

Male Nursing Students Training at Clinical Maternity Nursing Course: Challenges and Proposed Improvement Actions

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Abstract

Background: Increasing numbers of men enter the nursing field. When males enter nursing programs, during their training, they can face challenges, especially in maternity areas. **Aim:** To determine the challenges facing male nursing students during their training in the maternity department and propose improvement plan of actions to overcome these challenges. **Design:** A descriptive exploratory research design was utilized, **Sample:** A convenient sample of (300 participants) composed of (100) male nursing students and (100) female students who just completed their training in the maternity course in the Faculty of Nursing, Fayoum University during the two semesters of the academic year 2017-2018. Also 100 of women were recruited in this study. **Setting:** This study was implemented in the maternity department in the Faculty of Nursing, Fayoum University at Obstetrics and Gynecological department in El-Nabawy El-Mohandes Fayoum General Hospital affiliated to Ministry of Health, Egypt. **Tool of data collection:** Four tools used to collect current data: (I) structured self-administered questionnaire, (II) male students' attitudes towards maternity nursing clinical training (III) female nursing students' attitude towards their male colleague companionship during clinical training in the maternity department, and lastly (V) Women's attitude towards involvement of male student in providing maternity care during training in the maternity department. **Results:** the majority of studied male students (84%) facing a variety of problems and embarrassing situations during their training in clinical maternity course, there were moderate statistical significant relation between total attitude of studied male, female students, participant women and their residence P-value 0.010, 0.019. and 0.012 **Conclusion:** A strong positive correlation reported between male student attitude and their total self-evaluation, women's and female students' attitude was statistically significance P-value ≤ 0.05 . **Recommendations:** Further research should be conducted to compare the experiences of male nurses in different maternity training settings, residence and culture.

Keywords: Clinical, Maternity training, Challenges.

Introduction

Nowadays nursing has progressed as a feminine occupation with a few men doing men's jobs. The percentage of men joining the nursing career is increasing today, and the overwhelmed female profession, remain a minority (Tickner, et al 2018)

Maternity is an art; therefore, each student should be exposed to clinical experiences in a maternity nursing programme. Additionally, in order to minimize the practice of severity to a live patients, maternity students must be properly trained and directed along the way to being competent experts (Meyer, 2017).

In nursing, males have also played an important role historically, as well as being

employed in the healthcare sectors. Such functions include, but are not limited to, male nurses of different religious orders who provide the sick, injured and dying in times of war with nursing care and safety, and women in labour too (Egenes and Glenton, 2017)

Men position as nurses, face challenges that include concerns regarding their gender, gender inequality, lack of motivation, insufficient training on the proper use of touch, and disproportionate therapeutic changes. Such barriers would impact men enrolled in nursing education and training (Buthelezi et al., 2015)

The gender inequality in the nursing profession remains unchanged in the face of significant changes impacting health services. It has been attributed to historical as well as social thinking. Since Nightingale was attempting to reform nursing care, men were intentionally excluded from taking up the profession (Kangasniemi et al., 2015)

This historical context, the social context of men approaching the nursing profession has grown and is still being used as the most important barrier for men entering the nursing profession (Trotter, et al., 2017)

Maternity nursing regarded as a woman's field by male students, they were tourists. Undergraduates exercised outstanding defences while assessing postpartum completion. Many researchers found that midwives were aggressive during the appointment and that a male student felt insecure during the course of the study (Kirk, et al., 2013)

Challenges linked to gender role expectations tend to be aggravated when men first reach rotation in their nursing education program in the maternity clinical training settings. The personal nature of maternity care and its sexual overtones make male nurses uncertain and worried about this aspect of care (Ramadan, 2016)

Study significant

Male nursing students are critically needed in Egypt and health care system. Today's increasing numbers of male student nurses are enrolled in the Nursing faculties, especially those in rural areas such as Fayoum governorate, in order to achieve a good career

with high salaries and opportunities to travel for work in Arab or international institutions, consequently, culture can also influence the treatment provided to an Egyptian woman considered a source of difficulties for male students. So they face different problems in clinical training settings, especially in maternity setting. Hence granted less or restricted to denied growth and

development opportunities in the field. Settings in which qualified. A few finding studies pointed to obstacles fronting male nursing students particularly in the areas of clinical maternity. Trying to complete the gaps in literature on midwifery by focusing attention on the contradictions between students' roles, midwives and patients linked to cultural constraints and obstacles. So, the study reiterated the urgent need to identify and provide guidance on the challenges faced by male nurses during maternity training.

