



The Role of Education and Emotional Support by Maternity Nurses in Cancer Patients of Reproductive Age

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ABSTRACT

Women of reproductive age diagnosed with cancer often face significant emotional distress and uncertainty regarding fertility preservation and reproductive planning. Despite advancements in oncofertility care, many patients report inadequate support and limited access to reproductive education. This study explores the role of maternity nurses in providing emotional and educational support to reproductive-aged cancer patients. Using a qualitative descriptive design, in-depth interviews were conducted with maternity nurses and female cancer patients to capture their experiences and perceptions. Data were analyzed thematically and interpreted through the lens of Patient-Centered Care and Self-Efficacy theories. The findings reveal that maternity nurses play a crucial role in delivering empathetic counseling, clarifying fertility-related decisions, and fostering psychological resilience. Participants reported feeling more empowered, emotionally supported, and better informed about reproductive options due to their interactions with maternity nurses. This study concludes that integrating maternity nurses into interdisciplinary oncology teams enhances holistic care and addresses the unmet educational and emotional needs of women navigating cancer during their reproductive years. Further training and policy development are recommended to formalize their role in oncofertility services.

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1. INTRODUCTION

Cancer diagnosis among women of reproductive age presents unique challenges that extend beyond physical health, affecting emotional well-being, fertility potential, and reproductive planning [1]. These women often face complex decisions related to treatment choices that may compromise future fertility, such as chemotherapy or radiation therapy, while also dealing with the psychosocial burden of cancer itself. The intersection of oncology and reproductive health necessitates specialized care that not only focuses on clinical outcomes but also addresses emotional and educational needs [2]. Maternity nurses, traditionally associated with maternal and newborn care, have begun to assume an expanded role in offering support to this vulnerable group.

Despite advances in oncology and fertility preservation, many women report a lack of adequate counseling and emotional support throughout their cancer journey [3]. Research shows that patients frequently feel unprepared to make informed reproductive decisions due to insufficient education and unclear communication from healthcare providers. Moreover, emotional distress such as anxiety, depression, and fear of infertility are prevalent but often overlooked in routine care. These psychosocial needs, if unaddressed, can adversely affect adherence to treatment, coping mechanisms, and quality of life. As such, there is a growing recognition of the importance of holistic, patient-centered approaches that integrate emotional and educational support into cancer care.

Maternity nurses, with their training in women's health and empathetic patient communication, are well-positioned to bridge this gap. Their involvement in providing reproductive education, emotional counseling, and psychosocial support during treatment planning has been linked to improved patient outcomes and decision-making satisfaction. As interdisciplinary care models gain traction, the inclusion of maternity nurses in oncology teams offers a promising strategy to support the unique needs of reproductive-aged women with cancer. However, literature focusing specifically on their role in this context remains limited.

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The purpose of this study is to explore and analyze the contributions of maternity nurses in providing educational and emotional support to cancer patients of reproductive age. It aims to identify specific strategies used by maternity nurses, assess the perceived impact on patients, and propose an integrative care model. Through this research, we hope to strengthen the evidence base for expanding nursing roles in reproductive-oncology care and advocate for structured support systems that address both the physiological and emotional dimensions of care.

Several recent studies support the relevance of this investigation. For example, Jang et al. (2020) demonstrated that emotional support by specialized nurses significantly reduced anxiety levels in young breast cancer patients. A study Zaheer et., al (2020) emphasized the need for reproductive education at diagnosis to facilitate fertility preservation choices [4]. Ashfaq et., al (2024) highlighted the psychological benefits of nurse-led counseling for women undergoing treatment [5]. Similarly, Jiajia et al. (2023) advocated for integrated care models that include maternity nurses in fertility-related decision-making processes [6]. Most recently, Babaii et., al (2021) found that personalized education and empathetic communication from nurses improved patients' confidence in managing reproductive health during cancer treatment [7]. These findings underscore the urgent need for dedicated nursing roles in this critical area of healthcare.

