An Explanatory Sequential Study about Women's Satisfaction Regarding the Quality of Performance in Nursing Intervention Rendered by Maternity Students.

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KEYWORDS

Maternity nursing students, women's satisfaction, quality of care, labor and delivery, nursing education.

ABSTRACT

Background: nursing students in maternity care align with the broader goals of healthcare institutions to provide patient-centered and holistic care.

Aim: To evaluate an Explanatory Sequential Study about Women's Satisfaction Regarding the Quality of Performance in Nursing Intervention Rendered by Maternity Students.

Methods: A mixed-methods study was conducted at Al-Azhar University Hospital, Cairo, Egypt. The sample included 100 maternity nursing students, and 250 laboring women data was collected using self-administered questionnaires, observational checklists, satisfaction questionnaires, and qualitative interviews. Statistical analysis included descriptive statistics, chi-square tests, and correlation analysis.

Results: 78% of women expressed satisfaction with the overall quality of nursing care, with high satisfaction rates for communication (82%), interpersonal aspects (72%), and professional-clinical care (80%). A statistically significant positive correlation was found between the quality

of nursing care and women's satisfaction ($p<0.05$). Qualitative findings highlighted positive experiences with clear communication, respect, and timely care provision. However, areas for improvement included neglect towards distressed women and refusal to provide care.

Conclusion: The study revealed overall high satisfaction with the quality of nursing care provided by maternity nursing students, attributable to strong communication, interpersonal skills, and clinical competence. However, challenges related to compassionate care and responsiveness to emotional needs were identified, necessitating targeted interventions in nursing education and clinical practice..

Introduction:

The healthcare landscape has undergone a profound transformation in recent years, witnessing a paradigm shift towards patient-centered care. This transition is particularly pronounced in the domain of maternity nursing, a field that plays a pivotal role in safeguarding the health and well-being of both mothers and newborns during the crucial phase of labor. (1)Considering these dynamic changes in healthcare practices, nursing students' participation in maternity care has emerged as an indispensable element of their education. (2).

The evolution of maternity nursing education reflects a response to the evolving demands and complexities of the contemporary healthcare system. In the historical context, nursing students predominantly acquired knowledge through didactic lectures and clinical experiences guided by registered nurses. However, the landscape of nursing education has shifted dramatically, placing a heightened emphasis on experiential learning to cultivate a more dynamic educational environment. (3).

Contemporary nursing education recognizes the importance of active engagement in patient care, particularly in maternity services. The transition from a more passive learning approach to one that encourages students to participate in the healthcare process actively is rooted in the understanding that hands-on experiences are pivotal for the development of critical thinking and practical skills among nursing students. (4). Maternity nursing, with its unique challenges and responsibilities, serves as a fertile ground for students to apply theoretical knowledge, honing their abilities to provide comprehensive and compassionate care during labor. (5).

This shift in educational methodology aligns seamlessly with broader educational goals aimed at producing well-rounded and competent nursing professionals. By immersing students in the intricacies of maternity care, educators seek to bridge the gap between theory and practice, preparing nursing students for the multifaceted challenges they will encounter in their future careers. (6).

Moreover, the experiential learning model recognizes the value of simulation exercises and clinical rotations, where nursing students can engage in real-world scenarios under the guidance of experienced professionals. In the context of maternity nursing, this approach allows students to witness the dynamics of labor, childbirth, and postpartum care firsthand, translating theoretical knowledge into tangible skills. (7).

As healthcare continues to advance, so too does the need for healthcare professionals, especially those in maternal care, to possess a diverse skill set. Experiential learning in maternity nursing education not only equips students with the technical skills required for patient care but also instills qualities such as empathy, communication, and adaptability—essential attributes for providing patient-centered care. (8).

The involvement of maternity nursing students in providing care during labor transcends the boundaries of educational requirements. It serves as a pivotal opportunity for students to bridge the gap between theoretical knowledge and real-world application. This hands-on experience enables students to develop essential skills, enhance their clinical judgment, and build confidence in delivering quality care (9). Moreover, the integration of nursing students into maternity care contributes to the cultivation of a collaborative and interdisciplinary approach within the healthcare system(10,11).

Additionally, the involvement of nursing students in maternity care aligns with the broader goals of healthcare institutions to provide patient-centered and holistic care. Maternity nursing students work in tandem with other healthcare professionals, fostering a collaborative environment that enriches the overall quality of care provided to expectant mothers. (12,13).

Several factors contribute to women's satisfaction with the quality of performance in nursing care provided by maternity nursing students during labor. Effective communication skills, empathy, technical competence, and the ability to provide emotional support are key elements influencing women's overall satisfaction. (14). Additionally, cultural sensitivity, respect for privacy, and the establishment of a trusting relationship between the nursing student and the patient significantly contribute to the overall childbirth experience. (15,16).

Significance of the Study:

This study holds substantial significance within the realms of both nursing education and maternal care. It contributes to the ongoing discourse on the effectiveness of contemporary maternity nursing education programs. Furthermore, the study addresses a critical gap in the literature by shedding light on the patient's perspective in the context of maternity care provided by nursing students. Moreover, the findings of this study could have practical implications for healthcare institutions and policymakers involved in shaping maternity care practices. Understanding the factors that contribute to mother satisfaction during labor care provided by nursing students can inform the development of guidelines and standards for student involvement, ensuring that the quality of care remains paramount. Ultimately, the study has the potential to influence not only the education of future nursing professionals but also the broader landscape of maternity care, fostering improvements that benefit both healthcare providers and the women they serve.