Study Aim

To determine the challenges faced by male nursing students during their maternity clinical training course and to propose a recommendation for improvement actions to overcome these challenges through the following objectives:

1. Assess male nursing student's attitude toward their training in the maternity department
2. Assess female nursing student's attitude towards their male colleague companionship during training in the maternity course
3. Assess women's attitude regarding their male student caring during training in the maternity course
4. Determine the factors associated with challenges encountered maternity male nursing student training.

Research Question

1. What are the challenges facing male nursing students during their training in maternity course?
2. What are male nursing students' attitude toward their training in the maternity department
3. What are female nursing students' attitude towards their male colleague companionship during training in the

maternity department

4. What are women's attitude regarding their male student caring during training in the maternity department
5. Is there associated factors with challenges facing male nursing students during their clinical training in the maternity course

Subject and Methods

Design: A descriptive exploratory design was used in this study.

Setting: This study was implemented in the maternity department in the Faculty of Nursing, Fayoum University at Obstetrics and Gynecological department in El- Nabawy El-Mohandes Fayoum General Hospital affiliated to Ministry of Health, Egypt.

Sample: A convenient sample of (300 participants) composed of (100) male nursing students and (100) female students who just completed their training in the maternity course in the Faculty of Nursing, Fayoum University during the two semesters of the academic year 2017-2018. Also 100 of women were recruited from the previously mentioned setting those agreed to share in the study during the same period.

Tools: current study data collected by using the following 4 tools:

Tool (I): Structured self-administered questionnaire:

This tool was designed by the researchers after reviewing relevant literature. It comprised of three parts:

First part: Demographic data of study participants which included: Male, female student and women' age, residence

The second part: data related male students' perception regarding clinical training challenges and problems faced during training.

The third part: data related the embarrassing situation experienced by male students during clinical training in maternity

course.

Scoring System: Using this tools Likert Scale scoring system, consider whether it does not accept it (zero), if it is neutral (1) if it accepts (2)

Tool (II): Male students' attitudes towards maternity nursing clinical training:

This tool is adapted from (Ramadan, 2016) and the researcher modifies it. It included 20 statements developed to assess the attitude of male students toward maternity clinical course the three possible responses for each statement was

- Positive response was scored by (agree= 2).
- No opinion or indifferent was scored by (neutral= 1).
- Negative response was scored by (disagree= 0).
- If the total score was <50% the result was considered as negative attitude and if $\geq 50\%$, the result was considered as positive attitude toward maternity clinical course.

Tool III: Female nursing students' attitude towards their male colleague companionship during training in the maternity department.

This tool consisted of 10 designed statements by the researchers after reviewing related literature to assess female nursing student's attitude towards their male colleague companionship and involvement in training at the maternity department.

Scoring system: Using Likert Scale the scoring system for this tool in which the three possible responses for each statement was:

- Positive response was scored by (agree= 2).
- No opinion or indifferent was scored by (neutral = 1).
- Negative response was scored by (disagree= 0).

If the total score was <50% the result was considered as negative attitude and if $\geq 50\%$, the result was considered as positive attitude.

Tool V: Women's attitude regarding involvement of male student in providing maternity care during training in the maternity department

This tool adapted from a Turkish study

by (Nuriye, 2012) it comprise 18 statement to assess women's attitude regarding involvement of male student in providing maternity care during training in the maternity department.

Scoring system: Using Likert Scale the scoring system for this tool in which the three possible responses for each statement was

- Positive response was scored by (agree= 2).
- No opinion or indifferent was scored by (undecided = 1).
- Negative response was scored by (disagree= 0).

If the total score was <50% the result was considered as negative attitude and if $\geq 50\%$, the result was considered as positive attitude.

Validity Test:

A five of the subject areas staff specialists checked the tools for content validity. They were also assessed the items for completeness and clarification.

Reliability Test:

Test-re-test used by the researcher to test the reliability of the tools using the Cronbach alpha test that was equivalent to 0.90.

Pilot Study

It conducted on 10 percent of the total number of all participants in the study. The main study sample excluded them; some modifications have been made in the data collection tools according to pilot study results

Administrative design

- Official permission was obtained from all authorities; dean, and head of Maternity department in Faculty of Nursing, Fayoum University and general Fayoum hospital to conduct the study.

Ethical Considerations

- A comprehensive cleared cover letter indicates the study aim, benefits, and risks as well as, contact details for researchers provided to allow students to ask study related questions and maintain the confidentiality and anonymity of participants. Completely voluntary participation without any direct or indirect

effect to all participants were allowed, moreover; they can dismiss as they like.

