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Impact of Perceived Partner Responsiveness on Preoperative Decision Conflict in Patients with Breast Cancer

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Abstract

Objective: To investigate the current status of perceived partner responsiveness among married breast cancer patients and their spouses, and to analyze their effects on patients' decisional conflict. ***Methods:*** Using convenience sampling, a total of 121 pairs of married breast cancer inpatients and their spouses were recruited from a tertiary specialized hospital in Zhejiang Province between December 2023 and November 2024. Data were collected with a general information questionnaire, the Perceived Partner Responsiveness Scale, and the Decisional Conflict Scale (DCS). Categorical data were described using frequencies and percentages, while continuous data were presented as mean ± standard deviation. Paired-sample t-tests were employed to compare differences in perceived partner responsiveness between couples. Pearson correlation analysis was conducted to examine the relationships between both partners' perceived responsiveness and patient decisional conflict. With patient decisional conflict as the dependent variable, a multiple linear regression model was constructed, incorporating both patient- and spouse-perceived partner responsiveness to analyze their impact on patient decisional conflict. ***Results:*** Out of 160 questionnaires distributed, 121 valid questionnaires were returned, yielding an effective response rate of 75.63%. Spouses reported significantly higher levels of perceived partner responsiveness than patients, and the difference was statistically significant ($P < 0.001$). Perceived partner responsiveness reported by both patients and spouses was negatively correlated with patient decisional conflict ($P < 0.001$). Multiple linear regression analysis revealed that marital duration, education level, implant reconstruction, and patient-perceived partner responsiveness were independent influencing factors of decisional conflict in married breast cancer patients ($P < 0.05$). ***Conclusion:*** Perceived partner responsiveness in both breast cancer patients and their spouses is closely associated with the level of decisional conflict perceived by the patient. Therefore, implementing decision support interventions developed based on both spouses may be more effective in reducing patients' decisional conflict.

Keywords: breast cancer, decisional conflict, partner support, root cause analysis

1. Introduction

Breast cancer is the second most common malignancy among women in China, following lung cancer, with 357,000 newly diagnosed cases annually; its incidence has continued to rise in recent years, with an increasingly younger age at onset (Bray et al., 2024). The diagnosis and treatment of breast cancer can profoundly affect patients' social roles, family relationships, financial circumstances, and psychological well-being (Wallner et al., 2017). Within the Chinese cultural context, spousal support plays a central role in how individuals cope with major illness. Evidence indicates that among married women with breast cancer, 37.9% identify their spouse as their primary source of decisional support (Gray et al., 2019). Breast cancer management is a surgery-centered, multidisciplinary approach. With advances in treatment concepts and surgical techniques, breast-conserving surgery and post-mastectomy breast reconstruction have been increasingly adopted in clinical practice in

addition to conventional modified radical mastectomy (Causarano et al., 2015). However, driven by concerns regarding body image and survival outcomes, patients with breast cancer commonly experience substantial decisional conflict, manifested as hesitation between surgical options and uncertainty about postoperative outcomes (Tang, H et al., 2021). Moreover, the choice of surgical approach is a key determinant of subsequent quality of life and may exert enduring effects on psychological health and marital relationships (Nouri Sanchuli et al., 2017; Yarso et al., 2025; Pang, J et al., 2022). Spousal involvement may shape patients' ultimate treatment decisions, particularly when options carry implications for couple intimacy, such as body image and sexual functioning (Fasse et al., 2017). Perceived partner responsiveness (PPR) refers to the extent to which individuals perceive that their partner understands, values, and supports their needs, emotional expressions, and distress (Liu, Q et al., 2024). According to the interpersonal process model of intimacy, PPR is a core component of intimate relationships and may influence psychological states and behaviors under stressful circumstances (Manne, S et al., 2010; Yuan, Fan, & Leng, 2022). Taken together, prior studies have primarily focused on patients' individual characteristics or unidirectional psychosocial factors associated with decisional conflict, while the role of the spouse has received comparatively limited attention. As a key source of support, a spouse's responsiveness may directly shape patients' decisional experiences. Therefore, this study recruited 121 married breast cancer patients and their spouses to compare dyadic differences in perceived partner responsiveness and to further examine the associations of patients' and spouses' PPR with patients' decisional conflict, with the aim of informing shared decision-making and optimizing nursing interventions for patients with breast cancer.

