



## Evaluating the Preparedness of Male Nursing Students for Obstetric Care in Community Health Settings: Perceptions, Challenges, and Solutions for Interactive Education at Najran University, Saudi Arabia

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### ABSTRACT

**Background:** Male nursing students in the Kingdom of Saudi Arabia face unique challenges in obstetric education. Understanding these challenges is vital for developing tailored solutions to enhance their learning experience and better prepare them for professional roles in nursing. **Purpose:** This study aimed to explore male nursing students' perceptions, stressors and suggested solutions regarding obstetric education at Najran University, Kingdom of Saudi Arabia. **Methods:** A cross-sectional design was used, involving 50 male nursing students. Data was collected via a structured questionnaire covering demographic data, perceptions of the course importance, experienced stressors, challenges faced, and proposed solutions. **Results:** The current study revealed that only 36% of the students agreed that obstetrics is important for all nursing students. All the students reported that cultural norms are universally acknowledged as a source of stress.

Additionally, 88% highlighted a gap between theoretical instruction and clinical application. The absence of male role models was identified as a significant stressor by 82% of the students, while 66% reported experiencing anxiety during clinical tasks. All students (100%) recommended the establishment of specialized obstetric simulation labs. A strong positive correlation ( $R = 0.72, P=0.0001$ ) was found between students' perceptions of the course and their academic performance. **Conclusion:** Male nursing students at Najran University face significant challenges in obstetric education and suffer from several stressors. There is an urgent need to improve the learning environment to boost both engagement and academic outcomes. **Implications for Nursing:** The study highlighted the challenges faced by male nursing students in obstetric education. Establishing specialized obstetric simulation labs and integrating male role models into the curriculum enhanced learning experiences, reduced stressors, and improved preparedness. These measures were vital for developing competent male nurses capable of delivering high-quality obstetric care in culturally sensitive settings.

**Keywords:** Male nursing students, Najran University, Obstetric education perceptions, Kingdom of Saudi Arabia, Stressors, Suggested solutions.

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### What does this paper add?

1. This study highlights the evaluation of male nursing students' readiness, emphasizing a critical aspect of their training and competence.
2. It narrows the scope to a practical environment where obstetric care may differ significantly from hospital-based care, addressing unique challenges.
3. It explores challenges and solutions. The inclusion of "perceptions, challenges, and solutions" suggests a comprehensive approach to understanding and addressing barriers faced by male nursing students.
4. In terms of institutional and cultural contexts, by specifying "Najran University, Kingdom of Saudi Arabia," the title situates the study within a particular educational and cultural framework, making it relevant to local and regional nursing education practices.

### Introduction

The literature on nursing has identified a number of characteristics that influence male nurses' choices to become registered nurses. For example, a mixed method review detailed the difficulties that men who are thinking of becoming nurses experience. These include the demands of the position, career choice, recruiting, and social and educational obstacles (Teresa-Morales et al., 2022; Younas et al., 2019). Furthermore, a second cross-sectional study conducted in Taiwan using questionnaires given to 148 nursing students revealed that male students experience high to medium levels of stress in learning and reaching their life goals, which is greater than the stress they encounter in their interpersonal relationships (Banakhar et al., 2021).

In the past, the nursing profession has not always been dominated by women, mostly because of the relationship between men in the armed forces and nursing far earlier than Florence Nightingale's significant difference in the nursing occupation. The earliest nurses in history were men (O'Lynn, 2019). Regretfully, the society still hasn't ignored the contributions created by men to the early development of nursing. This is mostly because of the substantial influence of the female breastfeeding nineteenth-century movement on the historical ideology within the field (Achora, 2016).

Challenges faced by male nursing students in obstetric courses further reinforce these perceptions. Nursing education must continuously adapt to manage these challenges and evolving demands and the growing need for healthcare professionals who possess empathetic and culturally competent attributes (Abdalahim et al., 2023). Many report feeling anxious or stressed about clinical tasks due to the lack of male role models in obstetric nursing and societal expectations that primarily associate this field with female practitioners. Cultural norms also contribute to the discomfort experienced by male nursing students, particularly when working in obstetric settings, which can feel stigmatizing or inappropriate in certain contexts (Seshan et al., 2021). The absence of sufficient simulation equipment and real-world clinical experiences further hinders their ability to build practical skills, leading to a gap between theoretical knowledge and clinical application. These challenges highlight the need for more targeted support, including mentorship programs and enhanced simulation

resources, to help male nursing students succeed in obstetric education (Raghavan et al., 2023).

Male nursing students' perceptions regarding the importance of obstetric courses reveal a mix of opinions. While some male students recognize the value of obstetric education in providing comprehensive nursing training, others feel disconnected from the subject due to societal expectations and gender norms. Many believe that studying obstetrics is essential for all nursing students, regardless of gender, as it equips them with the critical knowledge needed to deliver holistic patient care (Yilmaz & Polat, 2020).

Some male students also acknowledge that learning about obstetrics can enhance their career opportunities in the broader field of nursing despite their reduced likelihood of directly engaging in obstetric care. However, a significant portion of male nursing students struggle to see the relevance of obstetric training to their personal career goals, which may impact their motivation and performance in these courses (Alshammari et al., 2023).