Aim of the Study:

This study aims to evaluate an Explanatory Sequential Study about Women's Satisfaction Regarding the Quality of Performance in Nursing Intervention Rendered by Maternity Students.

Research questions:

1. Are women satisfied with the quality of nursing care and intervention rendered by maternity nursing students during Labor and delivery?

2. Qualitative questions face-to-face interviews:

- Can you tell me about your perspective regarding the privacy and confidentiality of maternity students?

- What about Communication and respect from maternity students in the delivery room?

- From your point of view tell me about psychological support and nursing care for maternity students.

Subjects and Methods:

Research Design: An explanatory Sequential Study was employed to enhance the comprehensiveness of responses and strengthen the overall study. The mixed study facilitated a deeper understanding of individual situations and broadened the scope of the investigation. It was most suitable for our study and quantitative data was collected first, followed by qualitative data.

Setting: The study was conducted within the labor and delivery department affiliated with Al-Azhar University Hospital in Damietta governorate, Cairo, Egypt.

Subjects:

Group (I): Maternity Undergraduate Students A convenient sample of 100 maternity undergraduate students from the 3rd level, 2nd year of the Nursing Institute Technical Program participated in the study. These students were enrolled in the Childbearing Nursing and Reproductive Health course during the 1st semester of the academic year 2023. The students were divided into four equal groups, each comprising 25 students. They underwent practical training at the labor and delivery department, engaging in clinical rotations for two days per week over two weeks. The researchers individually evaluated student performance through nursing interventions and nursing care plans for parturient women at various stages of labor.

Group (II): Laboring Women A purposive sample of 250 laboring women was included, meeting specific inclusion criteria: primipara or multipara with ages between 20 to < 40 years, having a normal pregnancy course, lacking medical or obstetric risks, and experiencing normal vaginal delivery with or without an episiotomy. Additionally, these laboring women received care from the Nursing Institute Technical Program.

Sample Size Calculation: The sample size was determined using the formula for a single population proportion, considering a 95% confidence level, a margin of error (0.05), and the proportion of women satisfied with nursing care (p=80%) from a previous study. The formula used was:

$$n = \frac{Z^2_{1-\alpha/2} \cdot P \cdot (1-P)}{d^2}$$

Substituting the values:

$$n = \frac{1.962 \times 0.80 \times (1-0.80)}{0.05^2}$$

The calculated sample size (n) was 250, considering a 95% confidence level, a 5% margin of error, and incorporating a 10% non-response rate. This rigorous sampling methodology ensures the study's statistical robustness and reliability.

Tools:

Tool (I): Self-administered Questionnaire: The self-administered questionnaire served as the initial instrument for data collection, aiming to capture essential demographic information from the nursing students participating in the study. This tool, meticulously designed and adapted by researchers based on a thorough review of literature, delved into aspects such as the student's age, marital status, and current residence. This questionnaire provided a snapshot of the personal and contextual factors that might influence the nursing students' perspectives and experiences during their practical training in maternity care.

Tool (II): Assessment Tool for Quality of Nursing Care: Derived from standardized checklists formulated by the World Health Organization (WHO) - specifically, the "Tool of Assessment for the Quality of Hospital Care for Mothers and Newborn Babies" (2009) and "Standard Clinical Management Protocols and Flow Charts on Emergency Obstetric and Neonatal Care" (2015) the researchers meticulously adapted this assessment tool. Comprising 37 items, this observational checklist was designed to evaluate the quality of nursing care by maternity students during labor and delivery. The checklist encompassed various dimensions, including supportive care during labor, nursing care during different stages of labor, and overall quality of care. The scoring system applied allowed for nuanced categorization of the nursing care quality into poor, average, and good, providing a comprehensive insight into the student's performance.

Tool (III): Open-Ended Questions: To capture qualitative insights into the experiences and perspectives of parturient women, the researchers employed open-ended questions through focus group discussions and in-depth interviews. These qualitative data aimed to explore themes such as emotional support, privacy, confidentiality, communication, respect, psychological support, and nursing care. By allowing participants to share their thoughts and experiences in their own words, this tool enriched the study by providing a deeper understanding of the factors influencing women's satisfaction during labor and delivery. The open-ended nature of these questions enabled the researchers to uncover nuances and details that quantitative measures alone might overlook.

Tool (IV): Interviewing Patient Satisfaction Questionnaire (IPSQ): Adapted from the Newcastle Satisfaction with Nursing Scale (NSNS), the Interviewing Patient Satisfaction Questionnaire (IPSQ) represented a key instrument in assessing women's satisfaction with the quality of nursing care delivered by maternity nursing students during childbirth. This tool comprised two main sections: demographic characteristics and women's satisfaction regarding the quality of nursing care. The detailed nature of the demographic section allowed for a comprehensive understanding of the parturient women involved in the study, encompassing factors such as age, education, occupation, clinical history, and birth outcomes. The satisfaction section utilized a 4-point Likert scale format, exploring communication and interpersonal aspects, professional-technical phases, and informative phases of care. The overall score provided a quantitative measure categorizing women as satisfied or unsatisfied, offering a quantifiable metric for the quality-of-care assessment.

