

Table 1: Systematic reviews of acupuncture for fatigue

Source: Karen Pilkington, CAM-Cancer Collaboration. [Acupuncture for fatigue](#) [online document]. June 7th, 2021.

First author, year	Design and methods	Number of studies Type of studies Number of patients	Main outcomes/focus	Main results/ Conclusions
Duong 2017	5 English databases searched to May 2017 Assessment using Cochrane Risk of Bias but does not appear to be reported	12 RCTs of acupuncture or acupressure (6 trials of acupuncture)	Mind and body practices for fatigue reduction in patients with cancer and hematopoietic stem cell transplant recipients (<i>acupuncture included and results presented separately</i>)	Acupuncture or acupressure (7 RCTs, 462 patients) against all controls: SMD -0.40 (95% CI -0.86, 0.05). Not significant if compared against sham or if acupuncture alone compared against all controls.
Grant 2015	11 databases (English and Chinese), trial registries and other sources searched to December 2013 Acupuncture intervention assessed using NICMAN framework	7 RCTs 690 participants	Acupuncture (manual, electric, or auricular acupuncture) for cancer-related fatigue – defining the quality	'The 7 trials reviewed meet some criteria for a quality acupuncture intervention. However, frequently elements of the intervention were not addressed, and it is possible that the dosage trialed was suboptimal.'
He 2013	8 databases (English and Chinese) searched to December 2012 Assessment using Cochrane Risk of Bias; described as relatively high quality but all were unclear bias Methods for meta-analysis unclear; (based on 2 RCTs) effects on mild and severe but not moderate fatigue.	7 RCTs 804 participants (4 trials of acupuncture)	Acupuncture and moxibustion for cancer-related fatigue	'With real acupuncture versus sham acupuncture, subjects receiving true acupuncture benefited more in the reduction of fatigue'

Jang 2020	4 databases (English) searched to May 2019 Assessment using Cochrane Risk of Bias; 6 RCTs low risk of bias and 3 RCTs were at moderate ROB due to issues with blinding and incomplete data outcomes	9 RCTs 809 participants	Acupuncture on cancer-related fatigue	Meta-analysis: Brief Fatigue Inventory scores 0.93 points lower 95% CI (-1.65, -0.20) in true acupuncture versus sham acupuncture and 2.12 points lower 95% C (-3.21, -1.04) in true acupuncture versus usual care. ‘The current literature review suggests that acupuncture has therapeutic potential in management of CRF for cancer survivors’
Ling 2014	18 databases (English and Chinese) searched to April 2014 Assessment using a checklist from the Scottish Intercollegiate Guidelines Network (SIGN) No meta-analysis carried out	11 RCTs 731 participants	Acupuncture and acupressure for cancer-related fatigue	‘Although results are inconclusive , acupuncture and acupressure tend to be effective in relieving CRF, with the former producing a greater improvement.’
Pan 2018	4 databases (English) searched to April 2016. Assessed using Cochrane Risk of Bias. Methodological quality of the trials was judged to be ‘relatively rigorous’	17 RCTs 810 breast cancer patients (4 RCTs with 177 participants with fatigue)	Acupuncture for hormone therapy–related side effects in breast cancer patients	No significant differences were observed in ... fatigue (SMD -0.07 (-1.04, 0.90))
Posadzki 2013	14 databases (English, Chinese, Japanese and Korean) searched to November 2012 Assessed using Cochrane Risk of Bias; all had unclear or high risk of bias No meta-analysis carried out	7 RCTs 548 participants	Acupuncture for cancer-related fatigue	‘Overall, the quantity and quality of RCTs included in the analysis were too low to draw meaningful conclusions. ’
Vannorsdall 2020	4 databases (English) were searched to March 2019 Assessed using Cochrane Risk of Bias; acupressure RCT rated as low risk of bias	11 studies with 12 sets of data (1 RCT of acupressure with 43 participants)	Interventions for multidimensional aspects of breast cancer-related fatigue	‘a large effect size was observed for a single trial of acupressure across all three CRF (cancer-related fatigue) dimensions (p < 0.05)’

Wu 2019	4 databases (English) were searched to July 2017. Assessed using Cochrane Risk of Bias; 59 studies had low methodological quality; remainder low risk of methodological problems	182 studies 18,491 participants (unclear how many were of acupuncture as studies not cited)	Nonpharmacological interventions for cancer-related fatigue (network meta-analysis)	'for the European Organization for Research and Treatment of Cancer Quality of Life Questionnaire (EORTC QLQ-C30), acupuncture and CBT ranked best'
Yuangqing 2020	4 databases (English) were searched to April 2020. Assessed using Cochrane Risk of Bias and GRADE. Evidence for fatigue graded as low with substantial heterogeneity. Note: <i>same RCTs as in Pan 2018 but results different</i>	20 RCTs 2001 patients (4 RCTs with 177 participants on fatigue)	Acupuncture for hormone therapy-related side effects in breast cancer patients	'The pooled results suggested that acupuncture led to moderate improvements in ... fatigue' (SMD = -1.19; 95% CI = -2.25 to 0.12; P = 0.02)
Zeng 2013	5 English databases searched to May 2013 Assessed using Cochrane Risk of Bias; 3 judged high/4 low risk but table indicates 5 high risk (Note: same trials as above except for one recent RCT in place of an unpublished RCT)	7 RCTs 689 participants	Acupuncture for cancer-related fatigue	Overall favourable result for acupuncture but 3 of the 4 comparisons were non-significant and the 4 th involved a combination of acupuncture plus educational interventions versus usual care.
Zhang 2018	7 databases (English and Chinese) were searched to November 2016 Used Cochrane Risk of Bias assessment 5 studies (4 according to authors; 5 in table) had a high risk of bias 5 studies judged high risk of bias in main meta-analysis; 6 comparisons included for a 3-arm trial in same meta-analysis	11 RCTs 10 RCTs, including 1327 patients in meta-analysis	Acupuncture for cancer-related fatigue	'Acupuncture is effective for CRF management and should be recommended as a beneficial alternative therapy for CRF patients'