The current study aimed to explore perceptions, stressors, and suggested solutions by male nursing students regarding obstetric education at Najran University, Kingdom of Saudi Arabia.

## **Objectives**

This study seeks to achieve the following objectives:

1. To examine the perceptions of male nursing students regarding the importance of the obstetric course.
2. To assess academic stressors and challenges encountered by male nursing students while studying the obstetric course.
3. To identify the suggested solutions for improving the obstetric education experience for male nursing students.

## **Materials and Methods**

### **1. Research Design**

A cross-sectional study design will be utilized to explore male nursing students' perceptions, stressors, and suggested solutions regarding obstetric education at Najran University, Kingdom of Saudi Arabia. Cross-sectional studies enable the collection of data from a sizable participant pool within a relatively short timeframe, providing a comprehensive snapshot of the participants' experiences.

### **2. Study Setting**

The study will be conducted within the Faculty of Nursing at Najran University, Kingdom of Saudi Arabia, specifically targeting male students who are either currently enrolled in or have recently completed courses in obstetric nursing.

### **3. Study Population**

The target population will include all male nursing students who are enrolled in or have recently completed obstetric courses at Najran University. The total number of eligible students is 108, and the final sample size will consist of 50 students, representing those who agree to participate in the study. To justify the sample size, a power analysis was conducted using a significance level of 0.05 and an expected effect size of 0.5, which is commonly used in social science research. The analysis indicated that a minimum of 44 participants would be required to achieve a power of 0.8, making the final sample size of 50 participants sufficient for the study's objectives. This sample size was determined to balance feasibility with the need for a diverse representation of perspectives within the available population.

### **4. Sampling Method**

Purposive sampling will be employed to select participants who have direct experience with the challenges of studying obstetrics. This non-probability sampling technique ensures that participants are chosen based on specific characteristics relevant to the study's objectives. The inclusion criteria for participant selection are as follows; male nursing students currently or recently enrolled in obstetric courses, willing to participate in the study and able to communicate their experiences in either Arabic or English. While purposive sampling ensures the inclusion of students with relevant experience in obstetric courses, it may limit the generalizability of findings. Future studies could adopt random sampling or increase the sample size to enhance representativeness and external validity.

### **5. Data Collection Methods and Procedures**

Ethical compliance was a top priority in this study. Ethical approval was obtained on January 17, 2024, and all required permissions were secured before data collection, ensuring strict adherence to established ethical guidelines. The dean of the Faculty of Nursing at Najran University was fully informed about the study's

objectives, procedures, and participant involvement.

To address potential biases, the researchers employed several ethical measures during data collection. Eligible participants were informed in detail about the study's objectives, procedures, and the voluntary nature of their participation. Anonymity was ensured by anonymizing the questionnaire, and participants were given clear information that they had the right to refuse participation or withdraw from the study at any time without facing penalties or needing to provide a reason. Additionally, the online distribution of questionnaires forms *via* social media platforms ensured that the data collection process was both accessible and confidential, further minimizing any potential biases and ensuring that participants felt safe in providing honest responses. Ethical guidelines were strictly followed throughout the study to protect participants' rights and maintain the integrity of the research process.

To achieve the aim of the current study, the researchers designed the questionnaire after reviewing several articles (Abdel-Baky et al., 2019; Alghabashi & Sayed, 2022; Atia, 2016; Genedy et al., 2020). The questionnaire included both Likert-scale items and open-ended questions to gather comprehensive data from the participants.

The questionnaire was divided into six main sections:

1. The first section covered the socio-demographic data, such as age, residence, academic level, and marital status.
2. **Perception of Male Students Regarding the Importance of the Obstetric Course:**

This section consisted of 6 items measuring the students' perceptions of the relevance and significance of studying obstetrics, regardless of gender. The participants were asked to indicate their level of (Agree = 3, Neutral = 2, Disagree = 1). A higher total score indicated more positive perceptions of obstetrics. Examples of items: "Studying the obstetric course is important for all nursing students, regardless of gender." "Obstetric knowledge can enhance my career opportunities in nursing."

3. **Frequency Distribution of Stressors during the Obstetric Course**

This section focused on identifying the key stressors that male nursing students experienced during the obstetric course. Participants were asked to respond to statements such as feeling anxious during clinical tasks,

stress due to cultural norms, and the stressfulness of theoretical *versus* clinical components. In this section, participants were asked to indicate their experience of stressors related to the obstetric course. Responses were scored as follows: Agree = 3 points (indicating the presence of stress), Neutral = 2 points, Disagree = 1 point (indicating the absence of stress). A high score indicates a high level of stress. Examples of items: the lack of male role models in obstetric nursing increases my stress. "Cultural norms regarding men in obstetric nursing contribute to my stress." This scoring method quantified the presence and severity of stressors among the students.

4. **Challenges Faced by Male Nursing Students during the Obstetric Course**

This section addressed the specific challenges that male nursing students faced during the course, including the lack of real clinical experiences, inadequate simulation equipment, and the gap between theoretical and clinical instruction. Responses were scored as follows: Agree = 3 points (indicating the presence of challenge), Neutral = 2 points, Disagree = 1 point (indicating the absence of challenge). Examples of items; "There is a lack of simulation equipment required for developing my clinical skills in obstetrics". "There is a clear gap between theoretical instruction and clinical application in obstetrics".

