

Evidence Profile 4.1: A Proactive Approach to Bladder and Bowel Management in Adults

Recommendation 4.1 Evidence Profile (Quantitative)

Recommendation question 4: Should physical activity be recommended to improve outcomes in persons living with fecal incontinence and/or constipation?

Recommendation 4.1: The expert panel recommends that as part of a wider multicomponent program, health providers encourage persons living with constipation to engage in low-intensity physical activity for about 30-60 minutes (as tolerated) at least three times a week to help manage constipation.

Population: Adults living with constipation or fecal incontinence

Intervention: Exercise/movement

Comparison: No exercise/movement

Outcomes: Quality of life, constipation

Setting: Community

Bibliography: 2082, 1391, 5509

Quality assessment							Study details		No. of participants		Reported effects/outcomes	Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication Bias	Country	Intervention	Intervention	Control			
Constipation (patient assessment of constipation symptom [PAC-SYM], constipation severity instrument [CSI], constipation visual analogue scale [CVAS], Bristol stool chart)													
1	Systematic Review of RCTs	Serious ^a	Not serious	Not serious	Not serious	Not serious	Various	9 randomized controlled trials involving 680 participants were included. Eight studies involved aerobic exercise and only one study involved anaerobic exercise. The aerobic exercises included were Qigong, walking and physical movement.	N=351	N=329	The systematic review and meta-analysis indicates that exercise had significant benefits as a means of improving the symptoms of constipation patients [relative risk (RR) ¼ 1.97; 95% CI: 1.19, 3.27; p¼.009; I2¼91.3%]. Subgroup analyses showed that aerobic exercise (RR ¼ 2.42; 95% CI: 1.34, 4.36; p¼.000; I2¼88%) similarly had a positive effect on constipation.	⊕⊕⊕○ MODERATE	2082: Guo et al., 2019
1	Quasi-experimental (before and after)	Serious ^b	Not serious	Not serious	Serious ^c	Not serious	Turkey	8 home visits every 2 weeks, and women followed up for 3 months. The individual education program included: advice on dietary fiber consumption, fluid intake, walking for 30-60 min daily or 3-5 times /week, and counseling on optimal position to defecate. There was no control group; results were analyzed pre- and post-intervention.	N=35 Constipation Severity Instrument (CSI) total mean scores: Pre-intervention = 38.61 ± 11.9 Post-	No true control	There was a decrease in CSI total mean scores and CVAS severity of constipation scores after the education programme. According to BSC, 71.5% of women stated their stool form to be 'sausage-shaped, but lumpy' before education program. This dropped to 17.1% after the program. Also, 8.5% reported that they did not observe 'separate hard lumps, like nuts (hard to pass)' stool after the education programme.	⊕○○○ VERY LOW	1391: Ayaz & Hisar, 2014

Evidence Profile 4.1: A Proactive Approach to Bladder and Bowel Management in Adults

Quality assessment							Study details		No. of participants		Reported effects/outcomes	Certainty	Reference
No of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Publication Bias	Country	Intervention	Intervention	Control			
									intervention= 24.03 ± 7.0				
Quality of Life (patient assessment of constipation quality of life [PAC=QOL], 36 item short form survey [SF-36])													
1	RCT	Very Serious ^d	Not serious	Not serious	Serious ^b	Not serious	Egypt	Physical activity and low caloric diet in addition to routine standard care for constipation for obese women with chronic constipation. Exercise intervention for 12 weeks, 3 times/week, each session lasting 60 min. Control group received "standard" care for constipation and same low-calorie diet.	N=62 Overall PAC-QOL score = 1.38 ± 0.53 SF-36 PCS score = 49.6 ± 3.14 SF-36 MCS score = 49.2 ± 2.21	N=63 Overall PAC-QOL score = 1.67 ± 0.36 SF-36 score = 48.6 ± 2.33 SF-36 score = 47.1 ± 2.41	The study reported an improvement in quality of life in persons living with incontinence who underwent the physical activity intervention in comparison to the control group.	⊕⊕○○ LOW	5509: Tantawy et al., 2017

Evidence Profile 4.1: *A Proactive Approach to Bladder and Bowel Management in Adults*

Explanations

- a. Based on ROBIS tool for systematic reviews, the study had some concerns in how the study was conducted. We downgraded by 1.
- b. Based on the ROBINS-I tool for quasi-experimental studies, the study had very serious concerns related to risk of bias due to limitations in how the study was conducted. We downgraded by 1.
- c. Total number of participants was less than the optimal 400 participants. We downgraded by 1.
- d. Based on the Risk of Bias tool for Randomized Controlled Trials, the study had some serious concerns related to risk of bias due to limitations in how the study was conducted. Therefore, we downgraded by 1.5.

CONFIDENTIAL