Procedure

The data were gathered over two semesters of the academic year 2017 -2018 that done as the following:

First step: preparation of the data collection tools after reviewing related literatures.

Second step: obtaining all approval from all concerned authorities

Third step: collecting study data by the researcher from all participants using **Tool I, II and tool III** that distributed to the study participants' male and female students who finished their training course to fill the questionnaire after declaration the study nature and aim to them.

Then the researcher carried out face-to-face interview with participant women who accepted to participate in the study to fill the **tool V** concerning woman attitude towards male student involvement in maternity care during the period of the study.

Statistical analysis

Data that collected were coded and entered to the statistical package of social sciences (SPSS) version 20. After complete entry, data were explored for detecting any error, then, it was analyzed by the same program for presenting frequency tables with percentages. Quantitative data were described as mean/SD as appropriate. Pearson correlation (r) was performed to measure the strength of relationship between key study variables. It can range from -1 to 1. An r of -1 indicates a perfect negative linear relationship between variables, an r of 0 indicates no linear relationship between variables, and an r of 1 indicates a perfect positive linear relationship between variables. The Chi-Square test was used to check whether the variables are independent of each other or not. All tests were performed at a level of significance (P-value) equal or less than 0.05 was considered to be statistically significant.

Results

Table (1): Distribution of personal data of the studied participants

Characteristics	Male (No. 100)		Female (No.100)		Women(No. 100)	
Age						
Mean ± SD	41.12±1.02		21.9±1.13		25.14±7.13	
Residence	NO.	%	NO.	%	NO.	%
Rural	66	66	60	60	75	75
Urban	34	34	40	40	25	25

Table (1) Showed that mean age of studied participants (male, female students and participant women) were 21.14±1.02, 21.9±1.13, and 25.14±7.13 respectively. Nearly more than two thirds of all study participants were living in a rural area regarding residence of participants [male (66%), female (60%), and women (75%) respectively.

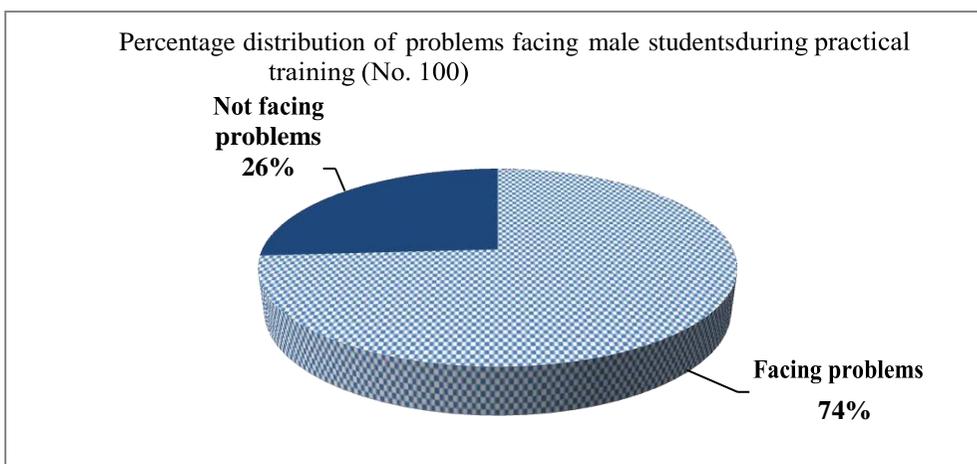


Figure (1): Percentage distribution of problems facing male students during practical training (No. =100):

Figure (1) demonstrated that nearly three quarters of male students (74%) facing problems during clinical training as the rejection of some physicians, nurses and women have caused them a lot of stress.