5. **Suggested solutions for Addressing Clinical Stressors and Challenges**

This section gathered the students' suggestions for improving their clinical learning experience in obstetrics. The items focused on potential solutions, such as the creation of specialized simulation labs, increasing the number of male obstetric instructors, and developing mentorship programs.

- Examples of items:
  - "Creating specialized obstetric simulation labs would help improve my clinical skills."
  - "Developing a mentorship program for male students in obstetrics would help in coping with stressors."

6. **Coping Mechanisms**

○ The questionnaire also included a section where students were asked whether they used any coping mechanisms to manage their academic stress during the obstetric course. The responses were gathered in a binary format (Yes/No).

### Validation of the Questionnaire

To ensure the validity and reliability of the self-developed questionnaire, several measures were taken.

- **Content Validity:** The questionnaire was reviewed by five professors from the Maternity and Obstetric Department to ensure that it comprehensively covered all relevant domains related to the perceptions, challenges, and stressors of male nursing students in obstetric courses.
- **Face Validity:** A pilot test was conducted with a group of male nursing students to assess the relevance and clarity of the questions. This process helped confirm that all questions were understandable and aligned with the objectives of the study.
- **Reliability (Test-Retest Method):** The reliability of the questionnaire was assessed using the test-retest method. The questionnaire was administered to the same group of students on two different occasions, and the consistency of their responses over time was evaluated to ensure the reliability of the instrument.
- The internal consistency was 0.87 for the second part, 0.83 for the third part and 0.89 for the last parts of the questionnaire, indicating good internal consistency.

### Data Analysis

Once data collection was completed, a comprehensive data analysis process was carried out using SPSS statistical software to ensure the precision and reliability of the results.

#### 1. Descriptive Statistics

- **Frequency Distribution:** Responses from the questionnaire were analyzed using frequency distribution in SPSS, presenting the percentage of students who agreed, were neutral, or disagreed with various statements related to their perceptions, stressors, challenges, and recommendations concerning the obstetric course.
  - **Mean Scores:** The mean scores for the perceptions were calculated in SPSS to provide an overall understanding.
2. **Reliability Analysis:** The reliability of the questionnaire was assessed using the test-retest method in SPSS, and internal consistency was measured through Cronbach's alpha. A Cronbach's alpha value above 0.7 was deemed acceptable, indicating strong internal consistency of the

instrument.

3. **Correlation Analysis:** To explore the relationship between male nursing students' perceptions of obstetric education and their overall performance scores, Pearson's correlation coefficient was calculated in SPSS. This analysis helped determine the strength and direction of the relationship between the students' perceptions and their academic performance.

### Ethical Considerations

Several ethical guidelines were followed throughout the study to ensure the well-being of the participants and the integrity of the research.

1. **Informed Consent:** All participants were informed about the purpose of the study, its voluntary nature, and the confidentiality of their responses. They were provided with written consent forms explaining that they could withdraw at any time without any consequences.
2. **Confidentiality:** The anonymity of the participants was strictly maintained. No personal identifiers were collected, and data was kept confidential. Only aggregated results were reported, ensuring that no individual student could be identified.
3. **Approval from Ethics Committee:** The study was reviewed and approved by the Faculty of Nursing, Najran University Ethics Committee, ensuring that all research activities complied with the university's ethical guidelines and regulations for research involving human participants.

### Results

**Table 1. Frequency distribution of the studied sample regarding socio-demographic and experience profile**

Items		N	%
Age	Mean	20.5	
	SD	2.3	
Marital status	Married	13	26
	Single	37	74
Level	7	18	36
	8	17	34
	Internship	15	30
Residence	Rural	27	54
	Urban	23	46
GBA score	<3	11	22
	≥3	39	78

The results presented in Table 1 provide an overview of the socio-demographic and experience profile of the studied sample. The mean age of the participants is 20.5 years (SD = 2.3), indicating that the majority of the nursing students are relatively young and likely in the early stages of their academic journey. Regarding marital status, a significant portion of the sample (74%) are single, with only 26% being married, which aligns with the demographic trends commonly observed among male nursing students in this age group.

In terms of educational level, the distribution shows

a fairly even split between students in level 7 (36%) and level 8 (34%), with 30% of the sample being in their internship phase. This distribution provides valuable insight into the perspectives of students across different phases of their nursing education, from theory-based learning to clinical practice. Additionally, the residential profile shows that 54% of the students come from rural areas, while 46% reside in urban settings. This indicates a diverse background among the students, where rural representation may impact their access to healthcare resources and clinical opportunities.

**Table 2. Perceptions of male nursing students regarding the importance of the obstetric course**

Items	Agree		Neutral		Disagree	
	N	%	N	%	N	%
Studying the obstetric course is important for all nursing students, regardless of gender.	18	36	12	24	20	40
Male nurses can significantly contribute to the field of obstetrics.	14	28	11	22	25	50
Learning about obstetrics is important for my overall nursing education.	16	32	9	18	25	50
Obstetric knowledge can enhance my career opportunities in nursing.	7	14	13	26	30	60
Understanding obstetrics is important even for male nurses working in non-obstetric specialties.	10	20	10	20	23	46
Studying obstetrics helps break gender stereotypes in nursing.	13	26	8	16	29	58
Mean±	9±1.6					

The data reveals generally neutral to negative perceptions of obstetric education among male nursing students. Only 36% considered it universally important, and 50% doubted its relevance to their careers or contributions to the field. A majority (60%) believed that it wouldn't enhance career prospects, and 46% saw

limited relevance outside obstetric specialties. Additionally, 58% did not see obstetrics as breaking gender stereotypes in nursing. The mean score of  $9 \pm 1.6$  reflects a disconnect, suggesting that obstetric education is perceived as less pertinent to their roles and future careers.

