Meta-regression approach Anxiety (n=91) Depression (n=116)	Crude increase in prevalence 36 % Prevalence higher in women (p. 509)	1990 – 4.4% 2005/2010- 4.4% (p. 506)	1990- 3.8% 2005/2010- 4.0% (p. 506)	-	-	-

	<i>anxiety and depression 1990 to 2010</i> (Depression and Anxiety, Jun 31, 6, 506-516)	Asia, Europe, Oceania, Sub-Sahara Africa, Caribbean, Latin America, North Africa/ Middle East, North America		Explained by population growth and age structure (p. 506)	Depression common in current conflict countries Anxiety in post conflict countries (p. 514)					
Studies		Population/ Sample Characteristics	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
5	Steel et al 2014 <i>The global prevalence of common mental disorders: a systematic review and meta-analysis</i> (In J of Epidemiology, 2014, 476-493)	1980- 2013 (n= 827 673) Adults 16 yrs + (over 50 % of studies) 174 WMHS surveys Across 63 countries Asia, Europe, Oceania, Sub-Sahara Africa, Caribbean, Latin America, North Africa/ Middle East, North America	Clinical interview DSM-III CIDI	Systematic review meta-analysis Logit-transformed prevalence rates Pooled prevalence rates 26 High income (HIC) 37 low/middle Income	12 months prevalence 17.6 % HIC 17.5% English speaking 19% Comorbid CMD and SUD 18.1% (p. 483) Lifetime prevalence 29.2% HIC 33.2% English speaking 39.7% (p. 484) Females higher mood and anxiety Males higher SUDs (p. 486)	Pooled 12 months 5.4% Lifetime 9.6% (p. 486)	Pooled 12 months 6.7% Lifetime 12.9 % (p. 486)	-	-	Pooled 12 month 3.8% Life time 10.7% (p. 486)
6	Lai et al 2015 <i>Prevalence of co-morbid substance use, anxiety and mood disorders in epidemiological surveys, 1990-2014: A systematic review and meta-analysis</i> (Drug and Alcohol Dependence, 154, 1-13)	1990 – 2014 (n= 504,319) Aged 15 years 22 studies 16 countries Belgium, Italy, Spain, France, South Korea, Germany, Netherlands, USA, Singapore, Mexico, Britain, Brazil, Thai, Australia, Canada, Puerto Rico	Clinical interview CIDI/ CIS-R Odds ratio (OR) Pooled 12 month OR Pooled lifetime OR	Systematic review Meta analysis Comorbidity AUDs/ DUDs (Drug Use Disorders) and anxiety and depression	-	AUDs and depression OR 1.532 (p. 7)	AUDs and any anxiety disorder 10 - 50% OR 2.144 SUDs and any anxiety disorder OR 2.355 (p. 7)	-	Up to 40 % (p. 7)	Up to 42 % (p. 7)

7	Spiers et al 2016 <i>The prevalence and treatment of CMD in the English National population 1993-2007</i> (British J of Psychiatry, 209, 2, 150-156)	1993- 2007 1993 (n= 8670) 2000 (n= 6977) 2007 (n= 5385) Adult 18 yrs + England	Clinical Interview CIS-R	Cross sectional Pseudo-cohort analysis Adult Psychiatric Morbidity Survey 1993 and 2000	1993 - 14.3 % 2000 – 16 % 2007 – 16% (p. 150)	1993 Men 8.3% 2007 Men 10.2% 1993 Woman 10.4 % 2007 Women 12.9% (p. 154)	-	-	-	-
	Studies	Population/ Sample Characteristics	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
8	Remes et al 2016 <i>A systematic review on the prevalence of anxiety disorders in adult populations</i> (Brains and Behaviour, 2016, 6, 7, 1-33)	1990- 2010 (n = not stated) All ages and Adults International Synthesis of 48 reviews One year prevalence Life time prevalence	Clinical Interview GAD	Systematic review and meta analysis	-	-	One year 10.6% Lifetime 16.6% (p. 3) 1990- 3.8% 2010 – 4% Women x 2 higher than men 5.2- 8.7% (p. 4) Trauma and physical illness anxiety (p. 6) Vulnerable sub groups Older people carers People who self harm pregnant women, LGBT (p. 7)	-	-	Addiction treatment and comorbid anxiety 2% to 67% (p. 4)
9	Jorm et al 2017 <i>Has increased provision of treatment reduced the prevalence of CMD? Review of the evidence from four countries.</i>	1990-2015 4 English speaking countries Australia, Canada, England and US (n = not stated)	Clinical interview CIDI Kessler Psychological Distress Scale (K10)	Systematic review Meta-analysis	Prevalence of CMD has not decreased with treatment. England 1993 prevalence - Men 10.9%/ Women 18.9% 2007 prevalence -	-	-	-	-	-

	(World Psychiatry, 16, 90-99)	Focus on treatment, but also prevalence of CMD 22 studies in the 4 countries 11 studies in Australia 3 studies in Canada 3 studies in England 5 studies in US	Patient Health Questionnaire (PHQ) 4-NS scale		Men 11.8% / Women 18.9 % (p. 92) Global Burden of Disease Depression 2 nd Anxiety 9 th					
Studies		Population/ Sample Characteristics	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
10	Koenen et al 2017 <i>Posttraumatic stress disorder in the World Mental Health Surveys</i> (Psychological Medicine, 47, 2260-2274)	2001 – 2012 (n= 71,083) Adult 18 yrs + Countries (n= 24) WMHS Studies (n=26) 6 measures of prevalence : lifetime general/ life time trauma exposed/ 12 month / 30 days Respondents with more than 1 TE assessed for PTSD CIDI interview	Clinical interview CIDI/ DSM Traumatic Event (TE) 30 day prevalence Life time prevalence	Systematic review Cross sectional analysis	-	-	--	cross national Life time prevalence 3.9% Trauma exposed prevalence 5.6% (p. 2260)	-	-
11	Ruscio et al 2017 <i>Cross-sectional Comparison of the Epidemiology of DSM-5 Generalised Anxiety Disorder Across the Globe</i> (JAMA Psychiatry, 2017, May, 1, 74, 5, 465-475)	2001 - 2012 (n= 147 261) Adults 18 yrs + 26 countries	Clinical interview CIDI/ DSM-5 WMHS	Cross sectional analysis Representative household samples	-	-	GAD Lifetime prevalence 3.7% High income countries 5% Lifetime comorbidity 81% mood (p. 465) Female, younger and	-	-	-

							not married/ partner associated with GAD (p. 471) Lower education, income and unemployed/ disability (p. 471) Onset adulthood			
Studies		Population (Sample Characteristics)	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
12	McCombe et al 2018 <i>Identified mental disorder in older adults in primary care: A cross- sectional database study</i> (European Journal of General Practice, 24, 1, 84 – 91)	2014-2015 (n= 74261) Adult 55 yrs + Ireland	Electronic Medical Records (EMR) Mental Health finder ICD-10 35 general practices Ireland	Cross sectional study Diagnostic coding of EMR data ICD-10 codes ICPC2 codes	19.1 % (p. 84) Range varied from (3.7 – 38.9 %) (p. 84)	17.1% Urban 17.6% Rural 15.1% (p. 86)	11.3 % Urban 12.9 % Rural 5.4% (p. 86)		3.8% Urban 4 % Rural 2.9 % (p. 86)	3.8% Urban 4.6 % Rural 0.9 % (p. 86)
13	Richter et al 2019 <i>Is the global prevalence rate of adult mental health illness increasing? Systematic review and meta- analysis</i> (Acta Psychiatrica Scandinavica, 140, 393- 407)	1978 – 2015 (n= 1 035 697) Adults 18 yrs + 44 samples/ 42 studies	Clinical interview ICD/ DSM diagnosis CIDI - 24 Symptom scales - 7 Distress scales – 13	Systematic review Meta analysis Odds ration	Increase of 1.179 OR (p. 393) Similarity with Global Burden of Disease findings, small increase in DALYs (p. 402)	-	-	-	-	-
14	Degenhardt et al 2019 <i>The epidemiology of drug use disorders</i>	2001 – 2015 (n= 90,093) Adults 18 yrs + 25 countries	Clinical interview DSM-4 CIDI		-	-	-	-	-	Life time Prevalence Illicit drug use

	<i>cross-nationally: Findings from the WHO's World Mental Health Surveys (In J of Drug Policy, 71, 103-112)</i>	27 WMH surveys from 25 countries								24.8% (1.3 -66.8%) (p. 105) Life time prevalence 3.5% (p. 105) 12 month prevalence 7% (p. 106) Onset mid- teens (p. 110)
Studies		Population (Sample Characteristics)	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
15	Bebbington & McManus 2020 <i>Revisiting the one in four: the prevalence of psychiatric disorder in the population of England 2000 – 2014 (The British J of Psychiatry, 216, 55-57)</i>	2000-2014 (n = not stated) Adult 16 yrs + England Of English APMS 2000, 2007, 2014	Clinical Interview Schedule Results APMS	Systematic review and Meta analysis Short report	All CMD 2000 17.6% 2007 17% 2014 18.2% (p. 56) 1 in 6 CMD 1 in 5 (+ substance use disorders) 1 in 4 (+ developmental disorder) (p. 55)	-	-	-	-	-
16	Glantz et al 2020 <i>The epidemiology of alcohol use disorders cross-nationally: Findings from the World Mental Health Surveys (Addictive Behaviours, 102, 1-15)</i>	2001 – 2015 (n = 123,237) Adults 18 yrs + Countries (n=27) World Mental Health surveys (n=29)	Clinical Interview CIDI/ DSM-IV Life time prevalence 12 month prevalence Household income Low Income (LI) Middle Income (MI) High Income (HI)	Systematic review and meta analysis	Life time CMD and life time AUDs 43.9% (p. 1) Wide variation between litres per capita alcohol consumption and prevalence of AUDs e.g. France and Australia, 12.2 litres alcohol, yet, prevalence AUDs	-	-	-	Life time 8.6% (0.7 – 22.7%) 12 month 2.2% (0.1-5.9%) (p. 9) LI 9.9% MI 7.2% HI 10.2% (p. 11) Men 14.1 %	-

					France 7.1% and Australia 22.7% (p. 10)				Women 3.4% (p. 11)	
17	Hyland et al 2020 <i>Trauma, PTSD and Complex PTSD in the Republic of Ireland: prevalence, service use, comorbidity and risk factors</i> (Social Psychiatry and Psychiatric Epidemiology, 56, 649-658)	Feb 2019 (n = 1200) Adults 18 yrs + Republic of Ireland	Clinical Interview Symptom scales International Trauma Exposure Interview PHQ9 GAD7 – higher cut off score 15>	Primary Study Comparison with WMHS	-	15.2% PTSD + depression 25.5% CPTSD + Depression 67.1% (p. 654)	10.5% PTSD + GAD 25.5% CPTSD + GAD 49.4% (p. 654)	12.1% (p. 655) Lifespan trauma 3.36% PTSD – 5% Complex PTSD 7.7% 1 in 8 adults (p. 649) 80% adults 1 trauma (p. 654)	-	-
Studies		Population (Sample Characteristics)	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
18	McGrath et al 2020 <i>Comorbidity within mental disorders: a comprehensive analysis based on 145990 survey respondents from 27 countries</i> (Epidemiological Psychiatric Sciences 29, e153, 1-9)	2001 – 2015 (n= 145990) Adult 18 yrs + 27 countries 19 national studies representative 24 mental disorders	Clinical interview CIDI/ WMHS	Meta analysis Cox proportional hazards models	Comorbidity CMD with mental disorder 12.1% (p. 1) Comorbidity increase pervasive across all types (p. 6)	Depression Then GAD 5-15 yr later 8.9-13.9 % (p. 7)	GAD then depression 5 –15yr later 28.2-46.9% (p. 7)	-	-	-
19	Yang, Fang,Chen et al 2021 <i>Global, regional and national burden of anxiety disorders from 1990 to 2019: results from the Global Burden of Disease Study 2019, (Epidemiology and</i>	1990- 2019 (n = not stated) All 5 years > 204 countries Global Burden of Disease study	Disability Adjusted Life Years (DALYS) Age Standardised Incident Rate (ASIR)	Systematic review and meta analysis	-	-	45.82 million cases global 301.39 million DALY 28.68 2019; 1-14 50% > since 1990 (p. 1) women 1.6 times (p. 5)	-	-	-

	<i>psychiatric Sciences, 30, 1-11)</i>						Bullying victimisation 7.07% (p. 4)			
20.	Corcoran, Marinescu, Vogelsang et al (2021) <i>Prevalence of depression in women with low income living in developed countries (Depression Anxiety, 2021, 38, 1046-1053)</i>	Women 18 years + (n= 218 035) (Europe, Israel, Australasia, US, UK, Europe, Canada, Japan). 1985 - 2018	Self reported instruments Centre for Epidemiological Studies- Depression Scale ICDI clinical interviews	Systematic review and meta analysis 164 studies; 25 clinical interview and 134 self reported instruments		Self report 22.9% (95% CI 17.8-28.5%) (p. 1048) Women and low income 36.3% (95% CI 31.4% - 42.4%) (p. 1049).				
Grey literature: Scottish Health Survey 2014, Adult Psychiatric Morbidity Survey, England, WHO depression and CMD report 2017, WHO Global alcohol report 2018, the Scottish Public Health Observatory 2022										
Studies		Population (Sample Characteristics)	Investigation (How measured)	Comparison (Analysis)	Outcome Prevalence of CMD	Depression	Anxiety	PTSD	AUDs	SUDs
21	Wilson et al 2016 <i>The Scottish Health Survey Topic Report/ Mental health and Wellbeing</i> (www.scotland.gov.uk , The Scottish Health Survey, 1-77)	Scottish Mental Health & Wellbeing Survey 2012/2013 (n= 9,709) 16yrs >	Clinical Interview telephone GHQ-12 Score 4> indicates possible psychiatric disorder (p. 23)	Scottish Survey results	Total estimate 15 % Men 13 % 1 in 8 Women 18 % 1 in 5 (p. 23) Remote and rural 10% Urban areas 17 %	-	-	-	-	-
22	McManus et al 2016 <i>Adult Psychiatric Morbidity survey England</i> (Adult Psychiatric Morbidity Study England 2014, Stanfeld et al – CMD- Chpt 2 37-68 ; Fear et al – PTSD- Chpt 4 – 106-130 ; Drummond et al – AUDs- Chpt 10- 238-264; Roberts et al – Drug Use – Chpt 11 265- 293)	Adult Psychiatric Morbidity Study England 1993-2014 (n= 7500) 16 years +	Clinical interview CIS-R Score 12> Symptoms of CMD Score 18> Severe AUDIT score 8> Harm/ hazard AUDIT 20> Dependent	English survey results	15.7% 1 in 6 symptoms of CMD 8% - 1 in 12 Severe symptoms of CMD In in 6 adults in England	3.3% adults in England	5.9%	4.4%	Hazardous levels 16.6% Men 27.9%	SUDs 3.1% Young Men (25-44 yrs) Drug use 52.9%
23	World Health Organisation (WHO) 2017	WMHS 2000 2010 Global Burden of Disease	Comparison Global Health estimates	322 million living with depression in 2015	Depression Global Estimate – 7.5% (p. 8)	4.4 % Women 5.1 % Men	Women 4.6% Men 2.6 %	-	-	-

	<i>Depression and other CMD: Global Health Estimates</i>	6 regions of the world	Global Disease Burden 2015	Western Pacific 21% (66.21 million) South East Asia 27 % (85.67 million) Americas 15% (48.16 million) European 12 % (40.27 million) African 9% (29.19 million) Eastern Mediterranean 16% (29.19 million) Comorbidity high	Anxiety Global Estimate - 3.4 % (p. 10) Years Lived with Disability Depression 7.5 % (p. 13) Anxiety 3.4% (p. 14)	3.6%				
24	WHO 2018 <i>Global Status report on alcohol and health 2018</i> (WHO 2018, Geneva)	(n=3000 million) 193 WHO member states Regional and per country	200 alcohol related indicators Harm per litre	Global Status Report on Alcohol & Health	Heavy episodic drinking (HED) 60 > grams once per month 18.2% globally (p. 9) Suicide risk increases by 37 x after heavy use (p. 10) CMD risk doubles (p. 10)	-	-	-	Europe AUDs 8.8% Harmful 5.1% Dependent 3.7% (p. 72) HED 15 yr > 26.5% (p. 51)	-
25	ScotPho 2019 <i>Drug Use: availability and prevalence</i> (The Scottish Public Health Observatory, June 2022, www.scotpho.org.uk)	2012/2013 - 2015/2016 Scotland	Voluntary testing Prisons Drug seizures Drug related deaths	Cross section comparison Scottish Health Surveys Drug offences Police and Prison	-	-	-	-	-	2012/2013 1.74% 2015/2016 1.62% Heavy use men 13.1% Women 6.5% 1339 deaths
26	ScotPho 2022 <i>Mental health: adults and mental health problems</i> (The Scottish Public Health Observatory, 28 March 2022, www.scotpho.org.uk)	2018/2019/ 2020 Scottish representative sample Adults 16-74	Scottish Health Survey Results 2020 Telephone interview (due to Covid pandemic)	Rate per 1000 in past week GHQ score 4> CIS-R	Any neurotic disorder 141 per 1000 Men – 109 per 1000 Women – 170 per 1000 Mixed depression and anxiety most prevalent 68 cases per 1000 adults 6% Women 17 %	25 per 1000	38 per 1000 14%	-	-	-
Legend/ abbreviations: ICD/ ICD-10 – International Classification of Disease, World Health Organisation; DSM – Diagnostic and Statistical Manual of Mental Disorders; International Classification of Primary Care, second edition (ICPC2); Office for National Statistics (ONS); Scottish Public Health Observatory (ScotPho); Clinical Interviews: CIDI – Composite International Diagnostic Interview (CIDI), Schedules For Clinical Assessment in Neuropsychiatry (SCAN); Clinical Interview Schedule – Revised (CIS-R);										

Appendix 6: Data extraction: the prevalence of common mental disorders, alcohol and drug use. Summary of included studies

Data extraction: the prevalence of common mental disorders, alcohol and drug use. Summary of included studies, strengths and weaknesses		
Studies 1- 20 Reports 21 - 26	Strengths	Weaknesses
Study 1: Wittchen, Jacobi, Rehm et al. (2011) The size and burden of mental disorders of the brain in Europe 2010, reports on the Global Burden of Disease Study 2010. Aim: to provide 12 month prevalence and disability estimates to mental and neurological disorders in the European Union. Method: systematic review and re-analysis, comparison 2005 and 2010 findings and Disability Adjusted Life Years (DALYs). Sample: (n=247.5 million) Aged 14 years +, 30 European countries. (EU = 27, plus Switzerland, Iceland and Norway). Diagnostic criteria ICD-10, DSM-IV Disability Adjusted Life Years (DALYs) Findings: 38.2 % prevalence of mental disorders is a conservative estimate within the European population, depression 6.9 %, anxiety 14 %, AUDs 3.4%, SUDs up to 1.8 % (p. 666) (Wittchen et al. 2011b, p. 666). Higher CMD prevalence in women equivalent to 1 in 3, men 1 in 4. Outcome: does not meet full inclusion and exclusion criteria, included adolescents 14 years old and above. Evidence of increase in CMD, AUDs and SUDs within the 2005 to 2010 timespan.	Highlights underestimation of mental disorders in Europe. Challenges stigma around mental disorder as it is found to affecting those who can cope with life problems.	Does not indicate regional variation within the countries, urban or rural locations.
Study 2: Whiteford, Degenhardt, Rehm et al. (2013) report on the Global Burden of Disease 1990 – 2010 and combined mental and substance use disorders. Aim: to summarise fatal and non fatal burden for 11 classes of mental and substance use disorders. Method: systematic review of Disability Adjusted Life Years (DALYs), Years Lived with Disability (YLDs) and Years of Life Lost to premature mortality (YLLs). Diagnostic Criteria: CDM or ICD. Sample: (n= unclear) 20 age groups across 187 countries. Findings: Co-morbid mental and substance disorders 7.4 % GBD (p. 5), depression 40.5% DALYs; anxiety 14.6 % DALYs, AUDs 9.6%; SUDs 10.9% (p. 4) (Whiteford et al. 2013). Outcome: comorbid common mental disorder and substance use disorder highly prevalent, noted to be the fifth leading cause for global burden of disease and disorder group (p. 5).	Accounts for discrepancies in diagnostic criteria between GBD studies and the under estimation of substance use disorders.	All mental disorder included in the study not just common mental disorder.
Study 3: Volkert, Schulz, Harter et al. 2013 reports on the prevalence of mental disorders in older people in North America and Europe. Aim/ objective: assess the prevalence of mental disorder in older adults in Europe and North America. Method: Meta-regression analysis, 25 studies from 15 countries between 2000 and 2011. 2 North American and 13 European. Diagnostic criteria: Clinical Interview, CIDI/ DSM. Sample: (n=51 236) Adults 50 yrs +. Findings: prevalence of mental disorder 3.29 % and lifetime 16.52% (p. 347) prevalence of depression ; current 19.47 %, life time 16.52 % (p. 339), prevalence of anxiety; current GAD 2.3%, life time 6.36% (p. 345); prevalence of PTSD current 1.26%, lifetime 6.36 % (p. 345); prevalence of AUDs, current 0.96%, lifetime 2.5% (p. 345); prevalence of SUDs current 0.34%, lifetime 0.19 % (p. 339) (Volkert et al. 2012 p. 347, 339, 345). Outcome: Depression is reported as the most prevalent CMD.	The study acknowledges not all studies representative of the population, does not meet all inclusion and exclusion criteria, the population of older adults is defined as 50 years +. Working age adults in most countries.	Only articles published in English or German are included (p. 350), plus non-responders are not accounted for in many of the studies.
Study 4: Baxter, Scott, Vos and Whiteford (2014) reports on the global prevalence of anxiety and depression between 1990 and 2010.	Interpretation of the age effect of	Acknowledges the limited of data from Central Asia,

