

Assessment of Knowledge and Attitude of Nursing Students of Secondary Technical Girls School Towards Premarital Care.

Asmaa K.Tohamy¹, Hamida A. Abd El hafiz², Reda R. Ali³

¹Teacher at Technical Nursing School of Girls in Assuit, Directorate of Health, Assuit governorate, Egypt.

²Professor of Obstetrics and Gynecological Nursing, Faculty of Nursing, Assuit Uneversity, Egypt.

³Assistant Professor of Obstetrics and Gynecological Nursing, Faculty of Nursing, Assuit Uneversity, Egypt.

Abstract:

Background: One of the most crucial approaches to preventing genetic diseases, congenital defects, and a number of medical and psychosocial marriage issues is premarital care. It may present a chance to act in response to the risk that has been discovered. **Aim:** Assess knowledge and Attitudes of nursing students of secondary school Technical girls' school towards premarital care. **Sample:** Involved 190 students, they used as a convenient sample. **Research design:** Descriptive cross sectional research design. **Setting:** The study conducted at Assuit Nursing Secondary School Female Students at Al-Eman General Hospital in Assuit city. **Tools:** Two tools were used, self-administered questionnaire that involved two parts, and attitude scale regarding premarital care. **Results:** About 71.6%, 26.3%, and 2.1% of the studied nursing students had poor, average and good knowledge respectively, 92.1% and 7.9% of the studied nursing students had positive and negative attitude respectively, a highly statistical significant relationship between the studied nursing students' total knowledge and attitude regarding premarital care at p-value < 0.01. **Conclusions:** Most of the studied nursing students had a poor knowledge and the majority of them had positive attitude regarding premarital care. **Recommendation:** arranging social worker-led counseling sessions in schools to educate students about premarital care.

Keywords: Attitude, Knowledge, Premarital care, Nursing students & Secondary Technical girls.

Introduction:

Premarital care (PMC) is a global initiative to identify and treat diseases that are not well known to the public and to prevent couples from contracting illnesses that could negatively impact their marriage and the health of their children. Future generations' health can be improved by supporting a woman's and her partner's health and wellness prior to becoming pregnant (Al-Shafai et al., 2022). It is well recognized as the primary defensive and preventive strategy for engaged couples (Youngblood, 2021).

It is seen as a part of preconception care, a fundamental preventive strategy used to treat many health concerns (Dewi et al., 2022). Since mid-2001, Egypt's first checkup center has been in operation (Saleh et al., 2022). Since 1946, the Egyptian Ministry of Health has included premarital genetic carrier screening as a fundamental part of marital and child health services. It began by offering these services to potential spouses at no cost in either specialized health centers or maternal and child health centers (Alkalash et al., 2021)

Since they will benefit from early, effective interventions to manage and prevent suspected disorders, youngsters who are preventing marriage are the target demographic for PMC (Almannaei et al., 2022). Many of them marry without having received enough education on sexuality, reproduction,

and family planning. Even among educated people, there is a significant knowledge gap about reproductive health. Therefore, before couples have their first kid, they need to learn more about family planning and reproductive health (Aldeeb et al., 2022).

One important way to reduce the financial burden on families whose children have inherited, congenital defects is by premarital care, which also helps avoid hereditary disorders and congenital diseases. Thus, the purpose of this study is to evaluate the attitudes and understanding of teenage students on premarital care (Dadras et al., 2022).

This study was carried out to assess the nursing perception of what constitutes a basis for better planning regarding counseling in the reproductive health since the student nurses of today will be the future nurses who were responsible for prevention and promotion of health during life cycle (AlOtaiby et al., 2023).

Significance of the study:

Many young men and women don't know enough about family planning, sexuality, or reproduction when they get married. Even among those with a higher education degree, there is a significant knowledge gap about reproductive health. Many studies have been carried out in Egypt and other

countries to address youth's knowledge and attitude towards PMC, with a particular focus on reproductive health hazards. However, fewer studies have been designed to evaluate the impact of health education interventions among youth in Egypt (**Adeyemo et al., 2022**). So, this study was conducted to assess knowledge, attitude among nursing students of high school Technical girls towards premarital care in Assiut.

Aim of the study:

This study aims to assess knowledge and Attitude of nursing students of high school Technical girls towards premarital care in Assiut.

Research question:

1. What are the levels of knowledge of nursing students of high school Technical girls towards premarital care?
2. What are the Attitude of nursing students of high school Technical girls regarding premarital care?