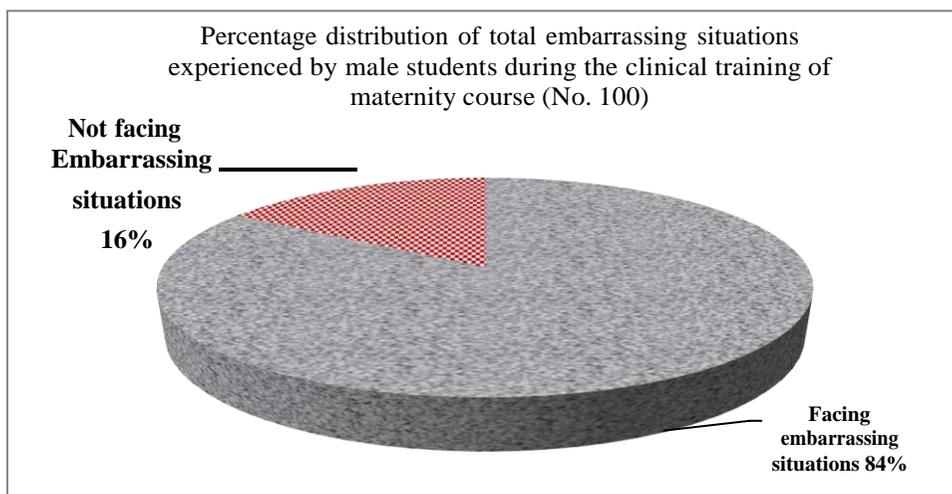


Figure (2): Percentage distribution of the embarrassing situations experienced by male students during the clinical training of maternity course (No. =100)

Figure (2) pointed to that the majority of studied male students (84%) facing a variety of embarrassing situations while they trained in clinical maternity course.

Table (2): Percentage distribution of the embarrassing situations experienced by male students during clinical training in maternity course (No=100):

Variables	Accept	Neutral	Not accept
	%	%	%
History taking			
Feel embarrassed while taking menstrual history	60	10	30
Feel embarrassed while the question of contraceptive methods	62	12	26
Feel embarrassed while taking the previous and current obstetrics and gynecology history	48	12	40
Clinical procedures of the course			
Abdominal examination	10	14	76
Breast examination	10	4	86
Examination of the perineal incision(episiotomy examination)	12	8	80
Examination of the genital tract system (vagina and cervical examination)	12	4	84
Contraceptive methods counseling	34	14	52
Health education of women on			
Breastfeeding	68	10	22
Reproductive tract infections	28	20	52
Contraceptive methods	36	18	46
Breast Care	38	8	54

Table (2) illustrated that the most embarrassing situations experienced by male students during clinical training in maternity course were varied among clinical skills as 40 % of them were embarrassed while taking the previous and current obstetrics and gynecology history. Also the majority of studied female (86%, 08%, 02%) were embarrassed with almost of clinical procedures breast examination, vaginal examination, and perineal care and examination. Moreover; regarding health education skills the most embarrassed topics were breast care, reproductive tract infections, and contraceptive counseling (54%, 52%, and 46% respectively).

Table (3): Percentage distribution of the male student' self-evaluation of the practical skills achievement and application of the maternity course in the clinical training setting (No.=100):

The training areas	Total self-evaluation						Mean± SD	Test of significance χ^2 & p
	Poor (<50%)		Fair (50- <75%)		Good (≥75%)			
	No.	%	No.	%	No.	%		
Antenatal area	84	84	84	84	21	21	4.8±1.56	$\chi^2 = 29.371$ P. = ≤0.0001
Labour (childbirth) area	21	21	11	11	21	21	10.38±3.08	
Postpartum area	24	24	11	11	24	24	13.34±3.90	
Operating Room area	13	13	39	39	48	48	11.38±4.08	
Family planning area	35	35	35	35	30	30	11.38±3.03	
Total self-evaluation	84	84	11	11	4	4	28.56±7.73	

(*) Statistical significant at (p ≤0.05) χ^2 = chi square.

Table (3) demonstrated that the total mean ± SD score of male student' self- evaluation of their practical skills achievement and application at maternity clinical skills in (Antenatal area, labour area, postpartum area, operating room area and family planning area skills) in the clinical training setting reflects that the high proportion of students scored their clinical achievement of main clinical skills areas between fair and poor whilst the

lowest proportion scored their achievement as good with significant statistical difference $P\text{-value} \leq 0.0001$

Table (4): Distribution for the studied male students' attitudes towards clinical training of the maternity course (No. =100):

