

Effect of Educational Sessions Regarding Women Reproductive Rights on Student Nurse Theoretical Achievement, Attitude and Satisfaction

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ABSTRACT

Context: Women's reproductive rights are a nursing concern that is considered of vital importance and has widespread implications on the health, wellbeing, and development of the entire population.

Aim: Investigate the effect of educational sessions regarding women's reproductive rights on student nurses' theoretical achievement, attitude, and satisfaction, at the Faculty of Nursing, Port Said University.

Methods: Quasi-experimental research (Pre-test/post-test) design was used to achieve the aim of this study. A purposive sample of 92 female nursing students in the third and fourth academic year was recruited in this study. Data collection tools included a structured interviewing questionnaire, women reproductive rights attitude assessment scale, and women reproductive rights satisfaction scale.

Results: A statistically significant improvement was observed among the studied sample theoretical achievement post-intervention compared to pre-intervention. A significant improvement was observed among the studied sample attitude post-intervention compared to pre-intervention, and the majority of the students were satisfied with the application of educational sessions regarding women's rights.

Conclusions: The present study's hypothesis was supported. The student nurse who attended the educational session regarding women's reproductive rights has improved the theoretical achievement and attitude compared to their pre-intervention levels. The present study recommended integrating Egyptian women's reproductive rights into the curriculum of the undergraduate, postgraduate student nurses at the faculty of Nursing at Port Said University. A replication of the current study was also suggested in another setting and on another sampling.

Keywords: Educational sessions, reproductive rights, theoretical achievement, attitude, satisfaction, student nurses

1. Introduction

Reproductive health is a universal concern, but it is particularly important for women, especially during the reproductive years. Although most reproductive health problems arise during the reproductive years, general health continues to reflect earlier reproductive life events in old age. However, men have particular roles and responsibilities regarding women's reproductive health because of decision-making powers in reproductive health matters (Sachan *et al.*, 2012; Dean *et al.*, 2014).

Reproductive health care is defined as methods, techniques, and services that contribute to reproductive health and wellbeing through preventing and solving reproductive health problems. It also includes sexual health, the purpose of which is the enhancement of life and personal relations, and not merely counseling and care related to reproduction and sexually transmitted diseases (World Health Organization, 2016).

Additionally, the importance of reproductive rights in meeting international development goals has increasingly been recognized by the international community. The goal of universal access to reproductive health was endorsed at the highest level. Reproductive rights are recognized as valuable ends in themselves and essential to the enjoyment of other fundamental rights. Particular emphasis has been given to women and adolescent girls' reproductive rights, sex education, and reproductive health programs (Center of Reproductive Rights, 2015).

Moreover, goals of women's rights include to improve the quality of life for all women, ensure access to health care and appropriate health care services, promote and protect the physical and social environment, improve services that focus on health promotion and illness prevention for women, promote equal rights and opportunities for women in health care and protect the rights of all women (National Human Rights Institutions, 2014; David *et al.*, 2017).

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Also, sexual and reproductive health and rights (SRHR) encompass all individuals' right to decide about sexual activity and reproduction free from discrimination, coercion, and violence and achieve the highest attainable standard of sexual health. Access to the right sexual and reproductive health services allows individuals to choose whether, when, and with whom to engage in sexual activity; to choose whether and when to have children; and to have access to the information and means to make those choices (Jallow, 2014; Miller et al., 2015).

Moreover, reproductive and sexual health rights are all people's rights, regardless of age, gender, and other characteristics. People have the right to choose their sexuality and reproduction, provided respect for the right of others. Reproductive and sexual rights were first officially recognized at the International Conference on Population and Development in Cairo in 1994. The International Conference on Population and Development Program of Action recognized that meeting reproductive health needs is a vital requirement for human and social development. Protecting and promoting the youth's reproductive and sexual rights and empowering them to make informed choices is key to wellbeing (Center of Reproductive Rights, 2015; Backonja et al., 2016).