Subjects and Methods:

The subjects and methods of the current study were discussed under four designs (technical, operational, administrative, and statistical design).

Technical design:

Research design:

Descriptive cross sectional research design was utilized in this study

Setting:

At Assiut Nursing Secondary Female School, the study was carried out. Al-Eman General Hospital in Assiut City is home to the Nursing Secondary Female School, which is made up of just one floor above the hospital's clinics. The hospital's third story served as the school's presentation space (clinic building). There were six classes in all. Two is for every level.

Sample:

All 190 nursing students at Assiut Nursing Secondary Female School who were available for data collection comprise the study's sample.

Data collection tools:

Two tools were used to collect data

Tool (1) Self-administered questionnaire was developed by researcher to collect information from the students, it included two parts:

Part 1: Personal characteristics of the students; it included: name, age, residence, parents' education and occupation.

Part 2: It consisted of 52 items to assess students' knowledge about premarital care which included definition, Beneficiary category (who will benefit from premarital care), Importance, diseases that can be detected by it, Types of pre-marital investigation, Suitable time for examination, source of information, Service providers, Place of premarital care (**Mzeri & Eugenia, 2022**).

Knowledge scoring system:

There were 52 items to assess student's knowledge, each correct answer was given (1) and incorrect answer and don't know was given (0). The total grades of knowledge were (52) grades. Total score was calculated by summing up and convert into a percent score as following: - Poor < 50% (26) Average 50(26) - <70% (36) Good \geq 70% (36) (**Sá-couto & Nicolau, 2019**).

Tool (2) Attitude scale, to assess attitudes of the student's regarding premarital care. It was consisted of 22 items as: attend lectures on premarital counseling and examination, they are important, are a necessary step for a successful marriage, have an important impact on the future of the family, must tell the other partner about any illnesses in the family, The presence of children with genetic problems affect the economic situation of the family, Going for premarital counseling and examination isn't a waste of time, Customs and traditions don't prevent me from premarital counseling and examining, I will do if it is free, Consanguineous marriage is considered one of the main causes of genetic diseases, should be done in all cases of marriage, The results of the tests are an obstacle to consummating the marriage if they are positive, It is socially acceptable to have premarital counseling and examination, should be obligatory for those wishing to marry, I am going to read about it, School curricula should contain information about it, My knowledge that my fiancé/fiancée is carrier of the disease will affect my choice to marry him/her, Embarrassment to conduct is not found, The presence it within the health insurance services , prevent the birth of children carrying genetic diseases, I accept vaccination before marriage, Punishments must be imposed on those who did not comply with the positive examination results and complete the marriage.

Attitude scoring system:

Three-point Likert scale with 3 possible responses: (disagree=1), (not sure=2), and (agree=3) was used to assess the student's attitude toward premarital counseling. Three scores were given for agree, two scores were given for not sure, and one score was given for disagree). The Technical school students' attitude was considered positive if the percent score is (> 60%) (>40 points) and negative if (< 60%) (< 40 points) (**Kamel et al., 2019**).

Tools Validity:

Three panel experts from the Assiut University Faculty of Nursing's Obstetrics and Gynecological Nursing department evaluated the study's instruments to make sure they measured the intended outcomes. The tools were adjusted based on the panel's assessment of the item sequencing, appropriateness of material, and sentence clarity.

Tools Reliability:

Tool reliability was employed by the researcher to confirm the instruments' internal consistency. The dependability of the data was assessed using Cranach's alpha test. A reliability item that was taken off the scale was used to measure it, and the SPSS software was used for analysis. For the structured interviewing questionnaire, it was reported to be 0.856, and for the attitudes scale tool, it was 0.879.

Operational design:

The design involved description of the preparatory phase, pilot study and field work.

Pilot study:

Following questionnaire preparation, a pre-test was conducted on 10% of cases, involving 19 female students, in order to determine the validity and reliability of the study materials. Since the study instruments did not undergo any significant changes, the subjects from the pilot study were also included in the main study.

Field work:

Data were gathered over the course of three months, from the beginning of April to the end of June 2023.

Preparatory phase:

The researcher used textbooks, papers, and important publications to study the local and worldwide literature related to the current topic. The instruments were created using a standard scale and this literature as a basis, and obstetric and gynecological specialists verified them.