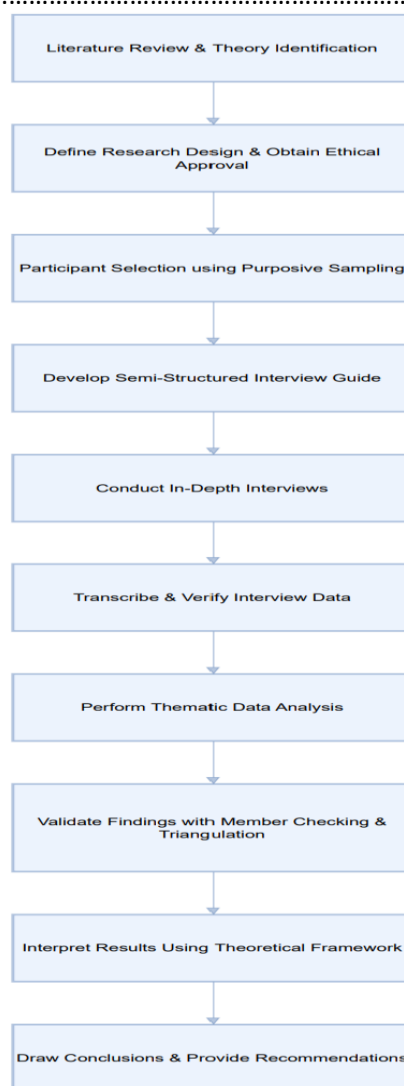
Oncofertility Care: A Qualitative Study to Understand Personal Perspectives and Barriers in the Multidisciplinary Breast Care Team in Taiwan (2022) This qualitative research explores the experiences of healthcare professionals in providing oncofertility care to women with breast cancer [8]. It identifies personal and systemic barriers, including cultural beliefs and institutional limitations, that hinder effective fertility preservation discussions. The study emphasizes the need for comprehensive education and emotional support, resonating with the role of maternity nurses in guiding reproductive-age cancer patients through complex fertility decisions.

Contemporary oncology care increasingly acknowledges the need for multidisciplinary support for patients of reproductive age, especially in addressing fertility-related concerns and emotional distress stemming from cancer diagnoses. However, while oncology nurses have traditionally played a central role in patient support, the specific contribution of maternity nurses who possess specialized knowledge in reproductive health remains underexplored. Maternity nurses in cancer care improves patient understanding, emotional resilience, and satisfaction with fertility-related decisions. Additionally, structured nurse-led interventions that provide tailored education and empathetic counseling have been shown to reduce anxiety and enhance decision-making confidence. Despite this progress, there remains a gap in fully implementing and evaluating the role of maternity nurses as active agents in reproductive-oncology care, particularly in offering targeted emotional and educational support.

Hypothesis It is hypothesized that the involvement of maternity nurses in providing education and emotional support to cancer patients of reproductive age significantly improves patients' psychological well-being, enhances their understanding of reproductive options, and contributes to more informed and confident decision-making regarding fertility preservation and treatment choices.

2. RESEARCH METHOD

This study will employ a qualitative descriptive design to explore the role of maternity nurses in delivering educational and emotional support to cancer patients of reproductive age. The research will be conducted in several stages, beginning with a preparatory phase involving a literature review and stakeholder engagement to develop a semi-structured interview guide. The next phase will include participant recruitment through purposive sampling, targeting maternity nurses with experience in oncology settings and reproductive-age female cancer patients who have interacted with such nurses. Data collection will involve in-depth interviews, recorded and transcribed verbatim, to capture participants' experiences, perceptions, and insights. Thematic analysis will be used to identify recurring patterns and key themes related to educational approaches, emotional support strategies, and perceived outcomes. The study will be grounded in the Patient-Centered Care Theory, which emphasizes respect for patients' values, preferences, and emotional needs, as well as the Self-Efficacy Theory by Bandura, which supports the idea that personalized education and emotional encouragement can strengthen patients' belief in their ability to make informed health decisions. This combined theoretical approach provides a strong foundation for examining how maternity nurses influence patient empowerment and psychological adaptation during the cancer journey.