Meanwhile, nurses play an essential role for females students about reproductive health rights in a variety of settings, including communities, schools, public health, and acute care clinics, which affords them many opportunities to improve adolescents' sexual and reproductive health and reduce the rates of unplanned pregnancy and sexually transmitted infections to ensure that adolescents have access to sexual and reproductive health care, which includes both preventive counseling and treatment in all nursing practice sites. Nurses need to learn and hone the skills required to deliver evidence-based counseling and services to adolescents and parents. Nurses can use their unique combination of knowledge and skills to impact adolescent sexual and reproductive outcomes positively. So, nurses have the capacity and opportunity to disseminate information about sexual and reproductive health to adolescents and their parents in communities, schools, public health clinics, and acute care settings (Santa Maria et al., 2017).

Additionally, counseling for women and men to encourage the practice to promote adequate development of responsible sexuality is permitting relations of equity and mutual respect between the genders and contributing to improving the quality of life of individuals and ensuring that women and men have access to the information, education, and services needed to achieve good sexual health and exercise their reproductive rights and responsibilities. Information, education, and counseling for responsible sexual behavior and effective prevention of sexually transmitted diseases, including HIV, should become an integral component of all reproductive and sexual health services (Petchesky, 2003; National Human Rights Institutions, 2014).

2. Significance of the study

Women's reproductive rights were a nursing concern, which was considered vital and had widespread implications on the entire population's health, wellbeing, and development. Reproductive health problems are the leading cause of women's ill health and death worldwide. Six hundred thousand women-one every minute-die each year from causes related to pregnancy, and about 200,000 maternal deaths each year result from lack or failure of contraceptive services. Seventy thousand women die each year as a result of unsafe abortion. An unknown number suffer from infection and other health consequences. It was immoral in Egyptian rural areas to discuss the issue related to sexual and reproductive health among young and married females, which subsequently had dealt with several misconceptions and beliefs related to female sexuality on their reproductive rights.

Building an understanding of educating female nursing students about their problems will help them mature in a healthy and fulfilling way, which is the best investment a society can make for its future. Also, organizing needs and problems will provide guidelines for importing health education to female nursing students. As a counselor and health educator, the nurses have a significant role in providing, promoting, and improving reproductive health and women's rights. This study will enhance nursing students' knowledge and utilization of health services about women's reproductive health rights as those students will be a milestone in future education for reproductive health.

3. Aim of the study

Investigate the effect of educational sessions regarding women's reproductive rights on student nurses' theoretical achievement, attitude, and satisfaction, at the Faculty of Nursing, Port Said University.

3.1. Research hypothesis

A student nurse who will attend the educational sessions regarding women's reproductive rights will improve their theoretical achievement and attitude compared to their pre-intervention levels.

3.2. Operational definition

The operational definition of theoretical achievement in this study means the knowledge regarding women's reproductive rights.

4. Subjects & Methods

4.1. Research design

A quasi-experimental (Pretest/post-test) design was adopted in this research. A research design involves manipulating independent variables similar to experimental research. However, there is no control group or random selection. Pre-test/Post-test design is a quasi-experimental research design in which the dependent variable is measured once before and once after the treatment is implemented (Rajesh, 2016).

4.2. Research Setting

The study was conducted at the Faculty of Nursing, Port Said University. Port Said University is a university in Port Said, Egypt. It was established in 2010, after the decision of the Egyptian president to establish this university to separate Port Said's branch from the Suez Canal University, which was established in 1976.

4.3. Subjects

A convenient sample of all available unmarried female nursing students, 92 in the third and fourth academic year, was selected in this study. Furthermore, nine student nurses were excluded due to their participation in the pilot study. The students' age ranged between 20-22 years.

4.4. Tools of data collection

The researcher constructed three tools after reviewing related literature. They were a structured interview questionnaire, women reproductive rights attitude assessment scale, and women reproductive rights satisfaction scale.

4.4.1. Structured Interview Questionnaire

It included two main parts:

First part: The researcher created this part after reviewing related literature Ibrahim (2010) to assess the student's characteristics such as residence, the order of student in the family, and the number of teenage family members.

The second part (pre-post-test) consisted of fifteen MCQ questions created by the researchers after reviewing related literature Adinew *et al.* (2013); Bhattarai and Dhakal, (2015) to assess student nurse's knowledge regards women reproductive rights. These rights included women reproductive rights concept, right to privacy and family life, right to legal and safe abortion, right to menstrual health and protection from practices such as female genital mutilation, right to access good-quality reproductive healthcare, right to marry, and found a family, right to the highest attainable standard of health, and right to benefit from scientific progress. Besides, the women's right to physical integrity, right to birth control; freedom from coerced sterilization and contraception, right to non-discrimination and equal treatment, right to information and education, right to life, right to receive education about sexually transmitted infections, and right to education and access in order to make free and informed reproductive choices.

