Systematic Review

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The Role of Social Support in Quality of Life After Mastectomy for Breast Cancer: A Systematic Review

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Abstract

Background: *Breast cancer survival rates continue to improve; however, mastectomy can substantially affect quality of life (QoL) across physical, psychological, and social domains. This systematic review evaluated the association between social support interventions and QoL outcomes among women who underwent mastectomy without reconstruction, regardless of surgical technique.*

Aim: *To evaluate the association between social support interventions and quality-of-life outcomes among women after mastectomy for breast cancer.*

Methods: *A systematic search of MEDLINE (PubMed), Embase, Scopus, Web of Science, and the Cochrane Central Register of Controlled Trials (CENTRAL), along with manual reference screening, was conducted through April 29, 2025. Eligible studies included randomized and nonrandomized designs evaluating social support interventions and QoL using validated instruments. Risk of bias was assessed using the Cochrane Risk of Bias tool for randomized trials and the Newcastle–Ottawa Scale for observational studies.*

Results: *Fifteen studies involving 1,546 participants met the inclusion criteria. Interventions varied widely and included peer support groups, psychological counseling, family-centered programs, and digital or technology-mediated platforms. Thirteen of the fifteen studies (87%) reported statistically significant improvements in overall quality of life, favoring social support interventions compared with control conditions over follow-up periods ranging from 4 to 12 weeks. Improvements were most consistently observed in emotional and social domains, whereas effects on physical functioning were smaller or mixed. Considerable heterogeneity was noted across study designs, intervention types, quality-of-life instruments, and cultural settings.*

Conclusion: *Social support interventions appear to improve QoL among post-mastectomy breast cancer patients, particularly in psychological and social domains. While these findings support the integration of psychosocial care into postoperative management, substantial heterogeneity and methodological limitations across studies warrant cautious interpretation. Larger, high-quality, and culturally diverse trials are needed to confirm these effects and identify the most effective models of support.*

Introduction

Breast cancer represents one of the most significant health challenges for women globally. In 2022, the Global Cancer Observatory estimated a crude incidence rate of 58.7 per 100,000 woman-years and a crude mortality rate of 17 per 100,000 woman-years worldwide. Even though screening and treatment advances have improved outcomes, many women experience long-lasting physical, psychological, and social sequelae related to the disease and its management (Bray et al., 2018).

Mastectomy, whether partial or total, continues to be a common component of care for early-stage and locally advanced disease. While oncologically effective, it is a radical procedure that can disrupt body image, sexuality, and perceptions of femininity, and is frequently accompanied by anxiety and depression (Alinejad Mofrad et al., 2021; Martins Faria et al., 2021; Archangelo et al., 2019; Fortin et al., 2021; Liu et al., 2021). Accordingly, improving quality of life (QoL) is a central priority in post-mastectomy survival (Chen et al., 2022; Durosini et al., 2022).

Social support, encompassing the perceived and actual availability of reliable care and assistance (Lakey, 2020), has been proposed as a modifiable factor that may influence postmastectomy QoL outcomes. Multiple studies suggest that greater support is associated with improved psychosocial functioning among women following a mastectomy (Culbertson et al., 2020). However, the literature is heterogeneous with respect to study designs, populations, type and intensity of treatment, and instruments used to measure QoL outcomes. These variations have yielded mixed or imprecise estimates of the effects and have affected the generalizability of the findings. Thus, despite suggestive evidence, the field lacks a rigorous domain-specific synthesis that can reconcile inconsistencies and guide clinical programs and survivorship care planning.

To address this gap, we conducted a systematic review to estimate the association between social support and QoL among women after mastectomy and to explore whether different forms of support (e.g., emotional, informational, practical; partner-integrated vs. patient-focused) may differentially influence physical, psychological, and social QoL domains. We hypothesized that higher levels of social support are associated with better overall and domain-specific QoL and that the magnitude of benefit varies by support type and delivery context.

Materials and Methods

This systematic review was conducted and reported in accordance with the Preferred Reporting Items for Systematic Reviews and Meta-Analysis (PRISMA) (Page et al., 2021) and methodological guidance from the Cochrane Handbook for Systematic Reviews of Interventions (Higgins, 2024).

Search strategy

A systematic search was conducted at MEDLINE (via PubMed), Scopus, Embase, Cochrane Library (CENTRAL), and Web of Science from database inception to April 29, 2025. The search combined free-text terms and controlled vocabulary (e.g., MeSH and Emtree) for the concepts "Breast Neoplasms," "Mastectomy," "Social Support," and "Quality of Life". Strategies were adapted to each database's syntax and indexing.

