

Table 1: Systematic reviews of yoga for cancer supportive care

Source: Karen Pilkington, CAM-Cancer Consortium. Yoga [online document]. December, 2019

First author, year, ref	Main outcomes	Number of studies	Main results/	Comments
		Type of studies Number of patients	Conclusions	
Buffart 2012	Physical and/or psychosocial	13 RCTs (1 in patients with lymphomas, 12 in a total of 744 patients with breast cancer)	Effect size on functional well- being was small and moderate to large for psychosocial outcomes. Effects on physical function and sleep were not significant.	Searches of 10 databases up to November 2011. Only RCTs were selected with non-exercise or wait list control groups. Quality scores based on 9 criteria, scores ranged from 22- 89%
Cramer 2012a	Fatigue	6 RCTs in a total of 362 breast cancer patients	Evidence that yoga has beneficial effects on fatigue in breast cancer patients and survivors.	Searches of 5 databases up to September 2011. Quality assessed using Cochrane risk of bias tool. All trials had several risks of bias,
Cramer 2012b	Health-related quality of life or psychological health	12 RCTs in a total of 742 breast cancer patients and survivors	Evidence of short-term effects on quality of life, well-being and psychological health. Efficacy found only during active cancer treatment.	Searches of 5 databases up to February 2012. Only RCTs in patients with a history of breast cancer were selected. Risk of bias was generally high based on Cochrane risk of bias tool.
Cramer 2017	Health-related quality of life, mental health and cancer- related symptoms	24 RCTs with a total of 2,166 participants (23 RCTs in meta-analysis) with breast cancer	'Moderate-quality evidence for improving health-related quality of life and reducing fatigue and sleep disturbances	Cochrane review Search of 5 databases (including an Indian database) and trials databases to January 2016.

			when compared with no therapy, as well as for reducing depression, anxiety and fatigue, when compared with psychosocial/educational interventions. Very low-quality evidence suggests that yoga might be as effective as other exercise interventions and might be used as an alternative to other exercise programmes.'	Cochrane risk of bias assessment revealed that 13 studies had low risk of selection bias, 5 studies had adequate blinding of outcome assessment and 15 studies had low risk of attrition bias
Dong 2019	Cancer-related fatigue	17 RCTs that included 2,183 breast cancer patients	'Yoga can be considered as an alternative therapy for relieving fatigue in breast cancer patients who have completed treatment or are undergoing anti-cancer treatment.'	Search of 8 English and Chinese databases to January 2019. Cochrane risk of bias criteria used for assessment Overall risk of bias judged moderate but all trials were at risk of performance bias due to lack of blinding.
El-Hashimi 2019	Quality of life	8 RCTs with 545 breast cancer participants	'This meta-analysis preliminarily demonstrated that yoga is probably as effective as other exercise modalities in improving the QoL of women with breast cancer'	Search of 10 databases plus Google up to November 2018. Quality assessment reported to have been conducted but criteria and results of assessment unclear.
Felbel 2014	Distress, fatigue, anxiety, depression. Quality of sleep	1 RCT in 39 people with haematological malignancies.	'The role of yoga in haematological malignancies remains unclear'	Cochrane review. Search of Cochrane CENTRAL and MEDLINE to Feb 2014, conference proceedings, trial registers. Only RCTs selected.

2

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				Cochrane risk of bias used for assessment and judged to be high
Harder 2012	Any measurable benefit, both physically and psychologically	18 RCTs in a total of 760 women with breast cancer	Moderate to good evidence in favour of the yoga interventions, greatest impact on global quality of life and emotional well-being.	Search of 8 databases up to June 2012. Only RCTs selected. Quality assessed using the PEDro scale. Trials scored between 1 and 8 with a median of 6. Note: for 2 trials a total of 6 separate reports were included and the outcome in one trial did not include a clinical outcome measure.

Lin 2011 (also listed as Tsauo 2011)	Psychological health (i.e., anxiety, depression, distress, and stress), quality of life, and physical health	10 RCTs in a total of 313 patients (7 in breast cancer, 1 in lymphoma, 2 in mixed cancer types)	Significantly greater improvements in psychological health with yoga than in support groups or wait list control groups.	Searches of 7 databases up to July 2010. Only RCTs selected. PEDro scores ranged from 4 to 7 out of possible maximum of 10.
Pan 2017	Treatment- related side effects and quality of life	16 RCTs with a total of 930 participants with breast cancer	'Comparing yoga groups to control groups, there was a statistically significant difference in overall health-related quality of life, depression, anxiety and gastrointestinal symptoms.'	Search of 3 databases up to June 2013 Cochrane risk of bias criteria used for assessment No study fulfilled all criteria.
Sadja and Mills 2013	Self-reported fatigue	10 RCTs in a total of 583 breast cancer survivors	'yoga interventions may be beneficial for reducing cancer- related fatigue in women with breast cancer.'	Search of PubMed and PsycINFO for studies up to June 2012. Only RCTs selected, a range of yoga interventions, type of cancer and treatment stage Risk of bias was high based on Cochrane risk of bias assessment.
Sharma 2013	Anxiety, depression, sleep disturbances, pain, quality of life and/or stress	13 studies including 6 RCTs, 1 quasi-experimental and 6 pretest-posttest (uncontrolled trials). Includes studies in adults and children.	The evidence is mixed although generally positive.	Search of 3 databases for studies published Jan 2010-July 2012 only. All study types included. No systematic quality assessment reported.

Sharma 2016	Various outcomes	23 quantitative studies (21 RCTs, 1 pre-post and 1 cohort) in a total of 2,187 patients with breast cancer	22 studies had statistically significant changes 'Despite the limitations yoga as an integrative form of therapy for breast cancer is a promising approach'	Search of 4 databases for studies published in English between 2013 and May 2016. No quality or risk of bias assessment carried out. No meta-analysis
Tang 2019	Sleep disturbance	25 RCTs of yoga (13) or walking (12) with a total of 1,918 participants (all breast cancer except for 1 lymphoma, 1 colorectal cancer and 1 all cancers)	'We concluded that walking is more effective than yoga in improving sleep disturbance in cancer patients'	Search of 7 English and Chinese database from January 1997 to January 2018. Cochrane risk of bias criteria used. Studies rated at high or unclear risk of bias: incomplete outcome data (n = 13); blinding of participants, personnel and outcome assessors (n = 8); random sequence generation (n = 4); allocation concealment (n = 2).
Tolia 2018	Physical and psychosocial outcomes	3 RCTs with a total of 155 oncology (breast cancer) patients treated with radiotherapy	'Yoga was found to have a substantial benefit in cancer patients' distress, anxiety, and depression. It also demonstrated a moderate impact on fatigue and emotional function and a small and insignificant effect on functional well-being	Search of 3 databases up to May 2017 Cochrane risk of bias criteria used for assessment. All 3 studies judged to be high quality (but at least one was at risk of bias due to lack of blinding) No meta-analysis.

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Psychological functioning and quality of life	6 RCTs in a total of 382 women with breast cancer	Statistically significant effect of yoga on quality of life, nonsignificant difference in psychological functioning or fatigue.	Searches of 5 databases (2 Chinese) up to May 2011 Only RCTs comparing yoga against no treatment were selected. Quality assessed using 4 criteria: sequence generation, allocation concealment, blinding, incomplete data. Methodological quality was described as not high.