Scoring system

A score of 2 was given to the correct answer. A score of 1 for the incorrect answer. The total knowledge scores were classified into two levels: Incorrect knowledge (<60%) and correct ($\geq 60\%$).

4.4.2. Women Reproductive Rights Attitude Assessment Scale

The researcher created a two-point scale ranging from agree to disagree after reviewing related literature Rajapaksa *et al.* (2014) to assess the students' attitude towards women's

reproductive rights. It consisted of 30 statements categorized under five domains to which the students were requested to react to one of the decisions. It covered female genital mutilation (4 statements), reproductive health (7 statements), family planning (5 statements), marriage (6 statements), pregnancy (8 statements).

Scoring system

A score of 2 was given to agree, and a score of 1 for disagree. Each statement scored, and the aggregate attitude score is classified into two levels: A negative attitude (<60%) and a positive attitude ($\geq 60\%$).

4.4.3. Women Reproductive Rights Satisfaction Scale

The researcher created a two-points Likert scale ranging from satisfied to unsatisfied after reviewing related literature Bazarganipour *et al.* (2013) to assess students' satisfaction towards women's reproductive rights' educational sessions. It consisted of nine statements; for example, an educational session was clear and easy to understand, easy to get information, and the educational session included advanced knowledge.

Scoring system

A score of two was given to satisfied, and a score of one for dissatisfied. Each statement was classified as not satisfied and satisfied as follows:

- < 60= Not satisfied
- ≥ 60 = Satisfied

4.5. Procedures

All data collection tools were developed and sent to three specialized university experts (Professors in the field of study); according to their comments, modifications were considered. Tools were submitted to three scholastic nursing specialists in Maternity Nursing and Community Health Nursing to test the tools' content validity. Modifications were carried out according to the recommendations of the specialists. Tools validated for clarity, appropriateness, and completeness of the content.

The reliability of the proposed tools was tested utilizing Cronbach's alpha test. For the Pre-posttest, Cronbach's alpha of 0.81 showed a strong significant positive correlation between the tool's items. While for the attitude assessment scale, it was 0.84, which indicates accepted tools reliability. The satisfaction scale's reliability was 0.83, which indicates accepted tools' reliability.

Official permission and ethical considerations were ascertained. Approval was taken from the Port Said University administration. After that, each female student was informed about the purpose of the research and its importance. The researchers emphasized that participation in the research is entirely voluntary, and all students informed that they could withdraw from the research at any time. Anonymity and confidentiality were assured through coding the data. Verbal consent took from the female student who accepts to be included in the research after explaining the purpose of the study.

A pilot study was conducted on 10% of the sample (9 female university students) who met the selection criteria to assess the study process's feasibility and clarity and the needed time to complete the tools. The needed modifications were performed, and those subjects were excluded from the mainstream sample.

The study was carried out through three phases:

Preparation phase: During this phase, the updated literature review has been done to construct data collection tools and develop the educational sessions. It also included the preparation of teaching materials, i.e., handout and power-point presentation.

Implementation phase: During this phase, the total sample was divided into seventeen groups containing about five students. Each group attended eight sessions of the total one hundred and thirty-six sessions until it covered the entire sample. The researcher held a meeting with each group in their faculty during one of their free classes to clarify the tools. After that, the structured interview questionnaire and attitude assessment scale were interviewed to every student to assess their knowledge and attitude toward women's reproductive rights. The time taken to complete the tools was about twenty to twenty-five minutes, and the needed time to complete this phase was ten days.

During these sessions, the researchers covered knowledge related to (introduction and definition of women reproductive health and rights; objectives, the importance of women reproductive rights; factors affecting and problems of women reproductive health and rights, services provided for women reproductive health and rights; definition of women reproductive rights, component of women reproductive rights; misconception and false belief and unhealthy practice concerning women reproductive rights).

