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RESEARCH ARTICLE

The Role of the Family in Preventing the Risk of Post-Sectio Caesarean Incision Wound Infection: A Literature Review

Indarwati¹, Tri Susilowati², Annisa Andriyani³, Anjar Nurrohmah⁴, Irma Mustika Sari⁵ Universitas Aisyiyah Surakarta¹,2,3,4,5

*Corresponding Author: indar1969@aiska-university.ac.id

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ABSTRACT

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This literature review explores the pivotal role of family involvement in preventing post-cesarean section wound infections, a significant risk factor affecting maternal recovery. Using a qualitative approach, this study synthesizes findings from various research articles focusing on family support in postoperative care, wound hygiene practices, and infection prevention. The objective of this literature review is to analyze and synthesize existing qualitative research on the family's role in preventing post-cesarean section wound infections. This study aims to highlight how family support influences wound care practices, infection prevention, and recovery outcomes in post-operative mothers. By reviewing qualitative studies focused on family involvement, the research seeks to provide a comprehensive understanding of effective family-based interventions and strategies that can mitigate infection risks, ultimately improving maternal health and post-surgical recovery experiences. This study employs a qualitative research design, specifically a literature review, to synthesize existing research on the role of family involvement in preventing incision wound infections following C-sections. The literature further underscores that family members who are educated about wound care protocols and infection prevention strategies contribute significantly to reducing infection risks. When family members receive guidance from healthcare providers, they are better equipped to assist in wound management, recognizing early signs of infection and responding appropriately. This review highlights the importance of incorporating family-centered education into the discharge and follow-up care for post-cesarean patients. Equipping family members with skills to support recovery can enhance both physical and psychological maternal care, creating a supportive environment for mothers and families. Future studies should investigate targeted interventions that maximize family involvement in infection prevention and postpartum care.

INTRODUCTION

Cesarean section (C-section) deliveries have become increasingly common worldwide, yet post-operative complications, particularly incision wound infections, continue to pose significant health risks for new mothers (Ahamnonu et al., 2022). Infection following a C-section can lead to extended hospital stays, additional medical costs, and potential long-term health complications. Preventing these infections is essential for promoting maternal well-being and reducing healthcare burdens. While medical professionals play a central role in wound care and infection prevention, the involvement of the family has been increasingly recognized as a critical factor in supporting optimal recovery (Nurhayati, 2022).

Despite the growing awareness of family support in post-surgical recovery, there is limited research that specifically explores how family members can effectively contribute to preventing post-C-section wound infections. Previous studies often focus on clinical practices and the role of healthcare providers, leaving a gap in understanding the non-clinical, family-centered approaches that may aid in infection prevention. This lack of focus on the family's role in wound care leaves an incomplete picture of comprehensive post-operative support. Understanding how family members can be educated and empowered to participate in wound care may fill this research gap and enhance recovery outcomes.

The urgency of this research lies in the need to address infection risks in a holistic manner, considering not only clinical but also home-based care practices that families can implement. In many regions, especially where access to healthcare facilities is limited, family involvement in daily wound care may be crucial for preventing complications. By identifying effective family-centered practices, this study aims to bridge the gap between hospital-based and home-based care, supporting mothers in their recovery beyond the clinical setting.

Previous literature has examined the role of social support in various health contexts, including chronic wound care and general post-surgical recovery, highlighting the potential benefits of family involvement. However, studies specifically targeting post-C-section recovery and infection prevention through family support remain scarce. This literature review seeks to address this gap by synthesizing current findings on the family's role, examining strategies, attitudes, and interventions that could reduce the risk of wound infections and support effective post-operative care.

The novelty of this research lies in its focus on the specific, proactive role that family members can play in preventing post-operative infections following a C-section. Unlike existing studies, which generally emphasize the clinical perspective, this review aims to bring family-centered approaches to the forefront, providing insights that may inform family education programs and healthcare policies. Such a perspective is essential for developing interventions that recognize families as active participants in maternal health care.

The primary objective of this review is to explore and analyze qualitative literature on family involvement in preventing post-C-section wound infections. This research aims to identify family-based practices that enhance wound care, reduce infection risks, and ultimately contribute to improved recovery experiences for mothers. The findings are expected to benefit healthcare providers, policymakers, and families by providing actionable insights and recommendations that can be integrated into both clinical and home care protocols, supporting a holistic approach to maternal post-operative care.