Variables	Agree	Neutral	Disagree
	%	%	%
1. Maternity nursing is a female-only profession.	62	4	34
2 Think that working in maternity nursing is culturally unacceptable for the society.	35	10	55
3. They prefer to treat male patients instead of female patients	64	4	32
4. Males in the maternity ward will provide nursing care.	66	5	29
5. Male students should not be excluded from maternity nursing.	64	----	36
6. Can deal with male patients as well as female patients.	61	5	34
7. Would prefer that male nursing students have a choice of not engaging in the practical training of the maternity course.	53	5	42
8. clinical training for male students should only take place in the skill lab.	56	1	43
9. Male students should have the same experience of the maternity nursing.	67	2	31
10. Male nursing students can improve the maternity nursing.	41	-----	59
11. Male nurses are accepted by female patients as maternity nurses.	53	10	37
Variables	Agree	Neutral	Disagree
	%	%	%
12. Male nurses are valued by society as maternity nurses.	45	-----	55
13. Male nursing students will be harmed from maternity nursing.	80	4	16
14. Feel that female patients trust on male doctors and nurses more than females.	58	10	32
15. Have the ability to practice maternity nursing as a profession.	56	8	36
16. Gained many skills during studying Maternity Nursing.	54	7	39
17. Feel that teaching staff treat both male and female students by the same way.	63	11	26
18. Male nurses should not be appointed in the obstetrics and gynecology departments.	82	6	12
19. Feel that my needs are not being satisfied by the faculty teaching staff during maternity course.	36	12	51
20. Think studying maternity nursing for male students is worthless.	36	14	50
Total male students' attitude level	No.		%
Negative attitude (<50%)	18		18
Positive attitude (≥50%)	46		81

Table (4) nearly half and more of male students of the total sample exhibited negative attitude regarding male students training, role as care provider of male students in maternity course either in clinical lab or clinical sitting while the remaining of them were

had apposite attitude (45% and 46% respectively).

Table (5): Distribution female students attitudes towards colleagues male students companionship during maternity clinical training (No.=100)

Variables	Agree	Neutral	Disagree
	%	%	%
Don't mind to acquire information and skills during training with my male colleague in the laboratory	----	26	74
Don't mind to apply some skills during training with my male colleague in the hospital's training places	4	24	72
Agree to work alternatively with male colleague in the same group during training in the lab?	45	16	39
Feel embarrassed during practical training with male colleague	19	33	48
Preferable to work with a female colleague more than male one in the same group during training in the hospital with women's	76	10	14
Total female students' attitude level	No.		%
Negative attitude (<50%)	65		65%
Positive attitude (≥50%)	35		35%

Distribution female student's attitudes towards colleague's male student's companionship during training table (5). Revealed that more than two thirds (65%) of female students exhibited negative attitude toward male students training in maternity course especially during sharing colleague male in training.

Table (6): Distribution of studied women' attitudes towards involvement of male student during the clinical training of the maternity course (No.=100)

Variables	Agree	Undecided	Disagree
	%	%	%
1. Prefer to receive perinatal care services from male nurses	32	8	60
2. Nursing is an occupation which can only be performed by women.	60	---	40
3. In maternity and childbirth facilities, male nurses can employ.	34	6	60
4. Can get care from male nurses during pregnancy and labor process	41	----	59
5. If male nurses carry out abdominal monitoring, will be disturbed.	58	8	34
6. If male nurses conduct vaginal monitoring, will be disturbed.	50	4	46
7. if male nurses perform urethral catheter. will be disturbed.	54	----	46
8. If male nurses listen to the baby's heart beat and perform NST, will be disturbed.	56	2	42
9. If male nurses perform some assessment, will be disturbed	40	-----	60
10. If male nurses assist in labor. Will be disturbed.	48	12	40
11. If male nurses implement postpartum position or mobilization. Will be disturbed.	62		38

Variables	Agree	Undecided	Disagree
	%	%	%
12. If male nurses participate in hygiene and dressing care after birth, will be disturbed	80	4	16
13. If male nurses inspect the incision site, do medical dressing, and do perineal care after birth, they will be disturbed.	56	10	34
14. If male nurses have instruction on breast care and breast feeding, will be disturbed.	54	8	38
15. 1. If male nurses have training about puerperium, will be disrupted	52	8	40
16. Will be disturbed if male nurses provide training about family planning and sexuality	62	12	26
17. 1. Prefer to receive male nurse counseling about baby care	90	6	4
18. Male nurses cannot be successful at maternity and childbirth services	26	10	64
Total women's' attitude level	No.		%
Negative attitude (<50%)	11		11
Positive attitude (≥50%)	81		81

Table (6) clear up that more than half (55%) of participants women's have a negative attitude regarding male student training in maternity sitting. The main negative point reported by nearly two thirds of women's toward male student were that they viewed male students can't be successful in providing care in maternity services, so they not accepted to male working at maternity and childbirth services., receiving perinatal care from male nurses while the great majority of women's (90%) accepted for receiving counseling and health education regarding baby care from male student main accepted one.