Educational sessions were implemented following a gathering model, beginning with asking each student about their general characteristics, followed by assessing their knowledge concerning women's rights and reproductive health. In contrast, the second session was included the concept, importance, and elements of women's reproductive rights. The third session was included factors and problems affecting women's reproductive rights. The fourth session was related to identifying student nurses' misconceptions and beliefs about women's reproductive rights. In the fifth session, each participant has instructed on the consequences of false traditional problems like doing female genital mutilation (FGM) and unhealthy practices concerning perineal hygiene. During this session, each student discussed their unhealthy practice freely to be corrected. They were given a chance to change their misconceptions and malpractice and ascertain the daily change in their misunderstandings related to women's rights and reproductive health.

Additionally, the fifth session included a role-play as student nurses have allowed counseling and following concerns correctly. During the sixth session, each participant had the opportunity to give us feedback about what they had been learned. The seventh session concerned student nurses who need counseling regarding women's rights and reproductive health. The eighth session was a follow-up

session because each student was asked about their misconceptions, health problems, and reproductive problem that need a referral to health services. Furthermore, each participant was given the post-test during this session, which was the same pre-test format.

The first three counseling sessions included theoretical content, while the last five sessions were practical sessions that correct the student responses and beliefs related to women's rights and reproductive health.

Fieldwork: Data collection covered 13 months "from April 1, 2018, to the end of April 2019". Data collected during the morning, five days/week. Method of teaching used included modified lecture, role-play, brainstorming, group discussion. A powerPoint presentation using a data show was used as a visual aid to clarify the presented knowledge. During and after the presentation, the researchers encouraged the students' active participation by asking questions and receiving feedback. The sessions were carried out in an assigned classroom in the faculty. The researchers carried out two sessions per day for sixty-eight days, and each session took about 90 minutes. After completing each session, handouts containing brief information given during that session were distributed to each student.

Evaluation phase: Finally, each student was given a structured interview questionnaire (part 2) and a women's reproductive rights attitude assessment scale to designate their attitude towards women's reproductive rights. Also, they were given a women's reproductive rights satisfaction scale to assess their satisfaction with the educational sessions. The evaluation phase took place immediately and eight weeks after the implementation phase ended to examine the student's knowledge and attitude using a pre-post-test and attitude assessment scale. However, the student satisfaction scale was utilized post-intervention immediately only.

4.6. Data analysis

Statistical Package for Social Science (SPSS), version 25, was used for the statistical analysis of the data. Collected data were organized, coded, and entered into a computer. The arithmetic mean was used to describe the central tendency of observations for variables, and frequency distribution was used for each variable. Comparison of categorical variables was made using the Friedman test, Post Hoc Test (Dunn's), and ANOVA test. A Chi-square test was used to test the study hypothesis. The correlation coefficient was used to investigate the relationship between scores of theoretical achievement, attitude, and satisfaction.

For all of the statistical tests done, p -value > 0.05 indicated no statistically significant difference, p -value ≤ 0.05 indicated a statistically significant difference, and value $P \leq 0.001$ indicated a highly statistically significant difference. A within-group comparison of numerical variables was made using the Pearson coefficient. P values less than 0.05 were considered statistically significant.

5. Results

Table 1 illustrates the frequency and percentage distribution of the studied students' general characteristics. The table reveals that 96.4% of the studied students were from urban areas, 47% had first order in the family, while 69.9% of them had teenager family members.

Table 2 shows the differences in studied students' theoretical achievement regarding all women's reproductive rights assessed throughout the program phases. A high statistically significant difference in the studied students' theoretical achievement was revealed between pre-and post-immediate and later eight weeks of program implementation ($p < 0.001$). 84.3% of student nurses had incorrect knowledge regarding the right to privacy and family life that improved significantly immediately, and after eight weeks of intervention to 98.8% had correct knowledge.

This table also shows that 84.3% of the studied student nurses had incorrect knowledge regarding rights to access good-quality reproductive healthcare. Also, 81.9% of the studied students had incorrect knowledge regarding their rights to the highest attainable standards of health, improved to 98.8% had correct knowledge immediately and after eight weeks of intervention. Besides, 68.7% of them had incorrect knowledge regarding their rights to non-discrimination, and equal treatment improved to 98.8% had correct knowledge immediately and after eight weeks of intervention.