Reference lists of included studies were also screened. Languages were restricted to English, Portuguese, and Spanish (these languages were included as they were the team's working languages). The complete database strategies are provided in the Supplementary Material.

Eligibility criteria

Studies were eligible if they met all of the following: (1) design: experimental (randomized controlled trial or quasi-experimental studies) or observational cohort (prospective or retrospective); (2) population: were women aged ≥18 years who underwent mastectomy for breast cancer; (3) intervention: any social-support modality (emotional, psychological, family-based, peer-related, or healthcare-professional support); (4) outcome: QoL assessed as a primary outcome using validated instruments; and (5) comparator: presence of a comparison group (e.g., usual care, lower/no support, patient-only vs partner-integrated, or alternative support modality).

Studies were excluded if they: (1) involved prophylactic or reconstructive mastectomies; (2) did not use a validated QoL instrument; or (3) were non-comparative designs or non-original research (e.g., case reports, editorials, letters, narrative reviews, or systematic reviews).

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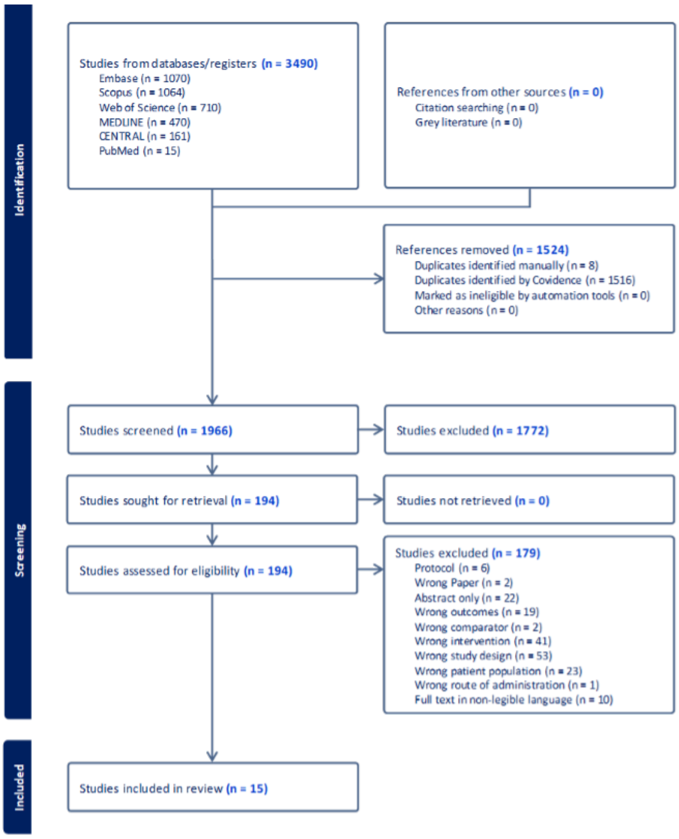


Figure 1: *PRISMA flowchart.*

Study selection

All records retrieved from the databases were imported into Covidence (Covidence, 2023) for duplicate removal, screening, and decision tracking. Two reviewers independently screened titles and abstracts, followed by an independent full-text assessment of potentially eligible studies. Discrepancies were resolved through discussion, with arbitration by a third reviewer when needed.

At the title and abstract levels, records unrelated to breast cancer, mastectomy, or psychosocial interventions were excluded. Full-text articles were assessed against the prespecified eligibility criteria using the PICOS framework (population, intervention, comparator, outcomes, and study design). The reasons for exclusion at this stage were recorded in the review log and are summarized in the PRISMA flow diagram (Figure 1).

Data extraction

Using Covidence's standardized extraction forms, reviewer pairs independently extracted: (1) study identifiers (authors, years, country, and funding), (2) design features (study type, randomization method, and blinding), (3) participant characteristics (sample size, age distribution, cancer stage, surgery type, marital status, and exclusion criteria), (4) intervention details (type, duration, frequency, theoretical framework, and delivery mode), (5) control conditions (standard care components and attention control elements), (6) outcomes (QoL instruments, assessment timepoints, and domain scores), (7) statistical data (baseline and follow-up scores, effect sizes, confidence intervals, and p-values), and (8) quality indicators (attrition rates, adherence, and adverse events).

Discrepancies were resolved through discussion, and a third reviewer was consulted when a consensus was not reached. Missing or unclear data were marked as "not reported."

