

Supplementary File 1

Search Strategy

ID	Cochrane Library	Results
#1	Cystectomies OR Cystectomy OR "bladder cancer*" OR "bladder neoplasm*" OR "bladder Tumor"	
#2	"Nutrition Assessment*" OR "Nutritional Assessment*" OR "Nutrition" OR "Nutritional"	
#3	Prehabilitation OR Prehabilitations OR Pre-habilitation OR Pre-habilitations OR Preoperative OR "Pre-operative" OR "Pre operative" OR Conditioning OR Exercise*	
#4	#1 AND #2 AND #3	
	68	
ID	Pubmed	Results
#1	"Cystectomy"[Mesh] OR Cystectomies OR Cystectomy OR "bladder cancer*" OR "bladder neoplasm*" OR "bladder Tumor"	
#2	"Nutrition Assessment"[Mesh] OR "Nutrition Assessment*" OR "Nutritional Assessment*" OR "Nutrition" OR "Nutritional"	
#3	Prehabilitation OR Prehabilitations OR Pre-habilitation OR Pre-habilitations OR Preoperative OR "Pre-operative" OR "Pre operative" OR Conditioning OR Exercise*	
#4	#1 AND #2 AND #3	
	142	
ID	Cumulative Index Of Nursing And Allied Health Literature (CINAHL)	Results
#1	Cystectomies OR Cystectomy OR "bladder cancer*" OR "bladder neoplasm*" OR "bladder Tumor"	
#2	"Nutrition Assessment*" OR "Nutritional Assessment*" OR "Nutrition" OR "Nutritional"	
#3	Prehabilitation OR Prehabilitations OR Pre-habilitation OR Pre-habilitations OR Preoperative OR "Pre-operative" OR "Pre operative" OR Conditioning OR Exercise*	
#4	#1 AND #2 AND #3	
	32	
ID	SCOPUS	Results
#1	Cystectomies OR Cystectomy OR "bladder cancer*" OR "bladder neoplasm*" OR "bladder Tumor"	
#2	"Nutrition Assessment*" OR "Nutritional Assessment*" OR "Nutrition" OR "Nutritional"	
#3	Prehabilitation OR Prehabilitations OR Pre-habilitation OR Pre-habilitations OR Preoperative OR "Pre-operative" OR "Pre operative" OR Conditioning OR Exercise*	

#4	#1 AND #2 AND #3	195
ID	Web of Science	
#1	Cystectomies OR Cystectomy OR "bladder cancer*" OR "bladder neoplasm*" OR "bladder Tumor*"	
#2	"Nutrition Assessment*" OR "Nutritional Assessment*" OR "Nutrition" OR "Nutritional"	
#3	Prehabilitation OR Prehabilitations OR Pre-habilitation OR Pre-habilitations OR Preoperative OR "Pre-operative" OR "Pre operative" OR Conditioning OR Exercise*	
#4	#1 AND #2 AND #3	149
TOTAL ARTICLES FOUND		586

INCLUSION / EXCLUSION CRITERIA		
	DUPLICATES	309
	TOTAL (DUPLICATES EXCLUDED)	277
	AFTER TITLE ABSTRACT READ	128
	AFTER FULL TEXTS READ	50
	RECORDS INCLUDED:	6
	RECORDS EXCLUDED:	44

	RECORDS INCLUDED:	
	n. 3-7-14-20-33-42	
	RECORDS EXCLUDED:	REASON:
7	n.1- 36-37-38-39-40-41	on-going
5	n. 2 -8-16-22-44	systematic review
12	n.4-5-6-10-17-24-25-26-27-31-32-46	Experts Opinion / journal article
14	n. 9-11-12-13-15-19-21-23-28-29 -30 -34-45-50	no NP intervention
2	n. 18-47	narrative review
3	n. 35-48-49	literature review

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JBI Critical Appraisal Tools

Table 1-9: JBI Checklist available at: <https://jbi.global/critical-appraisal-tools>

Score (mean): According to Pimsen et al., studies with a JBI score above 70% are considered of high quality, those scoring between 50% and 70% are of medium quality, and those with a score below 50% are categorized as low quality. The assessment of quality and risk of bias should be integrated as a separate column in the data extraction table to identify the appropriate level (low, medium, high).