**Table 3. Frequency distribution of stressors among the studied sample during the obstetric course**

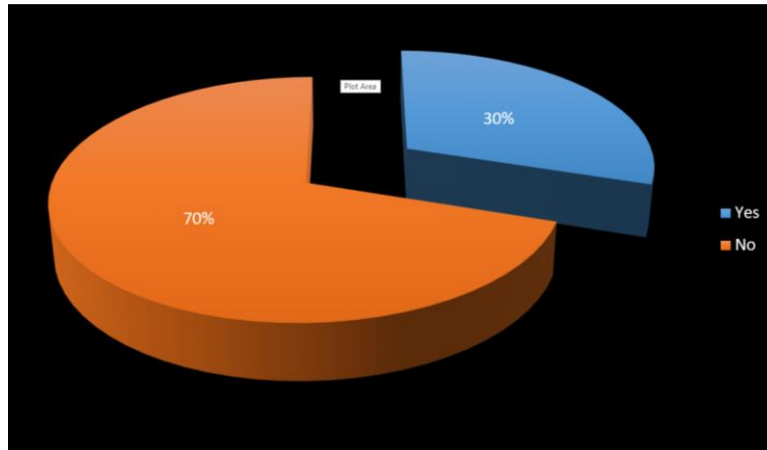
Items	Agree		Neutral		Disagree	
	N	%	N	%	N	%
I feel anxious about performing clinical tasks in obstetrics.	33	66	11	22	6	12
The lack of male role models in obstetric nursing increases my stress.	41	82	6	12	3	6
The cultural norms regarding men in obstetric nursing contribute to my stress.	50	100	0	0	0	0
The theoretical component of obstetric nursing is stressful.	15	30	19	38	16	32
Do you find the clinical component of obstetric nursing embarrassing?	35	70	10	20	5	10

The data pertinent to the frequency distribution reveals several key stressors among male nursing

students in obstetrics. A majority (66%) report anxiety about performing clinical tasks, indicating a need for

increased practical support. The lack of male role models is a significant stressor for 82% of the students, suggesting a gap in mentorship. Cultural norms are universally acknowledged as a stressor (100%), emphasizing the importance of cultural sensitivity.

Stress related to the theoretical component is more moderate, with 38% neutral and 32% disagreeing. Additionally, 70% of the students find the clinical component stressful, with varying responses pointing to a need for a more supportive clinical environment.



**Figure 1. Frequency distribution of male nursing students about using any coping mechanisms to deal with academic stress**

The data in Figure 1 provides insight into how male nursing students manage academic stress during their studies. About one-third (30%) of the studied students

reported using some form of coping mechanism to handle the pressures associated with their academic workload.

**Table 4. Frequency distribution of challenges faced by the studied sample during the obstetric course**

Items	Agree		neutral		Disagree	
	N	%	N	%	N	%
Missing real clinical experience in obstetrics	37	74	8	16	5	10
The lack of simulation equipment that required for developing my clinical skills in obstetrics.	42	84	5	10	3	6
I would prefer more specialized obstetric instructors with real-world experience	28	56	10	20	12	24
There is a clear gap between theoretical instruction and clinical application in obstetrics.	44	88	6	12	0	0

The data reveals several significant challenges faced by male nursing students during their obstetric course. A substantial majority (74%) agreed that they lack real clinical experience in obstetrics. Additionally, 84% of the students expressed concern due to the lack of simulation equipment required to develop clinical skills. More than a half of the students (56%) would prefer having more specialized obstetric instructors with real-world experience. The most striking finding is that 88%