Risk of bias assessment

For RCTs, the risk of bias was assessed using the Cochrane Risk of Bias Tool version 1.0 (RoB 1) (Sterne et al., 2016) across five domains: random sequence generation, allocation concealment, blinding of participants and personnel, incomplete outcome data, and selective reporting. Each domain was rated as having low risk, high risk, or some concerns, leading to an overall judgment of the risk of bias in the studies.

The Newcastle–Ottawa Scale (NOS) (Wells, 2000) was used for observational cohort studies. This tool assesses the study quality across three domains: selection of study groups, comparability of groups, and ascertainment of exposure or outcome. The studies were scored from 0 to 9 stars, with higher scores indicating better methodological quality. Two reviewers independently assessed the bias, and disagreements were resolved by consensus. Risk-of-bias judgments were not used as exclusion criteria in this study.

Data synthesis

Owing to the heterogeneity of study designs, interventions, and outcome reporting, as well as the limited availability of comparable data, a meta-analysis could not be conducted. Similarly, meta-regression analyses to explore factors associated with QoL outcomes were not feasible in this study.

Instead, a qualitative synthesis was performed. Study characteristics and outcome data were described narratively, including the results for each instrument domain and total scores when reported. The results were stratified by type of intervention and comparator group and presented according to each follow-up time point. For each domain and time point, means and standard deviations were reported when available, allowing for structured comparisons between studies.

Results

Study selection

Database searches yielded 3490 records. After removing 1524 duplicates, 1966 unique records underwent title/abstract screening. Of 194 full text assessed for eligibility, 15 studies met the inclusion criteria and were included in the qualitative synthesis (Figure 1).

Study characteristics

The 15 included studies comprised 9 RCTs, 1 quasi-experimental study, 2 prospective cohort studies, and 3 retrospective cohort studies, published between 2005 and 2025 across five countries (China, n=7; Iran, n=5; Poland, n=1; Bosnia and Herzegovina, n=1; Sweden, n=1) with a combined sample of 1546 women. Participants had stage I–III breast cancer and had undergone radical, modified radical, or partial mastectomy. The detailed characteristics are summarized in Table 1.

Interventions

Social support interventions were grouped as follows: (1) psychological (e.g., individual/group counseling, cognitive-behavioral approaches), (2) digital programs (WeChat-based care), and (3) multimodal (e.g., education plus support, palliative care frameworks, theory-based nursing, family centered programs). The intervention duration typically ranged from 4 to 12 weeks. Control groups most often received standard care (routine postoperative nursing, usual educational material, occasional phone follow-ups, and conventional medical treatment). The detailed intervention components and comparators are reported in Table 2 and Supplementary Material 2.

Instruments

QoL outcomes were measured using validated instruments: FACT-B/G (n = 6), EORTC QLQ-C30/BR23 (n = 4), and SF-36 (n = 2). Other instruments were used less frequently or for specific subdomains. Follow-up assessments were typically 4–12 weeks (n = 13), with one study extending to 12 months. Additional details of the study are presented in Table 1.

Outcomes

Across all instruments, 13 of 15 studies reported statistically significant improvements in overall QoL favoring social support interventions compared with control conditions. Due to substantial heterogeneity in study designs, intervention modalities, QoL instruments, and outcome reporting, a quantitative meta-analysis was not feasible. Therefore, results are presented narratively, with detailed study-level estimates provided in Table 2 and Supplementary Material 2.