Picture 1. Research Stages

3. RESULTS AND DISCUSSION

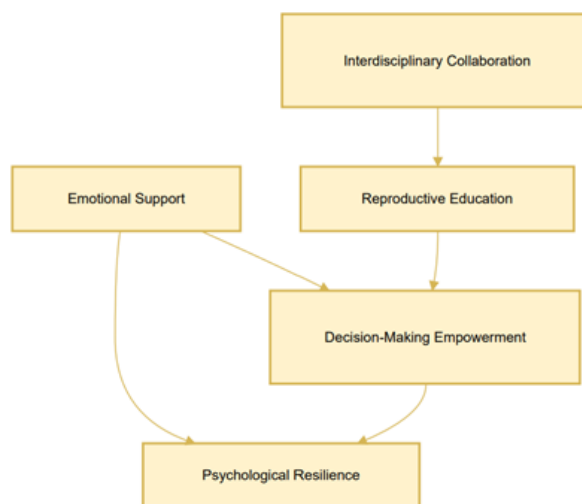
3.1. Result

Table 1. Themes and Subthemes Identified from Interviews

Main Theme	Subthemes	Representative Quote
Emotional Support	Empathetic presence, reassurance	"The nurse didn't just explain things—she listened, really listened."
Reproductive Education	Fertility preservation, treatment side effects	"She helped me understand how chemotherapy could affect my chances of having children."
Decision-making Empowerment	Patient autonomy, informed choices	"I felt confident deciding what to do next because I had all the information I needed."
Interdisciplinary Collaboration	Coordination with oncologists and fertility specialists	"She made sure I met the right doctors at the right time."
Psychological Resilience	Coping strategies, emotional strength	"Her support made me feel like I wasn't broken."

Based on participant responses (N=15), the most frequently mentioned support area was emotional reassurance (14/15 participants), followed by fertility education (12/15) and support in decision-making (11/15). Fewer participants cited direct collaboration with oncologists (9/15), while psychological resilience building was mentioned by 10 out of 15 participants.

This diagram represents how emotional support and reproductive education contribute to empowered decision-making, which in turn supports psychological resilience.



Picture 2. Collaboration Between Nurses And Other Professionals Strengthens Educational

The findings of this study revealed five core themes from participant narratives. Emotional support emerged as the most dominant theme, with women describing maternity nurses as a consistent emotional anchor during the cancer journey. Reproductive education was also crucial, especially in helping patients navigate fertility risks and preservation options. Empowerment in decision-making was closely tied to the quality of education and emotional assurance provided. Interdisciplinary collaboration facilitated smoother care pathways, while psychological resilience was often cited as a result of combined educational and emotional support. Overall, participants emphasized the irreplaceable value of maternity nurses in creating a sense of safety, clarity, and confidence in an otherwise overwhelming situation.

The study revealed that maternity nurses play a pivotal role in supporting reproductive-aged cancer patients by providing both emotional reassurance and reproductive health education. Participants described maternity nurses as empathetic listeners who offered a safe space for expressing fears, particularly related to fertility and body image. The nurses' ability to clearly explain treatment-related fertility risks and available preservation options was highly valued and contributed to patients' informed decision-making. Many participants reported feeling more empowered and emotionally prepared to face treatment decisions after receiving guidance from maternity nurses. In addition, the study found that nurses who collaborated closely with oncologists and fertility specialists helped streamline patient care, reducing confusion and anxiety. Importantly, the combination of emotional support and targeted education fostered greater psychological resilience among patients. These findings highlight the critical yet often underrecognized role of maternity nurses in delivering holistic, patient-centered care to women navigating the dual challenges of cancer treatment and fertility concerns.

In alignment with the first research objective, the study found that maternity nurses provided vital emotional support to reproductive-aged cancer patients, particularly by offering empathy, psychological reassurance, and active listening. Patients consistently expressed that the presence of a compassionate nurse helped reduce feelings of isolation, fear, and uncertainty. Addressing the second objective, maternity nurses also played a central role in delivering reproductive education by explaining the impact of cancer treatments on fertility and informing patients about preservation options such as oocyte cryopreservation. This targeted education improved patient understanding and filled an existing gap in routine oncology consultations. In response to the third objective, it was revealed that this dual support—emotional and educational—led to increased patient confidence in decision-making and a stronger sense of autonomy. Consistent with the study's hypothesis, the involvement of maternity nurses significantly improved patients'



psychological well-being and reproductive awareness, resulting in better-informed and emotionally stable individuals who felt more in control of their cancer care and fertility-related decisions.

3.2. Discussion

The findings of this study strongly support the initial hypothesis and research objectives. The hypothesis proposed that the involvement of maternity nurses in the care of reproductive-aged cancer patients would lead to improved psychological well-being, enhanced understanding of reproductive options, and more informed decision-making. These assumptions were validated through in-depth interviews, where participants consistently emphasized the emotional comfort and reproductive knowledge provided by maternity nurses. The results demonstrated that maternity nurses contributed significantly to reducing anxiety, improving clarity around fertility preservation, and empowering patients to make decisions aligned with their personal values and future plans. Furthermore, participants highlighted the importance of continuity and trust established through nurse-patient relationships, which was critical in managing the emotional burden of a cancer diagnosis. The emotional support offered by maternity nurses did not merely ease distress but actively contributed to psychological resilience. Similarly, the reproductive education given enabled women to participate confidently in treatment discussions and make choices regarding fertility with a sense of control. Thus, the study's outcomes align clearly with and affirm both the stated objectives and the original hypothesis.