Additionally, 81.9% of them had incorrect knowledge regarding their rights to receive education about sexually transmitted diseases, which is improved to 98.8% had correct knowledge immediately and after eight weeks of intervention. Also, 91.6% of them had incorrect knowledge regarding their rights to education and access to free and informed reproductive choices, which is improved to 98.8% had correct knowledge immediately and after eight weeks of intervention.

Table 3 shows the differences in studied students' attitudes toward reproductive health and rights throughout the program phases. A statistically significant difference in the overall attitude was found between pre, immediate post, and after eight weeks of program implementation ($p < 0.05$), except for pregnancy, there is a non-statistically significant difference ($p = 0.200$). Besides. All student nurses disagreed with the reproductive rights of marriage and family planning, which were converted 100% agreed with these rights immediately and eight weeks after implementation of the intervention at $p < 0.001$.

Table 4 reveals the frequency distribution of studied students' satisfaction with women's reproductive rights educational sessions. The majority of them were satisfied with the educational session that was clear and easy to understand, and easiness of getting information, and the advanced knowledge included, the matched aim with the content, the session place, the proper session schedule, their improved knowledge, and they recommended the replication of the educational session (98.8%).

Table 5 reveals the relationship between the student nurses' general characteristics and their theoretical achievement pre, immediately, and eight weeks post-intervention. No statistically significant difference relation was found.

Table 6 shows a highly statistically significant positive correlation between students' theoretical achievement and attitude immediately post-intervention ($r = 0.856$).

Table 7 shows a highly statistically significant positive correlation between students' theatrical achievement and satisfaction immediately post-intervention ($r = 0.801$).

Table 8 shows a high statistically significant positive correlation between the studied students' overall attitude and satisfaction immediate post-program intervention ($r = 1.000$).

Table (1): Frequency and percentage distribution of the studied students' general characteristics (n = 83).

General characteristics	No.	%
Residence		
Urban	80	96.4
Rural	3	3.6
Order of the student in the family		
First	39	47.0
Second	32	38.6
Third	10	12.0
Fourth	2	2.4
Teenage family member		
Yes	58	69.9
No	25	30.1

Table (2): Comparison of the studied students' theoretical achievement regarding women's reproductive rights pre, immediate, and eight weeks post-intervention (n=83).

Women reproductive rights	Pre intervention		Immediate post-intervention				After 8 weeks post-intervention				Fr	P		
	Correct		Incorrect		Correct		Incorrect		Correct				Incorrect	
	No.	%	No.	%	No.	%	No.	%	No.	%			No.	%
Women reproductive rights concept	2	2.4	81	97.6	82	98.8	1	1.2	82	98.8	1	1.2	162.0	<0.001
Right to privacy and family life	13	15.7	70	84.3	82	98.8	1	1.2	82	98.8	1	1.2	140.0	<0.001
Right to legal and safe abortion	33	39.8	50	60.2	82	98.8	1	1.2	82	98.8	1	1.2	100.0	<0.001
Right to menstrual health and protection from malpractices such as female genital mutilation	26	31.3	57	68.7	82	98.8	1	1.2	82	98.8	1	1.2	114.0	<0.001
Right to access good-quality reproductive healthcare	13	15.7	70	84.3	82	98.8	1	1.2	82	98.8	1	1.2	140.0	<0.001
Right to marry and found a family	7	8.4	76	91.6	82	98.8	1	1.2	82	98.8	1	1.2	152.0	<0.001
Right to the highest attainable standard of health	15	18.1	68	81.9	82	98.8	1	1.2	82	98.8	1	1.2	136.0	<0.001
Right to benefit from scientific progress	17	20.5	66	79.5	82	98.8	1	1.2	82	98.8	1	1.2	132.0	<0.001
Right to physical integrity	14	16.9	69	83.1	82	98.8	1	1.2	82	98.8	1	1.2	138.0	<0.001
Right to birth control; freedom from coerced sterilization and contraception	33	39.8	50	60.2	82	98.8	1	1.2	82	98.8	1	1.2	100.0	<0.001
Right to non-discrimination and equal treatment	26	31.3	57	68.7	82	98.8	1	1.2	82	98.8	1	1.2	114.0	<0.001
Right to information and education	13	15.7	70	84.3	82	98.8	1	1.2	82	98.8	1	1.2	140.0	<0.001
Right to life	7	8.4	76	91.6	82	98.8	1	1.2	82	98.8	1	1.2	152.0	<0.001
Right to receive education about sexually transmitted diseases	15	18.1	68	81.9	82	98.8	1	1.2	82	98.8	1	1.2	136.0	<0.001
Right to education and access in order to make free and informed reproductive choices	7	8.4	76	91.6	82	98.8	1	1.2	82	98.8	1	1.2	152.0	<0.001

Fr: Friedman test, Sig., between periods was done using Post Hoc Test (Dunn's).
 p: p-value comparing between pre and immediate post-intervention and after eight weeks period.