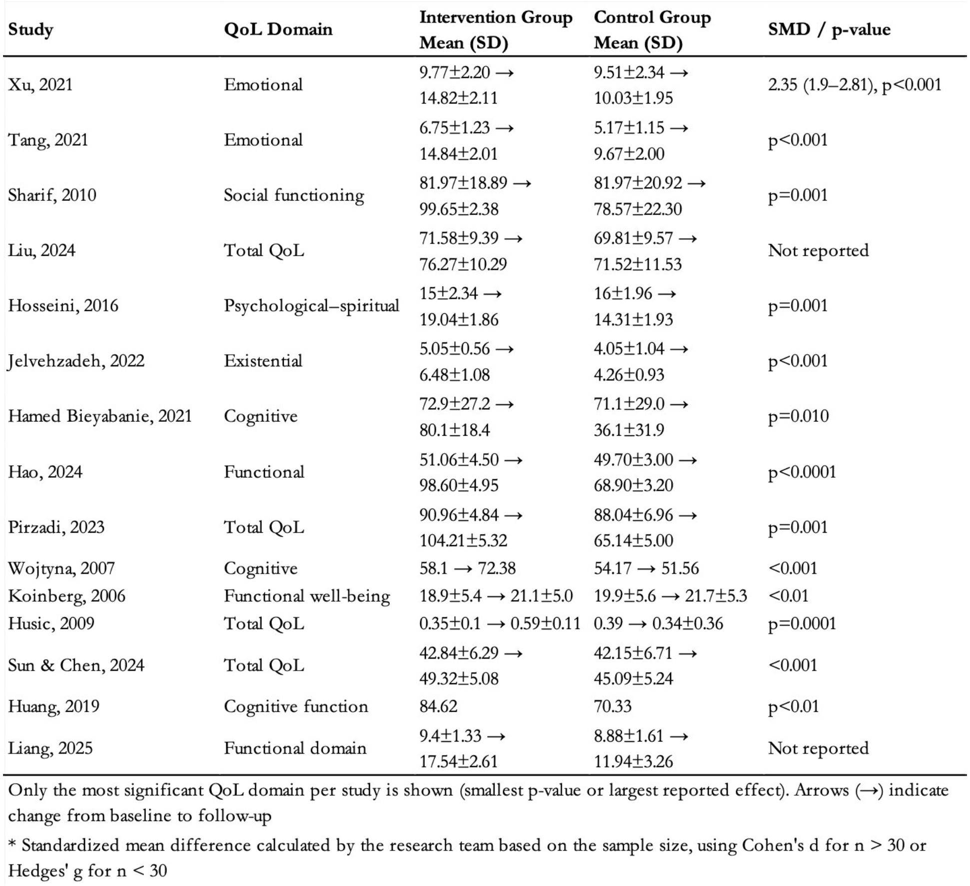
Studies using the FACT-B/G total score (0–144 scale) demonstrated net between-group improvements of approximately 5–10 points in intervention groups over follow-up periods ranging from 8 to 24 weeks. Similarly, studies employing the SF-36 (0–100 scale) reported intervention-favoring gains of approximately 3–7 points over 8–12 weeks. For studies using the EORTC QLQ-C30/BR23 Global Health scale (0–100 scale), intervention-associated increases of approximately 10–20 points were observed over 8–12 weeks, while control groups remained stable or showed declines.

When minimally important difference (MID) thresholds were available—such as 5–10 points for EORTC global health, approximately 5–8 points

Study (Year, Country)	Design & Sample Size	Population	Intervention (n)	Control (n)	QoL Tool	Follow-up
Xu, 2021 (China)	RCT (n=126)	<60 years (47.13±7.58 / 48.74±6.88)	WeChat-based care (63)	Nursing, psychological, home care (63)	FACT-B	After nursing
Tang, 2021 (China)	RCT (n=96)	27–71 years (52.87±8.96 / 53.12±9.07)	Multidimensional (48)	Conventional postop nursing (48)	FACT-B	After nursing
Sharif, 2010 (Iran)	RCT (n=99)	30–70 years (majority 40–49)	Peer-led education (49)	Educational pamphlet (50)	EORTC QLQ-C30/BR23	2 months
Liu, 2024 (China)	RCT (n=124)	>18 years	CALM intervention (62)	Routine care (62)	FACT-B	6 months
Hosseini, 2016 (Iran)	RCT (n=29)	25–65 years	Social capital enhancement (15)	Routine treatment (14)	Ferrans & Powers QoL	3 months
Jelvehzadeh, 2022 (Iran)	RCT (n=48)	25–65 years	CBT (Simonton) (24)	No psychological treatment (24)	McGill QoL	2 months
Hamed Bieyabanie, 2021 (Iran)	RCT (n=76)	<65 years	6 counseling sessions (32)	Booklet content (32)	QLQ-C30	2 months
Hao, 2024 (China)	RCT (n=200)	Not specified	Personalized graded psychological intervention (100)	Routine nursing (100)	FACT-B	2 months
Pirzadi, 2023 (Iran)	RCT (n=56)	22–55 years	Solution-focused counseling (28)	Educational program without SFC (28)	WHOQOL-BREF	6 weeks
Wojtyna, 2007 (Poland)	Prospective cohort (n=67)	32–66 years	CBT (Simonton) + support group (35)	Not described (32)	EORTC QLQ-C30	2 months
Koinberg, 2006 (Sweden)	Quasi-experimental (n=96)	Stage I–II breast cancer	Multidisciplinary educational programme (50)	Traditional follow-up (46)	FACT-G	12 months
Husic, 2009 (Bosnia)	Prospective cohort (n=70)	59.3±9.7	Daily hospice multidisciplinary care (35)	Without daily hospice (35)	SF-36	3 months
Sun & Chen, 2024 (China)	Retrospective cohort (n=100)	18–70 years (52.16±7.46 / 51.37±7.16)	Neuman's nursing model (50)	Routine care (50)	SF-36	Not detailed
Huang, 2019 (China)	Retrospective cohort (n=263)	40.18±12.56 / 41.33±11.87	Psychological counseling (152)	Routine nursing (111)	QLQ-30	3 months
Liang, 2025 (China)	Retrospective cohort (n=96)	Not specified	Case management extended care (48)	Routine care (48)	FACT-B	3 months