Data collection procedure:

- The Ministry of Health, the manager of the nursing secondary school, the Faculty of Nursing, and its ethical committee all granted their written official consent.
- The researcher met the manager of the school and was admitted to the Secondary School female at Al-Eman General Hospital.
- The manager was given an explanation of the study's nature and aim by the researcher, who also provided her with proof of official permission.
- During break time, the researcher interviewed students in the clinical room two days a week (Monday and Tuesday) from 12 PM to 3 PM in order to determine the sample size. Data collection took from the beginning of April to the end of June 2023
- After explaining the nature and purpose of the study to the female students present that day and taking into account the availability of the classes and their study schedule, the researcher conducted one-on-one interviews with each student in the class. She also got verbal consent for the students' voluntary participation. It took five to ten minutes to complete.

- All of the students who were present in class received an Arabic copy of the questionnaire from the researcher.
- The researcher went over every question on the questionnaire with the class and demonstrated how to complete it. and carried out this task in every class.
- The researcher instructed each student to carefully read the questionnaire, complete it, and ask questions about any parts that she did not understand. The questionnaire took fifteen to twenty minutes to complete.
- Every completed questionnaire from every student was gathered by the researcher.
- Thanking each student who took part in the study, the researcher

Administrative design:

Permission was obtained from the director of Secondary School female at Al-Eman General Hospital.

Ethical considerations:

- As well as an ethical clearance on the ethical committee of the Faculty of Nursing at Assiut University, an official authorization was received from a female Secondary School student at Al-Eman General Hospital.
- Each student gave their informed oral agreement before being added to the study sample and only after being given a concise and understandable description of the study's purpose.
- The nature of the investigation and its anticipated results were communicated in a straightforward and clear manner.
- It was made clear to every participant that she might leave the research whenever she wanted to.
- The complete sample had no discomfort or injury as a result of the study's nature.
- Privacy and confidentiality were taken into account with reference to the information gathered.

Statistical analysis:

The collected data was organized, categorized, coded, tabulated and analyzed using the Statistical Package for Social Sciences (SPSS) version 26. Data was presented in tables and figures using numbers, percentages, means, standard deviation and Pearson test was used in order to find an association between two qualitative variables. Statistical significant was considered at P-value < 0.05.

Results:

Table (1): Distribution of the studied nursing students according to their personal characteristics (N=190)

personal characteristics	N	%
Age/ years		
• <16 years	77	40.5
• >16 years	113	59.5
Mean±SD/ years	16.82±0.95	
Residence		
• Urban	126	66.3
• Rural	64	33.7
Mother's education		
• Illiterate	24	12.6
• Read & write	21	11.1
• Basic education	14	7.3
• Secondary education	83	43.7
• University education	48	25.3
Mothers' occupation		
• Housewife	145	76.3
• Employee	45	23.7
Fathers' education level		
• Read & write	38	20.0
• Basic education	28	14.7
• Secondary education	74	38.9
• University education	50	26.4
Fathers' occupation		
• Farmer	28	14.7
• Employee	101	53.2
• Not work	5	2.6
• Others	56	29.5

Table (2): Distribution of the studied nursing students according to their Mean and SD knowledge about premarital care (N=190)

Items	Mean±SD
Knowledge about premarital investigation	4.01±2.69
Knowledge about German measles	2.15±1.19
knowledge about hereditary and genetic diseases	3.59±1.08
knowledge about sexual transmitted diseases	7.01±4.67
Total knowledge	16.75±7.07