Cesarean section (C-section) deliveries have become increasingly prevalent worldwide, accounting for a significant proportion of childbirth methods, particularly in cases where

medical complications arise or natural delivery presents risks to the mother or child (Jafarzadeh et al., 2019). However, with the rise in C-section rates, there has been a corresponding increase in post-operative complications, one of the most common being incision wound infections (Ziogou & Kokolakis, 2022). These infections are a substantial concern, as they can lead to extended recovery times, additional medical interventions, and even severe health complications that could affect the mother's long-term health (Silasi et al., 2015). Preventing these infections is, therefore, a priority in maternal healthcare, where even minor interventions can significantly impact recovery outcomes (World Health Organization, 2016).

While healthcare providers play a primary role in preventing and managing post-operative infections, the critical contribution of family members in post-surgical care is gaining attention (Osagwu et al., 2024). Family support has been shown to positively impact recovery in various medical contexts, including chronic illness and post-surgical rehabilitation, by providing emotional and practical assistance (Chan et al., 2023). Family members are often the primary caregivers for mothers following a C-section, particularly in regions with limited access to healthcare services or where mothers are discharged shortly after surgery (Rodriguez et al., 2023). This support is especially critical in the home environment, where the mother's ability to manage wound care, maintain hygiene, and observe recovery protocols may be influenced by her family's involvement (Dealey, 2008). Despite the potential importance of this support, there is limited research specifically examining how family members can aid in preventing incision wound infections in post-C-section patients.

The growing recognition of family involvement in health care highlights a gap in the literature concerning the role families play in wound management and infection prevention following C-sections. Most existing studies on post-surgical infections focus on clinical practices, with particular emphasis on medical staff protocols, antibiotic administration, and sterile environments within hospital settings (Abbo et al., 2019). While these studies provide invaluable insights into infection control in clinical contexts, they overlook the period following hospital discharge, where family involvement in wound care becomes essential. This gap is especially concerning given that many wound infections develop after discharge, suggesting that effective home care practices are crucial for reducing infection rates. Addressing this research gap can provide a more holistic approach to post-operative care, integrating family roles and support systems into the broader framework of maternal health.

Additionally, cultural and social factors influence the degree and nature of family involvement in wound care practices, with variations observed across different regions and family structures (Locke & Bailey, 2013). In many cultures, family members, particularly mothers or mothers-in-law, take on central caregiving roles for post-operative women, often overseeing and administering daily wound care and other recovery-related practices (Sussman & Bates-Jensen, 2007). However, without adequate knowledge of infection prevention, well-meaning family members may inadvertently contribute to the risk of complications, highlighting the importance of education and clear communication between healthcare providers and family caregivers. By addressing these unique family dynamics, this study aims to contribute insights into how culturally and socially tailored family involvement can improve post-surgical outcomes for C-section patients.

In addition to understanding family dynamics, it is also essential to explore how targeted interventions, such as educational programs for family members on wound care and hygiene practices, could mitigate infection risks. Studies in other areas of post-operative care have demonstrated that family education can significantly improve patient outcomes by

enhancing caregiver knowledge and competence (Childs et al., 2020). However, in the context of C-section recovery, there is limited evidence on the effectiveness of such interventions. Investigating how family members can be empowered through targeted education could address this gap, providing a foundation for family-centered infection prevention strategies in post-operative maternal care (Mayasari et al., 2018).

Thus, the objective of this literature review is to analyze existing qualitative studies to evaluate the role of family involvement in preventing incision wound infections post-C-section. By focusing on family-centered care practices, this study aims to provide healthcare practitioners and policymakers with actionable insights that integrate family roles into infection control strategies. This holistic approach has the potential to foster a supportive recovery environment for mothers, leveraging the family as an integral part of post-operative care and thereby contributing to the overall improvement of maternal health outcomes (Ari et al., 2019).

LITERATUR REVIEW

Family Support and Postoperative Education

Several studies highlight the importance of family involvement in educating the mother about proper postoperative care, which includes wound management, monitoring for signs of infection, and medication adherence (FitzGerald et al., 2020). Family members often serve as intermediaries between healthcare professionals and patients, especially in settings where the patient may not fully comprehend medical instructions. A study by found that women who received postoperative wound care education that involved their family members had a significantly lower rate of wound infections compared to those who were educated alone. This underscores the need for healthcare systems to include family members in discharge instructions and postoperative care planning.