Aim: to test the hypothesis that anxiety and major depressive disorder was more prevalent between 1990 and 2010. Methods: Systematic analysis and Bayesian meta-analysis of 93 studies on anxiety and 173 studies on depression. Diagnostic criteria: DSM/ ICD, Symptom scale-General Health Questionnaire Sample: (n = not stated), All ages. (2 yrs +) Findings: 36% crude increase prevalence of CMD, explained in study by population growth and changes in age structure. Global prevalence of depression, no increase 4.4%, global prevalence of anxiety slight increase from 3.8 % in 1990 to 4% in 2010 (p. 506). Prevalence of CMD higher in women (p. 509) (Baxter et al. 2014 p. 506, 509). Anxiety disorders more prevalent in younger adults. Outcome: challenges the common held belief of an increased prevalence of CMD, however also criticising psychiatry for medicalising 'normal human experiences', recommends lowering the threshold for prevalence of anxiety and depression to include psychological distress (p. 514). Prevalence is regional specific, depression is common in current conflict countries and anxiety in post conflict countries (p. 514).	anxiety disorders in population groups.	Latin America, Oceania and central Sub-Saharan African countries, plus oversampling in conflict affected countries.
Study 5: Steel, Marnane, Iranpour, Chey et al. (2014) reports on the global prevalence of common mental disorder between 1980 and 2013. Aim: systematic review and meta analysis of the literature on mood, anxiety and substance use disorders. Method: systematic review of 174 WMHS. Random effect meta-analysis. Diagnostic criteria: DSM-III, CIDI. Sample: (n= 827 673) Adult 16 + (over 50 % of studies) across 63 countries, 26 High Income (HIC), 37 Low or Middle Income countries. Findings: 12 month prevalence of CMD 17.6 %, HIC 17.5%, English speaking countries, 19%. (p. 483). Lifetime prevalence 29.2%, HIC 33.2%, English Speaking 39.7% (p. 484), pooled prevalence of depression 9.6%, pooled prevalence of anxiety, comorbid CMD and SUDs 18.1%. (p. 483). Females higher prevalence CMD, males high prevalence SUDs (p. 486) (Steel et al. 2014, p. 484, 483, 486). Outcome: Gives full account of data sources and anomalies, regarding age and sample size, evidence of high prevalence of CMD, discrepancies in search strategies to identify studies.	Reports high prevalence of comorbid CMD and SUDs over a 30 year period. One in five people experience CMD, higher in women. Non - English speaking countries included in the review.	acknowledges inter-survey heterogeneity across the period 1980 to 2013.
Study 6: Lai, Cleary, Sitharthan et al. (2015) report on global comorbid substance use disorders (SUDs include drug and alcohol), anxiety and mood disorders. Aim: to determine the strength of association between comorbid SUDs, anxiety and mood disorders. Methods: systematic review of 22 studies pooled Odds Ratio (OR) Diagnostic criteria: DSM-5 Sample: (n= 504 319), Aged 15 yrs + Findings: prevalence of AUDs 40%, SUDs 42 % (p. 7) comorbidity between CMD, AUDs and SUDs; AUDs OR 2.1 times greater risk of anxiety disorder, OR 3.1 times greater risk of depression (p. 11), SUDs OR 2.3 greater risk of anxiety (Lai et al. 2015, p. 7, 11). Outcomes: high prevalence of comorbid AUDs, SUDs and CMD . Acknowledge limitations and potential for section bias due to response rate in different countries. Does not meet all inclusion criteria, not adult population but adolescents aged 15 years or above.	Acknowledge limitations of reporting more than one existing comorbidity i.e. anxiety and depression, plus substance use disorder.	Recognise limitation of binary cut off between dependency and abuse of SUDs, recommend mild, moderate and severity.
Study 7: Spiers, Qessam, Bebbington et al. (2016) report the prevalence and treatment of common mental disorder in England. Aim: evaluate the frequency of common mental disorders, service contact and treatment. Method: Cross sectional pseudo-cohort analysis of Adult Psychiatric Morbidity Study, England 1993 and 2007 Diagnostic criteria: Revised Clinical Interview Schedule (CIS-R). Sample: 1993 (n= 8670) and	Consistent longitudinal data across three surveys of the population health in England add weight to the findings, includes	The study does not report on urban or rural differences in prevalence within the English population.

2000 (n= 6977) and 2007 (n= 5385); Adult 18 yrs +. Findings: prevalence of CMD in 1993, 14.3%, 2000, 16%, 2007, 16% (p. 150). Gender and depression: 1993 women 10.4%, men 8.3%, in 2007 women 12.9%, men 10.2% (p. 154) (Spiers et al. 2016 p. 150, 154). Outcome: Indicated that common mental disorder has plateaued since 2007 in England, but an increase in treatment has not impacted on a reduction in prevalence.	those within the population with symptoms but who are not seeking help.	
Study 8: Remes, Brayne, van der Linde and Lafortune (2016) reports on global prevalence of anxiety between 1990 to 2010. Aim: report the prevalence of anxiety disorders in adult populations.	Highlights groups at risk of anxiety disorders and also addiction and chronic physical disease as areas of research attention.	Predominately North American and European countries, lack representation from LGB groups, sample size of included studies varied greatly. Does not report the self reported and symptoms checklists applied in the studies. Does not comment on urban or rural differences in prevalence within countries.
Aim: report the prevalence of anxiety disorders in adult populations. Method: systematic review of reviews and secondary data analysis of 48 systematic reviews. Primary studies via clinical interview. Diagnostic criteria: DSM or ICDI criteria, and self reported or symptom questionnaires. Sample (n= total not stated). Various age ranges reported, 6 years of age to adulthood in one study to 16 years to adults reported. Findings: Pooled 1 years prevalence 10.6%. Lifetime prevalence 16.6%. No significant increase in past 20 years between 1990 and 2010 (p. 3). Women higher prevalence of anxiety than men (p. 4). Social determinants of health, trauma exposure, comorbid physical and CMD, plus addiction prevalent (p. 6). Vulnerable groups identified women (5.2 – 8.7%), young adults (2.5 – 9.1%), people with chronic disease (1.4 – 70 %), those with addiction, trauma, older people, carers, LGBT, pregnant women and those people who self harm (p. 7) (Remes et al. 2016, p. 3, 4, 6, 7). Outcome: high global prevalence of anxiety, socio-demographic characteristics indicate vulnerable groups. Does not meet all inclusion and exclusion criteria regarding sample characteristics.		
Study 9: Jorm, Patton, Brugh, and Mojtabai (2017) reports on the provision of treatment and the impact on prevalence of CMD in Australia, Canada, England and the United States, 4 English speaking countries.	Highlights the need for prevention of common mental disorders.	Does not report on the diagnostic criteria. The results do not reflect urban or rural differences in prevalence.
Aim: to evaluate the effect of reducing the treatment gap in industrialised countries. Method: systematic review of studies found between 1990-2015. England APMS 1993, 2000 and 2007 primary data collated via clinical interview. Diagnostic criteria: unclear. Sample: (n= not stated), but 1993, 79% response rate, 2000, 69% response rate, 2007 57% response rate. Findings: prevalence of CMD in England in 1993 women 18.1%, men 10.9%; 2007 women 18.9%, men 11.8% (p. 92). CMD major non-communicable disease globally, depression 2 nd and anxiety 9 th GBD (p. 96). Suggests lack of national standardised treatment pathways, therefore quality of treatment offered for CMD is the problem contributing to ongoing prevalence of CMD in these 4 English speaking countries (97) (Jorm et al. 2017, p. 92, 96, 97). Outcome: prevalence data reported is a secondary finding to treatment, not representative of global common mental disorder, but provides a longitudinal background context to the prevalence in England and evidence for national treatment guidelines.		
Study 10: Koenen, Ratanatharathorn, Ng et al. (2017) reports on the global prevalence of PTSD 2001 to 2012.	two thirds of the sample are considered to be nationally representative.	variation in response rate across countries, non-respondents acknowledged, but higher income countries over represented, while countries with recent history of violence or
Aim: provide a comprehensive population-based cross-national data on the epidemiology of PTSD. Method: Cross sectional analysis of 26 WMHS. Diagnostic Criteria: clinical interview, CIDI, DSM-IV, . Sample: (n= 71,083) Adults 18 yrs +. 24 countries. Findings: cross national life time prevalence of PTSD 3.9%, trauma exposed prevalence 5.6 % (p. 2260). High income countries PTSD prevalence is 5%, twice low and middle income countries (p. 2263). Young, female, not employed, not married, less educated,		

lower household income associated with more likely to develop PTSD (p. 2266). It is not clear if the association is a risk or consequence of the disorder (p. 2270) (Koenen et al. 2017 p. 2260, 2263, 2266, 2270). Outcome: global prevalence of PTSD and social-economic demographic factors associated with PTSD.		conflict were not included.
Study 11: Ruscio, Hallion, Lim et al. (2017) reports on the global prevalence of GAD 2001 to 2012.	GAD triggered by stressful life events in the lifespan, also associated with marked disability (p. 9).	Social and cultural differences between countries not acknowledged in the study.
Aim: explore DSM-5 Generalised Anxiety Disorder cross national differences. Method: Cross sectional analysis of World Mental Health Surveys (WMHS). Primary WMHS clinical interview, 26 countries. Diagnostic Criteria: Compare DSM-IV to DSM -5. Sample (n=147 261) Adults 18 yrs to 99 years old. Findings: Lifetime prevalence for GAD 3.7%, High income countries 5%, Lifetime comorbidity with other common mental disorder is high, especially mood or other anxiety disorders 81% (p. 465). Female, younger, without a partner, lower education, low income and unemployed or disability associated with GAD (p. 471) (Ruscio et al. 2017 p. 465, 471). Outcome: evidence of global prevalence, GAD comorbidity with CMD and socio-economic demographic factors.		
Study 12: McCombe, Fogarty, Swan et al. (2018) report on prevalence of mental disorder in older people in primary care in Ireland 2014 to 2015.	Acknowledge caution in interpretation of the results. Supports an increased in common mental disorder across westernised countries.	The results do not address regional variation within countries.
Aim: identify the prevalence and treatment of identified mental disorders through electronic medical records. Method: cross sectional study of routine collected electronic medical records. Diagnostic Criteria: ICD coding. Sample: (n=74261) Adults 55 yrs + in 35 GP practices in Ireland. Findings: prevalence of CMD 19.1% (p. 84), ranging from 3.7 to 38.9% in some practices. Prevalence of depression total 17.1 % urban 17.6% rural 15.1 %, prevalence of anxiety total 11.3%, urban 12.9% rural 5.4%, prevalence AUDs 3.8%, urban 4% rural 2.9%, prevalence of SUDs 3.8%, urban 4.6%, rural 0.9% (p. 86). More frequent diagnosis of depression in urban practices, yet more frequent prescription of psychopharmaceuticals in rural practices (p. 89) (McCombe et al. 2018, p. 84, 86, 89). Outcome: Does not meet all inclusion and exclusion criteria, due to age range 55 yrs + and not nationally representative.		
Study 13: Richter, Wall, Bruen and Whittington (2019) reports on the global prevalence of CMD. Aim: to apply meta-analysis to achieve transparency and statistical precision.	Acknowledge caution in interpretation of the results. Supports an increased in common mental disorder across westernised countries.	The results do not address regional variation within countries.
Aim: to apply meta-analysis to achieve transparency and statistical precision. Method: systematic review and meta analysis of 42 studies; 1978 – 2015. Diagnostic criteria: clinical diagnostic interviews, ICDI, DSM, and community survey instruments, PHQ, GHQ-12, Kessler 6 (no cut off scores indicated). 5 languages, English, French, German, Dutch and Spanish. 7 samples used symptom scales, 13 samples used distress scales. 20 Western Europe, 16 North America, 3 Asia, 3 Oceania, 1 Middle east and 1 South America. Odds ratio Sample: (n= 1 035 697) Adults 18 yrs +. Findings: Does not fit full criteria, children included in several studies, also sample bias to Western Europe and North America, not global. Increase prevalence of CMD in adults OR 1.179 (p. 393). Outcome: small increase in prevalence of CMD.		
Study 14: Degenhardt, Bharat, Glantz, Sampson et al. (2019) reports the global prevalence of Drug Use Disorders (DUDs).	Highlights prevalence of DUDs and associated factors. Fully acknowledges the limitations of the WMHS and	Recognises lacks distinction between abuse and dependency and differentiations between different
Aim: report cross national comparisons of prevalence and correlations of DUDs in 25 countries. Methods: meta analysis of 27 WMHS findings from 25 countries between 2001 and 2015. Diagnostic Criteria: Sample: (n= 90 093)		

Adults 18 yrs +. Findings lifetime prevalence of DUDs 3.5% and illicit drug use varies from 1.3% to 66.8% between countries (p. 105). 12 month prevalence of DUDs is 7%. Characteristics associated with DUDs, unemployment, living alone, disability, male and low income household (p. 109) and onset mid-teens (p. 110) (Degenhardt et al. 2019 p. 105, 109, 110). Outcome: increase in prevalence of DUDs. Estimated to be under reported due to illicit nature and illegalities associated with substance misuse in many countries globally.	under reporting in many countries.	types of drugs or poly drug use which will influence the results (p. 111).
Study 15: Bebbington and McManus (2020) report on the prevalence of common mental disorder in England. Aim: to identify the origins and assumptions of the figure, recognise cultural dangers of over or under estimating the prevalence of mental disorder in England. Method: Short report. Systematic review of findings from Adult Psychiatric Morbidity Survey (APMS) England 2000 – 2014. Diagnostic criteria: clinical interview. Sample: (n= not stated in report) Adults 16 years +. Findings: Minimal increase in CMD between 2000, 17.6% and 2014, 18.2 %. Less severe CMD 1 in 6, CMD and SUDs (includes alcohol disorders) 1 in 5, developmental disorders (ADHD) 1 in 4 (p. 55, p. 56) (Bebbington and McManus 2020b p. 55, 56). Outcome: prevalence of common mental disorder and comorbid alcohol/ drug disorder in England is more prevalent at one in five, than common mental disorder alone at one in six.	Highlights the co-morbidity between common mental disorder and substance use disorders.	Covers a wide range of mental disorder, including psychosis, personality disorder and ADHD which brings the prevalence rate to one in three (p. 56).
Study 16: Glantz, Bharat, Degenhardt et al. (2020) reports on the global prevalence of Alcohol Use Disorders (AUDs). Aim: the prevalence and co-relations of Alcohol Use Disorders in countries who participate in the WMHS. Method: systematic review of 29 WMHS 2001 - 2015. Diagnostic Criteria: clinical interviews CI DI/ DSM criteria. Sample: (123,237) Adults 18 years +. Findings: Lifetime prevalence of AUDs 8.6%; Comorbidity AUDs and common mental disorder 43.1 % (p. 1) High Income countries (HICs) (Australia, Europe, New Zealand, Japan, Northern Ireland, US and Argentina) 10.2 % (p. 11) Wide variation within HICs prevalence of AUDs in France 7.1%, and Australia 22.7%; (Glantz et al. 2020 p. 1, 10, 11). Outcome: Overall indicates a high prevalence of AUDs in HI countries and co-morbidity with common mental disorder.	Highlights increased prevalence of AUDs for men as 14.1% across countries from 1.4 % in Irqq to 33.4% in Australia (p.7).	Wide variation within Europe, not representative of general population groups, for example, the UK is not included although Northern Ireland is included.
Study 17: Hyland, Vallieres, Cloitre et al. (2020) primary study that reports on the prevalence of trauma experiences with PTSD and Complex PTSD in the Republic of Ireland. Aim: first assessment of the prevalence of PTSD and Complex PTSD (CPTSD) in the general population of Ireland. Method: Primary Study. Diagnostic criteria: self report, International Trauma Exposure Measure (ITEM) ICD-11, DSM-5, International Trauma Questionnaire (ITQ) and self reported symptom scales PHQ9 (does not say cut off score used) and GAD7 (15 > cut off). Sample considered to be nationally representative (n= 1200) Adults 18 yrs +. Findings: 1 in 8 adults met the threshold for PTSD/ Complex PTSD diagnosis (p. 649); the prevalence of PTSD and comorbid GAD or depression combined was 25.5%; broken down as 15.2% met the criteria for depression and PTSD (p. 654), while 10.5% met the criteria for GAD and PTSD (p. 654). The prevalence of CPTSD and comorbid GAD was 49.4 %, while, CPTSD and comorbid depression 67.1% (p. 654) (Hyland et al. 2021, p. 649, 654). Outcome: high prevalence of PTSD/ Complex PTSD and co-morbid CMD.	Association between interpersonal index trauma, exposure to multiple traumas in adolescents and female sex is significant and consistent with American findings for PTSD but not CPTSD (p. 656).	Authors acknowledged that the study was not be representative of all demographic population, plus they cannot account for non - participants. The study does not address alcohol and drug use disorders which also have a high prevalence with common mental disorder including PTSD.
Study 18: McGrath, Lim, Plana-Ripoll, Holtz et al. (2020) report on the global prevalence of comorbid Common Mental Disorders and AUDs.	reports both treated and untreated mental disorder	insufficient statistical power to generate

Aim: an analysis of pair-wise lifetime co-morbidity across of range of common mental disorders based on diverse population based surveys. Method: meta-analysis Cox proportional hazards models, of WMHS data. Diagnostic criteria: clinical interview, CIDI, DSM-IV. Sample: (n= 145990) Adult 18 yrs +. Findings: Comorbidity with CMD 12.1 % (p. 6); absolute risk of prior GAD developing depression later (5, 10, 15 yr intervals) 28.2% - 46.9% (p. 7); absolute risk of depression developing GAD later (5, 10, 15 year intervals) 8.9% - 13.9% (p. 7). Risk of developing comorbid alcohol use disorder and PTSD is 20 % or 1 in 5 (p. 7). Outcome: Comorbid CMD includes Alcohol abuse, GAD, Depression, PTSD and nicotine dependence. Strong evidence of co-morbidity of CMD and other CMD or AUDS. Strong evidence of those who develop early onset common mental disorder under the age of 20 years are more likely to develop further disorders later in life (p. 7).	within general populations.	reliable estimates of prevalence for age and sex variables for many disorders.
Study 19: Yang, Fang, Chen et al. (2021) reports on the global burden of anxiety disorders from 1990 to 2019. Aim: a systematic understanding of the disease burden, trends and risk factors to inform national, regional and global policy. Methods: systematic review and meta-analysis of 204 countries Global Burden of Disease Study 2019, Disability Adjusted Life Years (DALYs), Age Standardised Incident Rate (ASIR). Diagnostic criteria: ICD-10/ DSM-IV. Sample: (n = not stated), Aged 5 years +. Findings: 45.82 million cases of anxiety disorders, 50% increase since 1990 (p. 1). Women 1.6 times more prevalence and DALYs (p. 5). Correlated to bullying victimisation in 20 countries 7.07 % (p. 4). Anxiety most frequent common mental disorder globally. Women and bullying victimisation linked to increase anxiety (p. 4). Onset children and adolescents, peak middle age, decline in older age (Yang et al. 2021 p. 1, 4). Outcome: Does not meet full inclusion and exclusion criteria, age range of sample 5 yrs +, however, reports on global study.	study findings highlight the increasing prevalence of anxiety and the associated impairment.	Bullying victimisation is being measured in the study. Not apparent in any other studies based on the global burden of disease, while other key risks or associations, such as marital status, employment and low levels of education are absent. Not adult population and not clear what proportion of the sample within each age range were in the sample.
Study 20: Corcoran, Marinescu, Vogelsang et al. (2021) reports on the prevalence of depression in women with low income living in developed countries. Aim: a focus on women with depression in low income circumstances, compared with women with high income status. Method: systematic review and meta-analysis of published and unpublished literature, 164 studies; Diagnostic criteria: 25 clinical interview and 134 self reported instruments. ICD and DSM. Study does not describe the self report instruments used. Sample: (n= 218 035) Adult women 18 yrs +. Findings: Women living on a low household income had a higher prevalence of depression than national representative studies (p. 1049). Prevalence of depression using clinical interview to diagnose 22.9% (95% CI, 17.8% - 28.5%). Prevalence within women using self-report instruments 37.4% (95% CI, 34%- 40.7%) (p. 1046). Methods have an impact on prevalence with self-reported measures scoring higher than diagnostic standards, namely interviews (p. 1051). More women live in poverty due to high proportion of female single parent households (p. 1052) (Corcoran et al. 2021, p. 1049, 1046, 1052). Outcome: Evidence of higher prevalence of depression in women in low income status.	describes limitations in the selection of the included studies and potential for bias. Highlight risks for women on low income living in middle to high income countries.	risk of bias in selection and inclusion described clearly, diagnostic criteria, only one self reported instrument reported in the study. Reports mostly North American studies.
Report 21: The Scottish Health Survey Mental Health & Wellbeing (2016): The Scottish Government, Wilson, Kellock, Adams and Landberg;	considered nationally representative	The study does not differentiate between types of