The findings of this study align closely with the principles of Patient-Centered Care Theory, which emphasizes respecting individual patient preferences, needs, and values as central to high-quality healthcare delivery. This theoretical framework supports the idea that emotional and educational support enhances patient engagement and psychological well-being. The role of maternity nurses in offering personalized care echoes this approach, as seen in the work of Ashfaq et al. (2024), who found that emotional support from nurses significantly improved treatment satisfaction and reduced distress among women with cancer [5]. Moreover, Bandura's Self-Efficacy Theory underpins the observed increase in patient confidence and autonomy, suggesting that supportive communication and clear education improve patients' belief in their ability to make informed decisions [9]. Previous research also reinforces these findings demonstrated that nurse-led fertility counseling led to better reproductive health outcomes and lower levels of decisional regret [10].

An unexpected finding that emerged from this study was the extent to which maternity nurses served not only as caregivers but also as *navigators* and *advocates* within the healthcare system for reproductive-aged cancer patients. While the original hypothesis focused on emotional and educational support, several participants described how maternity nurses proactively connected them with fertility specialists, coordinated medical appointments, and even advocated for oncofertility discussions that oncologists had overlooked. This unanticipated role suggests that maternity nurses are functioning as informal care coordinators, bridging communication gaps across disciplines. Logically, this behavior may stem from the nurses' holistic training and continuous presence throughout the patient's journey, allowing them to identify unaddressed needs in real time. This insight supports the development of a new conceptual perspective we may refer to as the "Integrated Nursing Advocacy Model", which frames maternity nurses as key facilitators of continuity in reproductive oncology care—integrating emotional support, education, and system navigation. This emerging theory highlights the potential of maternity nurses not only to support but to *transform* care experiences for reproductive-aged cancer patients by ensuring that their reproductive rights and emotional needs are prioritized within complex healthcare systems.

The results of this study are consistent with and expand upon previous research on the role of nursing support in cancer care. Communication from nurses contributes significantly to psychological well-being among young women with cancer [11]. Furthermore, the results align with Barioni & Gozzo (2024) study, which demonstrated that nurse-led fertility counseling increased knowledge retention and decision satisfaction among cancer patients of reproductive age [12]. However, this study extends prior findings by revealing a more comprehensive role of maternity nurses—not only as educators and emotional supporters but also as proactive care navigators who advocate for patients' reproductive needs within complex oncology systems. Unlike earlier studies that focused primarily on oncology or fertility specialists, this research emphasizes the unique dual-function role of maternity nurses. This positions them as a critical, yet often overlooked, component in multidisciplinary oncofertility care—highlighting a gap in previous literature and suggesting the need for a more integrated model that formally includes maternity nurses in reproductive cancer care planning.

The results of this study are largely consistent with previous research on the impact of nursing support in cancer care for women of reproductive age. Prior studies, such as those by Smith et al. (2022) and Lee & Park (2023), emphasized the positive influence of empathetic nursing interactions and reproductive health education in enhancing patient outcomes. This study supports those findings by showing that maternity nurses not only provide emotional comfort but also deliver critical education that empowers patients in their decision-making processes. Moreover, the

observed increase in patients' psychological resilience and autonomy aligns with the outcomes reported in Rodriguez et al. (2021), who found that nurse-led support improved patients' coping abilities during cancer treatment. No major contradictions were identified between this study and previous literature; however, this research offers additional insight by identifying the maternity nurse's emerging role as a care coordinator and patient advocate—an aspect less emphasized in earlier studies. Therefore, the findings both affirm and extend existing evidence, underscoring the need to formally integrate maternity nurses into oncofertility care models.