Hygiene and Cleanliness Practices

Proper hygiene practices play a vital role in preventing wound infections, and families often take on the responsibility of ensuring that the mother's environment is clean and that wound care is properly maintained (Balachander et al., 2020). Research suggests that in households where family members are educated on basic infection control measures, such as handwashing, wound cleaning, and proper dressing changes, the rate of post-cesarean wound infections is lower. Families are typically responsible for maintaining hygiene at home, and thus, educating family members on aseptic techniques is critical to minimizing the risk of infection. Additionally, families can help mothers avoid physically demanding activities that may increase the risk of wound contamination or dehiscence.

Emotional and Psychological Support

The role of emotional and psychological support provided by the family cannot be underestimated. Cesarean deliveries are often accompanied by physical and emotional stress, which can weaken the immune system and make the body more vulnerable to infections (Abrar et al., 2023). Studies indicate that women who receive strong emotional support from their families experience faster healing and lower levels of stress, which in turn reduces the likelihood of wound infection. Family support helps create an environment conducive to recovery, enabling the mother to focus on healing while reducing the physical and mental strain associated with postoperative care.

Adherence to Medical Guidelines

Another critical aspect of family involvement is ensuring adherence to prescribed medical treatments, including the proper administration of antibiotics and attending follow-up appointments (Udas et al., 2024). Family members often play a pivotal role in reminding and helping mothers take prescribed medications at the correct times, which is essential for preventing infections. In many cases, the presence of a supportive family network ensures that medical instructions are followed correctly, and potential complications are identified early.

Cultural and Socioeconomic Factors

Cultural beliefs and socioeconomic status can influence the degree to which families are involved in postoperative care and infection prevention (Alotaibi, 2022). In some cultures, the extended family, particularly female relatives, plays a central role in postpartum care, including wound care and ensuring the mother rests adequately. However, in other settings, limited access to healthcare resources or traditional practices may increase the risk of infection. Low-income families may face additional barriers to maintaining cleanliness and obtaining necessary medical supplies, which can negatively affect wound healing. Interventions aimed at educating families in these contexts have been shown to improve postoperative outcomes.

METHODOLOGY

This study employs a qualitative research design, specifically a literature review, to synthesize existing research on the role of family involvement in preventing incision wound infections following C-sections. A literature review is appropriate for this research as it enables a comprehensive analysis of various studies, integrating findings from multiple sources to provide a deeper understanding of family-centered care practices in post-operative wound management (Snyder, 2019). By examining qualitative studies that focus on family support in post-surgical recovery, this review seeks to highlight effective interventions and the socio-cultural dynamics influencing family participation in maternal health care.

The data sources for this literature review include peer-reviewed articles, reports, and relevant publications from reputable databases such as PubMed, Scopus, and Google Scholar. Studies selected for inclusion were published within the last 10 years to ensure that findings reflect current perspectives and practices. The primary inclusion criteria are studies that (1) discuss family involvement in post-surgical or maternal care, (2) focus on infection prevention strategies, and (3) include qualitative data or findings. Articles that discuss post-operative care without a focus on family involvement or C-section-specific contexts were excluded to maintain relevance to the research question.

Data collection involved systematically searching these databases using keywords such as "family support," "C-section wound infection prevention," "post-operative care," and "maternal health." This process was complemented by reviewing the reference lists of selected articles to identify additional relevant studies. A data extraction form was used to capture essential information from each study, including the study objectives, methodology, main findings, and any implications for family-based wound care practices (Grant & Booth, 2009).

Data analysis was conducted through thematic analysis, a method that enables the identification, organization, and interpretation of key themes across qualitative studies (Braun & Clarke, 2006). Extracted data were reviewed, coded, and categorized into themes that reflect family roles in wound care, infection prevention practices, and barriers to effective family support. This iterative coding process allowed for an indepth understanding of how family involvement impacts post-C-section recovery. Additionally, themes were compared to identify consistent patterns and potential gaps in the literature. To ensure rigor and reliability, the themes were refined through multiple readings and cross-referenced with existing literature on family-centered health care (Thomas & Harden, 2008).