Aim: investigate factors significantly associated with poor mental health and wellbeing. Methods: Clinical Interview by telephone. Diagnostic criteria: General Health Questionnaire (GHQ-12) Score 4+ indicates possible psychiatric disorder (p. 23) Alcohol AUDIT scores over 14 units for women and 21 units for men 'hazardous drinking', over 35 units for women and 50 units for men 'harmful drinking' (p. 51). Sample: (n= 9,709) 16 years and over. Findings: Prevalence of any common mental disorder 22%, indicated by GHQ-12 score of 4 or more. Total estimated prevalence for common mental disorder 15 %, Men 13 % or one in eight, Women estimated 18 %, or one in five (p. 23); 20 % of population considered hazardous or harmful drinkers (p. 51). 23 % men and 17% women. Outcome: highlights demographics factors associated with risk of common mental disorder namely, those 45 years to 54 years, separated, women, carers who provide over 35 hours per week, 35 % more likely to have psychiatric disorder (p. 44), plus lack of physical activity, alcohol use, smoking and poor diet all associated with psychiatric disorder.	sample. Urban and rural differences are reported with a reported 17 % of possible psychiatric disorder in urban locations and 10 % in remote rural areas (p. 37).	common mental disorders, merely symptoms as self reported in the GHQ-12.
Report 22: Adult Psychiatric Morbidity Survey England (2016) McManus, Bebbington, Jenkins, Brugha (ed) et al Aim: assessment of the nations mental health. Methods: Clinical interview. Cross-sectional surveys. Diagnostic criteria: CIS-R Score 12+ Symptoms of CMD Score 18+ Severe AUDIT score 8+ Harm/ hazard AUDIT 20+ Dependent Sample: (n= 7500), 16 years +. Findings: 15.7% or one in six of the population have symptoms of common mental disorder. Of which 8% or one in twelve have severe symptom. Depression estimated at 3.3% of the general population. Anxiety reported as 5.9%. PTSD 4.4%. Alcohol hazardous drinking 16.6 %, 27.8% in men, drug use disorders 3.1%, young men 52.9%. Outcome: Associations with higher prevalence of common mental disorder include, young women, living alone, poor physical health, not in employment, disability. Steady increase for women, static prevalence for men (p. 8). Also, association with common mental disorders co-morbidity with physical illness, 27.7 % report physical illness, high blood pressure, asthma, diabetes, cancer, 37.6% present with chronic physical condition and common mental disorder (p. 324).	considered nationally representative of the population.	no differentiation between urban and rural localities in England.
Report 23: World Health Organization report (2017) Depression and other common mental disorders; global health estimates. Aim: provide available estimates of depression and other mental disorders at global and regional levels. Methods: Global Burden of Disease. Diagnostic criteria: not stated. Sample: Global (n= 322 million). Findings: 4.4% of global population have depressive disorders. Women more prevalent at 5.1% and men 3.6%. Anxiety women 4.6% and men 2.6 %. Outcome: common mental disorder remains a global public health concern.	recognise co-morbidity between depression and anxiety disorders (p. 12). Also, link between common mental disorder and suicide at 1.5 % of all deaths, second leading cause of death in young people 15 years to 29 years (p. 14).	methodology not explained in report. Sample includes children and adolescents.
Item 24: World Health Organization report (2018) Global report on alcohol and health. Aim: global estimates Methods: WMHS. Calculated harm per litre of alcohol consumed. Diagnostic criteria: 200 alcohol related health indicators Sample: (n=3000 million) in 193 WHO member states. Findings: Heavy episodic drinking (HED) 18.2% globally (p. 9) Suicide risk increases by 37 x after HED (p. 10). Outcome: HED is higher in Europe AUDs 8.8% Harmful 5.1% Dependent 3.7% (p. 72) HED 26.5% (p. 51)	global estimates are reported.	Alcohol use is under reported in many countries due to legalities and cultural factors.

Item 25: Scottish Public Health Observatory (2019) Prevalence of Problem Drug use in Scotland 2015/16 Estimates. Aim: estimate national and local prevalence rates of problem drug use. Methods: cross sectional comparison. Police data, criminal justice data. Service data. Diagnostic criteria: as previous reports. Sample: 16 years to 64 years living in Scotland. Findings: 2012/2013- 1.74%; 2015/2016 estimated 55,800 to 58,900 1.62%; Heavy problem drug use among males 71 %. Rate of 2.35%, females 0.92% % with 1339 deaths associated with problem drug use. Outcome: Scottish rates of problem drug use are higher than global average, young males between 15 years and 24 years were four times higher than females (p. 5).	defines drug use as opioids, including illicit and prescribed, route and prolonged use. Highlights higher rates of drug use in urban areas.	changes in data collection methods and statistical analysis may explain perceived reduced estimates.
Item 26: Scottish Public Health Observatory (2022) Mental health: adults and mental health problems. Aim: national estimates and risk factors associated with mental health problems in Scotland. Methods: telephone interviews CIS-R. Diagnostic criteria: Warrick-Edinburgh Mental Well-being Scale (WEMWBS), General Health Questionnaire (GHQ-12) Score 4 or above. Sample: sample size is not clear from the website, but reports in 2016 408,300 people 16 years of age or over were suffering disability due to depression, while 473,000 were suffering disability due to anxiety. Scottish Burden of disease study. Findings: Prevalence of two or more depressive symptoms in 2021 was 11%. No difference noted between men and women. Prevalence of two or more anxiety symptoms 14 %. Women more likely to report anxiety symptoms than men. Adults 16 years to 64 years of age. Outcome: Scottish rates of common mental disorder more prevalent in areas of deprivation.	headline results from Scottish Health Survey and Scottish Burden of Disease study described as moderately accurate and relevant.	lacks clarity to validate the results reported. Website updates are subject to change.

Appendix 7: MeSH terms and Boolean operators: the management of common mental disorders in primary care

MeSH Term headings	Boolean descriptors
Care, Primary Care* Primary Health Care Practice nurse* nursing* nurse practitioner Mental Disorder Mental Illness Illness, mental Psychiatric Disorder Anxiety* Neurotic Disorders Alcohol Related Disorders Substance abuse disorders PTSD* Trauma and Stress related Disorders	For common mental disorder: Psych* Mental Disorder Depress* Anxie * PTSD* Post traumatic* For alcohol and substance use: Alcohol Drugs Substance For primary health care practitioners: General practice Primary Health Care Physician

Appendix 8: Database search: Screening and management of Common Mental Disorder in primary care

Medline	Psychinfo	Web of Science	CINHAL
Primary care or primary health care or primary healthcare or general practice or GP or practice nurse AND experiences or perceptions or attitudes or views or feelings or perceptions or opinions AND identification or detection or screening or recognition or treatment AND Common mental health disorders OR common mental disorders			
4,549	1,925	474	818
British, or UK, or United Kingdom or Britain or England or Wales or Scotland or Northern Island AND OR remote and rural, US, Canada and Australia			
1,278	976	37	237
adult population			
7,857	456	17	231
Exclusion criteria: setting: emergency clinics, outpatients, inpatients, mental disorders: serious mental disorder, dementia, bipolar, schizophrenia, psychosis, personality disorders, eating disorders, specific population groups: children and adolescents, peri-natal, post-partum, specific population groups comorbidity: intellectual disabilities, autism spectrum, epilepsy, neuro-developmental, medical condition/ disease – HIV, Hepatitis B, cancer, diabetes, respiratory disease, Hepatitis C specific treatment- pharmacology, Improving Access to Psychological Therapies (IAPTS),			
94	238	4	9
De-duplication			
71	151	4	6

Appendix 9: Summary of studies on primary care practitioner experiences of screening and managing common mental disorder

1. Ellis et al. (2010) A mixed methods study evaluating the implementation of a 2 day professional education course on managing mental health emergencies. Course was designed for generalist nurses and their colleagues in rural practice in Australia. Methods: pre and post training questionnaires and follow up interviews 6 months post course. Sample: (n= 475) staff surveyed pre and post course, (n=44) interviewed. Low response for follow up. Findings: staff confidence in providing treatment increased. Also, staff attitudes towards patients and the range of interventions offered positively changed. Outcome: does not meet inclusion and exclusion criteria – Excluded
2. Barley, Murray, Walters and Tylee (2011) A quantitative systematic review of British GP and practice nurses attitudes towards the management of depression. Method: meta-ethnographic approach to identification of common and refuted themes. Sample: (n= ? total). 17 studies identified, 7 qualitative studies and 10 quantitative studies. Findings: 26 first order constructs found, reconfigured into 7 second order constructs author derived themes: Professionals understanding of depression, as response to daily life, biomedical perspective; Recognising depression, making a diagnosis, the use of case finding tools, older people perceive 'time wasting' (p. 4), plus perceived outcome, having nothing to offer; Presentation of depression, consultation patterns and cues to talk about mental health, somatic symptoms, co-morbidity among older people, minority ethnic groups, gender differences; Management strategies, antidepressants, psychological therapies, listening, specialist services; Shame and stigma, both patient and clinician avoidance and reluctance to address mental health; Relationships between professionals, perceptions of roles and attitudes; Attitudes to managing depression, lack of clinician's confidence in managing depression; Clinician's training needs, seen as a training gap, yet not a priority. Outcome: does not meet full inclusion as is not a primary qualitative study yet this is a valuable synthesis of 7 qualitative studies and contributes to the knowledge of attitudes and beliefs of primary care practitioners on depression in the UK up to 2011 – Included
3. Karasz, Dowrick, Byng et al. 2012 A study of doctor and patient interactions and the influence of these conversations on diagnosing and treating depression. Method: secondary qualitative analysis of 30 transcribes from 4 large studies. Sample: (n= 30) adults from US, UK and Netherlands. Findings: *Symptom presenters* patients who described a biological presentation of depression were more likely to get treatment, being offered medication in 8 out of 9 transcribes. Problem presentation: *Situation presenters* patients who described life events and social circumstances contributing to their presentation were less likely to be offered medication, only 2 out of 11 transcribes. Mixed presenters, patients who described both social circumstances and symptoms were more likely to get offered medication in 6 out of 11 transcribes. Outcome: evidence that doctor patient communication is outcome orientated, often directed by the patient with the doctor following the social cues in both the content and implied beliefs in that conversation. Clinical guidelines were

not fully implemented. Psychological therapies considered first line treatment for mild to moderate depression not considered in the study, error and bias possible due to sample size out of a large secondary qualitative data available (n= 3710) primary care patients. – Included

4. Fleury et al. (2012) mixed methods study of GPs management of mental disorder in Canada. Method: secondary data informed sample selection, questionnaire and interviews. Sample: (n= 60) 60 GPs from 5 regions of Quebec. 52 % women. Practice characteristics given. Findings: GPs very comfortable with managing CMD, 20% of GP contacts are for mental disorder. Managing CMD viewed as a 'source of satisfaction', chance to practice holistically, whereas, mental illness viewed as can be 'burdensome' especially walk in clinics. Strategies used by GPs to improve management include see patient at the start or end of clinic, reserve longer time slots, schedule appointments alternate appointments between illness an severity (ease burden on GPs), set follow up appointments, 'one problem per visit rule' (p 7), reserve slot for crisis and finally, extend work days. Outcome: useful insights into GP practice and management of mental disorder including CMD and strategies used to manage more effectively– Included
5. Roberge et al. 2016 qualitative study of the perceived needs of patient with CMD and chronic disease in primary care in Canada. Method: semi structured interviews with patients and practitioners. Sample: (n=10) patients and (n=18) practitioners. Findings: Complexity of managing patients with CMD and comorbid medical conditions, themes identified problems around detection and diagnosis as symptoms overlap, focus on physical health, also of screening for CMD. Patient's willingness to talk about their mental health, patient perception of practitioner's role and time constraints, self perceived stigma. Challenges of treatment due to polypharmacy and risk of drug interactions (p 6). Outcome: does not meet full inclusion criteria as CMD and comorbidity, yet focusses on general complexity of CMD presentations and co-morbid medical condition so valuable insight into this common phenonema. – Included
6. Noonan et al. (2018) quantitative systemic review of global evidence on family physician (GP) role in supporting perinatal mental health. Methods: Systematic review of qualitative, quantitative and mixed methods studies reviewed. Sample: (n= 13) studies selected, 5 qualitative studies, 8 quantitative studies out of (n=1125) studies in search, dates 2000 to 2016. Findings: Barriers and facilitating factors identified: consistent themes of inconsistent screening and diagnosis, focus on depression not other CMD, women's reluctance to ask for help, lack of clear clinical pathways, dependence on medication as main treatment, generic approach to addressing ethnicity may hinder identification of CMD if language barriers exist, pressure on doctors time and resources available. Outcome: does not meet all inclusion and exclusion criteria, yet synthesis of themes from qualitative studies add to the body of knowledge on GPs role in treating perinatal CMD, however,

following identification, the treatment of emerging perinatal or post natal CMD would follow a different pathway (NICE 2020, CG192¹) – Excluded

7. Fernchick et al. (2019) narrative review of the challenges of implementing clinical guidelines for depression. Method: review of literature between 2007 and 2017. Sample: not stated. Findings: Recommend PHQ9 to be used for screening for depression. If screen positive for depression, further screening for comorbid CMD should occur. Functional impairment and symptom count relevant for determining severity of condition. Recommend chronic disease management in primary care for depression. Outcome: does not meet selection criteria – Excluded.
8. Geraghty et al. (2019) qualitative study exploring GPs perceptions of the distinctions between emotional distress and depression. Method: semi structured interviews and thematic analysis. Sample: (n=21) GPs in South of England. Findings: GP perceptions varied greatly, perceptions of proper or biological depression that occurs independent form life events. 8 themes identified to differentiate emotional distress from depression: the importance of context, the absence of biological features, rationality and coherence, severity of symptoms, inherent difficulty of concept of depression, viewing a distinction between distress and depression, asking is there a clearly perceived distinction, chronic stressors and a GPs role. Outcome: meets full inclusion criteria, high quality study, useful insight into GP perceptions – Included
9. Chakraborty et al. (2020) qualitative study of GPs clinical challenges in diagnosing and managing work related CMD. Method: Semi-structured interviews and distress screening instruments identified Kessler 10, Depression and anxiety scale. Sample: (n=41) of which (n=25) GPs, 9 rural practice, 16 urban practice. Findings: 8 key themes identified 1) range of tools for clinical diagnosis. 2) Patient/ GP interphase discussing diagnosis, 3) Managing patient expectations of recovery 4) Decision making, knowing when to refer to specialists. 5) Determining when and if work based interventions are appropriate to include in treatment. 6) When to prescribe, appropriate use of medication. 7) Providing care that follows protocol for procedural activities (work related health/ compensation) but is acceptable for the patient and does not hinder socio-economic and societal impacts for the patient. 8) Monitoring and facilitating recovery (p 3). In addition the challenges faced by rural GPs, managing interpersonal relationships, manage patient self stigma and mistrust in a small community. Challenges of dual roles between clinical care and care co-ordination especially in a small community. Caring for employer and employee. Outcome: high quality study of identifying and management work related CMD within adults in a rural community – Included
10. Thomas et al. (2020) qualitative study on the accessibility and acceptability of GP IAPT referral process for patients living on a low income. Method: interviews and secondary analysis. Sample: (n=80) patients, (n=10) GPs and (n=26) video

¹ NICE (2020) Antenatal and postnatal mental health: clinical management and service guidance, clinical guideline (CG 192) www.nice.org.uk

consultations, primary care practice in South West England. Findings: Self referral process perceived by patients to be an obstacle. 5 key themes identified. (See table). Reinforces negative self perceptions. Attitudes and perceptions by GPs and patients influence process and outcome, socio-economic factors including internet poverty and lack of phone credit impact patients ability to make self referral. Also, challenges of IAPT, treatment protocols and patient outcomes drop out rate high. Outcome: high quality study, includes qualitative of GPs attitudes but it does not meet the inclusion criteria, focus on accessing treatment for CMD, not detection of CMD – Excluded

Appendix 10: Critical Appraisal Skills Programme checklist (CASP) for qualitative studies

Critical appraisal of qualitative studies included (CASP tool) (2018)											
Criteria For selection	Was there a clear statement of the aims of the study?	Is a qualitative methodology appropriate?	Was the research design appropriate to address the aims of the research?	Was the recruitment strategy appropriate to the aims of the research?	Was the data collected in a way that that addressed the research question?	Has the relationship between researchers and participants been adequately considered?	Have ethical issues been taken into consideration?	Was the data analysis sufficiently rigorous?	Is there a clear statement of findings?	How valuable is the research?	Included/ Excluded from LR
Studies	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	In/Ex
Karasz et al. 2011	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In
Fluery et al. 2012	Y	Y	Y	Y	Y	N	Y	Y	Y	Y	In
Roberge et al. 2016	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In
Geraghty et al. 2019	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In
Chakraborty 2020	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y	In
Legend: Yes = Y; No = N; In/Ex – Included or Excluded											

Appendix 11: Critical Appraisal Skills Programme (CASP) checklist for systematic reviews

Critical Appraisal Skills Programme (CASP) checklist for systematic reviews 2018											
Criteria For selection	Did the review address a clearly focused research question?	Did the authors look for the right type of papers?	Do you think all the important, relevant studies were included?	Did the reviewers do enough to assess the quality of the included studies?	If the results of the review have been combined, was it reasonable to do so?	What the overall results of the review?	How precise are the results?	Can the results be applied to a local population?	Were all important outcomes considered?	Are the benefits worth the harms and costs?	Conclusion about the systematic review. Included/ Excluded from LR
Study	Q 1	Q 2	Q 3	Q 4	Q 5	Q 6	Q 7	Q 8	Q 9	Q 10	In/Ex
Barley et al. 2011	Y	Y	Y/N	Y	Y	n/a	n/a	Y	Y	Y	In
Legend: Yes = Y; No = N; Y/N – can't tell/ unclear; n/a – Not applicable; In/Ex – Included or Excluded											

Appendix 12: Screening and managing common mental disorders in primary care practice; data extraction tool

Data extraction PEO primary care practitioners' experiences of managing common mental disorders (Cochrane 2023, Greenhalgh checklist 2014)				
Study	Population characteristics, setting and sample size, sampling sources	Exposure Research question/ aim methodology /analysis/ quality control	Outcome Themes and findings 1: clinical problem as a clearly formulated question? 2: qualitative approach appropriate 3. Were the setting and sample selection described? 4. Researcher's perspective taken into account? 5. Data collection methods detailed enough? 6. Analysis data and quality control measures described? 7. Are results credible and clinically important? 8. Are conclusions justified by results? 9. Are findings transferable to other clinical settings (p 249, Greenhalgh 2014) Yes – Y No - N	Comment
STUDY One Geraghty, Santer, Beavis, Williams et al. 2019 <i>I mean what is depression? UK GPs perceptions of distinction between emotional distress and depression</i> British Medical Journal Open, 9, e032644, 1-7	Jan – March 2015 (n= 21) Age range 38 – 58 years Median age 45 yrs GPs from 19 practices South of England, WESSEX Clinical Research Network Deprivation indices, urban and rural locations 12 males 9 female 11 urban 10 rural Potential for sample bias as 1 GP was selected from 17 practices, yet 2 GPs were sampled from 2 practices. No explanation was given within in study.	Aim/ over arching research question: To explore GPs perceptions of distinctions between emotional distress and depressive disorder Public involvement informed the study (p 2) Methodology: Semi structured interviews face to face and telephone Analysis: verbatim transcribes/ coding framework developed by multiple researchers Quality Control: framework Braune and Clarke/ Joffe and Yardley Higher order themes by cluster coding by multiple researchers Ethics considered. Funding accounted for. Patient consent not required.	Eight higher order themes The importance of context: (i) relating symptoms to a trigger context or reaction to life events such as bereavement (p 3) The absence of biological features: (i) symptoms seen as a feature of emotional distressed rather than depression, reference to an ' <i>adjustment disorder</i> ' rather than ' <i>profound depression</i> ' (p 3) Rationality and Coherence: (i) patient's ability to articulate their emotional distress 'logically' symptoms and problems, despite the severity (p 4) Considering severity: (p 4) (i) continuum between distress and symptoms, (ii) use of PHQ-9 and GAD-7 subjective outcome, (iii) duration of symptoms as an indicator Inherent difficulty of concepts: (i) difficulty with the concept of depression, GPs with less formed views, ' <i>the middle ground</i> ' between distress and depression ' <i>what is depression?</i> ' (p 4) Conceptualising a distinction: (i) the opposite of a continuum between distress and depression, recognise shared commonalities, yet depressed patient ' <i>unable to reverse entrenched feelings and behaviours</i> ' (p 4) (ii) endogenous versus reactive, risk of over treatment of ' <i>shit life syndrome</i> ' (p 5) (iii) a ' <i>process narrative</i> ', focussing on life events and a continuum of distress and symptoms rather than either or, how best to classify them (p 5) Chronic stressors: (i) the presence of long term or 'ingrained' stressors such as work stress that cannot be changed diagnosis may depend on duration (p 5) Considering a GPs role: (p 5) (i) GPs perception of their role to manage cancer and being ' <i>far too busy to manage distress or upset</i> ' (p 5) (ii) majority of GPs value their role in listening, diagnosis and signposting, i.e. citizen's advice or counselling (iii) recognise the importance of normalising and not pathologizing symptoms (p 5) recognise the value of support ' <i>we are a neutral sounding board</i> ' (p 5) for non-disordered distress. 1-Y, 2- Y, 3- Y, 4 – Y and N, described by not explained how influenced interviews, 5 - Y, 6 – Y, 7 – Y Value is the exploration of interpretation of social causes and biological symptoms of depression. Assumptions that inform clinical guidelines on depression.	Use of screening tools PHQ or GAD No distinction between urban and rural practice