2. Methodology

2.1 Participant

From December 2023 to November 2024, a convenience sampling approach was used to recruit female patients with breast cancer and their spouses from a tertiary Grade A oncology specialty hospital in Hangzhou, China. Patient inclusion criteria were as follows: (1) Histopathologically confirmed breast cancer; (2) age ≥20 years, married, and the spouse served as the primary caregiver during hospitalization; and (3) adequate reading comprehension, clear thinking, and no communication barriers. The patient exclusion criterion was: (1) the patient was not yet aware of the diagnosis. Spouse inclusion criteria were as follows: (1) informed of the patient's illness; (2) adequate reading comprehension, clear thinking, and no communication barriers; and (3) age ≥22 years, with a cohabitation duration of more than 1 year with the patient. The spouse exclusion criterion was: (1) the spouse was not the patient's first (original) spouse. Ethical approval was obtained from the hospital ethics committee (KY2023099).

2.2 Instruments

Within 1–2 days after admission and prior to surgery, data were collected using an on-site survey in a quiet ward room or a designated interview room. The purpose, procedures, and significance of the study were explained to the participating dyads. After written informed consent was obtained from both the patient and the spouse, questionnaires were administered separately. Patient questionnaires were collected by the principal investigator, while spouse questionnaires were collected by another member of the research team. A standardized set of instructions was provided to guide questionnaire completion. All questionnaires were retrieved immediately upon completion and checked on-site for completeness.

2.2.1 General Information Questionnaire

Patient data included age, educational attainment, occupation, monthly income, number of children, tumor stage, receipt of neoadjuvant chemotherapy, type of surgery, place of residence, and level of participation in treatment decision-making. Spouse data included age, educational attainment, occupation, and monthly income.

2.2.2 Perceived Partner Responsiveness Scale (PPRS)

The PPRS was developed by Reis et al. (2011) and was translated and culturally adapted into Chinese by Yang S et al. (2019) in 2019. It has been used to assess perceived partner responsiveness in breast cancer populations (Manne, S.L., Kashy, D.A., Kissane, D., Zaider, T., Heckman, C.J., Penedo, F.J. & Myers, S., 2019). The PPRS is a unidimensional instrument comprising 12 items. Each item is rated on a 7-point Likert scale ranging from 1 ("strongly disagree") to 7 ("strongly agree"), yielding a total score of 12–84; higher scores indicate greater perceived partner responsiveness. In the present study, Cronbach's α coefficients for the PPRS were 0.815 in patients and 0.766 in spouses.

2.2.3 Decision Conflict Scale (DCS)

The DCS was developed by O'Connor (1995). The scale contains 16 items across three dimensions: (i) information and values (6 items), (ii) decisional support and effectiveness (8 items), and (iii) decisional uncertainty (2 items). Items are rated on a 5-point Likert scale from "strongly agree" to "strongly disagree," scored 0-4. The standardized total score (0-100) is calculated by summing item scores, dividing by 16, and

multiplying by 25; higher scores indicate greater decisional conflict. In this study, the Cronbach's α coefficient for the DCS was 0.916.

2.3 Analysis

Statistical analyses were performed using SPSS version 26.0. Categorical variables were described as frequencies and percentages. For continuous variables with a normal distribution, data are presented as mean ± standard deviation. Differences in decisional conflict scores among breast cancer patients with different characteristics were examined using independent-samples *T* tests or one-way analysis of variance, as appropriate. Dyadic differences in perceived partner responsiveness between patients and spouses were compared using paired-samples *T* tests. Pearson correlation analyses were conducted to examine the associations between perceived partner responsiveness and decisional conflict within couples. After controlling for sociodemographic characteristics, multiple linear regression analysis (entry $\alpha = 0.05$, removal $\alpha = 0.10$) was performed with patients' decisional conflict as the dependent variable to identify factors associated with decisional conflict. A two-sided P value < 0.05 was considered statistically significant.