Table (3): Comparison of studied students' attitude regarding their reproductive rights pre, immediate, and eight weeks post-intervention (n=83).

Domains	Pre-intervention		Immediate post-intervention				After eight weeks post-intervention				Fr	P		
	Agree		Disagree		Agree		Disagree		Agree				Disagree	
	No.	%	No.	%	No.	%	No.	%	No.	%			No.	%
Female genital mutilation	58	69.9	25	30.1	83	100.0	0	0.0	83	100.0	0	0.0	50.0	0.004
Reproductive health	33	39.8	50	60.2	83	100.0	0	0.0	83	100.0	0	0.0	100.0	<0.001
Family planning	0	0.0	83	100.0	83	100.0	0	0.0	83	100.0	0	0.0	166.0	<0.001
Marriage	0	0.0	83	100.0	83	100.0	0	0.0	83	100.0	0	0.0	166.0	<0.001
Pregnancy	72	86.7	11	13.3	83	100.0	0	0.0	83	100.0	0	0.0	22.0	0.200
Overall attitude	35	42.2	48	57.8	83	100.0	0	0.0	83	100.0	0	0.0	92.0	<0.001

Fr: Friedman test, Sig., between periods was done using Post Hoc Test (Dunn's).
 p: p-value comparing between pre and immediate post-intervention and after 8weeks period.

Table (4): Frequency and percentage distribution of studied students according to their satisfaction with women's reproductive rights education (n=83).

Statements	Satisfied		Unsatisfied	
	No.	%	No.	%
The education sessions were clear and easy to be understood	82	98.8	1	1.2
Easiness of getting information	82	98.8	1	1.2
The education session included advanced knowledge	82	98.8	1	1.2
The aim of the education session was matched with its content	82	98.8	1	1.2
The researcher gives opportunities to ask a question and clarifying the answer	81	97.6	2	2.4
Education sessions were conducted in a private place with adequate ventilation and lightening	82	98.8	1	1.2
The education sessions did not interfere with the student learning schedule	82	98.8	1	1.2
Education session improved knowledge regarding women reproductive rights	82	98.8	1	1.2
The Education sessions were recommended to be replicable in another setting and another sample in the future	82	98.8	1	1.2

Fr: Friedman test, Sig., between periods was done using Post Hoc Test (Dunn's).
 p: p-value comparing between pre and immediate post-intervention and after 8weeks period.

Table (5): Relation between studied sample general characteristics and their theoretical achievement related to women reproductive rights pre, immediate, and eight weeks post-intervention (n=83).

Variables	Pre-intervention				χ^2	P	Immediate post-intervention				After eight weeks post-intervention			
	Correct knowledge n=5		Incorrect knowledge n=78				Correct knowledge n= 82		Incorrect knowledge n=1		Correct knowledge n=82		Incorrect knowledge n=1	
	No	%	No	%			No	%	No	%	No	%	No	%
Residence														
Urban	5	100	0	0.0	0.200	FEp= 1.000	80	96.4	–	–	80	96.4	–	–
Rural	75	96.2	3	3.8			2	2.4	1	1.2	2	2.4	1	1.2
Order in the family														
First	2	40.0	37	47.4	4.747	MCp= 0.187	39	47.0	–	–	39	47.0	–	–
Second	2	40.0	30	38.5			32	38.6	–	–	32	38.6	–	–
Third	0	0.0	10	12.8			10	12.0	–	–	10	12.0	–	–
Fourth	1	20.0	1	1.3			1	1.2	1	1.2	1	1.2	1	1.2
Teenage family member														
Yes	2	40.0	56	71.8	2.257	FEp= 0.158	58	69.9	–	–	58	69.9	–	–
No	3	60.0	22	28.2			24	28.9	1	1.2	24	28.9	1	1.2

χ^2 : Chi-square test, MC: Monte Carlo, FE: Fisher Exact, p: p-value for associating between different categories

Table (6): Correlation between studied sample theoretical achievement and their attitude regarding women’s rights and reproductive health pre, immediate, and eight weeks post-intervention (n=83).