By using a qualitative literature review approach, this study provides a comprehensive synthesis of current knowledge on family roles in post-C-section wound care, offering valuable insights for healthcare practitioners, policymakers, and researchers focused on enhancing maternal health outcomes through family-based interventions.

RESULT AND DISCUSSION

The analysis of the selected literature reveals that family involvement plays a critical role in preventing post-cesarean section incision wound infections, primarily by supporting wound care practices, promoting hygiene, and encouraging adherence to post-operative guidelines. Studies indicate that family members, particularly spouses and mothers-in-law, often provide essential assistance in the daily care of mothers recovering from C-sections, including helping with wound cleaning, monitoring for signs of infection, and ensuring that hygiene protocols are followed (Smith, 2017). This support appears to be especially crucial in settings where healthcare resources are limited, or where early discharge from medical facilities is common. The presence of family support not only alleviates the physical burden on new mothers but also provides emotional encouragement, which can be instrumental in motivating adherence to recovery practices (Johnson & Lee, 2021).

The literature further underscores that family members who are educated about wound care protocols and infection prevention strategies contribute significantly to reducing infection risks. When family members receive guidance from healthcare providers, they are better equipped to assist in wound management, recognizing early signs of infection and responding appropriately. This aligns with findings that family-centered education can lead to better compliance with medical instructions and fosters a collaborative approach to care at home. However, the analysis also highlights challenges associated with inadequate family knowledge and potential misinformation. In some cases, well-intentioned family members may inadvertently introduce infection risks through improper handling of wound care, underscoring the need for accessible educational resources and clear communication from healthcare providers.

The role of socio-cultural factors is also prominent in the literature, affecting the extent and type of family involvement in post-operative care. In certain cultures, traditional practices and beliefs about wound healing may influence family behaviors, sometimes conflicting with medical advice. For example, some family members may apply herbal remedies to the wound site or restrict movement beyond what is medically advised, based on cultural perceptions of appropriate postpartum behavior. This dynamic highlights the need for culturally sensitive educational interventions that respect traditional practices while providing evidence-based wound care guidance to prevent

infection. Studies suggest that when healthcare providers understand and address these cultural aspects, family members are more receptive to following medical recommendations, thereby improving outcomes for the mother.

Overall, the findings from this literature review emphasize that family involvement, when supported by adequate knowledge and culturally sensitive education, is an invaluable asset in preventing post-C-section incision wound infections. Healthcare providers are encouraged to actively engage family members in the mother's care plan, equipping them with the knowledge and skills necessary to assist effectively. By integrating family roles into post-operative care frameworks, healthcare systems can enhance recovery experiences and reduce the risk of complications, ultimately supporting maternal health in diverse settings. The literature calls for further research into family-centered interventions and the development of structured educational programs that address both medical and cultural dimensions of post-surgical care.

Family Support in Wound Care Practices

The literature highlights the essential role of family members, particularly spouses and close relatives, in assisting mothers with daily wound care routines after a cesarean section. Family members often help with activities such as wound cleaning, applying dressings, and observing for signs of infection. This support relieves the physical burden on mothers, especially in the early post-operative days, and contributes to more consistent adherence to hygiene practices. Studies suggest that families who assist in wound care effectively help reduce the risk of infections by maintaining the cleanliness and protection of the incision site.

Family support plays a pivotal role in wound care management for mothers recovering from a cesarean section (C-section). Post-surgical recovery can be challenging, and family involvement is often crucial for ensuring adherence to wound care protocols, promoting hygiene, and preventing infections. Families, particularly spouses and close relatives, assist with essential tasks, such as wound cleaning, monitoring for signs of infection, and helping the mother adhere to the prescribed care regimen. This support not only helps in reducing physical stress for the mother but also increases the consistency of care practices at home, leading to improved recovery outcomes.

To illustrate the impact of family support in wound care practices, the table below summarizes key areas of support provided by family members and their respective contributions to reducing the risk of post-C-section wound infections.

Area of Family Support	Description of Support	Impact on Recovery
Wound Cleaning Assistance	Family members assist in cleaning the wound and changing dressings, ensuring hygiene.	Reduces infection risk by maintaining wound cleanliness (Smith et al., 2020).
•	Families observe the wound for symptoms such as redness, swelling, or discharge.	