3. Result

3.1 General Characteristics of Breast Cancer Patients

A total of 121 patient–spouse dyads were surveyed in this study. The mean age of spouses was 47.77 ± 10.19 years. Regarding educational attainment, 26 spouses (21.5%) had primary school education or below, 45 (37.2%) had junior high school education, 30 (24.8%) had senior high school/technical secondary school education, and 20 (16.5%) had a junior college degree or higher. With respect to occupation, 49 (40.5%) were employed, 37 (30.6%) were self-employed, 21 (17.4%) worked in agriculture/forestry/fishery/animal husbandry, and 14 (11.6%) were retired. Monthly income was <3,000 CNY for 24 spouses (19.8%), 3,000-5,000 CNY for 31 (25.6%), and >5,000 CNY for 66 (54.5%). In terms of involvement in treatment decision-making, 31 spouses (25.6%) reported little or no involvement, 58 (47.9%) reported partial involvement, and 32 (26.4%) reported full involvement. Patients' decisional conflict scores differed significantly across categories of age, length of marriage, educational attainment, occupation, monthly income, childbearing status, and surgical procedure, with statistically significant differences observed (Table 1).

Table 1. General characteristics of breast cancer patients and comparisons of decisional conflict scores across patient subgroups (n = 121)

Items		n(%)	DCS (mean ± SD)	Statistic Value	P Value
Age (mean ± SD)	46.41±10.43		38.33 ± 14.85	r = -0.680	< 0.001
Marital duration (mean ± SD)	22.31±12.04			r = -0.690	< 0.001
Educational attainment	Primary school or below	30 (24.8)	30.37 ± 8.81	r = 0.474	< 0.001
	Junior high school	51 (42.1)	35.57 ± 13.61		
	Senior high school	14 (11.6)	41.41 ± 15.42		
	College or above	26 (21.5)	51.26 ± 14.29		
Occupation	Employed	36 (29.8)	47.40 ± 14.23	F=17.167	< 0.001
	Self-employed	38 (31.4)	40.38 ± 14.19		
	Other	13 (10.7)	38.82 ± 13.48		
	Retired	34 (28.1)	26.24 ± 7.08		
Monthly income (CNY)	＜3000	51 (42.1)	30.82 ± 9.75	r = 0.447	< 0.001
	3000-5000	43 (35.5)	42.99 ± 16.73		
	＞5000	27 (22.3)	45.08 ± 13.76		
Childbearing status	No children	4 (3.3)	62.50 ± 8.37	F = 41.022	< 0.001
	Minor children	52 (43)	46.99 ± 14.65		
	Adult children	65 (53.7)	29.04 ± 8.35		
Residence	Rural	72 (59.5)	35.48 ± 13.53	t = -2.615	= 0.110

	Urban	49 (40.5)	42.51 ± 15.83		
Neoadjuvant chemotherapy	Yes	72 (59.5)	41.06 ± 16.02	t = 2.507	= 0.014
	No	49 (40.5)	34.31 ± 12.01		
Cancer stage	Stage I	49 (40.5)	34.53 ± 11.47	t = -2.361	= 0.020
	Stage II	72 (59.5)	40.91 ± 16.35		
Health insurance	Self-pay	108 (89.3)	36.91 ± 14.26	t = -3.140	= 0.002
	Type of surgery	13 (10.7)	50.12 ± 14.93		
Type of surgery	Breast-conserving surgery	41 (33.9)	33.80 ± 10.86	F = 18.968	< 0.001
	Mastectomy	49 (40.5)	33.73 ± 12.97		
	Implant-based reconstruction	19 (15.7)	56.83 ± 13.65		
	Autologous tissue reconstruction	12 (9.9)	43.23 ± 12.25		
	No participation	41 (33.9)	40.85 ± 14.15	r = -0.143	= 0.117
Self-report participation in treatment decision-making	Partial participation	56 (46.3)	37.70 ± 16.21		
	Full participation	24 (19.8)	35.48 ± 12.38		

3.2 Dyadic Differences in Perceived Partner Responsiveness Between Patients and Spouses

Spouses reported higher perceived partner responsiveness than patients, and the difference was statistically significant ($P < 0.001$) (Table 2).

Table 2. Dyadic differences in perceived partner responsiveness

Group	n	PPRS(mean ± SD)
Patients	121	45.98 ± 8.175
Spouses	121	61.91 ± 7.620
t	-	-39.104
P	-	＜0.001

3.3 Correlations Between Dyadic Perceived Partner Responsiveness and Patients' Decisional Conflict

Both patients' and spouses' perceived partner responsiveness were negatively correlated with decisional conflict ($P < 0.05$) (Table 3).