Table (7): Association of the total attitude of studied male, female students, and women's and their residence (N=100 for each):

Male student's residence	Male students' attitude				Total		Test of Significance
	Negative attitude		Positive attitude				
	No.	%	No.	%	No.	%	χ^2 & p
Rural	50	50	16	16	66	66	9.544 &0.010*
Urban	23	33	11	11	44	44	
female student's residence	Female students' attitude				Total		Test of Significance
	Negative attitude		Positive attitude				
	No.	%	No.	%	No.	%	χ^2 & p
Rural	40	40	20	20	60	60	9.544 &0.019*
Urban	23	23	17	17	40	40	
Women's residence	Women's attitude				Total		Test of Significance
	Negative attitude		Positive attitude				
	No.	%	No.	%	No.	%	χ^2 & p
Rural	50	50	25	25	75	75	8.53 &0.012*
Urban	20	20	5	5	25	25	

(*) Statistical significant at (p .05) χ^2 = chi square.

Table (7) reflects that there were moderate significant statistical relation between total attitude of studied male, female students ,and women's and their residence as well as the high proportion of

studied participants of male, female students, and women's who lived in rural areas were exhibited negative attitude P. value (P. value 0.010, 0.019. and 0.012.)

Table (8): relation between total studied male & female students' attitude and embarrassing area of clinical training

Practical training area	Female students' attitude				Male students' attitude				Test of Significance
	Negative attitude		Positive attitude		Negative attitude		Positive attitude		
	No.	%	No.	%	No.	%	No.	%	χ^2 & p
MCH	8	8	14	14	2	2	3	3	13.544 & 0.019*
Labour area	25	25	3	3	26	26	2	2	
Operating Room area	4	4	6	6	3	3	25	25	
Antenatal area	2	2	2	2	2	2	2	2	
Postpartum area	15	13	3	3	14	14	3	3	
Family planning area	11	11	7	7	3	3	15	15	
Total	65	65	35	35	54	54	46	46	

(*) Statistical significant at ($p \leq 0.05$) χ^2 = chi square.

Table (8) revealed that there were slight significant relation between total studied male & female students' attitude and embarrassing area of clinical training p.value 0.019 as evidenced by that labour, postpartum area were the most embarrassing area of training for both male and female students who had a negative attitude while sharing training area in maternity course.

Table (9): Correlation of the male student' attitude and their total self- evaluation, female student' attitude and the women's attitude (No=100):

Variables		Male student' attitude	Total male Self-evaluation	Female student' attitude	Women's' attitude
Male student' attitude	Pearson correlation (r)	1	0.418**	0.210*	0.723**
	Sig.(2-tailed)	---	0.000	0.036	0.000
Total male Self-evaluation	Pearson correlation (r)	8.218**	1	0.169	0.258**
	Sig.(2-tailed)	0.000	---	0.94	0.010
Female student' attitude	Pearson correlation (r)	0.210*	0.169	1	0.198*
	Sig.(2-tailed)	0.036	0.94	---	0.048
women's attitude'	Pearson correlation(r)	0.723**	0.258**	0.198*	1
	Sig.(2-tailed)	0.000	0.010	0.048	---

P: Significance. * Significant ($p \leq 0.05$).

*Correlation is significant at the 0.05 level.

**Correlation is significant at the 0.01 level

Table (9) pointed to that there were strong positive correlation among male student attitude and their total self-evaluation, women' female students' attitude which was statistically significance at P-value ≤ 0.01 . While moderate positive correlations were observed between female students' attitude, male & women's attitude had at P-value ≤ 0.05 . Moreover; strong to moderate positive correlation were observed between women's attitude, male student' attitude and total male students evaluation at statistical significant difference P-value ≤ 0.01

Discussion

The difficulties faced by male students raise their levels of anxiety and adversely affect their learning during the theoretical and practical courses in the nursing curriculum. In particular, the actions of their superiors in the clinical environment, the conduct shown to them by members of the health team, the caregivers directly affect their implementation of what they have learned in the theoretical part of the courses, the development of skills, the provision of quality nursing care, the enjoyment of the profession and the length of employment in the profession (**Wedge worth, 2016**)

Concerning the embarrassing situations experienced by male students during clinical training in maternity course, the present study illustrated that the most embarrassing situations experienced by male students during clinical training in maternity course, near half of them were embarrassed while taking the previous and current obstetrics and gynecology history. Also the majority of studied female were embarrassed with almost of clinical procedures breast examination, vaginal examination, and perineal care and examination. Moreover; regarding health education skills the most embarrassed topics were breast care, reproductive tract infections, and contraceptive counseling. so by this findings we answered the first research question.