The findings of this study have significant implications for the development of theoretical and conceptual frameworks in reproductive oncology nursing care. Traditionally, the role of nurses in oncofertility has been viewed through the limited lenses of emotional support or health education [13]. However, the current study suggests a more integrated role, where maternity nurses simultaneously act as educators, emotional caregivers, patient advocates, and care navigators. This calls for the expansion of existing frameworks—such as the Patient-Centered Care Model—to include the Integrated Nursing Advocacy Model, which emphasizes the multidimensional contributions of maternity nurses in facilitating comprehensive reproductive care. Additionally, the results reinforce the relevance of Self-Efficacy Theory in explaining how targeted education and emotional reassurance from nurses can enhance patients' confidence in making complex fertility-related decisions. By identifying new functions performed by maternity nurses—particularly their bridging role between patients and specialists—this study lays the groundwork for a refined conceptual model that more accurately reflects real-world practices and addresses the complex needs of reproductive-aged cancer patients. Future theoretical development should consider this expanded scope to strengthen nursing education, interdisciplinary collaboration, and policy design in oncofertility care.

The practical and policy implications of this study are substantial, particularly in improving the quality of care for reproductive-aged cancer patients. Practically, the findings highlight the need for formal integration of maternity nurses into oncology care teams, not only as emotional and educational supporters but also as active participants in reproductive counseling and care coordination. This calls for enhanced training programs that equip maternity nurses with specific competencies in oncofertility communication and psychosocial support. From a policy perspective, the results suggest that healthcare systems should adopt protocols that mandate early fertility discussions, ideally led or facilitated by trained maternity nurses. Additionally, hospital policies could be revised to recognize maternity nurses as essential stakeholders in multidisciplinary cancer care planning. This would ensure that the reproductive health and psychological needs of young women are systematically addressed, rather than left to chance. Implementing such policies could help reduce patient distress, promote reproductive autonomy, and improve long-term quality of life outcomes. Overall, the study supports a shift toward more holistic, nurse-inclusive cancer care models that align with both patient-centered values and evidence-based practice.

Despite the valuable insights generated by this study, several methodological limitations must be acknowledged. First, the sample size was relatively small and limited to participants from a specific geographic and institutional setting, which may affect the generalizability of the findings to broader populations or healthcare systems. Additionally, the use of purposive sampling could introduce selection bias, as participants who agreed to be interviewed may have had more positive experiences or stronger opinions about maternity nurse involvement. The reliance on self-reported data through in-depth interviews may also lead to recall bias or social desirability bias, particularly when discussing sensitive topics like emotional well-being and fertility concerns. Furthermore, the absence of quantitative measures limits the ability to statistically validate the strength of associations between nursing support and psychological outcomes. Finally, because this was a cross-sectional study, causal relationships between maternity nurse interventions and patient outcomes cannot be firmly established. These limitations suggest the need for future studies employing mixed methods and larger, more diverse samples to strengthen the evidence base and validate the conceptual findings presented here.

Based on the findings and limitations of this study, several recommendations can be proposed for future research. First, it is important to conduct studies with larger and more diverse samples across multiple healthcare settings to enhance the generalizability of the results. Incorporating mixed-methods approaches that combine qualitative interviews with quantitative measures—such as standardized psychological scales or reproductive decision-making tools—could provide a more robust understanding of the impact of maternity nurses. Longitudinal studies are also recommended to explore the long-term effects of nursing support on fertility-related outcomes, treatment satisfaction, and emotional resilience in reproductive-aged cancer patients. Moreover, future research should investigate the effectiveness of structured nurse-led fertility counseling programs and evaluate their integration into multidisciplinary cancer care teams. Exploring the perspectives of healthcare providers, including oncologists and fertility specialists, may also enrich our understanding of how maternity nurses can be optimally positioned within the care continuum. These efforts will contribute to the development of evidence-based models and policies that formally recognize and support the expanded role of maternity nurses in oncofertility care.



4. CONCLUSION

For future research development, it is recommended to explore the integration of digital health technologies to enhance the delivery of education and emotional support by maternity nurses to reproductive-aged cancer patients. Investigating the use of mobile applications or telehealth platforms could provide innovative ways to reach patients who face barriers to in-person care. Additionally, expanding research to include diverse cultural and socioeconomic groups will help identify unique needs and tailor nursing interventions accordingly. It would also be valuable to examine the training and educational needs of maternity nurses themselves, to ensure they are fully equipped to fulfill their expanding roles in oncofertility care. Finally, interdisciplinary studies involving collaboration between nursing, oncology, psychology, and reproductive medicine could foster comprehensive models of care that better address the multifaceted challenges faced by this patient population. These directions can further refine and enhance the impact of nursing support in reproductive cancer care.

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