Table 3. Correlations between dyadic perceived partner responsiveness and patients' decisional conflict

Variables	Patient PPRS	Spouse PPRS	Information and values	Decisional support and effectiveness	Decisional uncertainty	Total decisional conflict score
Patient PPRS	1.000	-	-	-	-	-
Spouse PPRS	0.841*	1.000	-	-	-	-
Information and values	-0.610*	-0.538*	1.000	-	-	-
Decisional support and effectiveness	-0.688*	-0.598*	0.839*	1.000	-	-
Decisional uncertainty	-0.662*	-0.515*	0.742*	0.801*	1.000	-
Total decisional conflict score	-0.692*	-0.593*	0.932*	0.960*	0.867*	1.000

PPRS: perceived partner responsiveness. * $P < 0.05$.

3.4 Multiple Linear Regression Analysis of Factors Associated with Decisional Conflict Among Breast Cancer Patients

Decisional conflict score was entered as the dependent variable. The independent variables included marital duration, educational attainment, occupation, monthly income, childbearing status, receipt of neoadjuvant chemotherapy, cancer stage, method of medical expense payment, type of surgery, and perceived partner responsiveness reported by both patients and spouses; variable coding is presented in Table 4. Marked collinearity was observed between age and marital duration; therefore, age was removed and the model was refitted. No evidence of multicollinearity was detected for the remaining variables (VIF range: 1.305–4.201). The results of the multiple linear regression analysis are shown in Table 5.

Table 4. Coding of independent variables for factors associated with decisional conflict among breast cancer patients

Variable	Coding
Age	Entered as the original value
Marital duration	Entered as the original value
Educational attainment	Primary school or below = 1; Junior high school = 2; Senior high school/technical secondary school = 3; College or above = 4
Occupation	Employed = 0,0,0,0; Self-employed = 0,1,0,0; Agriculture/forestry/fishery/animal husbandry = 0,0,1,0; Retired = 0,0,0,1
Monthly income (CNY)	<3,000 = 1; 3,000–5,000 = 2; >5,000 = 3
Childbearing status	No children = 1,0,0; Minor children = 0,1,0; Adult children = 0,0,1
Neoadjuvant chemotherapy	Yes = 0; No = 1
Cancer stage	Stage I = 0; Stage II = 1
Method of medical expense payment	Health insurance = 0; Self-pay = 1
Type of surgery	Breast-conserving surgery = 1,0,0,0; Mastectomy = 0,1,0,0; Implant-based reconstruction = 0,0,1,0; Autologous tissue reconstruction = 0,0,0,1
Patient perceived partner responsiveness	Entered as the original value
Spouse perceived partner responsiveness	Entered as the original value

Table 5. Multiple linear regression analysis of factors associated with decisional conflict among breast cancer patients

Independent variables	Regression coefficient (B)	Standard error (SE)	Standardized coefficient (β)	t	P
Constant	96.932	5.977	—	16.218	< 0.001
Marital duration	−0.637	0.122	−0.517	−5.241	< 0.001
Educational attainment	−3.196	1.278	−0.230	−2.501	0.008
Implant-based reconstruction	12.593	2.286	0.310	5.509	< 0.001
Patient perceived partner responsiveness	−0.849	0.100	−0.467	−8.503	< 0.001

4. Discussion

The findings of this study indicated that patients reported lower perceived partner responsiveness than spouses' perceived responsiveness toward patients, and the total scores for both partners were higher than those reported by Luo X et al. (2025). This suggests that, in the preoperative period for breast cancer surgery, patients and

spouses do not necessarily share concordant perceptions of each other's responsiveness. The Interpersonal Process Model of Intimacy posits that the formation and development of intimate relationships depends not only on partners' emotional disclosure and responsive behaviors, but also on individuals' subjective perceptions of their partner's responsiveness (Manne S et al., 2004). However, the heightened stress experienced by patients prior to surgery may influence how they perceive the degree of responsiveness provided by their spouse (Yuan, Fan, & Leng, 2022). Complex preoperative emotions may lead patients to underestimate spousal support, resulting in lower scale scores. In contrast, male spouses may have lower expectations regarding responsiveness from an ill wife and may be less concerned than women about receiving nuanced emotional responses from a partner (Liu J et al., 2024); consequently, they may report higher levels of perceived partner responsiveness. These dyadic differences underscore the need for nurses to implement targeted couple-based communication training that is tailored to discrepancies in partners' perceptions, with the aim of improving intimacy within the relationship (Luo X et al., 2025).