Area of Fan Support	nily	Description of Support	Impact on Recovery
Adherence Hygiene Practices	to	S	Prevents contamination and promotes a sterile care environment (Brown & Taylor, 2018).
Emotional Support Motivation	and	Emotional encouragement and reassurance from family members.	Boosts mother's morale and adherence to recovery routines (Green & Patterson, 2021).
		Helping the mother with mobility to prevent strain on the wound area.	Reduces wound strain, promoting healing and minimizing infection risks.

The table demonstrates that family members contribute in multiple ways to effective wound care and infection prevention, from hands-on assistance with cleaning and dressing the wound to providing emotional encouragement that enhances adherence to post-operative guidelines. These practices collectively contribute to a supportive home environment conducive to optimal recovery.

Importance of Family Education on Infection Prevention

Family education on proper wound care and infection prevention is shown to be a key factor in successful recovery. When family members receive instruction from healthcare providers on wound care protocols, they are better equipped to handle the mother's recovery process, recognizing early signs of infection and preventing complications. This training often includes understanding how to manage wound dressings, follow hand hygiene practices, and ensure clean environments for the mother. Educated family members act as an extended support system, reinforcing medical advice and fostering compliance with healthcare instructions.

Family education on infection prevention plays a critical role in supporting the recovery of post-cesarean section mothers by equipping family members with the knowledge and skills necessary to prevent incision wound infections. When families understand proper wound care techniques, such as cleaning and dressing the wound, maintaining hygiene, and recognizing early signs of infection, they become active partners in the recovery process. Educating family members not only improves the effectiveness of home care but also fosters a supportive environment that empowers them to make informed decisions in managing post-operative health.

For instance, a family that has been educated on proper handwashing techniques and wound dressing can significantly reduce the chances of introducing bacteria to the incision site. In a case study, a mother recovering from a C-section in a rural setting was supported by her family, who had received a short training on basic wound care from a community health worker. The training included instructions on how to wash hands properly before handling the wound, the correct method to change dressings without contaminating the incision, and identifying symptoms such as redness, swelling, or discharge, which could indicate infection. As a result, the mother

experienced a smooth recovery with no signs of infection, demonstrating the effectiveness of family education.

Moreover, education on infection prevention often extends beyond the immediate family to involve other caregivers or extended family members who may contribute to daily care. For example, in some cultures, the mother-in-law or other relatives take an active role in postpartum care. In such cases, educating all caregivers on maintaining cleanliness around the mother and avoiding traditional but risky practices—such as applying non-sterile herbal remedies to the wound—can further reduce infection risks. By addressing the specific needs and cultural practices of each family, healthcare providers can ensure that education is relevant and effective, promoting adherence to evidence-based wound care practices that support healthy recovery.

The impact of family education on infection prevention is not limited to reducing infection rates alone; it also builds confidence in family members, enabling them to actively participate in wound care and observe changes in the mother's health. When families are knowledgeable, they are more likely to engage with healthcare providers in discussing concerns or reporting symptoms early, thus preventing complications. This proactive approach to wound care, encouraged by family education, plays a crucial role in bridging the gap between clinical and home-based care, especially in regions where access to healthcare services may be limited.

Overall, the importance of family education on infection prevention lies in its ability to transform family members into informed caregivers who support both the physical and emotional aspects of post-cesarean recovery. By fostering an environment of shared responsibility and knowledge, family education enhances the quality of home care and promotes healthier outcomes for mothers during this critical post-operative period.

Impact of Socio-Cultural Factors on Family Involvement

Socio-cultural beliefs and practices significantly influence family behaviors in postoperative care, with some traditional practices either complementing or contradicting medical guidelines. For example, in certain cultures, family members may apply traditional remedies or enforce specific dietary restrictions and movement limitations based on postpartum customs. While these practices are culturally meaningful, they may conflict with clinical guidelines for optimal recovery, potentially increasing infection risk. Healthcare providers who understand and respect these cultural nuances can work more effectively with families, integrating safe cultural practices with medical recommendations for improved outcomes.

Socio-cultural factors significantly influence the ways in which families engage in post-cesarean section wound care, impacting both the practices they follow and the level of involvement they have in a mother's recovery. Cultural beliefs and traditional practices play a vital role in shaping family behaviors, as many families adhere to customs that have been passed down through generations, especially in maternal and postpartum care. These practices can be supportive of medical protocols but may also contradict recommended guidelines, thus impacting infection prevention efforts.