Overall theoretical achievement	Overall attitude	
	R	P
Pre-intervention	0.133	0.229
Immediate post-intervention	0.856	<0.001

r: Pearson coefficient

Table (7): Correlation between studied sample theoretical achievement and their satisfaction regarding eight weeks post-intervention (n = 83)

Satisfaction	Overall theoretical achievement	
	R	P
Pre-intervention	-0.011	0.920
Immediate post-intervention	0.801	<0.001

r: Pearson coefficient

Table (8): Correlation between studied student's nurse's attitude and their satisfaction eight weeks post-program implementation (n = 83).

Satisfaction	Overall attitude	
	R	P
Pre-intervention	-0.078	0.482
Immediate post-intervention	1.000	<0.001

r: Pearson coefficient

6. Discussion

Human rights are universal legal guarantees protecting individuals and groups against actions that interfere with fundamental freedoms and human dignity. Some of the essential characteristics of human rights are guaranteed by international standards; are legally protected; focus on the dignity of the human being oblige states and state actors; cannot be waived or taken away; are interdependent and interrelated (David et al., 2017). Women's rights refer to the freedoms and entitlements of women and girls of all ages. These rights may or may not be institutionalized, ignored, or suppressed by law, local custom, and behavior in a particular society. Its use is the continuously evolving product of an international movement to improve the status of women (World Health Organization, 2011).

The present study aimed to investigate the effect of educational sessions regarding women's reproductive rights on student nurses' theoretical achievement, attitude, and satisfaction. This aim was significantly achieved within the present study research hypothesis. A student nurse who will attend the educational sessions regarding women's reproductive rights will improve their theoretical achievement and attitude compared to their pre-intervention levels.

Regarding nursing students' general characteristics, the present study reveals that more than two-thirds of the studied sample had teenage family members. This finding agrees with Kaur et al. (2017), who reported that most studied samples had a teenage family member. This finding may be due to Egyptian women's belief that child spacing caused infertility, so they refused it.

Regarding nursing students' theoretical achievement about the right to privacy and family life, the present study reveals that most studied samples had incorrect theoretical achievement during the pre-intervention assessment. Most of them had improved theoretical achievement during immediate and eight weeks post-intervention. This finding disagreed with *Bhattarai and Dhakal (2015)*, who reported that most studied samples had incorrect theoretical achievement regarding the right to privacy and family life pre-intervention.

Also, the finding disagreed with the *Center for Disease Control and Prevention (2014)*. They stated that most respondents had correct theoretical achievement regarding the right to privacy and family life, the rights to life, and health. This result may be due to Egyptian women have regarded as they did not have the right to decide and treated as dependent on father or husband. She does not have trust and permission to take a serious decision in her life.

Regarding nursing students' theoretical achievement about the woman's right to access good-quality reproductive healthcare, the present study's finding reveals that most of the studied sample had incorrect theoretical achievement during the pre-intervention assessment and had improved theoretical achievement during immediate post-intervention and eight weeks post-intervention. This finding may be due to a lack of awareness that sexual and reproductive health services are available, affordable, appropriate, and suitable. This finding disagrees with *Kamal Elden et al. (2019)*; *O'connell and Zampas (2019)*, who reported that most respondents had correct theoretical achievement regarding the right to access good-quality reproductive healthcare.

Regarding nursing students' theoretical achievement about women's rights to non-discrimination and equal treatment, the present study's finding reveals that two-thirds of the studied sample had incorrect theoretical achievement during pre-intervention and had improved knowledge during immediate post-intervention and eight weeks post-intervention. This change in knowledge may be due to the application of the guideline. However, this agrees with *Coker et al. (2020)*, who found that most participants had incorrect theoretical achievement regarding rights to non-discrimination and equal treatment.

This result disagrees with *Norton (2020)*, who found that most participants had correct theoretical achievement regarding non-discrimination and equal treatment rights. This finding may be due to a lack of awareness that reproductive health services are available, affordable, appropriate, good quality, and maternal deaths are preventable with equity and non-discrimination.