Saber and Ibrahim (2019) also showed that vaginal examination and breast examination were the most humiliating clinical procedures, but immediate baby care and abdominal examination were the most favorable.⁽¹³⁾ This may be rendered to male nursing society's view.

Eswi and El Sayed (2011) who investigate the of Egyptian male student nurses experiences in clinical course of maternity nursing, discovered that high level of anxiety reported by male nursing students while they trained in maternity, and women didn't like treatment provided by male nursing students, in particular, breast and perineal treatment. The unhelpful attitudes of the instructors were a variables that influenced the student's experience. Likewise, **Mohammed and Elnemer (2013)**, who examined the newly Egyptian male nursing students enrolled in

Mansoura university maternity nursing, stated that care of perineum was the first embarrassing procedure followed by episiotomy care of breast and examination, The last embarrassing one was abdominal examination.

As regard the male student' self-evaluation of the practical skills achievement and application of the maternity course in the setting of training, present study demonstrated that the mean \pm SD score of total male student' self-evaluation of their practical skills achievement and application at maternity clinical skills in (Antenatal area, labour area, postpartum area, operating room area and family planning area skills) in the clinical training setting reflects that the high proportion of students scored their clinical achievement of main clinical skills areas between fair and poor whilst the lowest proportion scored their achievement as good with significant statistical difference. So by this findings the answer of the first research question was answered.

Another study by **Hunter, (2015)**, who analyzed the clinical mental health nursing student's attitude, also discovered that they were interested about maternal theoretical and practical training and were not hostile.

Concerning male students' attitudes towards practical training of the maternity course the current study reported that nearly half and more of male students of total sample exhibited negative attitude regarding male students training, role as care provider of male students in maternity course either in clinical lab or clinical sitting while the remaining of them were had apposite attitude. by this findings the second research question is answered.

Agreement with these results **Sabre and Ibrahim (2019)** findings that pointed to that the overall mean score for the attitude of the student towards practical training was negative (30.27 ± 6.85). This could be due to views that relate nursing to femininity and thus prevent men from becoming nurses.

These findings were also in line with **Powers (2018)** who found that the attitude of male students towards practical skills was negative during the maternity course study while they studied the lived experience of being a male nursing student. The emphasis of the finding is not agreed on the role of the

nursing male in Egypt for female caring, which puts them in stress and impacts on the attitude of male nursing students.

Regarding female student's attitudes towards colleague's male student's companionship during maternity clinical training, our study pointed to that more than two thirds of female students exhibited negative attitude toward male students training in maternity course especially during sharing her colleague male in training. That is answer the third research question.

These results were in accordance with **Meyer (2012)** results. Who carried out a study at a Eastern Cape regarding male nurses experience in midwifery training. The study began by stating various female patients preference for a female midwifery service given by denying male treatment was expressed. In fact, respondents themselves expressed the discomfort they encountered while taking care of women patients.

Concerning woman attitudes towards involvement of male students during the practical training of the maternity course, current findings cleared up that more than half of participants woman have a negative attitude regarding male student training in maternity sitting. The main negative point reported by nearly two thirds of woman toward male student were that they viewed male students can't be successful in providing care in maternity services, so they not accepted to male working at maternity and childbirth services., receiving perinatal care from male nurses the great majority of woman accepted for receiving counseling and health education regarding baby care from male student main accepted one. This may be attributed to cultural and beliefs factors. This paragraph answered the fourth research question.

A study by **Mohammed and Elnemer (2013)** on the same subject. Their findings showed that most of the students reported acceptance by women with limitations on them, and women rejected just five percent of them, whenever majority of the students (27.5 percent) registered the positive attitude of women. ⁽¹⁵⁾ **Hodges, et al., (2017)** as well investigating the bridging of the gender gap that facilitates the educational route for nursing men indicated that

the male student receives care during their clinical training, exclusion and inclusion of women.

On the contrary, **Abdel Ghani (2015)**, who studies the expectations, opinions and attitudes of pregnant women towards male nurses attending deliveries in El Kasr-Aini- Cairo-University Maternity Hospitals, reported that more than half of the women surveyed expressed good perceptions and attitudes towards male nurses attending deliveries and had no negative beliefs regarding male nurses attending deliveries and male nurses attending deliveries. Nearly half of the respondents reported that they had no religious values that stopped them from accessing further delivery services provided by male nurses; more than half of the participants reported that they had no cultural beliefs that could prohibit them from using health facilities where male nurses attend deliveries because of the existence of the group as a group.