			Implication how to talk about depression and emotional distress clearer guidance required 8 – Y, 9 – N noted as a limitation of the study	
Study	Population characteristics, setting and sample size, sampling sources	Exposure Research question/ aim methodology /analysis/ quality control	Outcome Themes and findings 1: clinical problem as a clearly formulated question? 2: qualitative approach appropriate 3. Were the setting and sample selection described? 4. Researcher's perspective taken into account? 5. Data collection methods detailed enough? 6. Analysis data and quality control measures described? 7. Are results credible and clinically important? 8. Are conclusions justified by results? 9. Are findings transferable to other clinical settings (p 249, Greenhalgh 2014) Yes – Y No – N	Comment
STUDY Two Karasz, Dowrick, Byng et al. 2011 <i>What we talk about when we talk about depression: doctor-patient conversations and treatment decision outcomes</i> British J of General Practice, 1-9	US data (2009 study) Dutch data 2000-2001 UK data may 2004-Feb 2005 (n= 30) Adult patients/ GP interaction transcribes, selected from a sample of over 3710 primary care patients in 4 studies conducted in the United States, UK and the Netherlands (n=30) Nationality of patients US – 12/ UK – 10 Netherlands – 8 Gender – female – 16 out of 30 (p 3) Small sample (n=30) from a large data pool (n=3710),	Research question/ aim: To understand the influence of GP patient interaction on decision making about treatment for depression Methodology: Secondary qualitative analysis of 30 transcribes of doctor and patient conversations Purposive sampling 3 criteria for selection 1. Medication offered 2. Psychotherapy offered 3. No treatment offered Analysis: 1 st micro analysis of conversation patterns in GP patient interactions about depression 2 nd narrative analysis of problem presentation (p 1) Coding from authors previous work Limitation – no non verbal cues not analysed Appropriate methodology. Ethics considered. Patient consent obtained. Funding stated.	Five themes identified Problem Presentation: (p 3) (i) Symptom presenters – patient describes biological presentation of depression Finding: Symptom presenters offered medication 8 / 9 (ii) Situation presenters – patient describes a social presentation of life events/ circumstances. Finding: Situational presenters offered medication 2/11 (iii) Mixed presenters - patient describes symptoms and situation as playing an equal role (p 3). Finding: Mixed presenters offered medication 6/10 Physician elicitation: (p 4) (i) Symptoms enquiry – two thirds of physicians enquired about depression, but limited to 3 symptoms or less (p 4); (ii) Situation enquiry: most physicians enquired about social situation and the context, but this did not influence decision making (p 4) Clarifying the relationship between situations and symptoms: (p 5) one sixth of physicians sought clarity on the sequence of social events and symptoms presenting (p. 5) Formulation of the problem: (p. 5) frequent use of the term depression, however, in one sixth of cases differentiation between depression as 'life problem' and 'real depression', those formulated as life depression, medication was not prescribed. The label of depression was not seen as a barrier in this study. The offer of treatment: (p 5) dependent on social or medical model of depression. Refusal of treatment in 6 out of 16 cases, vague language used ' <i>medication will not cure that</i> ' (p 5) Persuasion: (p 5) only 4 consultations evidenced attempts to follow guidelines by educating and offering treatment. ' <i>Persuasion was not only rare, it was unsuccessful</i> ' (p 6). 1-Y, 2-Y, 3- N except gender 4-N no reference to researchers influence, only Dutch data protection and research, signed consent for patients, no mention of signed consent for GPs, 5-Y, 6 - Y and N some general information given, but no details, 7-Y, 8 – Y, 9 – Y and N May have produced different results with a different sample. Risk of bias and error. – acknowledged, no country to country analysis. Sample characteristics of GP not described except gender. Contribution to understand doctors' perceptions. Limitations include lack of follow up i.e. was the data based on	2 data sets were UK samples 2 nd data set 13 Gps based in 5 diverse practices in London May 2004 – February 2005 PHQ-9 Hospital Anxiety and depression scale HAD used

			the initial doctor/patient conversation about depression or follow up conversations about depression.	
Study	Population characteristics, setting and sample size, sampling sources	Exposure Research question/ aim methodology /analysis/ quality control	Outcome Themes and findings 1: clinical problem as a clearly formulated question? 2: qualitative approach appropriate 3. Were the setting and sample selection described? 4. Researcher's perspective taken into account? 5. Data collection methods detailed enough? 6. Analysis data and quality control measures described? 7. Are results credible and clinically important? 8. Are conclusions justified by results? 9. Are findings transferable to other clinical settings (p 249, Greenhalgh 2014) Yes – Y No - N	Comment
STUDY 3 Fleury, Imboua, Aube, Farnad and Lambert (2012) <i>General practitioners' management of mental disorders: A rewarding practice with considerable obstacles</i> <i>Family Practice, 13, 19, 1-12</i>	April 2009 – March 2010 (n=60) 12 GPs in 5 regions of Quebec, Canada Male 29 female 31 Mean age 52 Sample bias possible due to 398 GPs in previous study, 120 GPs approached to participate in the study, Over representation of GPs with an interest in mental health Setting not detailed	Research question/ Aim: To add to the body of knowledge on mental disorder management by GPs and provide insight into how primary health care management could be improved (p 9) Methodology: Mixed methods study based on a previous study of 398 GPs. 27 item questionnaire and 70 minute interview Analysis: Literature derived codes, NVIVO to collate data/ SPSS for quantitative data Quality control: transcript analysis by 3 authors	Five themes identified: Management of mental disorders in GP's practice: (p 5) (i) 35 % of patients with CMD also had physical ailments (p 5), (ii) GPs treated both mental and physical disorders, except in 10 % of cases, (iii) GPs very comfortable with treating CMD, due to frequent exposure to CMD, keen interest, continuous medical education, lack of access to psychiatrist, (iv) GPs personal traits include listening skills, empathy, patience and an open mind (p 5) GPs' clinical practices in mental healthcare: diagnosis and treatment processes (p 5) (i) use of clinical intuition, experience and DSM-IV to detect mental disorder, (p 6), (ii) treatment for CMD pharmacotherapy, support therapy and psycho-education, yet favoured medication and psychotherapy, few referrals to community based services (iii) Average 7 follow up visits for CMD, (iv) average 36-24 minutes with patients (p 6) GPs' management of mental disorders: enabling and hindering factors (p 6) (i) clinical settings and limited access to specialists, (ii) referral process perceived as 'ineffective, burdensome and bureaucratic' (p 7), information of waiting times not available, (iii) single access points perceived as more satisfactory (p 7) Impact of mental disorder management on GPs practices (p 7) (i) mental health care practice viewed as a source of satisfaction, use of a holistic approach (p 7), (ii) could also be burdensome as required 'time, flexibility and emotional investment' especially crisis situations (p 7) (iii) walk in clinics stressful Strategies promoted by GPs to improve mental disorder management: (p 7) (i) see patients at beginning or end of the day, (ii) reserve longer time slots, (iii) schedule appointments, alternate between patients' illness and severity, (iv) one problem per visit rule, (v) reserve time slots for crisis situations, (vi) extend workdays or shorten lunch breaks 1 – N, broad aim, 2- Y, 3- Y and N 5 regions, no urban or rural setting, 4 – N, 5 – Y, 6 – Y, 7 – Y, 8 – Y, 9 – Y and N Canadian health care system. Limitation: Does not focus on common mental disorder.	20 % of all GPs visits were mental health related (p 5) Recognise concomitant substance misuse and mental disorder (p 10)

Study	Population characteristics, setting and sample size, sampling sources	Exposure Research question/ aim methodology /analysis/ quality control	Outcome Themes and findings 1: clinical problem as a clearly formulated question? 2: qualitative approach appropriate 3. Were the setting and sample selection described? 4. Researcher's perspective taken into account? 5. Data collection methods detailed enough? 6. Analysis data and quality control measures described? 7. Are results credible and clinically important? 8. Are conclusions justified by results? 9. Are findings transferable to other clinical settings (p 249, Greenhalgh 2014) Yes – Y No - N	Comment
STUDY 4 Roberge, Hudon, Pavilanis, Beaulieu et al. 2016 <i>A qualitative study of perceived needs and factors associated with the quality of care for Common Mental Disorders in patients with chronic diseases: the perspective of primary care clinicians and patients</i> (Family Practice, 17, 174 1-9)	March – August 2014 (n=10) Adults 18 yrs + patients (n= 18) 6 clinicians from each clinic 10 doctors, 6 nurses, 2 allied health (n=3) Primary care practices Urban and semi-urban settings in Quebec, Canada	Research question/ Aim: To explore the perceived needs, barriers and facilitators for delivery of mental health care for patients with coexisting common mental disorder and chronic disease in primary care. Methodology: Semi-structured Interviews with patients and practitioners by one interviewer. Analysis: coding Myles and Huberman data reduction, data display and conclusion Ethics considered. Patient consent obtained. Funding acknowledged. Value in exploring barriers and facilitating factors in the complexity of managing chronic health and Common Mental Disorder, specifically anxiety and depressive disorders. Does not meet full selection criteria as CMD is combined with chronic disease, however, general comorbidity considered not specific medical conditions.	Four themes identified: Detection and diagnosis of depression or anxiety disorders: (p 5) (i) greater attention given to physical health (ii) Similarities between CMD and chronic disease symptoms such as fatigue (iii) Patient willingness to talk about mental health (iv) Patient view about GPs time constraints ie. Only condition prompting the consultation to be discussed (p 6) (v) Patients feeling stigmatized by clinicians, being seen as sick, 'that's all they see' (p 6), (vi) Clinicians not using screening tools, except a nurse using PHQ9 and GAD7 in one location Treatment (pharmacology or psychotherapy): (i) adherence to clinical guidelines challenging due to polypharmacy, reluctance to 'add another pill' (p 6) Psychosocial and psychological interventions (i) nurses more invested than physicians in low intensity interventions, (ii) patients appreciated nurse practitioners care (p 7), (iii) lack of availability of psychological therapies, no knowledge of evidence base for treatment i.e. CBT over Brief solution focused therapies (p 7) Collaboration with other clinicians and resources: (i) the need for targeted short term consultations for medication reviews, (p 7), (ii) access to the wider MDT and the need for shared tools and records, ' <i>We don't work in silos</i> ' a community of practice' (p 9), (iii) access to specialist pharmacists for poly pharmacy within MDTs, role less defined or given attention (p 10), Barriers and facilitators which influence for optimal delivery of care: (p 8) (i) limited availability of mental health services, access improved in employee assisted schemes (ii) the burden of care (iii) suboptimal inter-professional communication and collaboration, (iv) training needs beyond formal education, CPD in mental health essential (p 9) (v) Use of PHQ9 and GAD7 to help detection (p 11). 1-Y, 2-Y, 3- Y, 4 – N, one interviewer a psychologist does not explain relationship, 5- Y, 6 – Y, 7 – Y, 8 – Y refer to clinical guidelines and stepped care approach Nice 2011a, (p 4). Limitations noted in the study, including selection bias and not achieving data saturation in all areas reported.	Use of screening tools PHQ and GAD. Stepped care NICE guidelines

Study	Population characteristics, setting and sample size, sampling sources	Exposure Research question/ aim methodology /analysis/ quality control	Outcome Themes and findings 1: clinical problem as a clearly formulated question? 2: qualitative approach appropriate 3. Were the setting and sample selection described? 4. Researcher's perspective taken into account? 5. Data collection methods detailed enough? 6. Analysis data and quality control measures described? 7. Are results credible and clinically important? 8. Are conclusions justified by results? 9. Are findings transferable to other clinical settings (p 249, Greenhalgh 2014) Yes – Y No - N	Comment
STUDY Five Chakraborty, Dermentzis, Brijnath, et al. 2020 <i>What clinical challenges are associated with diagnosing and managing work-related mental health conditions? A qualitative study in general practice</i> (British Medical Journal Open, 10, e037734)	July to September 2016 (n=41) 25 GPs, 16 GPs based in metropolitan area, 9 GPs based in rural area 7 psychiatrists 9 compensation scheme workers (n= 29,000) GPs in the region Age range 28-69yrs Purposive sampling for location rurality, gender and treating employment related CMD in past 3 years (p 2) 9 GPs rural practice (10,000 – 100,000 population) 16 GPs metropolitan practice (100,000 >) No GPs in remote and rural practice (< 10,000) Australia	Research question/ aim: To identify the clinical challenges experienced by GPs when diagnosing and managing work related mental health conditions (MHC). Methodology: Semi structured telephone interviews 25 – 55 minutes July to September 2016 Analysis: transcribes analysed inductive and deductive techniques Quality control: 2 researches coded, discrepancies resolved by a third Clinical reasoning systematic process (p 3) Appropriate methodology. Ethics considered and approved. Monash University Human Research Ethics Committee. Funding \$A150 gift voucher for GPs and psychiatrists Patient consent not required.	Eight themes identified Forming an accurate diagnosis of a mental health condition in relation to work: (i) Challenges in selecting the choice of screening tools, Kessler 10 item, Depression and Anxiety Stress Scales 21 item, (p 3) (ii) Challenge in attributing the role of work, when other non-work factors exacerbate the condition (p 3), (iii) lack of communication procedures within workplaces (p 6) How to discuss a diagnosis of a mental health condition with a patient: (p 6) (i) conscious of the use of language and the impact of diagnosis, (ii) request for a screening tool to aid discussion of mental health conditions in the context of a physical injury (p 6) Setting patient expectations for recovery and return to work (i) recovery expectations can undermine the therapeutic relationship, (ii) patients can engage in 'doctor-shopping' and non-compliance with the plan, if their expectations do not match their GPs (p 6) Knowing when to refer to other specialists: (i) early referral means early treatment or, (ii) premature referral and labelling patients (iii) having guidelines on timeframe for referrals perceived as helpful (p 6) (iv) rural GPs saw separating the roles of GP to treat the problem and return to work coordinator as more helpful (p 6) (v) case conferences viewed as helpful and a more effective way of working, though acknowledge time constraints on arranging same (p 7) Determining whether work should be included in the treatment approach and facilitating safe return to work: (i) health benefits of safe return to work acknowledged, (ii) GPs perceived themselves with limited authority in facilitating return to work (p7) Using pharmacological treatments appropriately: (p 7) (i) all groups agreed medication should not be the first line treatment for non-severe mental health conditions, (ii) Prescription of medication 'rule of thumb' not evidence based (p 7) Providing clinical care that is not hindered by the anticipation of procedural impacts on the patient: (p 7) (i) Conflict of interest and challenges with employee and employer living in close proximity 'manager is a good friend of mine' (p 7) (ii) lack of referral options (iii) 'what to write on certificates' acceptable for patients (p 7) Monitoring and facilitating recovery: (p 7) (i) the clinical challenge of rural living, 'close proximity' interpersonal complications, i.e. employer could be a friend or also a patient (p7, p 8) (ii) 'what to write on certificates' hesitancy on care decisions (p 7) Challenge of split - roles between clinical care and care co-ordination especially in a small community 1-Y, 2-Y, 3- Y, 4-N, 5 – Y, 6-Y, 7-Y, 8- Y, 9 – Y and N. Australian health care system, but rural setting comparable with other rural areas.	Acknowledged no alcohol or substance misuse issues emerged, although high comorbidity expected.

Study	Population characteristics, setting and sample size, sampling sources	Exposure Research question/ aim methodology /analysis/ quality control	Outcome Themes and findings Greenhalgh checklist for systematic reviews (2019) 1.Address clinical question? 2.Search criteria thorough/ range of sources? 3.Methodological quality? 4.Have results been interpreted with sensitivity, common sense and due regard to the problem? Yes-Y No-N	Comment
STUDY 6 Barley, Murray, Walters and Tylee 2011 <i>Managing depression in primary care: A meta synthesis of qualitative and quantitative research from the UK to identify barriers and facilitators</i> Family Practice, 12,47, 1-10	2000 – 2010 (n= 17) 10 quantitative studies 7 qualitative studies ⁱ reviewed namely: Maxwell (2005) Rogers et al. (2001) Chew-Graham et al. (2002) Murray et al. (2006) Burroughs et al. (2006) Johnston et al. (2007) Pollock and Grimes (2003)	Research Question: To identify qualitative and quantitative studies published in the UK since 2000 of GPs and practice nurses attitudes to managing depression. Methodology: Systematic literature review of qualitative and quantitative studies. Medline, Embase, Psychinfo, British Nursing Index and Archives (p 2) Thematic analysis of studies, synthesis of quantitative data on surveys that support the qualitative data. Analysis: Meta-ethnography to identify common and refuted themes. First order constructs include attitudes and experiences, both qualitative and quantitative methods. Quality Control: Second order identified from qualitative and quantitative data, plus good quality studies Consent not required. Ethics considered.	Seven 2nd order themes / constructs identified Professionals understanding of depression: (p 4) (i) as a normal response to daily life (ii) Biomedical or 'bio-chemical' understanding seen as helpful to 'remove blame and stigma' and open discussion on treatment, even if this belief was not held by the clinician (p 4) Recognising depression: (p 4) (i) making a diagnosis (ii) presentations of depression, (iii) making a diagnosis and (iv) effects of a depression diagnosis Management strategies: (p 5) (i) antidepressants (ii) psychological therapies (iii) listening (iv) specialist services Shame and stigma: (p 5) sensitivity across age groups and avoiding labelling, both patient and clinician reluctance to talk about it Relationships between professionals: (p 6) perceptions of roles and attitudes between GPs and PNs, lack of interaction between PHCT and specialist services Attitudes to managing depression: (p 6) clinicians lack of confidence in treatment of depression, unfavourable views of those with depression, Clinician's training needs: (p 6) GPs and PNs lack knowledge and training, however, low uptake of training when available, prioritise training on physical health needs 1-Y, 2 – Y, 3- Y, 4- Y 2,738 GP and 476 Practice Nurses	Lack of research exploring primary care clinician's attitudes to management of depression
ⁱ included qualitative studies Maxwell (2005) <i>Women's and doctors' accounts of their experiences of depression in primary care: the influence of social and moral reasoning on patients' and doctor's decisions</i> (Chronic Illness, 1, 61-71) – ref -30 Rogers et al. (2001) <i>Experiencing depression, experiencing the depressed: The separate world of patients and doctors</i> (JofMH, 10,3, 317-333) – ref - 31 Chew-Graham et al. (2002) <i>Experiencing depression in primary care: another example of the inverse care law</i> (Family Practice, 19, 632-637) – ref - 32 Murray et al. (2006) <i>Primary care professional perspectives of depression in older people: a qualitative study</i> (SS & Medicine, 63, 5, 1363-1373) – ref – 33 Burroughs et al. (2006) <i>'Justifiable depression', how primary care professionals and patients view late-life depression, a qualitative study</i> (Family practice, 23, 369-377) – ref – 34 Johnston et al. (2007) <i>Qualitative study of depression management in primary care: GP and patient goals and the value of listening</i> (BJofGP, 57, 872-879) – ref – 36 Pollock and Grimes (2003) <i>GP perspectives on managing time in consultations with patients suffering from depression: a qualitative study</i> (Family Practice, 20, 3, 262-269) UK				

Appendix 13: Qualitative evidence synthesis; thematic synthesis and recoded themes adapted from Thomas and Harden (2008)