Validity & Reliability: The internal consistency of the tools was confirmed using the Alpha-Cronbach test, yielding satisfactory results (90%).

Ethical Considerations: Approval was obtained from the Scientific Research Ethical Committee at Al-Azhar University (Ethical Committee - IRB 00012367). Oral and written informed consent was secured from participants, emphasizing confidentiality, privacy, and the right to withdraw. The study adhered to ethical standards and ensured that students' assessments had no impact on academic scores. The fieldwork for this study was meticulously executed at the labor and delivery department affiliated with Al-Azhar University Hospital in Damietta governorate, Cairo, Egypt.

Data analysis:

The Statistical Package for the Social Sciences (SPSS) was employed as the primary tool for data analysis, facilitating a comprehensive examination of quantitative data. Statistical tests, including the Chi-square test (X2) and the Pearson correlation coefficient (r-test), were strategically chosen to assess associations between variables and measure correlation strength. A significant level (P-value) of less than 0.05 was adopted to determine the statistical significance of observed associations.

Results

Table (1): reveals the mean age in years for nursing students 20.8±5.2 and 30.5±5.2 in parturient women. As regards the educational level, it was observed that two-thirds and more (36%) of women had secondary education and 56% were housewives .As regards gravidity, it was detected that three-fifths (64%) & more than half (56%) delivered four times or more and postpartum complications. On asked about current labor duration (44%) of the women stated that the duration of labor took 6-12 hours. 68% of them had an episiotomy with 52% of them delivering a male baby.

Table (2): demonstrates that three-fourths (75%) of maternity nursing students had a good level of quality of care through 3rd stage of labor whereas 10% of them had a poor level, with a mean score (of 75.6±19.1).

Figure (1): clarifies that (78 %) of the total level of quality of care for maternity nursing Students during labor had a good level of quality of nursing care during labor and delivery, while (10%) of them had a poor level, with the mean quality of care (74.8±21.8).

Table (3): represents the total satisfaction Score for women concerning the quality of care rendered by maternity nursing students with communication and interpersonal aspects, professional-clinical and informatics aspects of care were (82%& 72& 80%), respectively while (18%, 27.60% & 20%) of them were unsatisfied.

Figure (2): Displays the total level of women's satisfaction, it was observed that (78%) of women were satisfied as regards the quality of nursing care rendered by maternity nursing students, and (22.5%) of them were unsatisfied. However, the mean satisfaction score was 73.4±14.9.

Table (4): denotes the Association between total women's satisfaction and total quality of nursing care rendered by maternity nursing students, it shows a statistically significant positive correlation between total quality of maternity nursing student's care and total women's satisfaction (P< 0.05).

Tables:

Table (1): Socio-demographic and clinical data for the samples studied.

Items	No	%
Maternity students Data		
Age in years Mean ±SD	**20.8±5.2**	
Marital status		
-Single	**95**	**95.00**
Married	**5**	**5.00**
Current residence:		
Urban	**70**	**70.00**
Rural	**30**	**30.00**
Parturient Women Data		
Mean ±SD (Women Age)	**30.5±5.2**	
Women's education		
Illiterate or just read and write	**40**	**16.00**
Primary/preparatory	**55**	**22.00**
Secondary	**90**	**36.00**
University or above	**65**	**26.00**
Women`s occupation		
Working	**110**	**44.00**
Housewife	**140**	**56.00**
Clinical characteristics of the parturient women		
Gravidity:		
1-	**90**	**36.00**
3 – 7	**160**	**64.00**
Parity:		
1-3	**110**	**44.00**
4-7	**140**	**56.00**

Previous obstetric complications:		
Yes	**70**	**28.00**
No	**180**	**72.00**
- Current labor duration		
<6	**30**	**12.00**
6-<12	**110**	**44.00**
12-18	**100**	**40.00**
>18	**10**	**4.00**
Oxytocin uses		
Yes	**150**	**60.00**
No	**100**	**40.00**
Episiotomy		
Yes	**170**	**68.00**
No	**80**	**32.00**
Birth outcomes		
Male	**130**	**52.00**
Female	**120**	**48.00**

Table (2): maternity student intervention according to the quality of nursing intervention during labor.

Items	Poor	Average	Good	Mean ±SD
1)Supportive care through labor and delivery	**10**	**15**	**75**	**74.8±20.8**
2)Management and intervention care for 1st stage of labor	**9**	**18**	**70**	**69.8±21.7**
3)Management and intervention care for 2nd stage of labor	**10**	**16**	**71**	**70.4±21.4**
4)Management and intervention care for 3rd Stage of Labour	**10**	**13**	**76**	**75.6±19.1**
5)Management and intervention care for 4th stage of labor	**11**	**13**	**73**	**72.8±20.9**