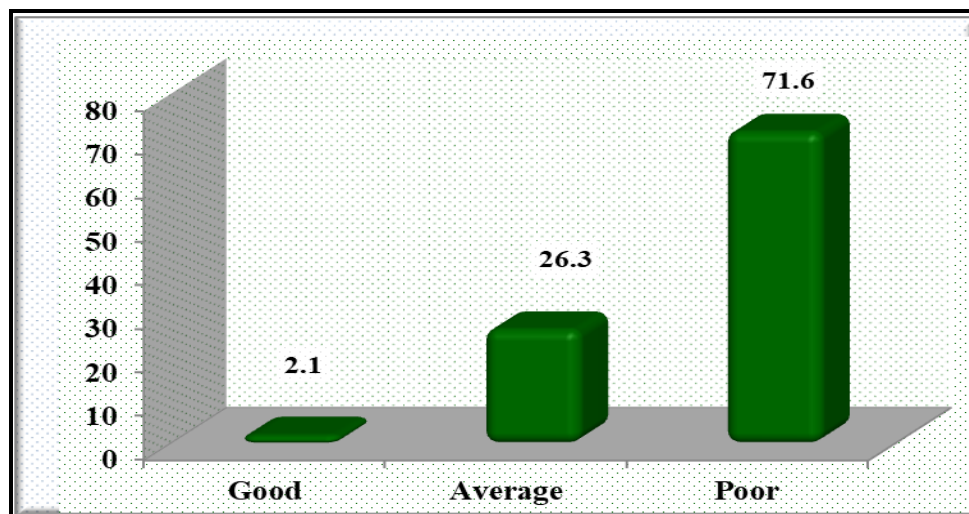


Figure (1): Distribution of the studied nursing students according to their total knowledge level regarding premarital care (N=190)

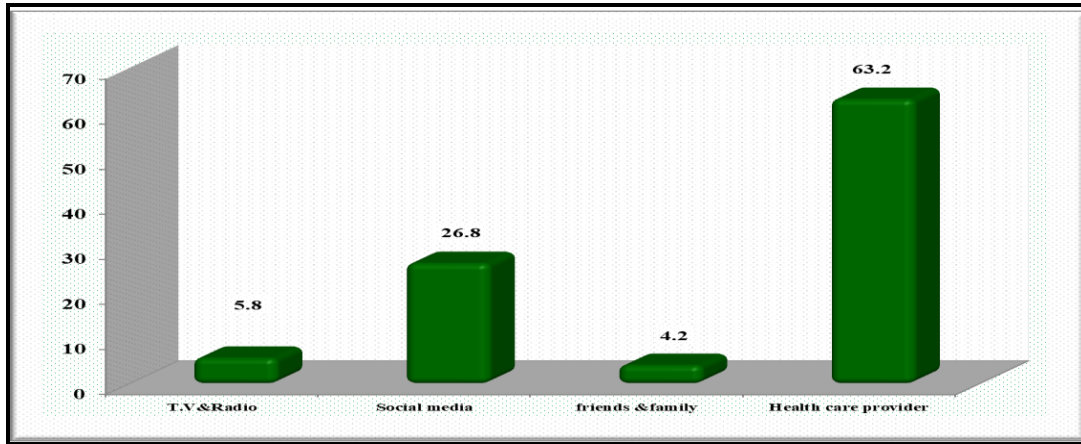


Figure (2): Distribution of the studied nursing students according to their source of information regarding pre-marital care (N=190)

Table (3): Distribution of the studied nursing students according to their attitude regarding premarital care (N=190)

Element	Agree		Not sure		Not agree	
	N	%	N	%	N	%
I am ready to attend lectures on premarital counseling and examination	187	98.4	3	1.6	0	0.0
Premarital counseling and examination are important for both fiancés	183	96.3	6	3.2	1	0.5
Pre-marital examination and counseling is a necessary step for a successful marriage	168	88.4	21	11.1	1	0.5
Premarital counseling and examination have an important impact on the future of the family	172	90.5	18	9.5	0	0.0
We must tell the other partner (the fiancé or fiancée) about any illnesses in the family	161	84.7	26	13.7	3	1.6
The presence of children with genetic problems affect the economic situation of the family	136	71.6	50	26.3	4	2.1
Going to premarital counseling and examination isn't a waste of time	135	71.1	49	25.8	6	3.2
Customs and traditions don't prevent me from premarital counseling and examining	120	63.2	62	32.6	8	4.2
I will do premarital counseling and examination if it is free	103	54.2	66	34.7	21	11.1
Consanguineous marriage is considered one of the main causes of genetic diseases	124	65.3	58	30.5	8	4.2
Premarital counseling and examination should be done in all cases of marriage (consanguineous and other marriage)	104	54.7	78	41.1	8	4.2
The results of the tests are an obstacle to consummating the marriage if they are positive	92	48.4	85	44.7	13	6.8
It is socially acceptable to have premarital counseling and examination	110	57.9	73	38.4	7	3.7
Pre-marital counseling and examination should be obligatory for those wishing to marry	129	67.9	54	28.4	7	3.7
I am going to read about premarital counseling and examination	165	86.8	19	10.0	6	3.2
School curricula should contain information about premarital counseling and examination	169	88.9	14	7.4	7	3.7
My knowledge that my fiancé/fiancée is carrier of the disease will affect my choice to marry him/her	110	57.9	68	35.8	12	6.3
Embarrassment to conduct premarital counseling and examination is not found	168	88.4	16	8.4	6	3.2
The presence of pre-marital counseling and examination within the health insurance services encourages an increase in the percentage of those who conduct it	166	87.4	18	9.5	6	3.2
Premarital counseling and examination prevent the birth of children carrying genetic diseases	119	62.6	64	33.7	7	3.7
I accept vaccination before marriage	133	70.0	50	26.3	7	3.7
Punishments must be imposed on those who did not comply with the positive examination results and complete the marriage	104	54.7	67	35.3	19	10.0