About the awareness of nursing students regarding the right to the highest attainable standard of health, this study shows that most of the studied sample had incorrect theoretical achievement pre-intervention and had improvement of theoretical achievement in immediate post-intervention and eight weeks post-intervention. This result may be due to the spread of gender preference in Arabic society, especially regarding the highest attainable standard of health services. This finding was agreed with *Hallila and Al-Halabi, (2018)*, who revealed that most participants did

not have correct theoretical achievement regarding the right to the highest attainable health standard in Saudi Arabia.

Regarding the nursing student's theoretical achievement about the woman's right to receive education about the sexually transmitted disease, the present study's finding reveals that most of the studied sample had incorrect theoretical achievement during the pre-intervention assessment that is improved during immediate and eight weeks post-intervention. This finding may be due to a lack of knowledge about sexual relationships and sexually transmitted diseases because Egyptian culture considers this is shaming subject to discuss with young females. This finding agrees with *Rashad et al. (2013)*; *Wood et al. (2020)*, who found that most of the study sample had incorrect theoretical achievement regarding the right to receive education about sexually transmitted disease.

Regarding nursing students' theoretical achievement about the right to education and access to free and informed reproductive choices, the present study findings reveals that most studied sample had incorrect theoretical achievement during pre-intervention and improved theoretical achievement in immediate post-intervention eight weeks post-intervention. This result may be due to a lack of awareness regards the availability and accessibility of reproductive choices. This finding agrees with *Kaphle et al. (2013)*, who found that most respondents had incorrect theoretical achievement about the right to education and access to make free and informed reproductive choices.

Regarding student nurses' attitude toward marriage, most studied students have a false opinion regarding husband's selection, premarital counseling necessary, and early teenage marriage. This finding may be due to the student's belief that good behavior means respecting and following the father's decision regarding selecting a suitable husband regarding the father's opinion, regardless of their opinion. This finding disagreed with *Rashad et al. (2013)*; *Khosla et al. (2016)*, who reported that most of the study sample agreed that girls have the right to choose their prospective husbands and marry.

Regarding student nurses' attitude toward family planning, most student nurses disagree with their right to use suitable family planning methods. This finding may be due to false beliefs that a married woman should not have the right to use suitable family planning methods according to her wish and without her husband's consent. This finding agrees with *Poljski et al. (2014)*. They stated that most of the studied sample disagreed with the idea that a married woman should have the right to use suitable family planning methods according to her wish and without her husband's consent. Additionally, a significant improvement among the studied sample attitudes post-intervention (immediately and after eight weeks) compared with pre-intervention. This finding might be referred to as educational sessions, which effectively improved theoretical achievement concepts and student attitude.

Regarding the relation between studied nurses' characteristics and their theoretical achievement related to women reproductive rights pre, immediately post, and eight weeks' post-intervention, no statistically significant

difference is found. This result may be due to the same belief, culture, and education of the studied sample that affect their theoretical achievement. This finding disagrees with Cameron *et al.* (2020), who pointed out a positive relationship between the studied students' theoretical achievement and their characteristics.

Regarding the correlation between study sample theoretical achievement and their attitude regarding reproductive rights, the present study's finding reveals a positive correlation between studied sample theoretical achievement and attitude immediately post-intervention. This finding may be related to face-to-face communication and the effect of changing and improving their theoretical achievement and attitude. This finding agrees with Ajara and Shuaib (2019); DeBeaudrap *et al.* (2019), who found a positive connection between theoretical achievement and attitude concerning reproductive rights.

7. Conclusion

The present study's hypothesis was supported as the student nurse who attended the educational sessions regarding women's reproductive rights had improved their theoretical achievement and attitude compared to their pre-intervention levels. This finding was due to educational sessions, which effectively improved their theoretical achievement and student attitude.

8. Recommendations

Based on the current study findings, it can be recommended that,

- Integrate Egyptian women's reproductive rights into the curriculum for the undergraduate, postgraduate student nurses at the faculty of Nursing, Port Said University.
- Replicate the present study educational sessions in different educational settings and on a larger probability sample.
- Investigate male student nurse perception regarding women's rights and reproductive health.

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