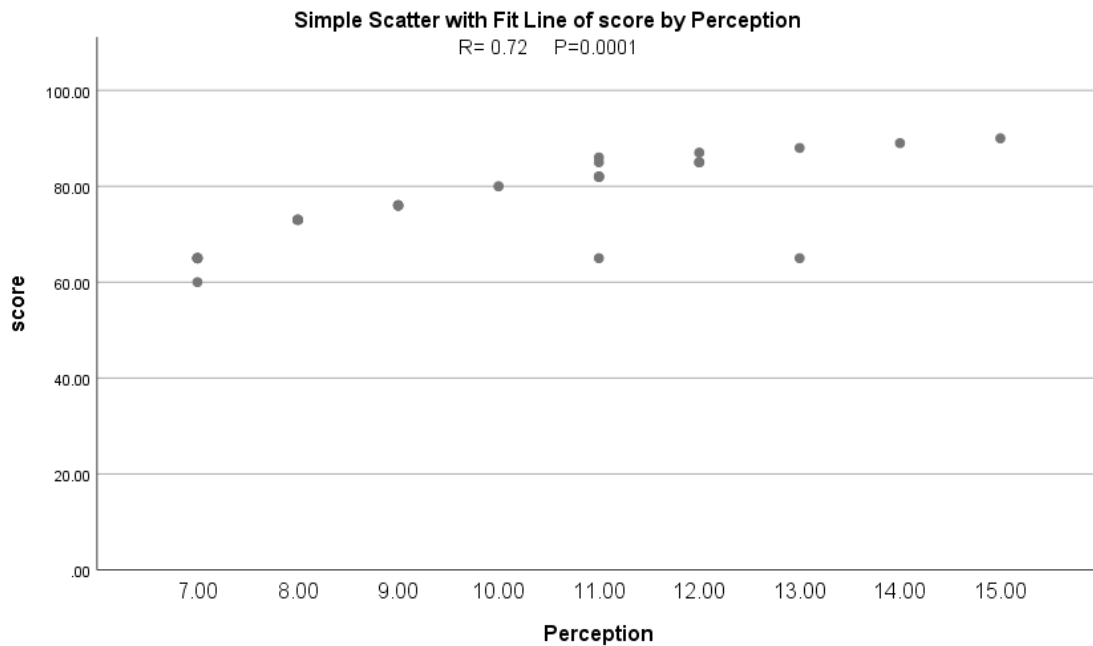
of the students believe that there is a clear gap between theoretical instruction and clinical application in obstetrics, reinforcing the need for curriculum improvements that better integrate theory with practice to enhance learning outcomes. These challenges highlight areas where program improvements could significantly enhance the educational experience and preparedness of male nursing students in obstetric care.

**Table 5. Frequency distribution of male nursing students' recommendations for addressing clinical stressors and challenges**

Items	Agree		neutral		Disagree	
	N	%	N	%	N	%
Creating specialized obstetric simulation labs would help improve my clinical skills.	50	100	0	0	0	0
Increasing the number of male obstetric instructors or role models would support male students better.	27	54	15	30	8	16
Use of virtual reality (VR) or augmented reality (AR) simulations as an alternative to traditional clinical placements in obstetrics.	38	76	7	14	5	10
Developing a mentorship program for male nursing students in obstetrics would help in coping with stressors.	34	68	10	20	6	12

The data reveals key recommendations from male nursing students aimed at improving their clinical experience in obstetrics. Notably, all students (100%) agreed that the creation of specialized obstetric simulation labs would significantly enhance their clinical skills. In terms of increasing the number of male obstetric instructors or role models, the responses were mixed. While 54% agreed that more male instructors would provide better support, 30% remained neutral, and 16% disagreed, suggesting that some students may feel that male role models are less critical for their educational success. The use of virtual reality (VR) or augmented reality (AR) simulations as an alternative to

traditional clinical placements received strong support, with 76% of the students in favor. However, a small group (10%) disagreed, possibly indicating reservations about the effectiveness or accessibility of these technologies in obstetric education. Lastly, 68% of the students supported the development of a mentorship program specifically for male nursing students in obstetrics, viewing it as a helpful tool for coping with clinical stressors. Nevertheless, 12% disagreed, implying that some students may seek other forms of support or feel that mentorship programs may not be the most effective solution for them.



**Figure 2. Correlation between the perceptions of male nursing students and their total scores at the end of the course**



The scatter plot in Figure 2 shows the correlation between students' perceptions of the obstetric course and their total performance scores at the end of the course. A positive correlation is observed, with an  $r$  value of 0.72, indicating a strong positive relationship between perceptions and performance. This suggests that as the students' perceptions of the course improve, their performance scores tend to increase as well. The significance level ( $P=0.0001$ ) confirms that this relationship is statistically significant.

## **Discussion**

An examination of the particular issues and perspectives arising from the growing number of male nursing students enrolled in obstetric schools is necessary. Male students often encounter cultural constraints, gender biases, and stressors that can hinder their learning experiences in maternity nursing. Research indicates that these challenges stem from traditional gender roles and stereotypes, leading to feelings of isolation and unacceptance in clinical settings (Raghavan et al., 2022). Furthermore, the lack of male role models and supportive faculty can exacerbate these issues, highlighting the need for targeted strategies to foster inclusivity and enhance educational outcomes for male nursing students (Morgan et al., 2018).

Regarding the perceptions of male nursing students regarding the importance of the obstetric course, the findings revealed a notable difference in the perceptions of male nursing students regarding the importance of obstetric education within the nursing curriculum. The data indicated that only around one-third of male nursing students recognize the necessity of studying obstetrics for all nursing students, while a significant portion of 40% express disagreement with this perception. This division raises important questions about the role of obstetric education in nursing programs and suggests a broader debate on gender perceptions in the nursing field. Similarly, a half of the students disagreed with the statement that learning obstetrics is important for their overall nursing education, indicating a broader perception among male nursing students that obstetrics may not be directly relevant to their careers.

There are several ways to understand male nursing students' doubts about the importance of obstetrics. Primarily, obstetrics is frequently perceived as a specialization that is exclusive to women, which may

reflect persistent biases about gender roles in healthcare. This perception could lead male students to feel disconnected from the subject matter, subsequently influencing their attitudes toward its importance in their education. The findings align with Muna et al. (2022), who studied "Perceptions of Male Nursing Students about Their Maternity Clinical Practice: A Cross-sectional Survey from a Nursing College" and stated that male nursing students often face societal stereotypes that associate nursing with femininity, leading to discomfort in engaging with obstetric education. The perception that obstetrics is primarily a female domain may deter male students from valuing its relevance, as they may feel less accepted in this field.