RCT: Randomized Controlled Trial; CBT: Cognitive Behavioral Therapy; CALM: Managing Cancer and Living Meaningfully; QoL: Quality of Life; EORTC QLQ-C30: European Organisation for Research and Treatment of Cancer Quality of Life Questionnaire; FACT-B: Functional Assessment of Cancer Therapy-Breast; FACT-G: Functional Assessment of Cancer Therapy-General; SF-36: Short Form-36 Health Survey; WHOQOL-BREF: World Health Organization Quality of Life-Brief.

Table 1: *Study characteristics.*



Study	QoL Domain	Intervention Group Mean (SD)	Control Group Mean (SD)	SMD / p-value
Xu, 2021	Emotional	9.77±2.20 → 14.82±2.11	9.51±2.34 → 10.03±1.95	2.35 (1.9–2.81), p<0.001
Tang, 2021	Emotional	6.75±1.23 → 14.84±2.01	5.17±1.15 → 9.67±2.00	p<0.001
Sharif, 2010	Social functioning	81.97±18.89 → 99.65±2.38	81.97±20.92 → 78.57±22.30	p=0.001
Liu, 2024	Total QoL	71.58±9.39 → 76.27±10.29	69.81±9.57 → 71.52±11.53	Not reported
Hosseini, 2016	Psychological–spiritual	15±2.34 → 19.04±1.86	16±1.96 → 14.31±1.93	p=0.001
Jelvehzadeh, 2022	Existential	5.05±0.56 → 6.48±1.08	4.05±1.04 → 4.26±0.93	p<0.001
Hamed Bieyabanie, 2021	Cognitive	72.9±27.2 → 80.1±18.4	71.1±29.0 → 36.1±31.9	p=0.010
Hao, 2024	Functional	51.06±4.50 → 98.60±4.95	49.70±3.00 → 68.90±3.20	p<0.0001
Pirzadi, 2023	Total QoL	90.96±4.84 → 104.21±5.32	88.04±6.96 → 65.14±5.00	p=0.001
Wojtyna, 2007	Cognitive	58.1 → 72.38	54.17 → 51.56	<0.001
Koinberg, 2006	Functional well-being	18.9±5.4 → 21.1±5.0	19.9±5.6 → 21.7±5.3	<0.01
Husic, 2009	Total QoL	0.35±0.1 → 0.59±0.11	0.39 → 0.34±0.36	p=0.0001
Sun & Chen, 2024	Total QoL	42.84±6.29 → 49.32±5.08	42.15±6.71 → 45.09±5.24	<0.001
Huang, 2019	Cognitive function	84.62	70.33	p<0.01
Liang, 2025	Functional domain	9.4±1.33 → 17.54±2.61	8.88±1.61 → 11.94±3.26	Not reported

Only the most significant QoL domain per study is shown (smallest p-value or largest reported effect). Arrows (→) indicate change from baseline to follow-up

* Standardized mean difference calculated by the research team based on the sample size, using Cohen's d for n > 30 or Hedges' g for n < 30