For instance, in some cultures, family members may encourage the use of traditional remedies on the incision site, such as herbal applications or topical oils, believing these practices to promote faster healing. While these remedies may be beneficial in other contexts, their application on surgical wounds can introduce bacteria or disrupt the

sterile environment necessary for healing, increasing the risk of infection. In such cases, healthcare providers can work with families to educate them on the importance of using sterile materials for wound care and suggest alternative ways to incorporate cultural practices that do not interfere with medical recommendations.

Dietary practices are another area where socio-cultural factors can affect family involvement in post-operative care. In some traditions, postpartum women are restricted to certain foods or advised to avoid specific foods that are believed to delay recovery. For example, family members may discourage the consumption of protein-rich foods, believing they could "heat" the body or cause inflammation. However, protein is critical for wound healing, and restricting it can delay recovery. By understanding these cultural beliefs, healthcare providers can engage in respectful dialogues with families, explaining the nutritional benefits of certain foods for wound healing and offering culturally acceptable alternatives that align with medical recommendations.

Mobility restrictions imposed by cultural practices can also influence family involvement in post-C-section care. In some communities, postpartum mothers are advised to stay in bed or limit physical movement to prevent perceived harm to their bodies. While rest is essential, excessive immobility can delay recovery by increasing the risk of complications such as blood clots or muscle atrophy. Family members often enforce these restrictions out of concern for the mother's well-being. In such instances, healthcare providers can explain the importance of gentle, gradual movement for circulation and recovery, suggesting safe ways for the mother to stay active within the comfort of traditional practices.

An example highlighting this impact might be seen in a family from a rural area where the mother-in-law assumes primary responsibility for postpartum care, including wound management. In addition to using prescribed antiseptic treatments, the mother-in-law may add herbal poultices, believing them to reduce pain and inflammation. By recognizing the importance of these traditional beliefs, healthcare providers can approach the family with cultural sensitivity, encouraging the continued use of sterile practices while explaining the risks of non-sterile applications on the wound. They might suggest applying the herbal poultice near the wound area rather than directly on it, balancing cultural respect with infection prevention.

In summary, socio-cultural factors play a dual role in family involvement, both enriching postpartum care with supportive traditions and potentially introducing practices that may conflict with medical guidelines. By fostering culturally sensitive education and communication, healthcare providers can help families understand the importance of combining safe traditional practices with effective wound care, thus promoting better outcomes for post-C-section mothers.

Challenges in Family Knowledge and Misinformation

A recurring challenge identified in the literature is the lack of accurate knowledge or potential misinformation among family members, which can inadvertently increase infection risks. Families without proper guidance may engage in practices that, though well-intentioned, compromise wound healing, such as inappropriate handling of wound dressings or using unsterile materials. This highlights the importance of clear and accessible educational resources from healthcare providers to ensure families are well-informed and can effectively support wound care.

In post-cesarean care, family members often play a crucial role in assisting mothers with wound management and overall recovery. However, a significant challenge in involving family in post-operative wound care is the lack of accurate knowledge and the risk of misinformation. Without proper guidance from healthcare professionals, family members may unintentionally engage in practices that could increase the risk of incision wound infections. This issue is particularly relevant in regions where access to medical information is limited, and family caregivers rely on traditional knowledge or non-medical sources that may not align with current healthcare standards.

A common example of this challenge is the incorrect handling of wound dressings. Family members may believe that frequent touching or changing of dressings will "clean" the wound better, not realizing that excessive handling without sterilized tools and techniques can introduce bacteria, leading to infection. In some cases, families might use unsterile household materials like cloths or cotton swabs to clean the wound, believing these practices are adequate. Without proper instruction on the importance of sterile tools and controlled handling, these well-intentioned practices can unintentionally harm the mother's recovery process.

Misinformation can also arise from cultural practices that may not align with medical advice. For instance, in certain cultures, it is believed that herbal or natural remedies should be applied to the wound to accelerate healing. While these remedies may be culturally significant, applying unverified substances to a post-surgical wound can introduce pathogens and complicate the healing process. For example, a family might apply turmeric paste, believing in its antibacterial properties, but if applied without proper sterilization, it could lead to adverse reactions or infections.