Concerning the distribution of stressors among the sample studied during the obstetric course, the results highlight several key stressors. Firstly, about two-thirds of the students reported feeling anxious about performing clinical tasks in obstetrics. Additionally, the majority of male nursing students agreed that the absence of male role models in obstetric nursing was identified as a major stressor. Furthermore, all studied students agreed that cultural norms regarding men working in obstetric nursing were universally acknowledged as a source of stress.

The experiences of male nursing students in obstetrics reveal significant anxiety and stress stemming from gender-related challenges. A prevalent concern among these students is the absence of male role models, which many identified as a major stressor in their clinical training. The lack of male mentors not only diminishes opportunities for guidance, but also contributes to feelings of isolation and inadequacy in a predominantly female environment. Furthermore, cultural norms regarding men in obstetric nursing exacerbate this stress; all studied students acknowledged that societal perceptions of masculinity and caregiving roles create barriers that hinder their clinical engagement.

These results were advocated by Potur & Bilgin (2014), who studied "Assessment of clinical stress in male and female nursing students, as measured on the first and last day of the obstetrical nursing clinic course" and reported that male nursing students often experience significant stress due to the predominance of female patients, which can lead to feelings of inadequacy and anxiety during clinical training. In the same context, Alexander et al. (2024) studied "Feeling the

responsibility: Exploring the emotional experiences of final-year medical students when carrying out clinical tasks" and found that the emotional experiences of medical students reveal that anxiety is a common response when faced with clinical tasks, particularly in obstetrics, where the risks are high. Additionally, this result remains in agreement with Mohamed et al. (2023), who examined "Mental Health Challenges: Anxiety among Medical Students - A Cross-sectional Analytical Study." They revealed that cultural and religious factors can exacerbate these feelings, as male students may face rejection from patients who prefer female practitioners.

Concerning challenges faced by male nursing students during the obstetric course, the data revealed that the majority of male students agreed that they lack real clinical experience in obstetrics and that there is a clear gap between theoretical instruction and clinical application in obstetrics, reinforcing the need for curriculum improvements that better integrate theory with practice to enhance learning outcomes.

One of the primary reasons for the reported lack of real clinical experience among male nursing students is gender bias within clinical settings. Male students often encounter patient refusals, where female patients may be uncomfortable receiving care from male nurses due to cultural sensitivities or personal preferences. This situation not only limits their opportunities for hands-on learning, but also reinforces feelings of isolation and inadequacy. The clear gap between theoretical instruction and clinical application further exacerbates the challenges that male nursing students face. The absence of practical experience can lead to increased anxiety and a lack of confidence when performing clinical tasks, as students feel unprepared to apply their theoretical knowledge in real-world scenarios.

This finding is consistent with Genedy et al. (2020), who studied "Male Nursing Students Training at Clinical Maternity Nursing Course: Challenges and Proposed Improvement Actions" and showed that many male students feel inadequately prepared for maternity clinical practice, and they reported various problems and embarrassing situations during their training. In addition, this result was further supported by Dias et al. (2024), who investigated "Simulation as an Innovative Teaching Pedagogy for Baccalaureate Male Students Undertaking a Maternal Health Course in the Arab World: A Pilot Project" and stated that the need for

curriculum improvements is evident, as integrating simulation-based learning has shown promise in enhancing students' obstetric knowledge and critical-thinking skills.

The study highlights the importance of simulation labs in nursing education, particularly in obstetric training, but does not fully address the practical implementation and associated challenges. While students strongly support the creation of specialized obstetric simulation labs, it is essential to consider the costs, resource requirements, and training needed for effective implementation. Establishing these labs requires substantial financial investment for equipment, space, and maintenance, as well as trained personnel to manage and run simulations. Additionally, faculty members must be trained to effectively integrate these labs into the curriculum and ensure that students benefit from the experience.

An alternative approach, such as the integration of virtual reality (VR) or augmented reality (AR) technologies, presents opportunities for overcoming some of these challenges. VR and AR simulations offer immersive, cost-effective, and scalable alternatives to traditional clinical placements, making them particularly appealing for institutions with limited resources, with more than three-quarters of the students in favor. About two-thirds of the students supported the development of a mentorship program, specifically for male nursing students in obstetrics, viewing it as a helpful tool for coping with clinical stressors.

This result is supported by Boucetta and Alaoui (2023), who studied "Clinical simulation training for the adequate management of obstetrics emergencies: A narrative review." They indicated that an unanimous agreement among students highlighted the need for specialized obstetric simulation labs, which are essential for enhancing clinical skills and confidence in managing emergencies. Additionally, the integration of the virtual reality (VR) and augmented reality (AR) simulations received strong support, with over three-quarters of the students favoring these innovative approaches as effective alternatives to traditional clinical placements (Nair, 2019; Vogel et al., 2024). Furthermore, approximately two-thirds of the students advocated for a mentorship program tailored for male students in obstetrics, recognizing it as a valuable resource for coping with clinical stressors (Jallad & Işık, 2024). In the same line, Divya et al. (2022) support findings of the current study.