Table 2: *Quality of life outcomes - most significant domain per study.*

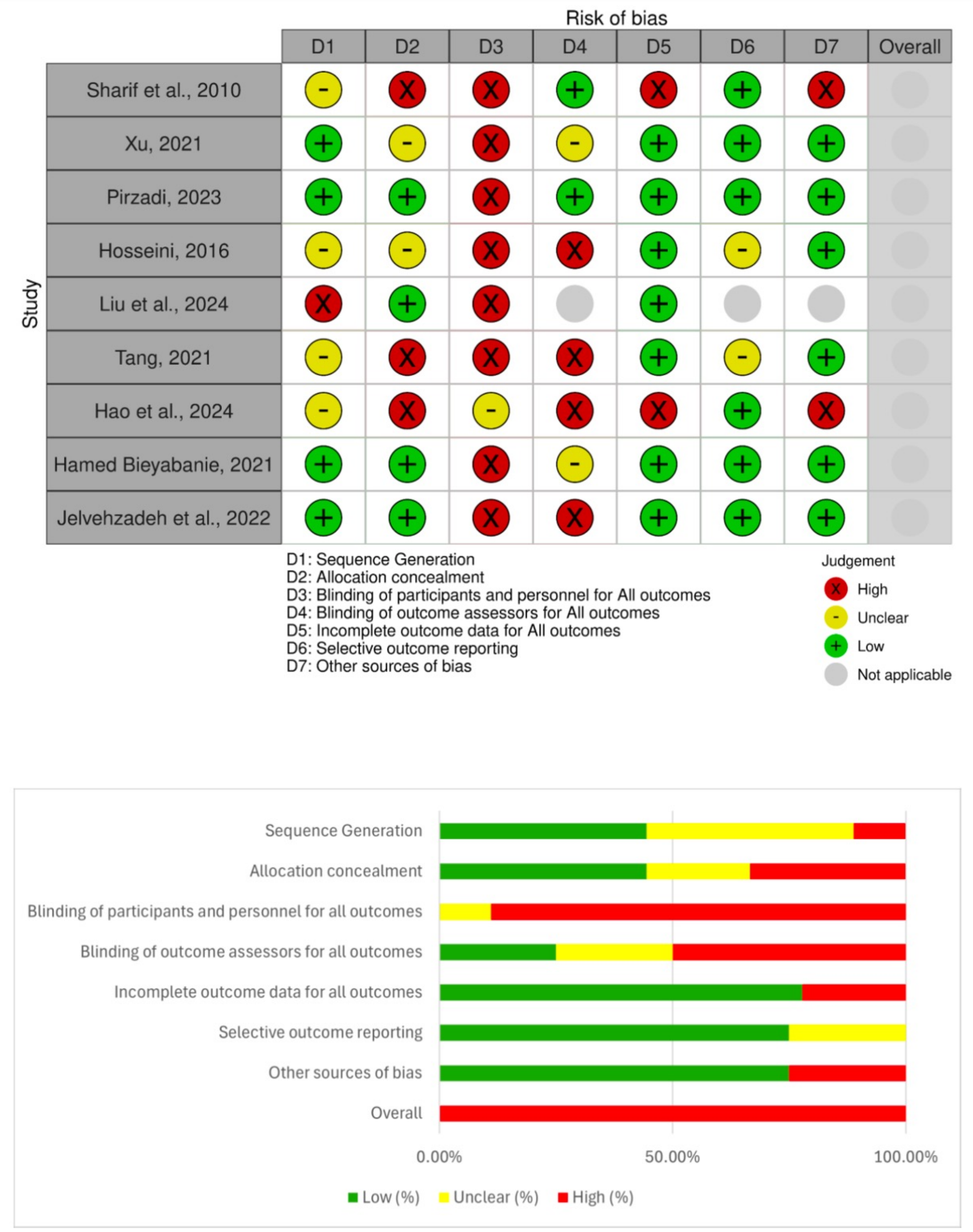
for selected SF-36 domains, and ∼5–7 points for FACT-B total scores in oncology populations—a subset of studies achieved changes likely to be clinically meaningful. Study-specific MID attainment is summarized in Table 2, based on thresholds reported by the original authors or derived from available data.

To facilitate cross-study comparisons, findings were grouped by harmonized domains across the various QoL instruments. Most studies reported moderate-to-large improvements in emotional functioning or mental health, favoring social support interventions at 8–12 weeks, with gains frequently exceeding those observed in control groups. Social functioning also improved consistently across both digital and in-person formats over similar follow-up periods, with family-centered and multimodal interventions generally demonstrating larger absolute improvements than education-only programs. Studies assessing physiological and spiritual well-being through combined psychological–spiritual constructs reported significant intervention-related gains at 8–12 weeks compared with controls.

In contrast, effects on physical functioning were smaller or mixed at short-term follow-up. While several studies reported modest intervention-associated improvements relative to controls, others found minimal between-group differences. Cognitive functioning, including measures of attention and concentration, improved in multiple studies over 8–12 weeks, generally favoring intervention arms, although effect sizes varied according to the instrument used and the intensity of the intervention. Consistent with these findings, the attention domain demonstrated moderate increases among participants receiving social support interventions. When broader domains such as environmental, general health, and biological well-being were assessed (e.g., using the WHOQOL-BREF), higher post-intervention scores were observed compared with control conditions at short-term follow-up. Finally, select studies reported improvements in family, couple, and socioeconomic domains, including role functioning, although effects varied across instruments and assessment timepoints.