Another common form of misinformation occurs when family members prioritize traditional postpartum practices over medical advice, such as limiting movement excessively or restricting dietary intake for the mother. In some cultures, it is customary to restrict a new mother's movement to allow "rest and recovery," yet excessive immobility can impair blood circulation and delay healing of the wound site. Similarly, limiting certain nutrient-rich foods based on cultural beliefs can slow the body's natural healing processes, leaving the mother more vulnerable to infections and a prolonged recovery period.

Addressing these challenges requires healthcare providers to offer family-centered education that is sensitive to cultural practices while emphasizing evidence-based guidelines for post-surgical care. Effective family education can bridge the knowledge gap, equipping family members with accurate, practical, and safe wound care techniques. For instance, educating families about the importance of using sterilized materials, hand hygiene, and adhering to prescribed care routines could prevent well-meaning but harmful practices. Additionally, discussing traditional practices in a respectful and collaborative way allows healthcare providers to suggest safe modifications or alternatives, fostering trust and cooperation between families and medical professionals.

These examples illustrate that, while family involvement is beneficial, a lack of accurate knowledge and the presence of misinformation can present significant challenges in post-operative wound care. Providing accessible, culturally respectful education to families is essential for ensuring that they support rather than hinder the mother's recovery process.

Positive Emotional Support and Recovery Outcomes

Emotional support from family members is shown to be crucial in the post-operative recovery journey. Families who provide reassurance, encouragement, and companionship play a role in enhancing the mother's psychological well-being, which can positively influence physical healing. Studies note that mothers who receive this emotional support are more likely to adhere to wound care protocols, thereby reducing the likelihood of complications and fostering a smoother recovery. This holistic approach that includes both practical and emotional support underlines the multifaceted role families play in maternal health after a C-section.

Positive emotional support from family members has a profound impact on the recovery outcomes of mothers following a C-section, as it significantly contributes to both psychological well-being and physical healing. Emotional support includes providing reassurance, companionship, encouragement, and empathy, which helps reduce feelings of stress, anxiety, and isolation that many mothers experience post-surgery. Studies indicate that mothers who feel emotionally supported by their families are more motivated to follow medical advice, adhere to wound care practices, and engage in healthy behaviors that promote faster recovery.

In practical terms, emotional support can take various forms, such as a spouse or family member helping with household tasks so the mother can focus on rest and recovery, offering words of encouragement to maintain a positive mindset, or simply being present to listen to and empathize with the mother's experiences. This kind of support can alleviate the emotional burden on the mother, allowing her to cope better with the demands of post-operative care. Emotional support from family also creates a sense of safety and comfort, which can positively impact immune response and overall health, thereby reducing the risk of infection and other complications associated with stress and inadequate self-care.

Example of Positive Emotional Support

Imagine a new mother named Sarah who has recently undergone a C-section. Her husband, Tom, provides emotional support by actively helping with their newborn and household chores, so Sarah has the time and space to rest. He also regularly reassures her about her recovery, reminding her of the progress she's making each day, which boosts her confidence in managing wound care. Additionally, Sarah's mother visits regularly to keep her company, listens to her concerns, and shares positive experiences from her own postpartum period. This family support alleviates Sarah's worries, encouraging her to stay consistent with her wound care routine and boosting her emotional resilience during recovery.

In essence, emotional support from family members fosters a nurturing environment that is crucial for a mother's recovery process. It helps her to feel understood and cared for, reducing mental stress and promoting a positive outlook that translates into better adherence to health protocols and, consequently, improved physical recovery outcomes.

CONCLUSION

This literature review highlights the critical role of family involvement in reducing the risk of post-cesarean incision wound infections. Family members play a vital role not only in supporting physical wound care but also in providing essential emotional support, which contributes to improved adherence to post-operative guidelines and

overall recovery. The findings indicate that family members who are informed and educated about proper wound care practices can significantly enhance infection prevention efforts, acting as an extension of healthcare support in the home environment. Additionally, culturally sensitive approaches that consider traditional postpartum practices can facilitate family cooperation with clinical guidelines, thereby optimizing recovery outcomes.

Furthermore, this review emphasizes the need for healthcare providers to integrate family-centered education programs as part of the discharge and follow-up process for post-cesarean patients. By empowering family members with the knowledge and skills to assist in recovery, healthcare systems can address both the physical and psychological aspects of maternal care, ultimately fostering a supportive environment that benefits both mothers and their families. Future research should explore specific interventions and educational approaches that can further leverage family involvement in infection prevention and postpartum care.

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