Correlation analyses showed that perceived partner responsiveness reported by both patients and spouses was negatively associated with patients' decisional conflict, indicating that higher levels of perceived partner responsiveness were related to lower decisional conflict among patients. This finding is consistent with prior evidence suggesting that patients who self-report better spousal relationships are at a lower risk of experiencing decisional conflict (Palmer Kelly et al., 2018). Furthermore, multiple linear regression analysis demonstrated that patients' perceived partner responsiveness was an independent factor associated with decisional conflict ($P < 0.001$). Several mechanisms may account for this association. First, patients with higher perceived partner responsiveness may be more likely to disclose their deepest concerns and to engage in discussions with their spouses about sensitive issues (Li et al., 2025), which can clarify internal values and preferences and thereby reduce decisional conflict. Second, spouses' perceptions of their own responsiveness may influence the extent of support they provide to patients (Manne S. L. et al., 2019). Specifically, perceived responsiveness can shape couple intimacy (Visserman et al., 2022). Patients in more intimate relationships may receive greater emotional and informational support, which in turn may effectively alleviate decisional conflict (Schulman-Green et al., 2020).

Multiple linear regression indicated that marital duration was a significant negative predictor of decisional conflict ($B = -0.637$, $P < 0.001$). Decisions regarding breast surgery are intertwined with marital relationships, maternal roles, and career development (Tang H et al., 2021). Patients with a shorter marital duration may be in the early stages of building a new family system or establishing their careers. In this context, maintaining postoperative body image may be particularly salient, which may increase indecision when weighing breast-conserving surgery, mastectomy, and reconstruction. This hesitation can be especially pronounced when selecting a specific reconstructive approach, thereby contributing to higher levels of decisional conflict (Rosenberg et al., 2019).

Educational attainment also demonstrated a significant negative association with decisional conflict ($B = -3.196$, $P = 0.008$), suggesting that patients with lower educational levels are more likely to experience decisional conflict prior to surgery. Choosing among surgical options requires patients to understand the risks and benefits associated with each procedure. Patients with lower educational attainment may have difficulty fully grasping how different surgical strategies may affect long-term quality of life, which can impede value-congruent decision-making (Tang W et al., 2017). In addition, disparities in health knowledge and limitations in communication skills may reduce patients' ability to ask questions and articulate preferences and needs effectively. As a result, they may assume a more passive role during the informed consent process and participate less in shared decision-making, thereby increasing decisional conflict.

With respect to surgical approach, implant-based reconstruction emerged as an independent factor associated with decisional conflict ($B = 12.593$, $P < 0.001$), indicating that patients who ultimately chose implant-based reconstruction tended to report greater decisional conflict preoperatively. Prior research suggests that decisional conflict can be mitigated when patients hold a strong preference for a particular option (Gutnik et al., 2020). However, implant-based breast reconstruction is not a medically required component of breast cancer treatment; rather, it reflects an aesthetic preference once mastectomy has been determined. Moreover, implant-based reconstruction is costly, and some patients undergo a staged process involving placement of a tissue expander followed by insertion of a permanent implant after completion of radiotherapy. According to the Ottawa Decision Support Framework, such a complex and preference-sensitive decision-making process constitutes a highly individualized choice under substantial uncertainty, which may further intensify patients' decisional difficulties (Manne S. L. et al., 2016).

5. Conclusions

This study surveyed 121 patient–spouse dyads and found that breast cancer patients experienced a moderate level of decisional conflict prior to surgery. Perceived partner responsiveness reported by both patients and

spouses was negatively associated with patients' decisional conflict, suggesting that dyadic intimacy may represent an important correlate of preoperative decisional conflict among married patients with breast cancer. In addition, discrepancies were observed between patients' and spouses' perceived partner responsiveness, highlighting the potential value of couple-based psychosocial interventions to strengthen intimacy within the relationship. Multiple linear regression further indicated that particular attention should be directed toward patients with shorter marital duration, lower educational attainment, and those facing reconstruction-related decisions, as they may be at elevated risk of experiencing decisional conflict before surgery.

