

Supplemental Table S1: Key Search Strategy	
Population	Aged OR elder* OR geriatr* OR gerontol* OR "baby boomer*" OR older OR
[Title/Abstract]	"oldest old" OR aged (Mesh)
(AND)	
Diagnosis and conditions [Mesh]	"opioid-related disorders/complications" OR "opioid-related disorders/drug therapy" OR "opioid-related disorders/nursing" OR "opioid-related disorders/prevention and control" OR "opioid-related disorders/psychology" OR "opioid-related disorders/rehabilitation" OR "opioid-related disorders/therapy"

Supplemental Table S2: Risk of Bias for Before-After (Pre-Post) Studies with No Control Groups

Citation	Study question or objective clear	Eligibility or selection criteria clearly described	Participants representative of real world patients	All eligible participants enrolled	Sample size appropriate for confidence in findings	Intervention clearly described and delivered consistently	Outcome measures pre-specified, defined, valid/reliable and assessed consistently	Assessors blinded to participant exposure to intervention	Loss to follow up after baseline 20% or less	Statistical methods examine changes in outcome measures from before to after intervention	Outcome measures were collected multiple times before and after intervention	Overall Risk of Bias Assessment (low, moderate, high risk)
Yajnik et al. 2019	Y	Y	N	Y	N	Y	Y	N	Y	Y	N	M
Goga et al. 2019	Y	N	Y	Y	Y	Y	Y	N	Y	Y	Y	L
Chen et al. 2019	Y	Y	N	Y	Y	Y	Y	N	Y	Y	Y	L

Evaluation: Y=yes, N=no, NR= Not reported

Scoring: 0-3 N=Low risk of bias (L), 4-8 N=Moderate risk of bias (M), 9-11 N= High risk of bias (H)

This tool was adapted from the original tool:

National Heart Lung and Blood Institute. Quality assessment tool for before-after (pre-post) studies with no control group [National Heart Lung and Blood Institute website].

2014 <https://www.nhlbi.nih.gov/health-topics/study-quality-assessment-tools>

Supplemental Table S3: Risk of Bias Table for RCT and Non-RCT Studies

Citation	Selection Bias (risk of bias arising from randomization process)			Performance Bias (effect of assignment to intervention)		Detection Bias		Attrition Bias	Reporting Bias	Overall Risk of Bias Assessment (low, moderate, high risk)
	Random Sequence Generation	Allocation Concealment (until participants enrolled and assigned)	Baseline differences between intervention groups (suggest problem with randomization?)	Blinding of Participants During the Trial	Blinding of Study Personnel During the Trial	Blinding of Outcome Assessment: Self-reported outcomes	Blinding of Outcome Assessment: Objective Outcomes (assessors aware of intervention received?)	Incomplete Outcome Data (data for all or nearly all participants)	Selective Reporting (results being reported selected on the basis of the results?)	
Fouladbak hsh 2011	-	-	?	-	-	-	-	+	+	M
El Shobary et al. 2008	+	+	+	+	+	+	?	+	+	L
Paris et al. 2008	+	-	+	-	-	+	-	+	+	M
Imasogie et al. 2009	-	-	+	-	-	-	-	+	+	M
Pesonen et al. 2011	+	+	+	+	+	-	+	-	+	L
Sulu et al. 2012	+	-	+	?	-	-	-	+	+	M
Motov et al. 2019	+	-	+	+	+	-	-	+	+	L
Singla et al. 2010	+	+	+	+	+	+	+	+	+	L

Note. Categories for risk of bias are as follows: Low risk of bias (+), unclear risk of bias (?), high risk of bias (-).

Scoring: 0-3 minuses=Low risk of bias (L), 4-6 minuses=Moderate risk of bias (M), 7-9 minuses= High risk of bias (H)

(Higgins JPT et al., 2016)