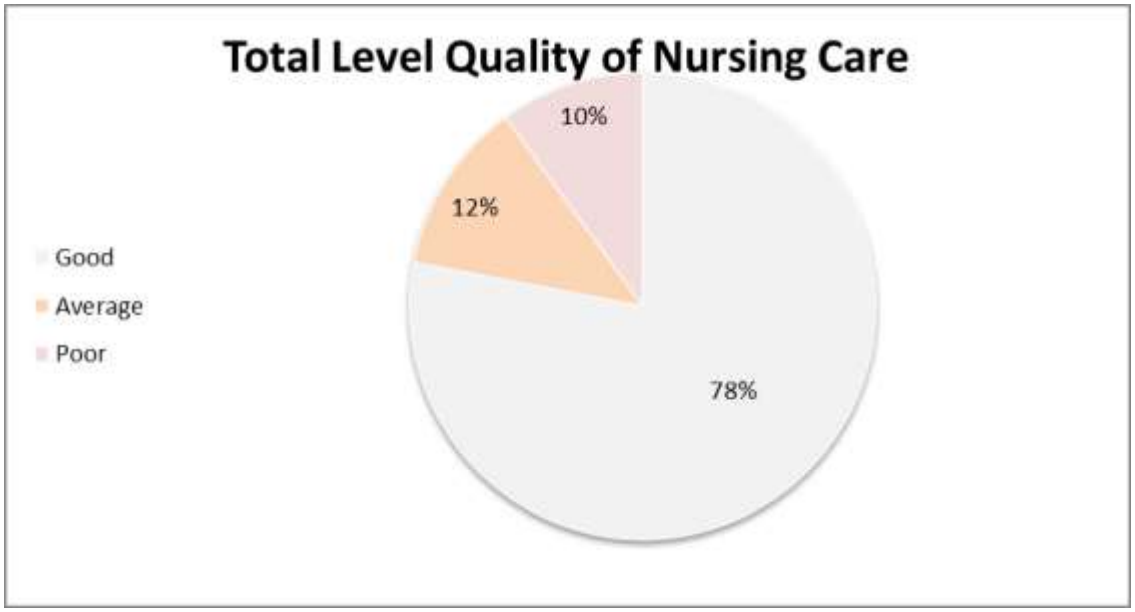

Figure (1): Total level of quality of nursing care for maternity nursing Students during labor& delivery.

Table (3): women's satisfaction regarding the quality of nursing intervention rendered by maternity nursing students during labor.

Items	Satisfied		unsatisfied	
	No	%	No	%
A- Communication and interpersonal aspects of care				
1-Nursing students treat me with respect and show an interest	**230**	**92.00**	**20**	**8.00**
2-Nursing students listen to my complaint carefully with interesting	**200**	**80.00**	**50**	**20.00**
3-Nursing students give me time to discuss my complaint	**195**	**78.00**	**55**	**22.00**
4-Nursing students offer me nursing care gently	**200**	**80.00**	**50**	**20.00**
5-Nursing students provide me with support and encouragement	**200**	**80.00**	**50**	**20.00**
Total Satisfaction Score	**205**	**82.00**	**45**	**18.00**
B- Professional-clinical aspects of care				
6-Nursing students take oral consent before nursing care	**225**	**90.00**	**20**	**10.00**
7-Nursing students keep privacy during nursing procedures.	**190**	**76.00**	**60**	**24.00**
8-Nursing students observe my condition frequently	**170**	**68.00**	**80**	**32.00**
9- I feel safe when receiving nursing care from nursing students	**189**	**75.60**	**61**	**24.40**
10- Nursing students provide me with continuous feedback related to labor progress.	**145**	**58.00**	**105**	**42.00**
11- Nursing students respond to my requests/complaints quickly.	**205**	**82.00**	**45**	**18.00**

12- Nursing students know effective pain relief methods	**197**	**78.80**	**53**	**21.20**
13- I met my health needs by maternity nursing students	**180**	**72.00**	**70**	**28.00**
14- If you have a problem, you will ask nursing students	**125**	**50.00**	**125**	**50.00**
15- Nursing student change of wet-unclean linen	**179**	**71.60**	**71**	**28.40**
Total Satisfaction Score	**181**	**72.40**	**69**	**27.60**
C-Informative aspects of care				
16-Nursing students introduce themselves and explain the nursing procedure clearly before performing it	**199**	**79.60**	**51**	**20.40**
17- Nursing students Provide simple information related to any procedure or examination	**197**	**78.80**	**53**	**21.20**
18- Nursing students Provide me with a simple explanation about post-partum care	**179**	**71.60**	**71**	**28.40**
19- Nursing students respond to me when I ask questions or do not understand some information	**230**	**92.00**	**20**	**8.00**
20- I receive useful information about my condition from student nurses	**195**	**78.00**	**55**	**22.00**
Total Satisfaction Score	**200**	**80.00**	**50**	**20.00**