Risk of bias assessment

Among the RCTs, 4/9 were rated as having a high risk of bias (primarily due to blinding). Among the observational studies, 4/6 had a moderate risk, and 2/6 had a low risk. Missing data concerns were common across studies and contributed to moderate



Risk of bias

Study	D1	D2	D3	D4	D5	D6	D7	Overall
Sharif et al., 2010	-	X	X	+	X	+	X	○
Xu, 2021	+	-	X	-	+	+	+	○
Pirzadi, 2023	+	+	X	+	+	+	+	○
Hosseini, 2016	-	-	X	X	+	-	+	○
Liu et al., 2024	X	+	X	○	+	○	○	○
Tang, 2021	-	X	X	X	+	-	+	○
Hao et al., 2024	-	X	-	X	X	+	X	○
Hamed Bieyabanie, 2021	+	+	X	-	+	+	+	○
Jelvehzadeh et al., 2022	+	+	X	X	+	+	+	○

D1: Sequence Generation
D2: Allocation concealment
D3: Blinding of participants and personnel for All outcomes
D4: Blinding of outcome assessors for All outcomes
D5: Incomplete outcome data for All outcomes
D6: Selective outcome reporting
D7: Other sources of bias

Judgement
X High
- Unclear
+ Low
○ Not applicable

Table 3: *Risk of bias assessment for randomized controlled trials using Rob 1.0.*

Study ID	Selection	Comparability	Outcome	Total Stars	Overall Quality
Koinberg et al., 2006	***	*	**	6	Fair quality
Sun & Chen, 2024	****	*	***	8	Good quality
Wojtyna, 2007	****	*	**	7	Good quality
Husic, 2009	***	*	**	6	Fair quality
Huang, 2019	****	*	**	7	Good quality
Liang, 2025	****	*	***	8	Good quality

Table 4: *Quality assessment using the Newcastle-Ottawa scale, for quasi-experimental and observational studies.*

or high risk ratings in the selected domains. The summaries are presented in Tables 3 and 4.

Discussion

This systematic review evaluated whether social support interventions improve QoL in women who underwent mastectomy for breast cancer. Our analysis of 15 studies involving 1546 participants showed that structured social support interventions significantly enhanced QoL compared with usual care or minimal-contact controls. Emotional and social domains showed the most consistent gains, whereas physical functioning changes were smaller or mixed at short-term follow-up (typically 4–12 weeks). Multimodal approaches incorporating educational, psychological, and family centered components have shown particularly promising results, and early evidence suggests that digital delivery is feasible and potentially comparable to face-to-face formats.

Comparison with previous literature

Our findings extend and refine the existing literature on social support and quality of life in oncology in several important ways. First, while earlier systematic reviews have demonstrated that social support and social networks are associated with improved psychosocial outcomes and survival across heterogeneous cancer populations (Nausheen et al., 2009; Pinquart & Duberstein, 2010), these syntheses did not focus specifically on women undergoing mastectomy. By restricting our analysis to post-mastectomy breast cancer patients, the present review offers a more clinically targeted synthesis and enables a clearer understanding of how social support influences distinct quality-of-life domains during a particularly vulnerable phase of survivorship. Importantly, our domain-specific mapping reveals that emotional and social functioning consistently benefit from supportive interventions, whereas physical functioning demonstrates more variable short-term effects—an observation that helps reconcile inconsistencies reported in prior mixed-population reviews.

Second, this review highlights the growing role of digital and technology-mediated interventions as viable and effective modalities for delivering social support. In particular, the WeChat-based intervention evaluated by Xu et al. (2021) demonstrated improvements in quality-of-life outcomes comparable to those observed with traditional face-to-face programs. This finding aligns with broader trends in digital health and underscores the potential of scalable, low-cost platforms to extend psychosocial care, especially in settings with limited access to in-person support services. As survivorship populations grow and healthcare systems face increasing resource constraints, such digital approaches may represent a pragmatic and equitable strategy for integrating social support into routine post-mastectomy care.

Third, our findings suggest that the timing of social support interventions may be less critical than previously assumed. Consistent with the concept of the “teachable moment” in cancer care (Demark-Wahnefried, 2005), benefits were observed regardless of whether interventions were initiated in the immediate postoperative period or later in survivorship. This flexibility has important clinical implications, indicating that meaningful gains in quality of life can still be achieved even when support is introduced after acute treatment phases, thereby expanding opportunities for intervention across the survivorship trajectory.

These results are further supported by a recent systematic review by Bottaro et al. (2023), which identified a robust and bidirectional association between coping strategies and social support across cancer populations. The convergence of findings suggests that social support functions as a key psychosocial resource that enhances adaptive coping, emotional regulation, and overall well-being. Our review extends this conceptual framework specifically to post-mastectomy breast cancer patients, reinforcing the notion that supportive care interventions play a central role across oncological contexts while also emphasizing the need to tailor delivery formats and content to population-specific needs.