Summary of themes (n= 36)	Recoded descriptive themes	Summary across studies
STUDY 1: Barley, Murray, Walters and Tylee 2011 - 7 themes 1. Professionals understanding of depression (p 4) 2. Recognising depression (p 4) 3. Management strategies (p 6) 4. Shame and stigma (p 5) 5. Relationships between professionals: (p 6) 6. Attitudes to managing depression: (p 6) 7. Clinician's training needs: (p 6) STUDY 2: Karasz, Dowrick, Byng et al. 2011 1. Problem Presentation: (p 4) 2. Physician elicitation: (p 4) 3. Formulation of the problem: (p 5) 4. The offer of treatment: (p 5) 5. Persuasion: (p 5) STUDY 3: Fleury M-J et al. (2012)	Theme 1: Understanding and diagnosing depression when it is viewed as a response to life events STUDY 1: Professionals understanding of depression: theme 1: GPs found it hard to distinguish between depression as a clinical disorder and viewing symptoms as a normal response to daily life. STUDY 2: Problem Presentation and physician elicitation: themes 1 and 2: When patients described social or life events as the cause of their symptoms they were offered medication less frequently. Also, GPs' conversations seeking clarity on the social context of the presenting symptoms negatively influenced treatment being offered. STUDY 4: Detection and diagnosis of depression or anxiety disorders: theme 1: greater attention was given to physical health even though similarities between mental disorder and symptoms of physical illness were recognised. STUDY 5: The importance of context, the absence of biological features, rationality and coherence and chronic stressors: themes, 1, 2, 3 and 7: patient's ability to describe what they experienced in a way that clinician's perceived as clinical symptoms of a depressive disorder, not stress, plus relating those symptoms to a social context or life event limited treatment being offered.	Similarities are found between studies 2, 5 and 6, on the social presentation of patients symptoms and GPs' perception of those symptoms as a clinical disorder, as opposed to emotional distress in response to normal life events. Impacts the offer of treatment for depression. There is a lack of published research exploring primary health care teams attitudes to the management of Common Mental Disorders, other than depression. Studies focus on GPs and not other members of the PHCT.
	Theme 2: Understanding and diagnosing depression when it is viewed as a medical condition STUDY 1: Professionals understanding of depression: theme 1: a biomedical understanding of depression shared with the patient was seen as helpful to reduce stigma and encourage treatment, even if this belief was not held by the clinician. STUDY 2: Problem Presentation and physician elicitation: theme 1 and 2: When patients describe a biological presentation of depression they received more favourable outcomes. This depends of doctors asking about symptoms and patients articulating their concerns about their mental health in a way perceived by GPs as a clinical concern. Study 5: Recognising depression Theme 1	Studies 2 and 6 describe the medical understanding of depression and the impact this has on diagnosis. Both GPs and patients' viewing depression as a medical condition had a positive influence on decision making and treatment, by reducing stigma and encouraging treatment, however, not all patients describe symptoms clearly and not all GPs accept to the medical model.
	Theme 3: Attitudes and stigma towards common mental disorders STUDY 1: Attitudes to managing depression, clinician's training needs and shame and stigma: theme 4, 6 and 7: clinicians lacked confidence in treating depression, and some GPs also expressed unfavourable views of those with depression. Both GPs and PNs lacked knowledge, however, there was a low uptake of training on mental health when it was available, prioritise training on physical health needs. Finally, patients and clinicians were reluctance to talk about mental health and both avoided labelling. STUDY 2: Problem presentation, formulation of the problem, the offer of treatment and persuasion: theme 1, 3, 4 and 5: Variation in the treatment offered to patients who described symptoms, situations, or both, mixed presenters, suggest that patients views determine diagnosis and treatment. STUDY 4: Detection and diagnosis of depression or anxiety disorders: theme 1: Patients	Studies 2, 4, 5 and 6 describe negative attitudes towards common mental disorder as a determinant for diagnosis and subsequent treatment. Patients fear of stigma and shame, plus fear of being labelled by their GP, thus avoidance of discussion about their mental health, were cited in the studies as patient concerns. Avoidance of direct discussion of mental health, allowing patients to direct the consultation, and poor uptake of training on

1. Management of mental disorders in GP's practice: (p 5) 2. GPs' clinical practices in mental healthcare: diagnosis and treatment processes (p 5) 3. GPs' management of mental disorders: enabling and hindering factors (p 6) 4. Impact of mental disorder management on GPs practices (p 7) 5. Strategies promoted by GPs to improve mental disorder management: (p 7) STUDY 4: Roberge et al. 2016 1. Detection and diagnosis of depression or anxiety disorders: (p 5) 2. Treatment (Pharmacology or psychotherapy) (p 6) 3. Collaboration with other clinicians and resources: (p 7) 4. Barriers and facilitators for optimal care delivery: (p 8) STUDY 5: Geraghty et al. 2019 1. The importance of context: (p 3) 2. The absence of biological features: (p 3) 3. Rationality and Coherence: (p 4) 4. Considering severity: (p 4) 5. Inherent difficulty of concepts: (p 4) 6. Conceptualising a distinction: (p 4) 7. Chronic stressors: (p 5) 8. Considering a GPs role: (p 5)	were unwilling to talk about their mental health and were concerned about being stigmatized by clinicians. STUDY 5: Inherent difficulty of concepts, conceptualising a distinction, chronic stressors and considering a GPs role: theme 5, 6, 7 and 8: difficulty with the concept of depression, with a contrast between viewing a continuum from distress to depression, and diagnosis in the context of long term life stressors. Valuing treatment of physical illness. STUDY 6: How to discuss a diagnosis of a mental health condition with a patient: theme 2: conscious of language used and the impact of diagnosis, plus the lack of published materials to use that discuss MHC in context of physical injury.	mental health were examples of PHCT negative attitudes towards common mental disorder. With some GPs viewing their role as treating with physical conditions.
	Theme 4: Liaison between PHCT professionals in the management of common mental disorders. STUDY 1: Relationships between professionals: theme 5: perceptions of roles between GPs and PNs, lack of interaction within the PHCT. STUDY 4: Treatment: theme 2: nurses were more invested in interventions and patients appreciated nurses care. STUDY 5: Considering a GPs role: theme 8: GPs valued their role in supporting patients.	Studies 4, 5 and 6 describe the role of the PHCT in supporting patients with distress or clinical disorders. That both GPs and nurse practitioners may have different views on their roles and may be able to work together more effectively to provide treatment.
	Theme 5: Liaison between PHCT and secondary care services in the management of common mental disorders STUDY 1: Relationships between professionals: theme 5: lack of interaction between PHCT and specialist services. STUDY 3: GPs' clinical practices in mental healthcare, GPs' management of mental disorders: enabling and hindering factors: theme 2 and 3: access to specialist services and communication systems seen as unsatisfactory, resulting in few referrals. STUDY 4: Collaboration with other clinicians and resources, Barriers and facilitators which influence for optimal delivery of care themes 3 and 4: lack of interprofessional working and shared systems affected patient care. STUDY 6: Knowing when to refer to other specialists: theme 4: lack of liaison between services. Care conferences valued.	Studies 3, 4, 5 and 6 cited lack of interprofessional working as hindering treatment for common mental disorder. Referral systems and processes were viewed as ineffective, and the lack of shared communication resulted in delays in referrals. Particular a concern for patients with co-morbidities and polypharmacy.
	Theme 6: Diagnosis of depression, clinical tools and strategies applied in primary care practice STUDY 2: the offer of treatment: theme 4: treatment was refused in 6 out of 16 cases, GPs used vague language to talk about depression with no attempt to provide psycho-education. STUDY 3: GPs' clinical practices in mental healthcare and strategies promoted by GPs to improve mental disorder management: theme 2 and 5: clinical experience and DSM-IV were used to detect mental disorder. GPs provided an average of 7 follow up visits, with each visit lasting between 36-24 minutes. Planning longer appointments at the beginning or end of a clinic. Also, effective management for GPs, reviewing working hours and alternating patients with different conditions. STUDY 5: Considering severity: theme 4: Use of PHQ-9 and GAD-7 subjective outcome, and considering the duration of symptoms as an indicator of common mental disorder. STUDY 6: Forming an accurate diagnosis of a MHC in relation to work: Selecting the most appropriate screening tools	Studies 2, 3, 5 and 6 describe clinical practice, namely the use of screening questionnaires by GPs and nurses, structured assessment criteria, planning longer appointments, follow up protocols and management strategies. In addition, clinical concerns namely, the interpretation of screening scores, selecting appropriate screening forms plus, lack of attempts to provide psycho-education by GPs to patients.
	Theme 7: Treatment for common mental disorders - Psychological Therapies STUDY 1: Management strategies: theme 3: psychological therapies and specialist services. STUDY 3: GPs' management of mental disorders: enabling and hindering factors: theme 3: limited assess to specialists, the referral process seen as ineffective, information of waiting times not available. A single access point recommended. STUDY 4: Treatment (pharmacology or psychotherapy): Psychosocial and psychological interventions and lack of availability of psychological therapies	Studies 1, 3, 4, 5 and 6 described psychological therapies as treatment for common mental disorders. Psychological therapies are described positively, but lack of availability is the consistent theme.

STUDY 6: Chakraborty et al. 2020 - Forming an accurate diagnosis of a mental health condition in relation to work: (p 3) - How to discuss a diagnosis of a mental health condition with a patient: (p 6) - Setting patient expectations for recovery and return to work (p 6) - Knowing when to refer to other specialists: (p 6) - Determining whether work should be included in the treatment approach and facilitating safe return to work: (p 7) - Using pharmacological treatments appropriately: (p 7) - Providing clinical care that is not hindered by the anticipation of procedural impacts on the patient: (p 7) - Monitoring and facilitating recovery: (p 7)	Theme 8: Treatment for Common Mental Disorders - Pharmacology STUDY 1: Management strategies: theme 3: appropriate use of antidepressants as a treatment for depression. STUDY 4: Treatment pharmacology: theme 2: adherence to clinical guidelines seen as challenging due to polypharmacy, GPs reluctant to prescribe. STUDY 6: Using pharmacological treatments appropriately: theme 6: medication should not be the first line treatment for non-severe mental health conditions, also a clinical concern is making appropriate use of medication.	While all six studies refer to access to medication as a treatment for common mental disorder with medication, studies 4, 5 and 6 cite clinical concerns around use of pharmacology as a treatment.
	Theme 9: Treatment for Common Mental Disorders- psycho-education, self help and group therapies. STUDY 1: Management strategies: refer to accessing specialist services. STUDY 2: Persuasion: only 4 consultations evidenced unsuccessful attempts to follow guidelines by offering psycho-education on mental health.	Studies 2 and 6 describe psychoeducation and self help as treatment for common mental disorders, plus referring on to specialist services. No details are given.
	Theme 10: The role of clinical guidelines in managing and treating Common Mental Disorders in primary care STUDY 1: Clinician's training needs: theme 7: GPs and PNs lacked knowledge and training, however a low uptake of training was noted when it was available. STUDY 2: Overall findings from the study suggest that GPs did not follow clinical guidelines in their assessment, diagnosis or treatment to patients. STUDY 3: Management of mental disorders in GP's practice, GPs' clinical practices in mental healthcare, diagnosis and treatment processes, themes 1 and 2: use of structured assessment such as the DSM-IV to detect mental disorder, plus treatment including pharmacotherapy and psychotherapy indicate awareness of clinical guidelines. STUDY 4: Treatment (Pharmacology or psychotherapy): theme 2: adherence to clinical guidelines challenging due to polypharmacy STUDY 5: Considering a GPs role, Chronic stressors: themes 7 and 8: GPs self perceptions of their role to manage physical conditions, plus contrasting views about long term stressors indicating distress, but possible disorder suggest poor adherence to clinical guidelines. STUDY 6: How to discuss a diagnosis of a mental health condition with a patient, Forming an accurate diagnosis of a MHC in relation to work, Using pharmacological treatments appropriately: themes 1, 2 and 6: avoidance of labelling mental disorder, challenges in the selection of screening tools, psycho-education to use with patients and seeking advice on when to prescribe medication suggest an overall lack of awareness or adherence to clinical guidelines.	All studies refer to clinical guidelines for the management of common mental disorders in primary care. Studies 1, 2, 4 and 5 suggest that clinical guidelines in the screening, assessment, diagnosis and treatment of common mental disorders are not fully known or adhered to by GPs in their practice. While study 3 and 5 suggest awareness of clinical guidelines and suggest that practice follows this guidance. Clinical concerns are raised about clinical guidelines being challenging to implement when dealing with complex patients with co-morbidity and polypharmacy.
	Theme 11: Managing Common Mental Disorders in rural primary care practice STUDY 3: GPs' management of mental disorders: enabling and hindering factors and impact of mental disorder management on GP practices: theme 3: lack of access to psychiatry seen as an incentive for rural GPs to develop skills in managing mental disorder. STUDY 6: Providing clinical care that is not hindered by the anticipation of procedural impacts on the patient, Monitoring and facilitating recovery and knowing when to refer to other specialists: theme 4, 7 and 8 describe the challenges and advantages of rural clinical practice. The study proposes that a solution to this dilemma is to separate the roles between clinical care and care co-ordination in rural practice. Referral processes and guidelines on the timeframe for onward referrals perceived as helpful and finding more effective way of working.	Studies 3 and 5, set in Canada and Australia describe rural primary care practice. Lack of services are viewed as an incentive for GPs to develop mental health competencies in study 3, whereas, study 5 describes the challenge of lack of access to specialist services in rural communities. In addition, study 5 describes the advantages of knowing the community, plus the challenges of managing professional and personal boundaries in a small community.

	Theme 12: Managing Common Mental Disorders and co-morbid medical conditions STUDY 1: recognised comorbidity as an potential clinical concern, but this did present in the findings, recommend more research into older patients with multi co-morbidities. STUDY 3: Management of mental disorders in GP's practice: 35 % of patients with CMD also had physical ailments, GPs treated both mental and physical disorders in 90 % of cases. STUDY 6: How to discuss a diagnosis of a mental health condition with a patient: a lack of published materials for GPs to use to discuss mental health conditions in the context of physical injury.	Studies 3, 5 and 6 refer to comorbid common mental disorders and physical disorders. Study 6 concludes that due to an aging population and chronic physical disease, co-morbidity was expected in the findings. Study 3 and 5 present contrasting views of GPs expressing knowledge and competence, also, GPs seeking guidance on polypharmacy.
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Appendix 14: Summary of the included studies

Study one: Geraghty, Santer, Beavis, Williams et al. (2019) is a qualitative study exploring GPs' perceptions of the distinctions between emotional distress and depression. The study was conducted in the Wessex area of England and the authors targeted practices with different sizes of practice and deprivation index. Twenty one GPs were sampled across 19 practices, the practice size ranged from 3400 to 17,829 and median range of deprivation was 14.1. Eleven GPs described an urban practice setting, while ten GPs described a rural practice setting. The median length of experience practicing as a GP was 16 years, and GPs' age was 45 years of age. Furthermore, twelve males and nine females were interviewed. Eight themes were identified to differentiate emotional distress from depression.

The study suggests that GPs' perceptions varied from that of proper or biological depression that occurs independent from life events. The study suggests development of a framework that considers complexity and duration, not just a simplistic assessment of symptoms and screening scores, i.e., a full psycho-social assessment as recommended in NICE (2011a) guidelines is required. The use of language and how concepts are co-constructed within GP patient consultations is a recommendation for further research. Applying screening tools such as the Patient Health Questionnaire (PHQ) or Generalised Anxiety Disorder questionnaire (GAD) did not influence outcomes, did not predict formal diagnosis or treatment, so do not adhere to clinical guidelines. The strengths of this study are that the sample characteristics, methods and analysis are described. However, the limitations are that the authors do not say what percentage of GPs in the Wessex catchment area were sampled, therefore the findings may not be transferable. The study claims to target a sample in ten rural and eleven urban primary care practice areas but describes the sample and results as 'relatively homogenous' with no distinctions between urban and rural localities (p. 6).

Study two: Karasz, Dowrick, Byng, Buszewicz et al. (2012) is a study of two datasets from the UK, one from the US and one from the Netherlands on doctor and patient interactions and the influence of these conversations on diagnosing

and treating depression. Applying a micro analysis approach, transcribes of doctor and patient conversations were analysed. The authors do not distinguish between urban or rural practice settings in any country. The authors describe the gender, nationality and age of patients, but not describe the characteristics of the doctors. Five themes were identified in this study (see Appendix 12).

The findings suggest that doctor patient communications are outcome orientated, often directed by the patient with the doctor following the social cues in both the content and implied beliefs in that conversation. Clinical guidelines for the management of depression were not fully implemented. Psychological therapies considered the first line treatment for mild to moderate depression were not considered in the study, where the focus was on medication alone. That beliefs about depression influence patients and doctors interactions and the decision making process about the offer of treatment. For example, if patients articulate their symptoms as an effect of social circumstances, then treatment is not offered. Being attuned to their patients' beliefs about depression, was a major factor to predict treatment being offered. A strength of this study is the use of doctor and patient interactions in the transcribed interviews, not only opinions. Also, UK data is included in the study, although only 10 out of the 30 transcribes were UK based. A limitation of the study is that no demographic characteristics of the doctors are included in the study. Risk of bias is possible due to the small sample size extracted from a large secondary qualitative data available (n= 3710).

Study three: Fleury, Imboua, Aube, Farnad and Lambert (2012) is a mixed methods study combining a questionnaire and interview with 60 GPs practicing within five regions of Quebec, Canada. GPs characteristics are given for gender, thirty one females and twenty nine male doctors, and the average age of the sample was between 45-59 years of age. The study states that 75 % of the sample worked in more than one setting, up to four settings. Practice characteristics were not included and there is no reference to urban or rural practice settings. Five themes were identified in the study (See Table 4).

The findings suggest that twenty percent of all patients had a mental disorder, 35% of those with a common mental disorder and 52% of those with a serious

mental disorder also had a co-morbidity physical disorder and, or a substance use disorder (p. 5). The study also suggest that clinician factors, namely GPs personal characteristics, interest in mental disorder and knowledge of disorders, were facilitating factors in treating mental disorders. System barriers including clinical settings, were lack of treatment options available, lack of a single point of access to services, long waiting times for treatment were obstacles. Shared care arrangements between primary care and secondary mental health services were considered underdeveloped (p.10). Recommendations for improvements include practical changes to the timing and frequency of appointments. Improving access to appointments, having a stepped-care interprofessional approach to treatment. A strength of the study is that although urban and rural practice settings were not identified in the characteristics, differences in rural practice were highlighted within the themes. Limitations of the study are lack of description of the range of comorbid mental disorders, physical disorders and substance use disorders. Furthermore, the study does not critique the limitations within the study, there is no discussion of the interviewers influence. Outcomes are limited to be transferable to other clinical settings.

Study four: Roberge, Hudon, Pavilanis, Beaulieu et al. (2016) is a qualitative study of the perceived needs of patients with common mental disorder and chronic disease in Quebec, Canada. Ten patients and eighteen multi-disciplinary practitioners were selected from three practice settings. This included ten doctors, six nurses, one psychologist and one social worker. 83% were female, the average age of participants were between 30 – 39 years of age and 56% had over ten years of experience in their profession. Two settings were described as urban with 12,000 patients and, semi-urban with 10,000 patients. The third setting was described as an urban hospital setting with 30,000 patients. Four themes were identified in the study (See Table 4). A strength of the study is the inclusion of nurses. Furthermore, there are many useful insights into an increasing problem of comorbidity. A limitation of the study is that the findings within the Canadian health care system may not be transferability to other settings.

Study five: Chakraborty, Dermentzis, Brijnath, Ivey and Mazza (2020) is a qualitative study of GPs clinical challenges in diagnosing and managing work

related common mental disorder in Australia. Participants were purposively sampled by geographic location and snowballing, out of 29,000 GPs, twenty five were interviewed, and forty one health professionals. The gender of the sample is not described, but ages range 28 to 69 years and they were from all territories except the Australian Capital Territory. Practice settings were described as nine rural practice, with between 10,000 and 100,000 population, and sixteen metropolitan practice with over 100,000 population. The gender of participants is not described. Eight themes were identified in the study (See Table 4).

Recommendations include separating the GP role from the occupational management role. Having clear procedures and time frames for managing work related mental health issues, developing ways to talk about mental health and co-morbid physical health problems. Rural practice had the advantage of GPs' knowing the community and the workplace. A strength of the study is the differences found between rural practice and urban practice as a focus of the study. A limitation is that the primary focus of the study is not common mental disorders. Plus, there is inconsistency between this study and other studies, as this study does not report that dual diagnosis of common mental disorders and substance misuse is prevalent (p 8).

Study 6: Barely, Murray, Walters and Tylee (2011) is a systematic review of UK GPs and practice nurses attitudes towards the management of depression. The twenty-seven studies in the review include ten quantitative studies. The included studies describe 2,738 GPs and 476 nurses. There are characteristics of gender, age or length of professional experience. Neither is there description of rural or urban practice settings. The study describes twenty six first order constructs, which were reconfigured into seven second order constructs or themes (See table 4). The findings suggests clinician factors influence managing depression including understanding, attitudes, training, stigma and reluctance to talk about depression. Similarly, system barriers which influence managing depression include lack of interprofessional working and limited access to services. Furthermore, patient barriers include attitudes and stigma, that impede the management of depression in primary care. Co-morbid physical illness and depression was recognised as a research interest and stepped or collaborative

care suggested as a way forward. The management of depression was recognised as a complex clinical issue, with depression seen as both a clinical disorder and a psycho-social consequence of life experiences. A strength of the study is that it is a UK study and it acknowledges the researchers influence on the selection and synthesis of studies. A limitation is the risk of bias that is acknowledged in the study. Furthermore, there is no indication of rural or urban practice settings identified in the study.

Appendix 15: Qualitative evidence synthesis; thematic synthesis and recoded themes adapted from Thomas and Harden (2008)

A priori themes (n= 12)

Theme 1: Understanding and diagnosing depression when it is viewed as a response to life events

Theme 2: Understanding and diagnosing depression when it is viewed as a medical condition

Theme 3: Attitudes and stigma towards common mental disorders

Theme 4: Liaison between PHCT professionals in the management of common mental disorders.