The observed strong positive correlation between students' perceptions of the obstetric course and their performance aligns with prior research emphasizing the role of student engagement and attitudes in academic achievement. For example, studies by Genedy et al. (2020) and Dias et al. (2024) demonstrated that when students perceive the course content as relevant and teaching methods as engaging, their academic outcomes improve significantly. Similarly, Nair (2020) highlighted that fostering a supportive learning environment enhances confidence and motivation, which, in turn, positively impacts performance in obstetric education settings. This underscores the importance of interactive and student-centered pedagogical approaches in improving outcomes.

### Limitations of the Study

The study acknowledges several limitations that may have influenced the findings, particularly in terms of generalizability and sample size.

1. **Single-institution Setting:** The study was conducted at one institution, which limits the ability to generalize the findings to nursing students in other institutions, both within Saudi Arabia and internationally. The specific context of Najran University may have introduced biases that do not reflect the experiences of male nursing students at other universities with different educational environments, curricula, or student populations.
2. **Small Sample Size:** The relatively small sample size, because the Faculty of Nursing is newly established, leads to a limited number of enrolled students, although all students who agreed to participate were included in the study, which is still a weakness point, and we recommend further study with a larger sample size to provide more reliable data and increase the study's external validity.
3. **Cultural and Societal Influences:** Cultural and societal norms in Saudi Arabia, such as the traditional roles assigned to gender, may have influenced the participants' responses and attitudes toward obstetric courses. These norms may not be applicable to male nursing students in other countries or regions where gender roles and expectations differ, thus limiting the applicability of the findings beyond the Saudi context.

### Conclusion

This study identified significant challenges faced by male nursing students at Najran University during their obstetric education, including low perceptions of the relevance of obstetrics, cultural stressors, and a lack of male role models. The findings revealed that cultural norms and stress during clinical practice are key factors contributing to students' negative perceptions and discomfort in obstetric education. Furthermore, the disconnect between theoretical instruction and clinical practice negatively affects their confidence and preparedness. The positive correlation between students' perceptions of the course and their academic performance underscores the importance of improving the learning environment to foster better engagement and academic outcomes.

### Recommendations

1. **Establishing Specialized Obstetric Simulation Labs:** Developing simulation labs tailored for obstetric education will allow male nursing students to gain practical experience in a non-threatening, controlled environment. This will help reduce anxiety and increase their confidence in performing clinical tasks.
2. **Increasing the Integration of Theory and Practice:** Bridging the gap between theoretical knowledge and clinical application is crucial. Aligning classroom instruction with real-world practice will provide students with a clearer understanding of obstetric care and how it applies to their future roles as nurses, ultimately improving their perceptions and readiness for clinical tasks.
3. **Developing Structured Mentorship Programs for Male Nursing Students:** Institutions should create targeted mentorship programs for male nursing students in obstetrics, which will provide them with the support and guidance needed to navigate the challenges they face.
4. **Future Studies:** To enhance the generalizability of future research, future studies should consider incorporating multiple institutions from diverse geographical locations. Additionally, increasing the sample size will improve the statistical power of the study, making the results more robust and reliable.