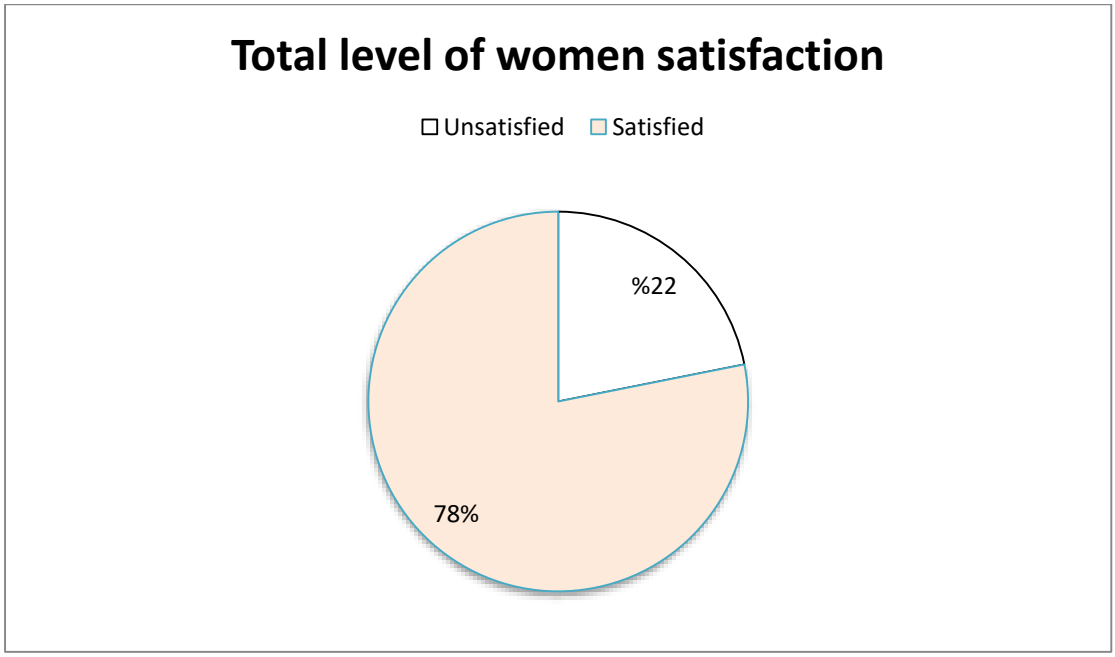

Figure (2): Total level of women's satisfaction regarding quality of care rendered by maternity nursing students

Table (4): Correlation between total women's satisfaction and total quality of care rendered by maternity nursing students:

	Total women's satisfaction	
	r	**p**
Total quality of care	0.766	0.041*

***P< 0.05 Statistically Significant Difference**

Results of qualitative data

Qualitative Results Themes and Sub-themes:

1. Communication and Respect in the Delivery Room:

- **Positive Aspects:**
  - *Addressing by Name:* Many nursing students were noted to address the mothers by name, fostering a personalized and respectful communication approach.
    - *Participant Verbatim:* "They always called me by my name, which made me feel seen and cared for."
  - *Involvement in Decisions:* Most nursing students actively involved mothers in decisions about their care, demonstrating a patient-centered approach.
    - *Participant Verbatim:* "They explained everything to me and asked for my opinion, making me feel part of the decision-making process."
  - *Emotional Support:* Participants shared instances where nursing students attended to emotional distress, offering comfort until the mother calmed down and ensuring well-being.
    - *Participant Verbatim:* "I was crying a lot, and they stayed with me until I calmed down. It felt like they genuinely cared about my emotional state."
  - *Explanation of Procedures:* Positive stories highlighted students explaining procedures, obtaining consent, and responding to mothers' questions, promoting autonomy.
    - *Participant Verbatim:* "They always explained what they were doing, got my permission, and patiently answered all my questions."

- **Negative Aspects:**
    - *Neglecting Distressed Women:* Some women reported instances of neglect, stating that maternity nursing ignored care for distressed or complaining women, possibly as a form of punishment.
        - *Participant Verbatim:* "When I was in pain and crying, they seemed to ignore me, and it felt like punishment for being distressed."
    - *Refusal and Ignoring:* Maternity nursing was described as reacting to distress by refusing and ignoring women, contributing to a fear of asking questions due to anticipated strict responses.
        - *Participant Verbatim:* "They avoided me when I was upset, and I stopped asking questions because I was afraid of their reactions."

- **Timely Care Provision:**
    - *Routine Services:* Participants reported routine and timely provision of necessary services upon admission, emphasizing the importance of providing essential care promptly during the clinical field period.
        - *Participant Verbatim:* "They checked on me as soon as I arrived, and they provided the necessary care right away. It felt reassuring."

2. Psychological Support During Nursing Care:

- **Positive Experiences:**
    - *Dignity and Respect:* Some nursing students were recognized for treating women with dignity, fidelity, respect, friendliness, and politeness.
        - *Participant Verbatim:* "A few of them treated me with respect and kindness, making me feel dignified and valued."
    - *Privacy and Confidentiality:* Women reported positive experiences where their privacy and confidentiality were respected by a few nursing students.
        - *Participant Verbatim:* "They respected my privacy, and I felt comfortable discussing personal matters knowing it would remain confidential."
- **Challenges:**
    - *Restrictions on Birth Companions:* Some women expressed a desire for birth companions for support during labor, but hospital policies prohibited it. This limitation led to women relying on sisters or female relatives for support.
        - *Participant Verbatim:* "I wanted someone with me during labor, but hospital rules didn't allow it. I had to rely on my sister for support."

- *Exclusion of Male Companions:* While recognizing the need for privacy, participants suggested alternatives for support, advocating for at least one person to be present during labor to offer comfort.
    - *Participant Verbatim:* "There should be someone close during labor for comfort. Even if not a husband, maybe a female companion should be allowed."

- **Maternity Nursing Support:**
    - *Information and Communication:* Most participants acknowledged positive experiences with maternity nursing, emphasizing clear explanations, attentive listening, thorough answers to questions, and overall kind treatment.
        - *Participant Verbatim:* "They explained everything, listened carefully, and treated me kindly. It made the whole experience much more comfortable."