Theme 5: Liaison between PHCT and secondary care services in the management of common mental disorder

Theme 6: Diagnosis of depression, clinical tools and strategies applied in primary care practice

Overarching Themes (n=4)

Theme One: Identification of common mental disorder

- Recognition of common mental disorder
- Screening for common mental disorder
- Assessment of common mental disorder

Theme Three: Perceived Barriers in managing common mental disorder

- Stigma (internal and external)
- Confidentiality and trust
- Working in a close community
- Lack of patient choice
- Lack of specialist services in the islands
- Low income as a barrier to accessing services
- Isolation
- Work culture; having the time to attend clinics
- Vulnerable groups: older people, carers, Camp residents, complex health, multi morbidity, contractors and their families
- Time constraints (primary care practitioner and patient interaction)

Theme Two: Treatment for common mental disorder

- Cognitive behaviour therapy
- Medication (anti-depressants)
- Community mental health nurses
- Specialist advice
- Online CBT
- Group CBT
- Exercises Referral
- Mental health charity

Theme Four: Perceived enablers in managing common mental disorder

- Continuing professional development/ in service training
- Team work with mental health practitioners
- Remote access to specialist services by email/ phone/
- Telemedicine/ video consultation
- Public health promotion
- Mental health awareness in schools
- Extending patient choice
- Public policies: public health strategy/ Camp Strategy (island wide/ across government services)
- A community resource or Hub in Camp

A priori themes (n=12)

Theme 7: Treatment for common mental disorders - Psychological Therapies

Theme 8: Treatment for Common Mental Disorders – Pharmacology

Theme 9: Treatment for Common Mental Disorders- psycho-education, self help and group therapies.

Theme 10: The role of clinical guidelines in managing and treating Common Mental Disorders in primary care

Theme 11: Managing Common Mental Disorders in rural primary care practice

Theme 12: Managing Common Mental Disorders and co-morbid medical conditions

- Lack of policy on the management of common mental disorder
- Lack of policy (public health/ community wide)
- Policies to enhance treatment compliance
- Creative ways to engage the community

Appendix 16: Participant Invitations

Invitation to participate in the survey



UNIVERSITY OF
STIRLING

Dear _____,

I would like to invite you to participate the first Mental Health & Wellbeing Survey conducted here in the Falkland Islands. Please read the information contained in this letter and decide if you would like to participate in the survey. A pen and return envelope are enclosed if you wish to participate in the survey.

What is this survey about?

This survey is about your mental health and wellbeing here in the Falklands Islands. **Your views are important** to help gain a better understanding of the challenges you face in maintaining good mental health and wellbeing here in the Falkland Islands. Health surveys are regularly conducted within the British Isles and many other countries as they help shape our understanding of the health of our nation. For example, learning about life style choices helps us to identify trends in what enhances our population's health and what is detrimental to our health.

Who can participate in this survey?

Everyone over 18 years of age is invited to take part in this survey. Whether you are an islander, a resident or are living here temporarily to work in the islands your views are welcome.

Si desea una copia de este cuestionario en español por favor llame a Miguel Barrientos en 00500 51709 (Monday – Friday 12noon- 1pm)

Do I have to complete this questionnaire?

No. Taking part in this survey is voluntary. The more people take part in the survey the results will be more representative of the population however, the choice to participate remains entirely yours.

Is the survey confidential?

Yes. This survey is anonymous. Personal details which can be used to identify you have **not** been requested in the survey. All information submitted will be handled with sensitivity and care to ensure that **your confidentiality and anonymity will be maintained** throughout the survey. Furthermore, the Policy Unit will store this information long term to ensure your future protection.

Are there any implications from taking part in this survey?

No. Information submitted by you will be totally anonymous. No information will be identifiable to you. Results will be generalised so that your anonymity is maintained.

Are there any risks from taking part in this survey?

There are **no specific risks** from taking part in this survey however, if taking part in this survey raises any questions or concerns you may have about your mental health and wellbeing please contact your GP on 28000 or call the Community Mental Health Service on 28082 who can give you further advice and assistance.

What are the benefits of taking part in this survey?

The information gathered from this survey will form the basis of clinical research and will increase our understanding about the health of the Falkland Islands population. The results of this study will be published locally and will make a significant contribution to our local knowledge about public health in the Falklands Islands. The results will also be published in appropriate clinical academic journals. Any information published will be presented sensitively and it will not be possible to identify any individuals in the results.

Who will review and monitor this study?

Dr Rebecca Edwards, Chief Medical Officer, Mrs Janette Vincent, Healthcare Governance Facilitator and the Director of Health & Social Services have reviewed and approved this research proposal and considered ethical aspects of this study. Furthermore, the Faculty of Health Sciences and Sports Ethics Committee, University of Stirling have approved this research proposal. Ongoing monitoring and academic supervision will be provided by Professor Margaret Maxwell, Dr James Taylor and Dr Kath Stoddart who will advise throughout the research process. This research is conducted by K Rimicans as a clinical research component of the Clinical Doctorate Programme at the University of Stirling, UK. This programme has been funded by the Community Development Fund, Falkland Islands Government.

If you have any questions or need help?

If you have any questions or would like more information about this survey please call K Rimicans on 00500 55946 (Monday – Friday 9am – 6pm) or call Mrs Janette Vincent, Healthcare Governance Facilitator on 00500 28000 (Monday – Friday 8.30am – 3pm) for independent advice or discussion about this research project.

With regards

K Rimicans

Senior Community Psychiatric Nurse Clinical Doctorate Student

Falkland Islands Government

University of Stirling

Invitation to Participate – Interviews

Version 1:1 (09/03/2017)



UNIVERSITY OF
STIRLING

Participant Information Sheet

Health In Mind: a survey of mental health, wellbeing and lifestyle in the Falkland Islands and an explorative qualitative study of managing mental health and wellbeing by primary care professionals

Dear

You are invited to participate in an interview as a component of the Health in Mind study. This information sheet will help you decide if you would like to take part in this study.

What are the interviews about?

Interviews with healthcare professionals are designed to provide insight into the management of mental health within primary care services in the Falkland Islands. The interview will consist of questions about your role, your professional education and experience, your experience of providing mental health care prior to working in the Falkland Islands and your experience of managing mental health care within the islands. It is anticipated that exploring health professionals' views of providing primary care mental health services will enrich the findings obtained from the qualitative survey.

Who will be invited to participate in interviews?

All primary healthcare professionals will be eligible to participate, however a maximum of 10 people will be interviewed due to the resources available.

Do I have to participate in this study?

No. Participating in an interview is entirely your own choice. Furthermore, if you do participate in an interview you may choose to withdraw from the study without giving a reason at any time before the completion of the study and your data will not be used.

Are interviews confidential?

Interview will be audio recorded. The content of interviews will be transcribed so will be anonymised. Personal or professional details that can be used to identify you and demographic information such as gender or job title will be anonymised. All information given will be handled with sensitivity and care to ensure that your confidentiality and anonymity will be maintained throughout. Information will be held in a securely locked cabinet and all computers or hard drives used will be securely encrypted. Furthermore, the University of Stirling and the Policy Unit will maintain long term secure storage of digital data to ensure your future protection. If direct quotes are selected for publication this will be done in a way that protects your anonymity.

What does participating in an interview entail?

If you wish to participate in this research an interview will be arranged at a mutually convenient time and venue. A consent form to ensure formal permission to participate and audio record the interview will be given to you. The interview should take no longer than 30 minutes.

What are the benefits of taking part in this study ?

The results of this study will make a significant contribution to our local knowledge about public health in the Falklands Islands. The results will be published both locally and in appropriate clinical academic journals. Any information published will be presented sensitively and it will not be possible to identify any individuals in the results.

Who will review and monitor this research ?

Local ethical approval has been sought through the Falkland Islands Government and Health & Social Care Directorate. Furthermore, the General University Ethics Panel, University of Stirling have approved this research proposal.

Academic supervision is provided by Professor Margaret Maxwell, Dr James Taylor and Dr Kath Stoddart who will advise throughout the research process. This research is conducted by K Rimicans as a clinical research component of the Clinical Doctorate Programme at the University of Stirling, UK. This programme has been funded by the Community Development Fund, Falkland Islands Government.

If you have any questions

If you have any questions or would like more information about this research please call K Rimicans on 00500 55946 (Monday – Friday 9am – 6pm) or call Mrs Janette Vincent, for independent advice or discussion about this research project.

With regards

K Rimicans

Appendix 17: Questionnaire Survey

Completing the questionnaire

Please complete the questionnaire and return this in the stamped addressed envelope provided to:

Health Survey, Post Office, Stanley

A complimentary pen is provided for your convenience.

For each question please put a tick **V** inside one of the boxes ☐ .

Please do not put your name and address on this form.

By following the instructions you will find that you are directed to questions that are applicable to you, therefore you will miss out sections of the survey that do not apply to you.

Do not worry about making any mistakes. To change an answer simply fill in the box ☐ and tick **V** the box ☐ that you prefer.

If you have any questions or need help?

If you have any questions or would like more information about this health survey please call Karen on 00500 55946 (9am – 6pm) or Miguel for Spanish translation.

ABOUT YOU

1. What is your gender?

☐ female

☐ male

2. What is your marital status?

- ☐ Never married
- ☐ Married
- ☐ Married but permanently separated
- ☐ Cohabiting
- ☐ Divorced
- ☐ Widow or widower
- ☐ Other (please state)

3. What age range best describes you?

- ☐ 16 or over - under 18 years
- ☐ 18 or over – under 25 years
- ☐ 25 – 30 years
- ☐ 30 – 40 years
- ☐ 40 – 50 years
- ☐ 50 – 60 years
- ☐ 60 - 70 years
- ☐ 70 - 80 years
- ☐ 80 years +

4. How long have you lived in the Falkland Islands?

- ☐ 2 years or less
- ☐ 3 to 5 years
- ☐ 6 to 10 years
- ☐ more than 10 years
- ☐ I have lived here all my life

5. Which of the following best describes your immigration status?

- ☐ Falkland Islander
- ☐ FI status/ permanent resident (PRP)
- ☐ Work permit holder
- ☐ Visitors permit holder
- ☐ I am exempt from immigration control due to my employment with the UK Ministry of Defence or another part of UK Government (or, I am a spouse of such a person)
- Other please state.....

6. How would you describe your National Identity?

- ☐ Falkland Islander
- ☐ British
- ☐ St. Helenian
- ☐ Chilean
- ☐ Filipino
- ☐ Other - please state below

7. Have you obtained any of the following qualifications?

- ☐ No qualifications
- ☐ O levels/ CSEs/ GCSEs (Foundation Diploma)
- ☐ A Levels/ VCEs, Advanced Diploma
- ☐ Degree or Higher Degree (post graduate Diploma, MA PhD, PGCE)

Vocational/ Trade qualifications

Have you obtained NVQs, BTEC, City and Guilds, RSA Apprenticeships

- ☐ Yes
- ☐ No

Have you obtained a professional **qualification**? (teaching, accountancy)

- ☐ Yes
- ☐ No

SOCIAL SUPPORT & CONTACTS

8. Where do you usually live?

- ☐ Stanley
- ☐ Camp (includes outer islands)
- ☐ MPC
- ☐ Other

9. Where do your family and friends mostly live?

- ☐ locally within the islands
- ☐ overseas
- ☐ locally and overseas

10. How do you keep in contact with your family and friends? (Tick all that apply)

- ☐ meet socially/ personal visit
- ☐ Phone (calls/ text)
- ☐ Social media (Facebook/ emails)
- ☐ Skype/ Facetime
- ☐ mail (Letters/ cards)

11. Are you satisfied with the level of contact you have with your family or friends?

- ☐ more or less satisfied
- ☐ more or less unsatisfied

12. If you are unsatisfied with your contact with family and friends, what limits your level of contact?

- ☐ distance/ proximity
- ☐ access to transport to visit
- ☐ costs associated with travel
- ☐ costs associated with using the telephone/ internet/ social media
- ☐ Other please state

13. Do you feel lonely?

- ☐ A lot of the time
- ☐ Some of the time
- ☐ I do not feel lonely

14. How many people are so close to you that you can count on them if you have a serious personal problems?

- ☐ None
- ☐ 1 or 2
- ☐ 3 - 5
- ☐ More than 5

15. How much concern do people show in what you are doing?

☐ A lot of concern and interest

☐ A little concern and interest

☐ Some concern and interest

☐ Uncertain

☐ No concern and interest

16. How easy is it to get help from neighbours if you should need it?

☐ Very easy

☐ Easy

☐ Possible

☐ Difficult

☐ Very difficult

17. If you had to could you raise £2,000 in an emergency

☐ Yes

☐ No

WORK & COMMITMENTS

1. Are you in paid employment within the islands?

☐ No → Please go to question 7

☐ I am retired → Please go to question 7

☐ Yes

2. Do you work as an employee or are you self employed?

☐ Employee

☐ Self employed with employees

☐ Self employed without employees

3. Within which sector is your main employment?

☐ Public Service (FIG)

☐ Private Sector

☐ MOD employed/ contractor

☐ Other please state:

4. Do you have other paid employment within the islands?

☐ no

☐ 1 job

☐ 2 jobs

☐ 3 or more jobs

5. Is your work seasonal?

☐ Yes

☐ No

☐ Other

6. Please state the average number of hours you work per week in all your paid jobs?

7. Do you have regular unpaid work?

(please tick all that apply to you)

☐ No → [please go to question 9](#)

☐ Household work, cooking, repairs, gardening etc for their own household

☐ Looking after a child who is a member of their household

☐ Looking after a member of their household who is ill or has a disability

☐ Looking after a child (who does NOT live in their household) on an unpaid basis

☐ Helping someone who is ill or has a disability (who does NOT live in their household) on an unpaid basis

☐ Other helping or voluntary (unpaid) work for or through any organisation or group (charities, associations, local churches)

☐ Attending or studying for 20 hours or more per week at school/ college or any other place

☐ Attending or studying for less than 20 hours per week at school or any other place

☐ None of these

8. Please state the total number of unpaid hours you normally work per week?

9. How many hours each week approximately do you spend providing any regularly (unpaid) help or support to a family member, friend, neighbour or other because of either:

☐ Long term physical/ mental condition or illness/ disability or

☐ Problems relating to old age

10. On average what are the **longest hours** you would spend at work in a day (any work)?

11. Do you work shifts outside the hours of 7am to 7pm?

☐ most of the time

☐ occasionally

☐ never

12. Do you have weekends or regular days off work?

☐ Yes

☐ No

13. On average, how many days off work do you have each week?

14. Have you had any time off work due to ill health in the past 12 months?

☐ No → please go to the next section

☐ Yes

15. Was your time off work due to any of the following reasons?

☐ physical condition or ill health

☐ stress or personal problems

☐ mental ill health

☐ other please state

☐ I prefer not to say

ACTIVITIES & COMMUNITY INVOLVEMENT

1.. On average how many days per week do you engage in **vigorous** activity such as heavy lifting, digging, DIY, sports, aerobics or fast cycling? (Exercise that makes you breathe much harder than you normally do)

2. On average how many days per week do you engage in **moderate** activity such as carrying light loads, DIY such as painting, sports, gardening, cycling at a steady pace, swimming?

3. How many days per week do you do light activity such as light housework, walking?

4. Do you monitor your daily steps?

☐ No

☐ Yes, if so on average how many steps do you achieve per day.....

5. Do you engage in any indoor pastimes or hobbies such as crafts/ puzzles/ reading (excluding screen time i.e. TV, gaming or computers)?

☐ Yes

☐ No → Please go to question 8

6. How much time do you spend on your pastime or hobbies (excluding screen time)?

7. How much screen time do you spend on an average day? (time spend on computers/ watching TV/ tablets/ smart phones/ gaming/ watching movies or DVDs)

8. Do you use the internet?

☐ No → please go to question 11

☐ Yes

9. When do you mostly access the internet?

☐ day time (between 6am and midnight)

☐ night time (between midnight and 6am)

☐ both day and night

10. How much time do you spend each week on average on the internet?

☐ 1-2 hours per day (7-14 hours per week)

☐ 3-4 hours per day (21- 28 hours)

☐ other (weekends).....

11. How active are you at joining associations, clubs or attending public events?

☐ Very active

☐ Fairly active

☐ Not very active

☐ Not active at all

12. Do you drive?

☐ No

☐ Yes

13. Is there a car usually available for use by you or other members of your household?

☐ yes

☐ no

14. How often do you take holidays abroad?

☐ never

☐ every year

☐ less frequently (than annually)

☐ more frequently (than annually)

☐ I have no interest in taking holidays abroad

15. How often do you take holidays locally?

☐ never

☐ every year

☐ less frequent (than yearly)

☐ more frequent (than yearly)

☐ I have no interest in taking holidays locally

16. Do you have adequate access to community resources (shops, post office, bank, library)?

☐ Yes

☐ No

17. If no, what prevents you having adequate access to community resources

☐ Distance/ proximity to facilities

☐ Transport

☐ Other please states. For example, personal choice to live in a remote location , some where to stay in town,

.....

HEALTH & LIFESTYLE

1. How would you rate your health in general?

☐ very good

☐ good

☐ fair

☐ bad

☐ very bad

2. Do you have any of the following conditions?

☐ Heart Disease

☐ High Blood Pressure

☐ Diabetes (Type 2)

☐ Asthma / respiratory condition

☐ Cancer

☐ Osteoporosis

☐ Other (for example: diabetes, type 1 asthma, joint or muscular injury, memory loss, depression or anxiety)

.....

3. Do you suffer from acute or chronic pain?

☐ No → please go to question 5

☐ Yes

4. Has your health conditions or pain affected your regular daily activities or social activities?

☐ No

☐ Yes

5. Have you ever smoked a cigarette?

☐ No → please go to question 13

☐ Yes

6. How old were you when you first tried smoking a cigarette, even if it only a puff or two?

.....

7. Do you smoke nowadays?

☐ No → please go to question 13

☐ Yes

8. Why did you decide to give up smoking?

☐ Advice from a health professional

☐ Health concerns

☐ Financial reasons

☐ Health warnings

☐ Family or friends

☐ Worried about future health problems

☐ Pregnancy

☐ Something else

9. **If you are a current smoker** how many cigarettes a day to you smoke on **weekdays**?

.....

... and how many cigarettes do you usually smoke on **weekends**?

.....

10. Do you mainly smoke...

☐ Filter tipped cigarettes

☐ Hand rolled tobacco

☐ Other (vaping/ ecigarettes).....

11. Would you like to give up smoking altogether?

☐ no → please go to question 13

☐ Yes [Please contact your GP on 28000 or the pharmacist on 28010 for more information on smoking cessation](#) pharmacist@kemh.gov.f

12. Have you ever used any of these nicotine replacement products?

☐ Nicotine chewing gum/ patches/ oral melts

☐ Nicotine replacement products/ inhalators

☐ Electronic cigarettes/ vaping

☐ None

13. Have you ever drank alcohol?

☐ No → [please go to question 30](#)

☐ Yes

14. How old were you the first time you ever had a proper alcoholic drink?

15. Do you drink alcohol?

☐ Yes

☐ No

16. If you are a non –drinker have you always been a non-drinker or did you stop drinking for some reason?

☐ Always a non drinker

☐ Used to drink but stopped for some reason

If you drink nowadays.....

17. How often do you have a drink containing alcohol?

☐ Never →please go to question 30

☐ Monthly or less

☐ 2-4 times a month

☐ 2-3 times a week

☐ 4 or more times a week

18. How many drinks containing alcohol do you have on a typical day when you are drinking?

☐ 1 or 2

☐ 3 or 4

☐ 5 or 6

☐ 7 to 9

☐ 10 or more

19. How often do you have six or more drinks in one go?

☐ Never

☐ less than monthly

☐ monthly

☐ weekly

☐ daily or almost daily

20. How often during the past year have you failed to do what was normally expected of you because of drinking?

☐ Never

☐ less than monthly

☐ monthly

☐ weekly

☐ daily or almost daily

21. How often during the past year have you needed a first drink in the morning to get yourself going after a heavy drinking session?

☐ Never

New Window

☐ less than monthly

☐ monthly

☐ weekly

☐ daily or almost daily

22. How often during the past year have you had a feeling of guilt or remorse after drinking?

☐ Never

☐ less than monthly

☐ monthly

☐ weekly

☐ daily or almost daily

23. How often during the past year have you been unable to remember what happened the night before because of your drinking?

☐ Never

☐ less than monthly

☐ monthly

☐ weekly

☐ daily or almost daily

24. Have you or someone else been injured because of your drinking?

☐ No

☐ Yes but not in the last year

☐ Yes, during the last year

25. Has a relative, friend, doctor or other health care worker been concerned about your drinking or suggested that you cut down?

☐ No

☐ Yes, but not in the last year

☐ Yes, during the last year

26. Where and with whom do you usually drink?

☐ at home on my own

☐ at home with friends or family

☐ in a licensed public bar/ restaurant/ social club

☐ other

27. What do type of alcohol do you usually drink?

☐ beer/ cider

☐ wine

☐ spirits

☐ beer/ wine and / or spirits

28. On average how many units do you drink in a typical week? (*examples are estimates only, check the labels for exact measures*)

☐ Up to 5 units or less *2 cans or bottles of beer/ cider = 3 units*

2 small glasses of wine = 3 units

1 pub measure of spirits = 1 unit

☐ Between 6 to 10 units *6 beers/ ciders = 9 units*

1 bottle of wine = 10 units

¼ bottle of spirits = 9 units

☐ Between 11-15 units *10 beers/ ciders = 15 units*

1 litre carton of wine = 15 units

15 pub measures of spirits = 15 units

☐ Between 15-20 units *12 beers/ciders = 18 units*

2 bottles of wine = 20 units

½ bottle of spirits = 18 units

☐ Between 21-30 units *¾ case of beer is 27 units*

3 bottles of wine = 30 units

☐ 31 units or more *1 case of beer = 36 units*

1 bottle of spirits = 38 units

30. In the last 12 months have you used drugs, including over the counter and those required for medical reasons **above the level** recommended or specifically prescribed for you?