As regarding association of total attitude of studied male, female students and women regarding their residence that is answer the last fifth research question, this study reflects that there were moderate significant statistical relation between total attitude of studied male, female students, and women' and their residence as well as the high proportion of studied participants of male, female students, and women who lived in rural areas were exhibited negative attitude. This may be because male, female students and women beliefs and behaviours in caring for female patients are affected by cultural context. In the growth of rural communities, culture still plays a major role.

On the other hand **Saber and Ibrahim (2019)** stated that absent of any reported statistical significant difference among male's students attitude and their rural residence.

Regarding relationship between total studied male student attitudes and their total self-evaluation regarding practical skills achievement and application of the maternity course the present study Pointed to presence of significant relation between total studied male students' attitude and their total self-evaluation regarding practical skills achievement and application of the maternity course that

evidenced by the high proportion of students who scored their clinical achievement of main clinical skills areas as poor achievement were have negative attitude with significant statistical difference.

This may be because there was a discrepancy between theoretical and clinical planning, since clinical procedures were not conducted by students in the hospital.

Conclusion

Based on the findings of the current results and research questions it concluded that:

The majority of studied male students (84%) facing a variety of problems and embarrassing situations while they trained in clinical maternity course, and there were moderate statistical significant relation between total attitude of studied male, female students, participant women and their residence P-value 0.010, 0.019. and 0.012 moreover; there were strong positive correlation among male student attitude and their total self-evaluation, women' female students' attitude which was statistically significance at P-value ≤ 0.05

Recommendations

Based on study findings, it was recommended the following:

Needing for male nursing students in Egypt is vital for diversity in the nursing field in the health care system. Additional efforts should be made to provide male nursing students with valuable learning chances equal to the chances provided to female students. In order to promote male enrolment in nursing education and the health care system in Egypt, social and community awareness should be raised. Further research should be conducted to compare male student's experiences in different maternity sitting, residence, and culture.

Proposed improvement actions

On the basis of this study which found that all participants faced and encountered by many difficulties in their maternity clinical training. So the researcher suggested and recommended the following proposed improvement actions that must be taken into account. These actions designed according to the

responsible authority and persons as (Maternity Nursing Educational program, Faculty staff, clinical Medical health care provider Maternity Medical & Nursing care provider, Hospital administrators, and community), these improvement proposed actions must be executed, followed up and supervised as a plan with execute time.

Maternity Nursing Educational program, Faculty institution staff

- Updating educational nursing programs and providing equitable opportunities to learn without gender bias. Health care professionals should be given career advancement so that they can accept Male maternity health care nurses.
- Male students must be allowed to align themselves with the role model of male obstetricians.
- In order to develop strategies for enhancing the attitude of male students, the re-planning of current maternity nursing clinical practices to provide additional clinical experience for male students.
 - Ensure that the curriculum preparation provides guidance for how to deal with providing care to the opposite sex
 - Channels of communication on gender-specific improvements in care behaviors, among the university and community signifies the role of male faculty members in the maternal health nursing specialty is significant.
 - Continuously review clinical requirements in order to be on board with exactly what is going in the clinical field of midwifery and to assess if the standards for clinical procedures are still appropriate.
- Supporting male students by faculty members in overcoming the challenges they faced by ensuring that male students are prepared mentally to cope with the negative feelings of anxiety, discomfort and embarrassment before being integrated into the clinical setting

Maternity Medical & Nursing care provider, Hospital administrators.

- Champion the creation of specific rules on the rights of male nurses in maternity, and

address initiatives in this regard with the medical staff concerned.

- Health care providers should be granted career development to support male nurses in the health care delivery system.
- According to the learning theories, practitioners and nurses must be permitted to exercise nursing skills.

Nursing clinical instructors:

- Instructors and trained nurses must be aware of gender differences and should make attempts to provide a welcoming environment of teaching and learning in terms of their views of gender. Learning resources should be fairly distributed to students, regardless of gender.
- It is essential to introduce a curriculum or guidelines primarily regarding gender issues in nursing as a female-dominated profession.
- This orientation should be preferably carried out by a male clinical supervisor or a lecturer. It will guarantee that students are adequately trained mentally and emotionally to resolve the difficulties they face in a clinical environment.
- Instill trust in male learners by exhibiting a constructive and respectful attitude and refraining from conventional behavior, both verbal and nonverbal

Communities

- A community orientation program concentrating on the incorporation of essential functions that men have taken as caregivers
- Male nurse needs to communicate with the pregnant woman in a professional relationship using effective communication, interpersonal skills and counseling.
- Nursing Faculties media and professional journals should be highlighted roles for men in various specialties like maternity nursing

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