Table 1

STUDY	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	ITEM 9	ITEM 10	ITEM 11	ITEM 12	ITEM 13	SCORE (mean)	SEEK FURTHER INFO	QUALITY
Jill et., al. 2018	Y	Y	Y	Y	Y	U	Y	Y	Y	Y	Y	Y	Y	92,31%		HIGH
D.Lyon et., al. 2017	N	N	Y	N	N	N	Y	Y	Y	Y	Y	Y	Y	61,54%		MEDIUM

Table 1. JBI Critical appraisal tool for Randomized Controlled Trials

Legend: Y=Yes; N=No; U=Unclear; NA=Not Applicable / Items from JBI Critical appraisal tool for Randomized Controlled Trials: 1.Was true randomization used for assignment of participants to treatment groups?; 2.Was allocation to treatment groups concealed?;3.Were treatment groups similar at the baseline?; 4. Were participants blind to treatment assignment?;5.Were those delivering treatment blind to treatment assignment? ;6.Were outcomes assessors blind to treatment assignment?;7.Were treatment groups treated identically other than the intervention of interest?;8.Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?;9.Were participants analyzed in the groups to which they were randomized?;10.Were outcomes measured in the same way for treatment groups?;11.Were outcomes measured in a reliable way?;12.Was appropriate statistical analysis used?;13.Was the trial design appropriate, and any deviations from the standard RCT design (individual randomization, parallel groups) accounted for in the conduct and analysis of the trial?

Table 2

STUDY	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	ITEM 9	SCORE (mean)	SEEK FURTHER INFO	QUALITY
Bente et., al. 2019	Y	U	N	N	Y	Y	Y	Y	Y	66.6%		MEDIUM

Table 2. JBI Critical appraisal tool for quasi-experimental studies

Legend: Y=Yes; N=No; U=Unclear; NA=Not Applicable / Items from JBI Critical appraisal tool for quasi-experimental studies:1=Is it clear in the study what is the 'cause' and what is the 'effect' (i.e. there is no confusion about which variable comes first)?; 2=Were the participants included in any comparisons similar?; 3=Were the participants included in any comparisons receiving similar treatment/care, other than the exposure or intervention of interest?; 4=Was there a control group?; 5=Were there multiple measurements of the outcome both pre and post the intervention/exposure?; 6=Was follow up complete and if not, were differences between groups in terms of their follow up adequately described and analyzed?; 7=Were the outcomes of participants included in any comparisons measured in the same way?;8=Were outcomes measured in a reliable way?; 9=Was appropriate statistical analysis used?

Table 3

STUDY	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	INCLUDE / EXCLUDE	SCORE (mean)	SEEK FURTHER INFO	QUALITY
Patel et., al. 2022	Y	Y	Y	Y	Y	Y	Y	Y	Y	100%		HIGH

Table 3. JBI Critical appraisal tool of analytical cross sectional studies

Legend: Y=Yes; N=No; U=Unclear; NA=Not Applicable / Items from Critical appraisal of analytical cross sectional studies: 1= Were the criteria for inclusion in the sample clearly defined?; 2=Were the study subjects and the setting described in detail?; 3=Was the exposure measured in a valid and reliable way?; 4=Were objective, standard criteria used for measurement of the condition?; 5=Were confounding factors identified?; 6=Were strategies to deal with confounding factors stated?; 7=Were the outcomes measured in a valid and reliable way?; 8=Was appropriate statistical analysis used?

Table 4

STUDY	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	ITEM 9	ITEM 10	SCORE (mean)	SEEK FURTHER INFO	QUALITY
Naif et. al. 2020	Y	Y	Y	Y	Y	N	N	Y	Y	Y	80%		HIGH

Table 4. JBI Critical appraisal tool for case control studies

Legend: Y=Yes; N=No; U=Unclear; NA=Not Applicable / Items from JBI Critical appraisal tool for case control studies: 1.Were the groups comparable other than the presence of disease in cases or the absence of disease in controls?; 2.Were cases and controls matched appropriately?; 3.Were the same criteria used for identification of cases and controls?; 4.Was exposure measured in a standard, valid and reliable way?; 5.Was exposure measured in the same way for cases and controls?; 6.Were confounding factors identified?; 7.Were strategies to deal with confounding factors stated?; 8.Were outcomes assessed in a standard, valid and reliable way for cases and controls?; 9.Was the exposure period of interest long enough to be meaningful?; 10.Was appropriate statistical analysis used?

Table 5

STUDY	ITEM 1	ITEM 2	ITEM 3	ITEM 4	ITEM 5	ITEM 6	ITEM 7	ITEM 8	ITEM 9	ITEM 10	ITEM 11	SCORE (mean)	SEEK FURTHER INFO	QUALITY
Cozzi, et., al. 2021	Y	Y	Y	N	N	Y	Y	Y	Y	NA	Y	72,73%		HIGH

Table 5. Critical appraisal of cohort studies included

Legend: Y=Yes; N=No; U=Unclear; NA=Not Applicable; / Items from JBI Critical appraisal checklist for Cohort Study: 1= Were the two groups similar and recruited from the same population? 2= Were the exposures measured similarly to assign people to both exposed and unexposed groups? 3= Was the exposure measured in a valid and reliable way? 4= Were confounding factors identified? 5= Were strategies to deal with confounding factors stated? 6= Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)? 7= Were the outcomes measured in a valid and reliable way? 8= Was the follow-up time reported and sufficient to be long enough for outcomes to occur? 9= Was follow-up complete, and if not, were the reasons to loss to follow up described and explored? 10= Were strategies to address incomplete follow-up utilized? 11= Was appropriate statistical analysis used?