☐ No → [please go to question 40](#)

☐ Yes

The term **drug use** or **drug abuse** **excludes alcohol and tobacco**, but does **include** prescribed or over the counter medicines in excess of the directions given to you and any non medical use of drugs.

31. Do you abuse more than one drug at a time?

☐ No

☐ Yes

32. Are you always able to stop using drugs when you want to?

☐ No

☐ Yes

33. Have you had blackouts or flashbacks as a result of drug use?

☐ No

☐ Yes

34. Do you ever feel bad or guilty about your drug use?

☐ No

☐ Yes

35. Does your spouse/ partner (parents/ others) ever complain about your involvement with drugs?

☐ No

☐ Yes

36. Have you ever neglected your family because of your use of drugs?

☐ No

☐ Yes

37. Have you engaged in illegal activities in order to obtain drugs?

☐ No

☐ Yes

38. Have you ever experienced withdrawal symptoms (felt sick) when you stopped taking drugs?

☐ No

☐ Yes

39. Have you ever had medical problems as a result of your drug use (e.g. memory loss, hepatitis, convulsions, bleeding etc)?

☐ No

☐ Yes

40. Do you gamble (on line/ locally)?

☐ Yes

☐ No → please go to question 42

41. Do you have any concerns about your gambling or has anyone close to you expressed concerns about your gambling habits?

☐ Yes

☐ No

42. Do you have financial worries/ or are you worried about debt?

☐ Yes (contact the Falkland Islands Citizen's Advice Bureau on 55355 for advice
www.citizensadvice.org.fk)

☐ No

43. Are you worried about your weight?

☐ No → please go to the next section

☐ Yes, I think I am under weight

☐ Yes, I think I am over weight

44. Have you tried to control your weight through dietary changes and / or exercise?

☐ no → please go to the next section

☐ yes

45. Which of the following prevent you from eating as well as you'd like or exercising as often as you'd prefer?

Tick as many boxes as apply to you

☐ Having time to prepare healthy meals

☐ Having access to fruit and vegetables

☐ Knowing what to cook

☐ Having time to exercise

- ☐ Access to fitness equipment/ gym
- ☐ Knowing what exercises to do
- ☐ Having motivation to exercise
- ☐ Other reason (for example: access to child care, the cost of fruit and vegetables, the cost of gym membership or exercise classes)
.....
.....

MENTAL HEALTH & WELLBEING

1. In the last month, how often have you been upset because of something that happened unexpectedly?

- ☐ Never
- ☐ Almost never
- ☐ Sometimes
- ☐ Fairly often
- ☐ Very often

2. In the last month, how often have you felt that you were unable to control the important things in your life?

- ☐ Never
- ☐ Almost never
- ☐ Sometimes
- ☐ Fairly often
- ☐ Very often

3. In the last month, how often have you felt nervous and 'stressed'?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

4. In the last month, how often have you felt confident about your ability to handle your personal problems?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

5. In the last month, how often have you felt that things were going your way?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

6. In the last month, how often have you been able to control irritations in your life?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

7. In the last month, how often have you found that you could not cope with all the things that you had to do?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

8. In the last month, how often have you felt that you were on top of things?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

9. In the last month, how often have you been angered because of things that were outside your control?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

☐ Never

☐ Almost never

☐ Sometimes

☐ Fairly often

☐ Very often

Please **answer all the questions in this section.** Over the **past two weeks** how often have you been bothered by any of the following problems

11. Little interest or pleasure in doing things

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

12. Feeling down, depressed or hopeless

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

13. Trouble falling or staying asleep, or sleeping too much

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

14. Feeling tired or having little energy

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

15. Poor appetite or overeating

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

16. Feeling bad about yourself – or that you are a failure or have let yourself or your family down

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

17. Trouble concentrating on things, such as reading the newspaper or watching television

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

18. Moving or speaking so slowly that other people could have noticed. Or the opposite – being so fidgety or restless that you have been moving around a lot more than usual

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

19. Thoughts that you would be better off dead, or of hurting yourself in some way

☐ Not at all

☐ Several days

☐ More than half the days

☐ Nearly every day

If you are concerned about your mental health call your GP on 28000 or the Community Mental Health Nurses on 28082 or think about talk to the Samaritans FREEPHONE 51515 www.jo@samaritans.org

The next questions are about problems and complaints that people sometimes have **in response to stressful life experiences**. Please indicate how much you have been bothered by each problem **in the last month**.

1. Repeated disturbing memories, thoughts or images of a stressful experience from the past have bothered me?

☐ Not at all

☐ A little bit

☐ Moderately

☐ Quite a bit

☐ Extremely

2. Feeling very upset when something reminded you of a stressful experience from the past?

☐ Not at all

☐ A little bit

☐ Moderately

☐ Quite a bit

☐ Extremely

3. Avoiding activities or situations because they reminded you of a stressful experience from the past?

☐ Not at all

☐ A little bit

☐ Moderately

☐ Quite a bit

☐ Extremely

4. Feeling distant or cut off from people?

☐ Not at all

☐ A little bit

☐ Moderately

☐ Quite a bit

☐ Extremely

5. Feeling irritable or having angry outbursts?

☐ Not at all

☐ A little bit

☐ Moderately

☐ Quite a bit

☐ Extremely

6. Difficulty concentrating ?

☐ Not at all

☐ A little bit

☐ Moderately

☐ Quite a bit

☐ Extremely

Below are some statements about childhood experiences. Please tick the box that best describes your experience as a child.

How often have you been victimised by the following things?

Physical aggression

Someone has for example hit you, kicked you or shoved you?

Never Seldom Sometimes Often Very often

☐ ☐ ☐ ☐ ☐

Verbal aggression

Someone has for example yelled at you, called you bad names or said hurtful things to you?

Never Seldom Sometimes Often Very often

☐ ☐ ☐ ☐ ☐

Indirect aggression

Someone has for example gossiped maliciously about you, spread harmful rumours about you or tried to socially exclude you from others?

Never Seldom Sometimes Often Very often

☐ ☐ ☐ ☐ ☐

How often have you yourself done any of the following things to someone else?

Physical aggression

Have you for example hit you, kicked you or shoved you?

Never Seldom Sometimes Often Very often

☐ ☐ ☐ ☐ ☐

Verbal aggression

Have you for example yelled at you, called you bad names or said hurtful things to you?

Never Seldom Sometimes Often Very often

☐ ☐ ☐ ☐ ☐

Indirect aggression

Have you for example gossiped maliciously about you, spread harmful rumours about you or tried to socially exclude you from others?

Never Seldom Sometimes Often Very often

☐ ☐ ☐ ☐ ☐

Below are some statements about recovery from stress.

Please tick the box that best describes your view.

I tend to bounce back quickly after hard times

Strongly	Disagree	Neutral		Agree	Strongly
	Disagree				Agree
☐		☐	☐	☐	☐

I have a hard time making it through stressful events

Strongly	Disagree	Neutral		Agree	Strongly
	Disagree				Agree
☐		☐	☐	☐	☐

It does not take me long to recover from a stressful event

Strongly	Disagree	Neutral		Agree	Strongly
	Disagree				Agree
☐		☐	☐	☐	☐

It is hard for me to snap back when something bad happens

Strongly	Disagree	Neutral		Agree	Strongly
	Disagree				Agree
☐		☐	☐	☐	☐

I usually come through difficult times with little trouble

Strongly	Disagree	Neutral		Agree	Strongly
----------	----------	---------	--	-------	----------

Disagree Agree

☐ ☐ ☐ ☐ ☐

I tend to take a long time to get over set backs in my life

Strongly Disagree Neutral Agree Strongly

Disagree Agree

☐ ☐ ☐ ☐ ☐

Below are some statements about feelings and thoughts. Please tick the box that best describes your experience of each over the last 2 weeks.

I've been feeling optimistic about the future

None of the Time Rarely Some of the time Often All the time

☐ ☐ ☐ ☐ ☐

I've been feeling useful

None of the Time Rarely Some of the time Often All the time

☐ ☐ ☐ ☐ ☐

I've been feeling relaxed

None of the Time Rarely Some of the time Often All the time

☐ ☐ ☐ ☐ ☐

I've been feeling interested in other people

None of the	Rarely	Some of the	Often	All the
Time		time		time
☐	☐	☐	☐	☐

I've had energy to spare

None of the	Rarely	Some of the	Often	All the
Time		time		time
☐	☐	☐	☐	☐

I've been dealing with problems well

None of the	Rarely	Some of the	Often	All the
Time		time		time
☐	☐	☐	☐	☐

I've been thinking clearly

None of the	Rarely	Some of the	Often	All the
Time		time		time
☐	☐	☐	☐	☐

I've been feeling good about myself

None of the	Rarely	Some of the	Often	All the
Time		time		time
☐	☐	☐	☐	☐

I've been feeling close to other people

None of the Rarely Some of the Often All the

Time time time

☐ ☐ ☐ ☐ ☐

I've been feeling confident

None of the Rarely Some of the Often All the

Time time time

☐ ☐ ☐ ☐ ☐

I've been able to make up my mind about things

None of the Rarely Some of the Often All the

Time time time

☐ ☐ ☐ ☐ ☐

I've been feeling loved

None of the Rarely Some of the Often All the

Time time time

☐ ☐ ☐ ☐ ☐

I've been feeling interested in new things

None of the rarely Some of the Often All the

Time time time

☐ ☐ ☐ ☐ ☐

I've been feeling cheerful

None of the	rarely	Some of the	Often	All the
Time		time		time
☐	☐	☐	☐	☐

You have now complete the mental health & wellbeing survey.

THANK YOU for your participation.

Please return this questionnaire in the

Stamped Addressed envelope provided to:

Health Survey

Post Office

Stanley

Appendix 18: Consent Form Example

 UNIVERSITY OF STIRLING

Health In Mind: a survey of mental health, wellbeing and lifestyle in the Falkland Islands and an explorative qualitative study of managing mental health and wellbeing by primary care professionals

Consent Form

Researcher: Karen Rimicans

Please
initial
box

1. I confirm that I have read and understand the Participant Information Leaflet dated 09:03:2017 (version 1.1) for this study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily. ☒
2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason. If I decide to withdraw from the study before its completion, I understand that my data will be not be used. ☒
3. I understand that the data I provide will be depersonalised and that electronic versions of these will be stored on password protected computers in the Falkland Islands and the University of Stirling.. ☒
4. I understand that if some of my views are quoted in a report or published papers, this will be done in a way that ensures that I cannot be identified. ☒
5. I understand that, subject to my permission, the interview will be audio recorded for the purpose of the study and that any recordings will be destroyed at the end of the study. Depersonalised transcripts of the recordings will be kept for a period of 10 years to ensure accurate reporting in any future publications. ☒
6. I agree to take part in the above study. ☒

Name

Name of Researcher taking consent

28/10/17

Date

28/10/17

Date

Signature

Signature

299

Appendix 19: Manuscript : Common Mental Disorders in the Falkland Islands

Highlights:

Community based survey

Estimated prevalence of common mental disorders in the Falkland Islands

Implications for screening for the range of common mental disorders and associated alcohol and substance misuse in primary care practice.

Abstract

Objectives: This study provides insight into common mental disorders in the adult population of the Falkland Islands to establish a baseline for future public health surveillance and inform clinical practice in this remote and rural community. Estimated prevalence rates for depression, anxiety, posttraumatic stress symptoms are reported, and comorbid alcohol and drug use in the islands.

Study design: A community based anonymised postal survey was distributed to 2,800 adult residents, of which 979 responses were returned (M= 418 F= 560). Common mental disorders, depression, anxiety and post-traumatic stress symptoms (PHQ-9, GAD-7, PCL-C), and alcohol and drug use (AUDIT, DAST-10) were screened within the health and wellbeing survey.

Methods: Cut off scores were applied to identify prevalence estimates for the sample and compared estimates between sex, age range, employment, place of residency and residency status.

Results: 12.5% of the sample reported depressive and anxiety symptoms. Adults of working age 30 – 70 years reported higher prevalence of anxiety and depressive symptoms. Females were three times more likely to report depressive or anxiety symptoms. 10 % of the sample reported posttraumatic stress symptoms across the age ranges from 18 years to 70 years, of which females were twice as likely to report symptoms. Younger females, aged 18 -30 years 19% and older males, aged 50 – 70 years 16 % reported moderate symptoms. In contrast, 25% of males reported hazardous alcohol intake compared to 12.5 % of females in the study. While, 1 in 20 adults reported misuse of substances.

Conclusion: The prevalence of common mental disorder within the adult population of the Falkland Islands is comparable with European estimates, however prevalence rates for posttraumatic stress symptoms are higher. Implications are screening for common mental disorders, including posttraumatic stress symptoms and associated alcohol and drug use disorders in primary care in the Falkland Islands and other remote and rural communities.

Introduction

Common mental disorders are defined as ‘depressive disorders, generalised anxiety disorder (GAD), panic disorder, obsessive compulsive disorder (OCD), post-traumatic stress disorder (PTSD) and social anxiety disorders’ (NICE 2011, p 5). Common mental disorders are the most prevalent of mental disorders globally and are a public health concern (World Health Organisation (WHO) 2017). Common mental disorders often emerge in childhood and adolescence; however, adults present with the highest prevalence and WHO estimates that the global prevalence of common mental disorders among adults’ ranges from between 5% and 18.1 %, increases to 36.1% when combined with alcohol use disorders and drug use disorders (Degenhardt et al 2019, Glantz et al 2019, WHO 2017). Walker et al (2022) describes the data deficit that exists in United Kingdom Overseas Territories (UKOTs) and other Small Island Developing States (SIDS), which share the common tensions of limited mental health resources, limited access to specialist services and effectively managing confidentiality, therefore the need for community surveys (Walker, Asher, Pari, Attride-Stirling et al 2022).

In rural areas, lower prevalence rates of common mental disorders and higher rates of alcohol misuse are expected. A study of medical records in the Falklands in 1979, estimated lower rates of neurotic conditions (28.3 per 1000 population), one third lower than the UK, and higher rates of alcohol dependence (13.2 per 1000 population), twice as high as UK estimates (King and Bleaney 1982). The World Health Organisation (WHO) defines a holistic view of mental health encompassing individual’s wellbeing and growth with community participation; this inter-connected view of health and wellbeing is relevant for remote and rural communities (WHO 2017). Measures to improve and sustain population mental health are required, yet a pre-requisite for interventions is identifying the prevalence of common mental disorder in the population.

The Falkland Islands are a United Kingdom Overseas Territory (UKOT) located in the South Atlantic Ocean, approximately 8,000 miles from the UK and 300 miles from South America. The islands are sparsely populated with 3,200 residents in the 2016 (Falkland Islands Government 2017). Stanley is the main residential area with 2,800 residents, while the remainder of the population live in small settlements, farms and islands collectively referred to as ‘Camp’ or reside as contractors at Mount Pleasant Complex military base. With less than 3,000 people living more than one hour away from a

population of 10,000 or more, the islands meet the definition of an extreme remote and rural locality (Swan, Sivasubramaniam and Godden 2008). Adults of working age account for 71 % of the population and the median age of the population is 38.3 years. With a transient workforce of 823 work permit holders and their dependents, the Falkland Islands have less than 2% unemployment (Falkland Islands Government 2021). A feature of the Falklands population is the diverse nationality of residents, with over 68 nationalities identified in the 2016 Census (Falkland Islands Government 2017). In addition, the Falkland Islands population have endured the 1982 conflict and the aftermath within their community (Smith 2002).

Co-morbidity between common mental disorders and Non-Communicable Diseases (NCD) are highly prevalence in the UK, with conditions such as cardio-vascular disease and diabetes attributed to inactivity, unhealthy dietary intake, harmful consumption of alcohol and tobacco consumption (Marmot 2010). The socio-economic and environmental factors associated with living and maintaining health within the Falklands population may impact population mental health. Risk factors associated with NCDs are particularly relevant in the Falklands, an island dependant on the importation of commodities, where for example, the cost of alcohol is inexpensive, yet fresh produce such as fruit and vegetables are expensive to buy, this may influence lifestyle choices (Falkland Islands Government 2021).

Depressive disorders are characterised by an ‘absence of positive affect’, a ‘low mood’ and ‘a range of physical, emotional, cognitive and behavioural symptoms’ which may vary in ‘intensity, duration and impact’ (NICE 2022, p 7). The prevalence of depressive disorders in adults ranges from 5 % globally to an estimated 16 % in the UK, and it is predominately detected, assessed and treated within primary care (Office for National Statistics 2022)

Anxiety disorders are characterised by worry, anticipatory social and performance fears, and avoidance behaviours, the prevalence of anxiety ranges from 3.6% to estimated 34% of adults across the lifespan (Szuhany and Simon 2022, WHO 2017). Anxiety disorders also vary in duration, intensity and impact, and they often present with co-morbid depressive symptoms managed in primary care (Das-Munshi et al 2008).

Posttraumatic stress disorder (PTSD) may emerge because of exposures to traumatic life events, including ‘serious accidents, assaults, abuse, work related trauma, serious health

problems, war and conflict or torture'. PTSD is characterised by 're-experiencing, avoidance, hyperarousal, hypervigilance, negative mood and thinking and emotional numbing', (NICE 2018, p 54). Posttraumatic stress symptoms are estimated to affect between 4% to an estimated 10 % of the population, although English and Irish studies suggest that the prevalence of posttraumatic stress could be as high as 15% (Cowlshaw et al 2020, Hyland et al 2021, Koenen et al 2017). While treatment for PTSD may be predominantly provided by specialist mental health services, the detection and management of care remains within primary care. In addition, primary care services support those with 'clinically important symptoms' people who may not have a formal diagnosis of PTSD yet meet the threshold for having posttraumatic stress symptoms using a validated scale (NICE 2018, p 26). There is strong evidence to suggest that people with posttraumatic stress symptoms also present with co-morbid anxiety, depression and substance misuse (Koenen et al 2022, NICE 2018).

Methods

Study design

Population data was drawn from an anonymised postal survey of adult residents in the Falkland Islands. A range of questions on population demographic characteristics from the Falkland Islands Government Census 2016 were applied including sex, age range, place of residency and immigration status to allow comparison between the community survey and the population census. In addition, validated psychometric questionnaires were included in the survey to screen for common mental disorder. Residents over the age of 18 years were invited to participate in the study, through media and postal invitation. The survey was approved by the Falkland Islands Government and the University of Stirling, General University Ethics Panel.

Study population

2800 questionnaires were distributed to participants identified as Falkland Islanders or permanent residents via their postal addresses. Islanders and residents were identified through the electoral roll and the phone book. In addition, survey questionnaires were distributed to private businesses where temporary residents who are contractor work permit holders could be accessed.

Measures

Validated, unlicensed and concise screening questionnaires suitable for self-administration in population health surveys were selected.

Depressive symptoms

To screen for depressive symptoms, the nine item Patient Health Questionnaire (PHQ-9) was used, which is a screening instrument based on diagnostic criteria for depression from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV) (Kroenke and Spitzer 2002). The PHQ-9 is a four-point Likert scale with scores ranging from 0-27. A cut off score of 10 is recommended to show clinically relevant moderate depressive symptoms or above and demonstrates good psychometric properties, sensitivity of 0.88, 95 % confidence level and specificity of 0.85 (Levis, Benedetti and Thombs 2019).

Anxiety symptoms

To screen for anxiety symptoms, the seven item Generalised Anxiety Disorder Questionnaire (GAD-7) was used, which is a screening instrument developed for primary care settings, based on the diagnostic criteria for generalised anxiety disorder from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV). Based on a four-point likert scale the GAD-7 scores range from 0 to 21. A cut of score of 8 or above was used to determine moderate symptoms or above (Spitzer, Kroenke, Williams and Lowe 2006).

Posttraumatic stress symptoms

To screen for posttraumatic stress symptoms the Abbreviated Post-Traumatic Checklist-6 item Civilian Checklist (PCL-C) was used, which is a screening instrument developed for use in primary care settings. Based on a five-point Likert scale the PCL-C scores range from 0 to 30. A cut of score of 14 or above was used to determine difficulties with symptoms of posttraumatic stress (Lang and Stein 2005).

Risk of harmful alcohol use

To screen for alcohol use, the Alcohol Use Disorders Identification Test (AUDIT) was used, which is a 10-item screening instrument that can be self-administered within a primary care setting. Based on a five-point Likert scale the scores range from 0 to 40. A

cut of score of 8 or above was applied to identify people at risk of harmful or hazardous drinking (Bohn, Babor and Kranzler 1995).

Drug use in the Falkland Islands

The Drug Use Screening Test, a brief 10 item screening instrument that can be self-administered in primary care settings, was included in the survey. The DAST scores range from 0 to 10, however, Smith et al (2010) found that brief screening, with a score of 1 or above was considered a positive score indicating drug misuse in primary care screening (Skinner 1982, Smith, Schmidt, Allensworth-Davies and Saitz 2010).