- **Perceptions of Respectful Care:**
    - *Timely Clinical Care:* Some participants perceived respectful care as timely clinical care, citing the fulfillment of physiological needs during labor and birth. They believed that disrespect was not prevalent in the study hospital due to prompt care provision.
        - *Participant Verbatim:* "The care was prompt and timely. I felt respected because they attended to my needs as soon as I arrived."

Discussion

The present study provides valuable insights into women's satisfaction regarding the quality of care by maternity nursing students during labor. The quantitative findings reveal a high level of satisfaction among women concerning the quality of nursing care by maternity nursing students. This positive outcome aligns with previous studies that have highlighted the pivotal role of nursing students in enhancing patient satisfaction and the quality of care in maternity settings. The high satisfaction levels observed in this study can be attributed to several factors. (17,18,19).

Moreover, the findings suggest that maternity nursing students possessed strong communication and interpersonal skills, as evidenced by the high satisfaction rates in these domains (82% and 72%, respectively). Effective communication and the establishment of positive interpersonal relationships are crucial in maternity care, as they promote trust, empathy, and a sense of emotional support for women during the vulnerable and emotionally charged experience of childbirth. (20).

The qualitative data further corroborates these findings, with participants highlighting positive experiences related to communication and respect in the delivery room. Many women reported being addressed by their names, actively involved in decision-making processes, and provided with clear explanations regarding procedures. These practices foster a patient-centered approach, recognizing women as active participants in their care, rather than passive recipients. (21)

Additionally, the study findings suggest that maternity nursing students exhibited strong clinical and professional competence, as reflected in the high satisfaction rate for the professional-clinical and informatics aspects of care. This outcome aligns with the educational goals of contemporary nursing programs, which place a strong emphasis on experiential learning and the development of practical skills. (22).

The qualitative data further substantiates these findings, with participants acknowledging positive experiences related to timely care provision and the fulfillment of physiological needs during labor and birth. Many women perceived respectful care as the prompt and attentive provision of clinical services, suggesting that maternity nursing students were well-equipped to meet the diverse needs of women during the labor process.

However, it is important to acknowledge the challenges and areas for improvement identified in the study. While the overall satisfaction levels were high, a notable proportion of women (22.5%) expressed dissatisfaction with the quality of nursing care provided by maternity nursing students. This finding underscores the need for continuous improvement in nursing education programs and the support systems in place for nursing students in clinical settings.

The qualitative data sheds light on some of the negative experiences reported by participants. Instances of neglect towards distressed or complaining women, refusal to provide care, and ignoring women's concerns were highlighted. These experiences not only undermine patient satisfaction but also challenge the fundamental principles of patient-centered care and ethical practices in nursing.

It is crucial to address these issues through targeted interventions and ongoing education for nursing students. Fostering a culture of empathy, compassion, and responsiveness to patients'

emotional needs should be a key priority in nursing education programs. Additionally, establishing clear protocols and guidelines for handling patient distress or complaints can help mitigate such negative experiences and promote a more positive care environment.

Furthermore, the study findings reveal a statistically significant positive correlation between the total quality of nursing care rendered by maternity nursing students and the total satisfaction levels of women. This correlation emphasizes the intrinsic link between the quality of care provided and patient satisfaction, reinforcing the importance of continuous efforts to enhance nursing education and clinical practices.

The challenges identified in this study align with broader discussions in the literature surrounding the integration of nursing students into healthcare settings. Several studies have highlighted the potential for role ambiguity, lack of confidence, and the need for effective supervision and support systems for nursing students in clinical environments. (23,24).

Moreover, fostering open lines of communication between nursing students and healthcare teams can help mitigate potential misunderstandings or conflicts, promoting a collaborative and respectful working environment. Regular feedback sessions and debriefing opportunities can also facilitate the identification and resolution of challenges faced by nursing students, enabling continuous improvement in their clinical skills and patient interactions. (25,26).

Incorporating culturally sensitive practices and respecting women's preferences for support systems can enhance patient satisfaction and contribute to a more positive childbirth experience. Healthcare institutions and policymakers should consider reviewing existing policies and exploring ways to accommodate women's needs while maintaining privacy and safety standards. (27).

Furthermore, the study's findings have implications for the broader discourse on patient-centered care and the role of nursing in promoting holistic well-being. The experiences shared by participants underscore the importance of addressing not only physical needs but also emotional and psychological aspects of care. Nurses, particularly those in maternity settings, play a crucial role in providing emotional support, fostering a sense of dignity and respect, and creating a positive and empowering environment for women during childbirth.(28).

Integrating these elements into nursing education curricula and emphasizing the development of emotional intelligence and compassionate care can contribute to the overall enhancement of patient satisfaction and the quality of healthcare services. By fostering a patient-centered approach that acknowledges the multidimensional needs of women, nursing professionals can play a pivotal role in shaping positive birth experiences and promoting maternal well-being. (29).

Conclusions:

The study offers valuable insights into women's satisfaction regarding the quality of nursing care rendered by maternity nursing students during labor. The high levels of satisfaction observed, particularly in areas such as communication, interpersonal skills, and clinical competence, highlight the positive impact of integrating nursing students into maternity care settings. However, the identification of challenges and areas for improvement underscores the need for ongoing efforts to enhance nursing education programs and support systems for nursing students in clinical environments.