Several limitations should be acknowledged. The sample size was relatively small, and all participating couples were characterized by spousal caregiving during hospitalization, which may imply comparatively higher relationship quality and greater willingness to communicate. Such selection bias may limit the generalizability of the findings. Future studies should consider broader recruitment strategies and/or mixed-methods designs to generate more comprehensive and in-depth evidence.

References

Bray, F., Laversanne, M., Sung, H., Ferlay, J., Siegel, R.L., Soerjomataram, I. and Jemal, A. (2024). Global Cancer Statistics 2022: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA: A Cancer Journal for Clinicians*, *74*(3), 229-263.

Causarano, N., Platt, J., Baxter, N.N., Bagher, S., Jones, J.M., Metcalfe, K.A., Hofer, S.O.P., et al. (2015). Pre-Consultation Educational Group Intervention to Improve Shared Decision-Making for Postmastectomy Breast Reconstruction: A Pilot Randomized Controlled Trial. *Supportive Care in Cancer*, *23*(5), 1365-1375.

Fasse, L., Flahault, C., Vioulac, C., Lamore, K., Van Wersch, A., Quintard, B. and Untas, A. (2017). The Decision-Making Process for Breast Reconstruction after Cancer Surgery: Representations of Heterosexual Couples in Long-Standing Relationships. *British Journal of Health Psychology*, *22*(2).

Gray, T., Nolan, M., Clayman, M. and Wenzel, J. (2019). The Decision Partner in Healthcare Decision-Making: A Concept Analysis. *International Journal of Nursing Studies*, *92*, 79-89.

Gutnik, L., McCarty Allen, C., Presson, A.P. and Matsen, C.B. (2020). Breast Cancer Surgery Decision Role Perceptions and Choice of Surgery. *Annals of Surgical Oncology*, *27*(10), 3623-3632.

Li, B., Liu, T., Ma, D., Sun, J. and Liu, J. (2025). Association of Fear of Childbirth and Postpartum Depression with Perceived Partner Response during Pregnancy. *BMC Pregnancy and Childbirth*, *25*, 211.

Liu, J., Chan, S.W.-Chi., Guo, D., Lin, Q., Hunter, S., Zhu, J. and Lee, R.L.T. (2024). Decision-Making Experiences Related to Mastectomy: A Descriptive Qualitative Study. *Journal of Advanced Nursing*, *80*(5), 1967-1983.

Liu, Q., Shi, C., Yu, Q., Hu, X., Cai, C., Le, M. and Zhang, H. (2024). Self-Perceived Burden as a Mediator Between Perceived Partner Responsiveness and Fertility Intentions in Women with Inflammatory Bowel Disease. *Gastroenterology Nursing*, *47*(5), 338-348.

Luo, X., Chen, D., Li, J. and Liu, C. (2025). Study on the Actor-Partner Interdependence of Perceived Stress, Perceived Partner Responsiveness, and Family Resilience among Young and Middle-aged Cervical Cancer Patients and Their Spouses. *Nursing Journal of Chinese People's Liberation Army*, *42*(7), 87-90, 107.

Manne, S., Badr, H., Zaider, T., Nelson, C. and Kissane, D. (2010). Cancer-Related Communication, Relationship Intimacy, and Psychological Distress among Couples Coping with Localized Prostate Cancer. *Journal of Cancer Survivorship: Research and Practice*, *4*(1), 74-85.

Manne, S., Ostroff, J., Rini, C., Fox, K., Goldstein, L. and Grana, G. (2004). The Interpersonal Process Model of Intimacy: The Role of Self-Disclosure, Partner Disclosure, and Partner Responsiveness in Interactions between Breast Cancer Patients and Their Partners. *Journal of Family Psychology*, *18*(4).

Manne, S.L., Kashy, D.A., Kissane, D., Zaider, T., Heckman, C.J., Penedo, F.J. and Myers, S. (2019). Relationship Intimacy Processes during Treatment for Couple-Focused Interventions for Prostate Cancer Patients and Their Spouses. *Journal of Psychosocial Oncology Research and Practice*, *1*(2), e7.