Statistical analysis

Analysed was performed using SPSS Version 28. To calculate prevalence the cut of scores above were applied. To investigate gender differences between prevalence levels, standardised residuals were used indicate association between variables, at 5% significance levels. Pearson's Chi-squared tests are shown, and effects were regarded as of statistically significant at $<.05$

Results

Socio-demographic characteristics

Respondents (n = 979 adults) had a median age range of between 40 and 50 years (CI 95% Lower Bound 1.1.1341 Upper bound 1.3859) (SD = .44309). The survey adhered to the binary sex coding used within the Falklands Census 2016, (n= 560) female respondents and (n= 418) male. One respondent defined themselves as 'other'. The majority lived in Stanley 76 % and over 80 % were employed. Differences are found in the immigration status of respondents with 81 % of female respondents describing being a Falkland Islander or having permanent resident status. In contrast, 40 % of male respondents described themselves as work permit holders therefore transient residents in the islands.

TABLE 1: SOCIO-DEMOGRAPHIC CHARACTERISTICS BY SEX					
	Female respondents	Male respondents	Total	Pearson χ^2	P value
Number of respondents			978 + 1 other		
Sex (%)	560 (57 %)	418 (43 %)			
Age range	560	418 + 1	979	999.542	<.001
18 – 30 years	95	40	135		
30 – 40 years	121	87	208		
40 – 50 years	111	115	226		
50 – 60 years	116	82	198		
60– 70 years	60	57	117		
70 years +	57	37	94		
Place of Residency	558	416	974	210.540	<.001
Stanley	471	318	789		
Camp	52	45	97		
Mount Pleasant Complex/ other	34	47	88		
Employment Status	559	416	976	8.988	.174
7. Employed (includes semi retired)	445	347	793		
8. Retired	57	48	105		
9. Not in paid employment	48	18	66		
Immigration Status	560	418	979	1045.756	<.001
Permanent Residents: Falkland Islander, FI Status or Permanent Resident Status	452	250	(n= 702)		
Transient Worker Work permit holder or dependent / Visitor permit holder (+ 1 exempt)	108	167 + 1 exempt	(n= 276)		
10. 1 respondent defined themselves as ‘Other’. Non-binary was not included as the Falklands Census 2016 di not include this option.					

Prevalence estimates for common mental disorders

The estimated prevalence rate for common mental disorder was 12.5 % or one in eight of adults in the Falkland Islands consistent across self-reported depression, anxiety symptoms and post-traumatic stress symptoms.

Table 2: Socio-demographic characteristics and common mental disorder, alcohol and drug use by sex			
Demographics	Total	Female	Male
Sample	979	560	418

Age range mean (SD)	40-50 years (1.62)	40-50 yrs (1.71)	40-50 yrs (1.50)
Screening questionnaires			
Depressive symptoms	967		
PHQ-9 mean (SD)	5.47 (4.655)	5.79 (4.724)	4.99 (4.515)
Range (min-max)	0-27	0-27	0-27
PHQ-10 10> Moderate depressive symptoms or above	128	92	36
Anxiety Symptoms	968		
GAD-7 mean (SD)	2.98 (3.96)	3.40 (4.016)	2.41 (3.834)
Range (min-max)	0-21	0-21	0-21
GAD-7 8> Moderate anxiety symptoms or above	103	85	18
Posttraumatic stress symptoms	963		
PCL-C mean (SD)	8.86 (4.06)	9.04 (3.990)	8.62 (4.153)
Range (min-max)	0-30	0-30	0-30
PCLC-6 14 > Moderate post trauma symptoms or above	116	71	45
Alcohol use	842		
AUDIT mean (SD)	5.25 (4.42)	4.63 (3.966)	6.10 (4.85)
Range (min-max)	0-40	0-40	0-40
AUDIT cut off 8> Hazardous or harmful use of alcohol	174	59	115
Drug Use	938		
DAST-10 (SD)	0.135 (0.58)	0.094 (0.366)	0.1901 (0.790)
Range (min – max)	0-10	0-10	0-10
DAST-10 1>	65	37	28

Prevalence of common mental disorder, alcohol and drug use by sex and age range

For self-rated depression the mean score for females was 4.48, (SD= 4.81), while the average score for males was 3.30, (SD=4.36). While for anxiety symptoms the mean score for females was 3.40, (SD= 4.01), while the average score for males was 2.41, (SD=3.83). Finally, the mean score for post-traumatic stress symptoms for females was 9.04, (SD= 3.99), while the mean score for males was 8.55, (SD=4.25).

Applying the cut of scores PHQ-10 10>, GAD-7 8> and the PCLC -6 14> differences are found within the sex and age range of respondents. The findings indicate that there is an association between the sex of respondents and the age range of respondents, where female respondents were three times more likely to report moderate depressive, anxiety and PTSD symptoms and younger females reporting higher prevalence rates of common

mental disorder. The exception is older males aged 50 to 70 years who self-report higher prevalence of PTSD symptoms.

In contrast, for self-reported alcohol use and drug use, the mean AUDIT score for females was 4.61, (SD= 3.96), while the mean score for males was 6.03, (SD=4.88). While the mean DAST score for females was 0.940, (SD= .366), and the mean score for males was .189, (SD=.788).

Applying the cut of score AUDIT 8>, the findings indicate that there is an association between the sex and the age range of respondents, with males' self-report the highest prevalence of harmful or hazardous alcohol consumption. Males aged 18 to 30 years had the highest prevalence of alcohol use at hazardous levels, with 54% or one in two, plus, for those male respondents aged 30 to 50 years, 33% or one in three, and those aged 50 to 70 years, 28%, or one in four. An exception is females aged 18 years to 30 years, who report where 33% or one in three are consuming alcohol at potentially harmful levels.

Applying the cut of score of DAST 1 > similar prevalence is found across the sexes although younger respondents report higher prevalence of drug use. Where the highest prevalence of one in ten is found in males aged 18 to 30 years.

Table 3: Common mental disorder, alcohol and drug use in the Falklands by sex and age range: female						
	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
PHQ-9 score >10	23 (24%)	41 (18%)	21 (12%)	1 (3%)	22.2	<.001
GAD-7score >8	23 (24%)	36 (16%)	22 (13%)	5 (9.3%)	18.9	<.001
PCLC-6 score 14 >	18 (19%)	27 (12%)	20 (12%)	6 (11%)	2.58	.275
AUDIT score 8>	32 (38%)	37 (17%)	17 (11%)	2 (6%)	38.38	<.001
DAST-10 score 1>	13 (6%)	13 (6%)	8 (5%)	4 (8%)	.5531	.509

While, applying the cut of scores of AUDIT 8> and DAST 1>, male respondents were found to report higher prevalence of hazardous or harmful use of alcohol and drug use.

Table 4: Common mental disorder, alcohol and drug use in the Falklands by sex and age range: male						
	18-30 years	30-50 years	50-70 years	70 years +	χ^2	P value
PHQ-9 score >10	3 (8%)	16 (8%)	16 (12%)	1 (3%)	22.2	<.001
GAD-7score >8	4 (10%)	21 (10%)	11 (8%)	1(3%)	18.9	<.001
PCLC-6 score14 >	4 (19%)	17 (8%)	22 (12%)	2 (5%)	2.58	.275
AUDIT score 8>	19 (54%)	55 (33%)	35 (28%)	6 (10%)	38.38	<.001
DAST-10 score 1>	4 (10%)	14 (7%)	8 (6%)	2 (6%)	.5531	.509

Prevalence of common mental disorder, alcohol and drug use by employment status and sex

In total, 963 respondents completed the employment status questions, of which, 81% of the sample (n= 792) reported to be in employment, which included semi-retirement, 11% reported as retired (n= 105), and 7% reported as ‘not in paid employment’ which includes unable to work, providing childcare, looking after a person with an illness or disability, voluntary work or study (n=66). Applying the cut of scores as previous, one in six working females and one in five males who report as not in paid employment, report higher scores for depression, anxiety and PTSD symptoms.

Table 5: Common mental disorder, alcohol and drug use in the Falklands by employment status and sex: female			
	Employed	Retired	Not in paid employment
PHQ-9 score >10	76 (17%)	5 (9%)	5 (11%)
GAD-7score >8	75 (17%)	2 (4%)	5 (11%)
PCLC-6 score 14 >	60 (14%)	4 (7%)	6 (13%)
AUDIT score 8>	78 (19%)	3 (8%)	7 (19%)
DAST-10 score 1>	32 (7%)	2 (4%)	5 (11%)

Males report greater prevalence of hazardous or harmful alcohol use across employment status, although those not in paid employment have the highest prevalence, one in two.

Table 6: Common mental disorder, alcohol and drug use in the Falklands by employment status and sex: male			
	Employed	Retired	Not in paid employment
PHQ-9 score >10	29 (9%)	3 (6%)	4 (22%)
GAD-7score >8	29 (9%)	3 (6%)	5 (28%)
PCLC-6 score 14 >	36 (10%)	5 (10%)	4 (22%)
AUDIT score 8>	99 (33%)	9 (23%)	7 (50%)
DAST-10 score 1>	29 (9%)	3 (6%)	5 (28%)

Prevalence of common mental disorder, alcohol and drug use by sex and place of residency

81% of respondents lived in Stanley, (n= 789), 10 % lived in ‘Camp’ or the countryside (n= 97), while 9% lived in Mount Pleasant Complex or other, which included more than one place of residency (n=88). Applying the cut of scores as previous, females living in Stanley and Camp have the highest prevalence of depressive and anxiety symptoms, between one in six and one in four. There is a weak link found between the prevalence of PTSD symptoms and females and living in Camp ($\chi^2 (1) = 5.34$, $P .069$).

Table 7: Common mental disorder, alcohol and drug use in the Falklands by place of residency and sex: female			
	Stanley	Camp	Mount Pleasant Complex or other
PHQ-9 score >10	80 (17%)	10 (19%)	1 (3%)
GAD-7score >8	72 (15%)	13 (25%)	1 (3%)
PCLC-6 score 14 >	59 (13%)	10 (20%)	2 (6%)
AUDIT score 8>	77 (19%)	9 (19%)	2 (7 %)
DAST-10 score 1>	32 (7%)	2 (4%)	3 (9 %)

Males report greater prevalence of hazardous or harmful alcohol use across place of residency.

Table 8: Common mental disorder, alcohol and drug use in the Falklands by place of residency and sex: male

	Stanley	Camp	Mount Pleasant Complex or other
PHQ-9 score >10	28 (9%)	4 (9%)	1 (3%)
GAD-7score >8	28 (9%)	3 (7%)	6 (11%)
PCLC-6 score 14 >	35 (11%)	3 (7%)	7 (13%)
AUDIT score 8>	84 (32%)	13 (31%)	18 (38%)
DAST-10 score 1>	20 (6%)	4 (9%)	4 (8%)

Prevalence of common mental disorder, alcohol and drug use by residency status and sex

In total, 72 % of respondents (n=702) reported as permanent residents, including Falkland Islanders, Falkland Islands Status holders and Permanent Resident Permit holders, thereafter 28 % of respondents reported as temporary residents (n=276), including Work Permit Holders or dependants and Visitor Permit Holders. Applying the cut of scores as previous, 19 % of permanent female residents report higher prevalence of depression, with 17 % report higher prevalence for anxiety symptoms. Permanent residents both females and males report higher prevalence of PTSD symptoms.

Table 9: Common mental disorder, alcohol and drug use in the Falklands by residency status and sex: female

	Permanent Resident	Temporary Resident
PHQ-9 score >10	83 (19%)	28 (11%)
GAD-7score >8	78 (17%)	25 (10%)
PCLC-6 score 14 >	60 (13%)	11 (10%)
AUDIT score 8>	80 (21%)	8 (9%)
DAST-10 score 1>	30 (7%)	7 (7%)

Both permanent and temporary resident males report higher prevalence of hazardous or harmful alcohol use.

Table 10: Common mental disorder, alcohol and drug use in the Falklands by residency status and sex: male		
	Permanent Resident	Temporary Resident
PHQ-9 score >10	9 (8%)	8 (5%)
GAD-7score >8	8 (8%)	12 (7%)
PCLC-6 score 14 >	31 (12%)	14 (8%)
AUDIT score 8>	79 (35%)	36 (28%)
DAST-10 score 1>	14 (6%)	14 (9%)

Prevalence of common mental disorder and alcohol above the cut off scores by sex

The association between alcohol use the most common substance consumed in the islands and common mental disorder is considered. Of female non-drinkers (n=38) and low risk drinkers (n=358), 14% report (n=52) moderate symptoms of depression, 11% (n=43) report moderate symptoms of PTSD and 14% (n= 54) report moderate symptoms of anxiety.

Females who self-report hazardous or harmful use of alcohol, (n=88) also report common mental disorder between one in three for depression, one in four for anxiety and one in five for symptoms of PTSD. There is a strong association between common mental disorder and harmful or hazardous alcohol consumption.

Table 11: Common mental disorder and alcohol use above the cut off scores by sex: female	
	AUDIT score 8 >
PHQ-9 score >10	27 (31 %)
GAD-7score >8	24 (27 %)
PCLC-6 score 14 >	20 (22 %)

Of male non-drinkers (n=50) and low risk drinkers (n=190), 8% report (n=20) moderate symptoms of depression, 10% (n=23) report moderate symptoms of PTSD and 8% (n= 20) report moderate symptoms of anxiety.

Males who report hazardous or harmful use of alcohol, (n= 115) also report common mental disorder at lower rates than females between one in ten for depression, one in eight

for anxiety and one in six for symptoms of PTSD. The association between common mental disorder and hazardous or harmful alcohol consumption is weaker for males.

Table 12: Common mental disorder and alcohol use above the cut off scores by sex: male	
	AUDIT score 8 >
PHQ-9 score >10	12 (10 %)
GAD-7score >8	14 (12 %)
PCLC-6 score 14 >	18 (16 %)

Depression

71% of the sample (n= 704) completed the PHQ-9 questions scoring between 1-27, of which the (M=5.47) (CI 95%, 5.13-5.82), indicating no significant depressive symptoms. Applying the PHQ-10 of 10 >, 13% of respondents (n=128) reported moderate symptoms or above. Females were three times more likely than males to report depressive symptoms at 72 % of this sample (n=92) (CI 95 % 1.5714- 1.7143). In comparison, 28 % of males or (n= 36) (CI95%; 1.6955 – 1.8786) report higher scores for depressive symptoms. $P < 0.007$ value $r = 0.79$. Co-relation between sex and PHQ-9 at 0.01 level. Of the 13 % of the sample (n= 128) who self-reported moderate levels, 20 % were in the age range of 18 – 30 years (n= 26) (95% CI, 6.26, 5.37-7.15), standard error .449, while respondents aged between 30 and 50 years account for 45 % (n=57), those aged 50 – 70 years account for 29 % (n=37) and finally those respondents aged 70 years and over account for 6% (n=8) of this group, (StD 20.151016008). There is a strong co-relation between age and depressive symptoms $P < 0.05$ $n = 0.67$. The findings show that 85 % (n=108) of respondents who self-reported moderate depressive symptoms lived in Stanley. Stanley is the main place of residence in the Falklands where 75 % of the population (n=2,524) live.

Anxiety symptoms (GAD-7)

The estimated prevalence rate of anxiety symptoms was 13 % or one in eight adults (n=123) in the Falkland Islands. In total (n= 968) survey respondents completed the GAD7 questions with scores ranging from 0 – 21, the mean score was 2.9835 indicating minimal anxiety symptoms (95 % CI, Upper CI 95 % - 3.233605; Lower CI 95% -

2.73337, Standard Deviation 3.96569), of which 40 % of the sample (n=386) report no anxiety symptoms, while 47 % (n=459) report low levels of anxiety symptoms.

Applying the GAD-7 cut off point of 8>, 70 % (n=86) were female (95% CI, 1.486-0.4093), while 30 % (n=37) were male (95% CI, SD .33322). Furthermore, 73 % of respondents (n=90) were in the age range of 30 to 70 years. Respondents aged between 18- 30 years presented 22% (n= 27), respondents aged between 30 and 50 years presented 46 % (n=58), while those aged 50 to 70 years were 26% (n=32), and finally those aged 70 years or above represented 5 % (n=6) of those with moderate anxiety symptoms or above. 81 % respondents with moderate anxiety symptoms (n=100) lived in Stanley, while 13 % lived in Camp (n=16), finally 5% lived in Mount Pleasant Complex (n= 6). 91 % of the sample (n=104) were in employment.

Posttraumatic stress symptoms (PCL-C)

The estimated prevalence of posttraumatic stress symptoms was 10 % or one in ten adults (n= 116) in the Falkland Islands. In total, 964 respondents completed the PCL-C questions with scores ranging from 0 – 30, of which 63 % had no symptoms of posttraumatic stress and 37 % of the sample (n=356) has a mean PCL-C score of 8.8683, indicating mild symptoms SD 4.06212.

Applying the PCL-C cut off score of 14 >, 33% of the sample (n=116) report posttraumatic stress symptoms at moderate levels of above, of which 61 % were female (n=71) (CI95 % 0.256749; Upper CI 95 % - 9.125006; Lower CI 95% - 8.611509). Respondents aged between 18-30 years presented 19 % (n=22), while 74 % of those aged between 30 years to 70 years (n= 86), and 7% of those aged 70 years or over presented with moderate posttraumatic stress symptoms (n=8). 82 % of respondents with moderate posttraumatic stress symptoms or above (n=94) lived in Stanley, while 11% lived in Camp (n=13) and 7 % lived in Mount Pleasant Complex (n=13). Finally, 83 % were in employment (n=96).

Risk of harmful alcohol use (AUDIT)

The estimated prevalence rate of harmful alcohol use is 25% or one in four of adults (n=212) in the Falkland Islands of which 43 % are female (n=91) and 57 % are male (121). Of the 850 respondents who completed the AUDIT with a range of scores between 1 and 40, the mean score was 5.257344 indicating alcohol consumption within safer levels, (CI 95% - 0.297717, Upper CI 95 % 5.555061, Lower CI 95 % 4.959627, Standard Deviation 4.424882). 11% of the sample described themselves as non drinkers (n=181).

Non drinkers were 43% female (n=39) and 57% male (n=51). Meanwhile, two out of three respondents (n = 548) reported drinking alcohol with of an AUDIT score of <8, of those 65 % were female (n=358) and 35 % (n=190) were male.

Drug use in the Falkland Islands (DAST-10)

One in ten respondents reported using illicit drugs or prescribed medication above the level recommended (n=75). In total, 938 respondents completed the question, of those respondents 93 % report no drug use (n=847). Applying the DAST-10 cut off score of 1> there was no significant differences found between female respondents (n=39) and male respondents (n=36). Mean score .1354. Standard deviation .58967. Standard error .01925. Ten respondents scored 3 or more on the DAST 10 questions indicating requiring further investigation for drug dependency. Mean score is 0.6. Standard deviation .24. range of 1-8, CL 95% - 0.037785, Upper CI 95 % 0.173179, Lower CI 95% - 0.097.

Discussion

The study sought to identify the estimated prevalence of common mental disorders in the Falkland Islands. The findings suggest that one in eight adults have moderate symptoms of depression or above, this is less than the estimated global prevalence of one in four (25%) and UK prevalence of one in six (16%), however, is aligned with the European estimated prevalence for depression at one in eight (12 %) (WHO 2017, p 8). A similar prevalence rate is found with anxiety symptoms, where one in eight adults have moderate anxiety symptoms. The Falklands findings reflect global, European and UK findings where women report higher levels of depressive and anxiety symptoms.

The estimated prevalence of posttraumatic stress symptoms was one in ten adults in the Falkland Islands. Female respondents aged between 18-30 years and males' respondents aged between 50 and 70 years report higher prevalence. The prevalence of PTSD is higher in the Falklands, than global estimates of between 5.6% - 7.7 % (Koenen et al 2017; Hyland et al 2020). For trauma exposed populations the prevalence of stress symptoms related to life experiences, is expected to be higher (Koenen et al 2017).

Alcohol use at potentially harmful levels is found at higher prevalence than UK and global estimates, while drug use is found at a lower prevalence. This may reflect the availability

of alcohol and lack of access to substances in this remote island community. Also, the social acceptance of alcohol use and taboo of reporting drug use.

Conclusion

As the first community prevalence study of common mental disorder within the Falkland Islands this survey establishes a benchmark to consider public health policy and practice. Primary care is the gateway to access treatment for common mental disorder in the Falklands. Implication for clinical practice, following best practice guidelines, indicates that implementing consistent screening for common mental disorders, alcohol and drug use, would improve detection within the community.

Implication for public mental health suggest that population subgroups exist within the Falklands community who are at greater risk of developing common mental disorders, alcohol or drug use, and that enhancing public awareness of those more vulnerable may help increase self-detection and uptake of services.

Strengths - As the first community-based prevalence study of common mental disorder in the Falkland Islands population the sample was sufficient to provide credibility. The study contributes to knowledge on the prevalence of common mental disorder and substance use disorders in UKOTs.

Limitations – Transferability of findings is limited. The small sample size is acknowledged. Plus, the diverse range of nationalities that exist within the Falklands community are not represented within the sample. Non-binary coding for sex/ gender in the demographic characteristics of the survey would have enhanced inclusion.

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Statement of Ethical approval

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