Strengths and limitations

Strengths include the predominance of randomized designs, use of validated quality of life QoL instruments (EORTC QLQ-C30, FACT-B/G, SF-36), and the use of validated tools for quality appraisal (RoB 1.0 and Newcastle–Ottawa Scale), enhancing reliability.

Limitations temper certainty: (1) Marked heterogeneity in interventions, controls, outcome instruments, and assessment time points. (2) Short follow-up with most assessments occurring within 4–12 weeks. (3) Generalizability is constrained by geographic concentration (primarily China and Iran). (4) High risk of bias, with inadequate allocation concealment and limited blinding.

Implications for Practice, Policy, and Research

The findings of this review underscore the importance of integrating structured social support interventions into routine post-mastectomy care. Healthcare providers should view psychosocial support not as an adjunctive service, but as a core component of comprehensive breast cancer survivorship care. Peer support programs—particularly those involving trained breast cancer survivors—have demonstrated meaningful benefits and offer a patient-centered approach that leverages shared experience, empathy, and practical guidance. Such programs should be systematically developed, standardized, and embedded within oncology and rehabilitation services to ensure consistent access and quality.

Technology-mediated interventions represent a particularly promising avenue for expanding access to social support. Digital platforms, telephone-based programs, and mobile health applications can overcome geographic, financial, and logistical barriers that often limit participation in traditional in-person services, especially in rural or underserved communities. For example, the U.S. Peer Connect program, which trains cancer survivors to provide structured telephone-based support, has demonstrated feasibility and acceptability, highlighting the potential for scalable delivery models that can be integrated into existing healthcare infrastructures (Hoey et al., 2008). As digital health adoption accelerates globally, incorporating evidence-based psychosocial content into these platforms may substantially broaden the reach of supportive care.

From a policy perspective, the inclusion of social support services within insurance coverage frameworks is essential to promote equitable access. In the United States, the Women's Health and Cancer Rights Act of 1998 established coverage for post-mastectomy services, setting an important precedent for the integration of supportive and rehabilitative care within standard oncology benefits (Cook, 1994). Expanding such policies to explicitly recognize and reimburse psychosocial and peer-support interventions would further align coverage with evidence-based survivorship needs. Internationally, policy initiatives such as the European Code of Cancer Practice emphasize the ethical and clinical imperative of embedding psychosocial support within cancer care pathways, reinforcing the relevance of these findings across healthcare systems (Lawler et al., 2021).

Healthcare systems should also prioritize the development of quality indicators and outcome metrics to evaluate the effectiveness of social support interventions. Standardized measures of psychosocial well-being, patient-reported outcomes, and satisfaction could facilitate benchmarking, inform quality improvement efforts, and guide resource allocation. Additionally, investment in structured training programs for peer supporters and healthcare professionals is critical to ensure intervention fidelity, cultural competence, and sustainability.

From a research standpoint, future studies should focus on comparative effectiveness to determine which models of social support are most beneficial for specific patient subgroups and at different stages of survivorship. Implementation research is needed to identify barriers and facilitators to integrating these interventions into routine care, as well as to assess long-term sustainability and cost-effectiveness. Cross-cultural research will also be essential to adapt interventions to diverse sociocultural contexts while preserving their core therapeutic elements.

Overall, these findings reinforce the central role of social support in post-mastectomy recovery, validating what patients and their families have long recognized as fundamental to healing. By translating this evidence into clinical practice, policy frameworks, and targeted research efforts, healthcare systems can more effectively address the holistic needs of breast cancer survivors and improve long-term quality of life outcomes.

Future Research Directions

Priorities include comparative effectiveness research to determine optimal interventions for specific populations, studies on social support mechanisms affecting quality of life, and implementation research for program development. Further research is needed to examine the long-term sustainability and clinical outcomes of this approach. Cultural adaptation studies should explore tailored interventions while maintaining effective elements.

Conclusion

This systematic review suggests that social support interventions can improve the QoL of patients after mastectomy, particularly in the psychological and social domains. Although the majority of the included studies reported positive effects, these results should be interpreted with caution. The considerable heterogeneity of study designs, interventions, measurement instruments, and populations, as well as the moderate to high risk of bias in some cases, limit the validity of the evidence reported. Future large-scale, methodologically high-quality studies in different cultural contexts are needed to confirm these findings and specify which forms of social support have the greatest long-term impact on QoL.

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Supplementary Materials

Search strategy for each database; table quality of life outcomes (all domains).

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Conflicts of Interest

The authors declare no conflict of interest.

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