The findings of this study have significant implications for nursing education institutions, healthcare facilities, and policymakers. By addressing the identified challenges, fostering a culture of empathy and compassion, and promoting collaborative efforts between academic and clinical settings, the healthcare system can better equip nursing students to provide high-quality, patient-centered care that meets the diverse needs of women during childbirth.

Recommendation:

1- The research contributes to the broader discourse on patient satisfaction, quality of care, and the role of nursing in promoting holistic well-being.
2- Continuously striving to improve nursing education and clinical practices, the healthcare community can create a more positive and empowering environment for women during one of life's most transformative experiences – the journey of motherhood.
3- Nurses should get regular training on interpersonal relationships and communication.

References:

1. Vareta DA, Oliveira C, Família C, Ventura F. Perspectives on the Person-Centered Practice of Healthcare Professionals at an Inpatient Hospital Department: A Descriptive Study. Int J Environ Res Public Health [Internet]. 2023 Apr 25;20(9):5635. Available from: https://www.mdpi.com/1660-4601/20/9/5635.

2. Liu K, Zhang W, Li W, Wang T, Zheng Y. Effectiveness of virtual reality in nursing education: a systematic review and meta-analysis. BMC Med Educ [Internet]. 2023 Sep 28;23(1):710. Available from: https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-023-04662-x.

3. Murray R. An Overview of Experiential Learning in Nursing Education. Adv Soc Sci Res J [Internet]. 2018 Jan 31;5(1). Available from: http://www.scholarpublishing.org/index.php/ASSRJ/article/view/4102.

4. Pivač S, Skela-Savič B, Jović D, Avdić M, Kalender-Smajlović S. Implementation of active learning methods by nurse educators in undergraduate nursing students' programs – a group interview. BMC Nurs [Internet]. 2021 Dec 18;20(1):173. Available from: https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-021-00688-y.

5. Murn NL. Mothering the Mother: An Educational Program for Nurse-Provided Continuous Labor Support. J Perinat Educ [Internet]. 2019 Oct 1;28(4):199–209. Available from: http://connect.springerpub.com/lookup/doi/10.1891/1058-1243.28.4.199.

6. Saifan A, Devadas B, Daradkeh F, Abdel-Fattah H, Aljabery M, Michael LM. Solutions to bridge the theory-practice gap in nursing education in the UAE: a qualitative study. BMC Med Educ [Internet]. 2021 Dec 13;21(1):490. Available from: https://bmcmededuc.biomedcentral.com/articles/10.1186/s12909-021-02919-x.

7. Khalil AI, Hantira NY, Alnajjar HA. The Effect of Simulation Training on Enhancing Nursing Students' Perceptions to Incorporate Patients' Families Into Treatment Plans: A Randomized Experimental Study. Cureus [Internet]. 2023 Aug 26; Available from: https://www.cureus.com/articles/171770-the-effect-of-simulation-training-on-enhancing-nursing-students-perceptions-to-incorporate-patients-families-into-treatment-plans-a-randomized-experimental-study.

8. Merriel A, Ficquet J, Barnard K, Kunutsor SK, Soar J, Lenguerrand E, et al. The effects of interactive training of healthcare providers on the management of life-threatening emergencies in hospital. Cochrane Database Syst Rev [Internet]. 2019 Sep 24; Available from: https://doi.wiley.com/10.1002/14651858.CD012177.pub2.

9. Cooksey NR. Bridging the Gap Between Textbook and Maternity Patient: A Nurse-Developed Teaching Model for First-Year Medical Students. Birth [Internet]. 2010 Dec 17;37(4):325–33. Available from: https://onlinelibrary.wiley.com/doi/10.1111/j.1523-536X.2010.00428.x.

10. Saxell L, Harris S, Elarar L. The Collaboration for Maternal and Newborn Health: Interprofessional Maternity Care Education for Medical, Midwifery, and Nursing Students. J Midwifery Womens Health [Internet]. 2009 Jul 8;54(4):314–20. Available from: https://onlinelibrary.wiley.com/doi/10.1016/j.jmwh.2009.03.017.

11. Nagineviciute M, Bartuseviciene E, Blazeviciene A. Woman-Centered Care: Standardized Outcomes Measure. Medicina (B Aires) [Internet]. 2023 Aug 25;59(9):1537. Available from: https://www.mdpi.com/1648-9144/59/9/1537.

12. Beecher C, Devane D, White M, Greene R, Dowling M. Women's experiences of their maternity care: A principle-based concept analysis. Women and Birth [Internet]. 2020 Sep;33(5):419–25. Available from: https://linkinghub.elsevier.com/retrieve/pii/S1871519219303622.

13. Barnes LAJ, Barclay L, McCaffery K, Aslani P. Women's health literacy and the complex decision-making process to use complementary medicine products in pregnancy and lactation. Heal Expect [Internet]. 2019 Oct 22;22(5):1013–27. Available from: https://onlinelibrary.wiley.com/doi/10.1111/hex.12910.

14. Baranowska B, Pawlicka P, Kiersnowska I, Misztal A, Kajdy A, Sys D, et al. Woman's Needs and Satisfaction Regarding Communication with Doctors and Midwives during Labour, Delivery and Early Postpartum. Healthcare [Internet]. 2021 Apr 1;9(4):382. Available from: https://www.mdpi.com/2227-9032/9/4/382.

