

Table S1. Barriers and facilitators to medication and exercise adherence.

<i>First author, year</i>	Barriers	Facilitators
Medication		
<i>Adriano, L. S., 2017</i>	Uncertainty of medication dosage; Forgetfulness; Adverse reactions to medication; Uncertainty of medication use	Tracking medication-taking; More certainty around how to take medication
<i>Chaney, J. M., 1989</i>	Poor family functioning; Family stressors; Mother having low coping behavior; Father having low level of family satisfaction	High family functioning; Mother having more effective coping behavior; Father having high level of family satisfaction
<i>El Miedany, Y., 2019</i>	N/A	Shared decision-making aid
<i>Favier, L. A., 2018</i>	None emerged significant	None emerged significant
<i>Hawwa, A. F., 2015</i>	Oral route of medication; Low severity of disease; Greater medication side effects	Higher disease activity; Fewer medication side effects; Younger age of patient
<i>Litt, I. F., 1982</i>	Poor self-esteem; Poor social adaptation	Positive self-view; Greater adolescent autonomy
<i>Lohse, A., 2021</i>	Poor therapeutic alliance between provider and child	Strong therapeutic alliance between provider and child
<i>Marshall, A., 2019</i>	N/A	N/A
<i>Mulligan, K., 2015</i>	N/A	N/A
<i>Pelajo, C. F., 2012</i>	Patient forgetfulness of medication; high side-effects of medication; Barriers to going to the hospital or fill medication; Financial burden	Knowledge of treatment protocol; Lower side-effects to medication; Fewer barriers in travelling to the hospital and medication
<i>Rapoff, M. A., 2005</i>	Longer disease duration; Lower severity of disease, Lower socioeconomic status (SES)	Newly diagnosed; High symptom prevalence; Higher SES
<i>Rapoff, M. A., 2002</i>	Education alone without behavioral intervention; Mild disease severity	Nurse-administered behavioral intervention; Higher symptom severity
Exercise		
<i>Birt, L., 2014</i>	Child responsibility for completing exercise; Strained parent-child relationship; Lack of time; Lack of enjoyment of exercise	Building exercise into family routine; Instituting rewards for completing exercises (e.g., computer time); Doing exercises with siblings or parents; Experiencing physical or quality of life improvement from exercise
<i>Britton, C., 1999</i>	Consequences to family life associated with exercise adherence (e.g., takes more time to be incorporated into daily routine, parental fear of child injury, etc.); Uncertainty about splint effectiveness	Social support and acceptance from family members, siblings, and friends
<i>De Civita, M., 2007.</i>	N/A	N/A

<i>Houghton, K.M., 2018</i>	Greater chronicity of treatment regimen	More in-person or group-based exercise; Incorporate technology into exercise tracking; Reducing pain and focusing on this reduction
<i>Risum, K., 2018</i>	Lower age; Use of biological medication; Low accelerometer wear time; Pain	Use of biological medication; Participation in organized physical activity; Enjoyment of exercise; Becoming physically fit
<i>Singh-Grewal, D., 2007</i>	Failure to demonstrate reduction in disease morbidity; Accessibility to training center	Home-based exercise programs; Informing patient of improvements gained from exercise
<i>Sims-Gould, J., 2018</i>	Lack of enjoyment in exercise; Time required to complete exercise; Scheduling concerns; Forgetfulness; Physical ailments	Parental support
<i>Wynn, K. S., 1986</i>	High perceived hopelessness for cure or relief; Not understanding in-home treatment protocols; Low belief in treatment efficacy	High patient belief in treatment efficacy; Thermotherapy recommendation; Writing down in-home treatment protocols
Medication & Exercise		
<i>April, K. T., 2006</i>	N/A ₁	N/A
<i>Brandelli, Y. N., 2019</i>	Parent fear or catastrophizing of child's pain during treatment	N/A
<i>Cartwright, T., 2015</i>	Desire to be a normal teenager; Psychosocial burden of living with JIA	Effective emotional coping strategies; Taking control of treatment
<i>Degotardi, P. J., 1999</i>	Dislike for exercise	Reminder tools, such as alarms; Behavioral reward systems for adherence; Effective emotional coping skills
<i>Feldman, D. E., 2004</i>	N/A	N/A
<i>Feldman₁, D. E., 2007</i>	Early combination treatment of medication and exercise (opposed to add-on treatment); Adolescents' high perceived responsibility	Healthcare providers discussing treatment importance and adherence; Behavioral reward systems for adherence; Educational interventions about benefit of treatment
<i>Feldman₂, D. E., 2007</i>	Caregiver-physician disagreements; Physical therapist-caregiver disagreements; Severity of disease; Older age of patient	Belief that treatment is helpful; Provider explanations of treatments and effectiveness to caregiver; Educational interventions; Provider communication perceived as caring and open
<i>Grande, S. W., 2019</i>	N/A	Normalizing illness through shared experience with peers
<i>Hayford, J. R., 1988</i>	Parents assumed less responsibility with adolescents; Failure to see improvements with exercise; Poor	Greater parental sharing of responsibility with child; Importance of exercise is thoroughly explained;

1. Studies listed with N/A either did not focus on or did not report barriers and/or facilitators to adherence.

	communication between parents, adolescents, and physical therapist	Provider and patient plan for responsibility of transition
<i>Kyngas, H., 2002</i>	Lower perceived effect of disease on social aspects, lower energy and motivation, low fear	Higher child motivation to engage in treatment; Higher fear of disease flare ups; Significant threats to social well being
<i>Thompson, S. M., 1995</i>	Providing documentation with treatment recommendations rather than discussing them with the patient	Provider recommendation of multiple treatment options; High quality of information given
<i>Toupin-April, K., 2009</i>	Economic hardship	Use of complementary alternative healthcare

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