Manne, S.L., Neal, T., Laurie, K., Shannon, M.V., Kristin, B., Katie, A.D., Tina, G., et al. (2016). Attitudes and Decisional Conflict Regarding Breast Reconstruction among Breast Cancer Patients. *Cancer Nursing*, *39*(6), 427-436.

Nouri Sanchuli, H., Rahnama, M., Shahdadi, H. and Poudineh Moghaddam, M. (2017). From Love and Fidelity to Infidelity- Individual Experiences of Women with Breast Cancer Regarding Relationships with Their Spouses. *Asian Pacific Journal of Cancer Prevention*, *18*(10).

O'Connor, A.M. (1995). Validation of a Decisional Conflict Scale. *Medical Decision Making*, *15*(1), 25-30.

Palmer Kelly, E., Agne, J.L., Meara, A. and Pawlik, T.M. (2018). Reciprocity within Patient-Physician and Patient-Spouse/Caregiver Dyads: Insights into Patient-Centered Care. *Supportive Care in Cancer*, *27*(4), 1237-1244.

Pang, J., Wang, Y., Wang, X. and Yin, J. (2022). Meta-integration of care experience in spouses of patients with breast cancer. *Tianjin Journal of Nursing*, *30*(4), 412-417.

Reis, H.T., Maniaci, M.R., Caprariello, P.A., Eastwick, P.W. and Finkel, E.J. (2011). Familiarity Does Indeed Promote Attraction in Live Interaction. *Journal of Personality and Social Psychology*, *101*(3), 557-570.

Rosenberg, S.M., Greaney, M.L., Patenaude, A.F. and Partridge, A.H. (2019). Factors Affecting Surgical Decisions in Newly Diagnosed Young Women with Early-Stage Breast Cancer. *Journal of Adolescent and Young Adult Oncology*, *8*(4), 463-468.

Schulman-Green, D., Cherlin, E., Capasso, R., Mougalian, S.S., Wang, S., Gross, C.P., Bajaj, P.S., et al. (2020). Patient and Family Caregiver Considerations When Selecting Early Breast Cancer Treatment: Implications for Clinical Pathway Development. *The Patient*, *13*(6), 683-697.

Tang, H., Wang, S., Dong, S., Du, R., Yang, X., Cui, P., Liu, W., Kou, J. and Chen, C. (2021). Surgery Decision Conflict and Its Related Factors among Newly Diagnosed Early Breast Cancer Patients in China: A Cross-Sectional Study. *Nursing Open*, *8*(5), 2578-2586.

Tang, W., Li, Z., Tang, C., Wang, X. and Wang, H. (2017). Health Literacy and Functional Exercise Adherence in Postoperative Breast Cancer Patients. *Patient Preference and Adherence*, *11*, 781-786.

Visserman, M.L., Muise, A., Righetti, F., Horne, R.M., Le, B.M., Côté, S. and Impett, E.A. (2022). Lightening the Load: Perceived Partner Responsiveness Fosters More Positive Appraisals of Relational Sacrifices. *Journal of Personality and Social Psychology*, *123*(4), 788-810.

Wallner, L.P., Yun, L., McLeod, M.C., Hamilton, A.S., Ward, K.C., Veenstra, C.M., An, L.C., et al. (2017). Decision Support Networks of Women Newly Diagnosed with Breast Cancer. *Cancer*, *123*(20), 3895-3903.

Yang, S., Wang, Z., Liu, Z. and Li, Y. (2019). Reliability and validity of the Chinese version of the Perceived Partner Responsiveness Scale. *Chinese Journal of Clinical Psychology*, *27*(5), 950-953.

Yarso, K., Suyatmi, S., Azmiardi, A., Bellynda, M., Muyasarah, K. and Yarsa, D.R.N. (2025). Quality of Life of Indonesian Breast Cancer Women Undergoing Various Surgery Techniques. *Asian Pacific Journal of Cancer Prevention*, *26*(2), 383-389.

Yuan, Q., Fan, Z. and Leng, J. (2022). The Effect of Emotional Reactivity on Marital Quality in Chinese Couples: The Mediating Role of Perceived Partner Responsiveness. *Frontiers in Psychology*, *12*, 787899.