## REFERENCES

- Abdalrahim, A., Alkhalwaldeh, A., AlBashtawy, M., AlAzzam, M., & Suliman, M. (2023). Enhancing empathy in nursing education: A feasibility and usability study of virtual reality-based training for dementia care. *Jordan Journal of Nursing Research*, 2(4), 246. <https://doi.org/10.14525/JJNR.v2i4.04>
- Abdel-Baky, F.A.A., Abdel Moniem, E.F., & Farag, F.A.E. (2019). Obstacles facing male nursing students at maternity clinical learning settings. *Egyptian Journal of Health Care*, 10(4), 233-244. [https://ejhc.journals.ekb.eg/article\\_65531.html](https://ejhc.journals.ekb.eg/article_65531.html)
- Achora, S. (2016). Conflicting image: Experience of male nurses in a Uganda's hospital. *International Journal of Africa Nursing Sciences*, 5, 24-28. <https://doi.org/10.1016/j.ijans.2016.05.001>
- Alexander, M., Behrend, R., Franz, A., & Peters, H. (2024). Feeling the responsibility: Exploring the emotional experiences of final-year medical students when carrying out clinical tasks. *Medical Teacher*, 1-8. <https://doi.org/10.1080/0142159x.2024.2351137>
- Alghabashi, M.T., & Sayed, H.Y. (2022). Assessment of male and female nursing students' perception of male nurses role at Makkah, KSA. *Pakistan Journal of Medical & Health Sciences*, 16(05), 861. <https://doi.org/10.53350/pjmhs22165861>
- Alshammari, M., Rajagopal, M., Vellokalam, C., & Alshammari, Z. (2023). Perception of male nursing students about their maternity clinical practice: A cross-sectional survey from a nursing college. *Open Journal of Nursing*, 13, 65-79. <https://doi.org/10.4236/ojn.2023.131005>
- Atia, N. (2016). Practical and theoretical barriers facing male students at antenatal and intra-natal units of Ain Shams Maternity University Hospital. *Obstacles Facing Male Nursing Students at Maternity Clinical Learning Settings*, 212-244.
- Banakhar, M., Bamohrez, M., Alhaddad, R., Youldash, R., Alyafee, R., Sabr, S., Sharif, L., Mahsoon, A., & Alasmee, N. (2021). The journey of Saudi male nurses studying within the nursing profession: A qualitative study. *Nursing Reports*, 11(4), 832-846. <https://doi.org/10.3390/nursrep11040078>
- Boucetta, N., & El Alaoui, M. (2023). Clinical simulation training for the adequate management of obstetrics emergencies: A narrative review. *Medwave*, 23(10). <https://doi.org/10.5867/medwave.2023.10.2712>
- Dias, J.M., Abraham, M.S., Subu, M.A., Al-Yateem, N., & Ahmed, F.R. (2024). Simulation as an innovative teaching pedagogy for baccalaureate male students undertaking a maternal health course in the Arab world: A pilot project. *International Board*, 16(1), 27. <https://doi.org/10.37506/qnt6qx32>
- Divya, R., Gerald, A., Matua, G., Vidya, S., & Prince, E.J. (2022). Male student challenges in a maternity nursing clinical course in a Middle Eastern country: Strategies for improved performance and future implications for nursing education and practice. *SAGE Open Nursing*. <https://doi.org/10.1177/23779608231160482>
- Genedy, A.S.E., Ahmed, A.K., Mostafa, M.M., & Omar, A.M. (2020). Male nursing students training at clinical maternity nursing course: Challenges and proposed improvement actions. *Egyptian Journal of Health Care*, 11(3), 576-590. [https://ejhc.journals.ekb.eg/article\\_153388.html](https://ejhc.journals.ekb.eg/article_153388.html)
- Jallad, S.T., & Işık, B. (2024). The effectiveness of immersive virtual-reality simulation as an innovative learning strategy for acquisition of clinical skills in nursing education: Experimental design. *Games for Health Journal*. <https://doi.org/10.1089/g4h.2023.0139>
- Mohamed, K.O., Mohammed, A.A., Zaki, E.A., Soumit, S.M., Ali, W.A., & Abbas, A.M. (2023). Mental health challenges: Anxiety among medical students: A cross-sectional analytical study. *International Journal of Medical Students*, S120. <https://doi.org/10.5195/ijms.2023.2295>
- Morgan, B. T., Smallheer, B. A., Molloy, M. A., & Gordon, H. (2018). Identifying strategies for addressing perceived barriers to education for pre-licensure male nursing students. *Journal of Nursing Education and Practice*, 8(10), 76-84.
- Muna, A., Rajagopal, M., Vellokalam, C., & Alshammari, Z. (2022). Perceptions of male nursing students about their maternity clinical practice: A cross-sectional survey from a nursing college. *Open Journal of Nursing*. <https://doi.org/10.4236/ojn.2023.131005>
- Nair, N.N. (2020). Virtual simulations: Cultivating self-efficacy among undergraduate students to manage obstetric emergencies in nursing. *Journal of Education and Human Development*, 9(3), 40-47. <https://doi.org/10.15640/jehd.v9n3a4>
- O'Lynn, C. (2019). Perceptions of gender-based barriers for men in an online nursing completion program compared to traditional on-campus nursing programs. *Journal of Online Learning and Teaching*, 9(4), 481-488.

- Potur, D.C., & Bilgin, N.Ç. (2014). Assessment of clinical stress in male and female nursing students, as measured on the first and last day of the obstetrical nursing clinic course. *Kashed, 1*(1), 93-106. <https://api.Semantic scholar.org/CorpusID:70835353>
- Raghavan, D., Matua, G.A., Seshan, V., & Prince, E.J. (2023). Male student challenges in a maternity nursing clinical course in a Middle Eastern country: Strategies for improved performance and future implications for nursing education and practice. *SAGE Open Nursing, 9*. <https://doi.org/10.1177/23779608231160482>
- Seshan, V., Matua, G. A., Raghavan, D., Arulappan, J., Al Hashmi, I., Roach, E. J., & Prince, E. J. (2021). Case study analysis as an effective teaching strategy: Perceptions of undergraduate nursing students from a Middle Eastern country. *SAGE Open Nursing, 7*, 23779608211059265. <https://doi.org/10.1177/23779608211059265>
- Teresa-Morales, C., Rodríguez-Pérez, M., Araujo-Hernández, M., & Fera-Ramírez, C. (2022). Current stereotypes associated with nursing and nursing professionals: An integrative review. *International Journal of Environmental Research and Public Health, 19*(13), 7640. <https://doi.org/10.3390/ijerph19137640>
- Vogel, K., Bernloehr, A., Willmeroth, T., Blattgerste, J., Hellmers, C., & Bauer, N. H. (2024). Augmented reality simulation-based training for midwifery students and its impact on perceived knowledge, confidence, and skills for managing critical incidents. *Midwifery*. <https://doi.org/10.1016/j.midw.2024.104064>
- Yilmaz, F.A., & Polat, S. (2020). Male nurses' views on the implementation of the obstetrics gynecology nursing course. *International Journal of Caring Sciences, 13*(1), 359-365. <https://www.internationaljournalofcaringsciences.org>
- Younas, A., Sundus, A., Zeb, H., & Sommer, J. (2019). A mixed method reviews of male nursing students' challenges during nursing education and strategies to tackle these challenges. *Journal of Professional Nursing, 35*(4), 260-276. <https://doi.org/10.1016/j.profnurs.2019.01.008>