15. O'Brien D, Butler MM, Casey M. The importance of nurturing trusting relationships to embed shared decision-making during pregnancy and childbirth. Midwifery [Internet]. 2021 Jul;98:102987. Available from: https://linkinghub.elsevier.com/retrieve/pii/S0266613821000668.

16. Ashipala DO, Matundu M. Nursing students' communication experiences in a multilingual and multicultural clinical environment: A qualitative study. Nurs Open [Internet]. 2023 Oct 18;10(10):6875–84. Available from:

https://onlinelibrary.wiley.com/doi/10.1002/nop2.1939.

17. Alharbi HF, Alzahrani NS, Almarwani AM, Asiri SA, Alhowaymel FM. Patients' satisfaction with nursing care quality and associated factors: A cross-section study. Nurs Open [Internet]. 2023 May 30;10(5):3253–62. Available from: https://onlinelibrary.wiley.com/doi/10.1002/nop2.1577.

18. Esan DT, Sokan-Adeaga AA, Rasaq NO. Assessment of satisfaction with delivery care among mothers in selected health care facilities in Ekiti state, Nigeria. J Public Health Res [Internet]. 2022 Oct 6;11(4). Available from: https://journals.sagepub.com/doi/10.1177/22799036221127572.

19. Rashawn Mohamed Abd-Elhady T, Hamdy Nasr Abdelhalim E, Abd El Reheem Abd El Reheem H, Mosaad Mohamed Elghabbour G. Nursing Students' Experience and Satisfaction with the Clinical Learning Environment. Int Egypt J Nurs Sci Res [Internet]. 2022 Jul 1;3(1):437–54. Available from: https://ejnsr.journals.ekb.eg/article_247221.html.

20. Shamoradifar Z, Asghari-Jafarabadi M, Nourizadeh R, Mehrabi E, Areshtanab HN, Shaigan H. The impact of effective communication-based care on the childbirth experience and satisfaction among primiparous women: an experimental study. J Egypt Public Health Assoc [Internet]. 2022 Aug 9;97(1):12. Available from: https://jepha.springeropen.com/articles/10.1186/s42506-022-00108-2.

21. Munkhondya BMJ, Munkhondya TE, Msiska G, Kabuluzi E, Yao J, Wang H. A qualitative study of childbirth fear and preparation among primigravid women: The blind spot of antenatal care in Lilongwe, Malawi. Int J Nurs Sci [Internet]. 2020 Jul;7(3):303–12. Available from: https://linkinghub.elsevier.com/retrieve/pii/S2352013220300764.

22. Baghdadi NA, Sankarapandian C, Arulappan J, Taani MH, Snethen J, Andargeery SY. The Association between Nursing Students' Happiness, Emotional Intelligence, and Perceived Caring Behavior in Riyadh City, Saudi Arabia. Healthcare [Internet]. 2023 Dec 28;12(1):67. Available from: https://www.mdpi.com/2227-9032/12/1/67.

23. Aryuwat P, Holmgren J, Asp M, Radabutr M, Lövenmark A. Experiences of Nursing Students Regarding Challenges and Support for Resilience during Clinical Education: A Qualitative Study. Nurs Reports [Internet]. 2024 Jun 28;14(3):1604–20. Available from: https://www.mdpi.com/2039-4403/14/3/120.

24. Hafsteinsdóttir TB, Schoonhoven L, Hamers J, Schuurmans MJ. The Leadership Mentoring in Nursing Research Program for Postdoctoral Nurses: A Development Paper. J Nurs Scholarsh [Internet]. 2020 Jul 26;52(4):435–45. Available from: https://sigmapubs.onlinelibrary.wiley.com/doi/10.1111/jnu.12565.

25. Dietl JE, Derksen C, Keller FM, Lippke S. Interdisciplinary and interprofessional communication intervention: How psychological safety fosters communication and increases patient safety. Front Psychol [Internet]. 2023 Jun 15;14. Available from: https://www.frontiersin.org/articles/10.3389/fpsyg.2023.1164288/full.

26. Nakphong MK, Afulani PA, Opot J, Sudhinaraset M. Access to support during childbirth?: women's preferences and experiences of support person integration in a cross-sectional facility-based survey. BMC Pregnancy Childbirth [Internet]. 2023 Sep 16;23(1):665. Available from:

https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/s12884-023-05962-2.

27. Nair L, Adetayo OA. Cultural Competence and Ethnic Diversity in Healthcare. Plast Reconstr Surg - Glob Open [Internet]. 2019 May;7(5):e2219. Available from: https://journals.lww.com/01720096-201905000-00043.

28. Shaban M, Mohammed HH, Gomaa Mohamed Amer F, Shaban MM, Abdel-Aziz HR, Ibrahim AM. Exploring the nurse-patient relationship in caring for the health priorities of older adults: qualitative study. BMC Nurs [Internet]. 2024 Jul 15;23(1):480. Available from: https://bmcnurs.biomedcentral.com/articles/10.1186/s12912-024-02099-1.

29. Khademi E, Abdi M, Saeidi M, Piri S, Mohammadian R. Emotional Intelligence and Quality of Nursing Care. Iran J Nurs Midwifery Res [Internet]. 2021 Jul;26(4):361–7. Available from: https://journals.lww.com/10.4103/ijnmr.IJNMR_268_19.