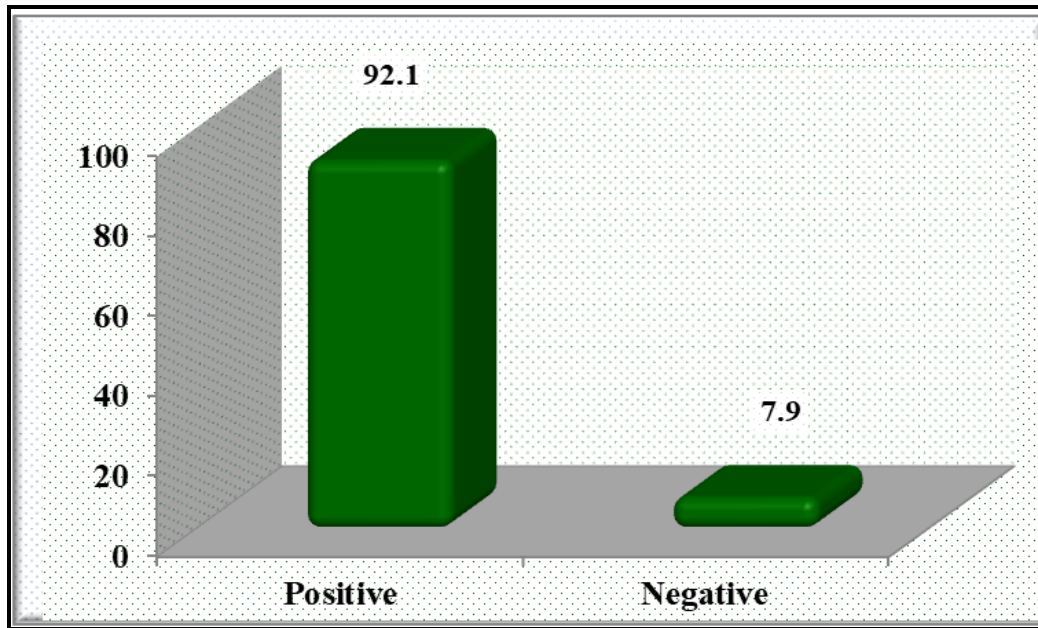


Figure (3): Distribution of the studied nursing students according to their total attitude level regarding premarital care (N=190)

Table (4): Relationship between the studied nursing students' total knowledge about premarital care and socio-demographic characteristics (N=190):

Socio-demographic characteristics	Students' total knowledge about premarital care						p-value
	Good (4)		Average (50)		Poor (136)		
	N	%	N	%	N	%	
Age/ years							0.247
• <16 years	0	0.0	21	42.0	56	41.2	
• >16 years	4	100.0	29	58.0	80	58.8	
Residence							0.104
• Urban	1	25.0	37	74.0	88	64.7	
• Rural	3	75.0	13	26.0	48	35.3	
Mother's education							0.606
• Illiterate	0	0.0	7	14.0	17	12.5	
• Read & write	1	25.0	6	12.0	14	10.3	
• Basic education	1	25.0	4	8.0	9	6.6	
• Secondary education	0	0.0	20	40.0	63	46.3	
• University education	2	50.0	13	26.0	33	24.3	
Mothers' occupation							0.056
• Housewife	3	75.0	32	64.0	110	80.9	
• Employee	1	25.0	18	36.0	26	19.1	
Fathers' education level							0.801
• Read & write	0	0.0	10	20.0	28	20.6	
• Basic education	0	0.0	7	14.0	21	15.4	
• Secondary education	2	50.0	18	36.0	54	39.7	
• University education	2	50.0	15	30.0	33	24.3	
Fathers' occupation							0.550
• Farmer	0	0.0	10	20.0	18	13.2	
• Employee	3	75.0	28	56.0	70	51.5	
• Not work	0	0.0	2	4.0	3	2.2	
• Others	1	25.0	10	20.0	45	33.1	

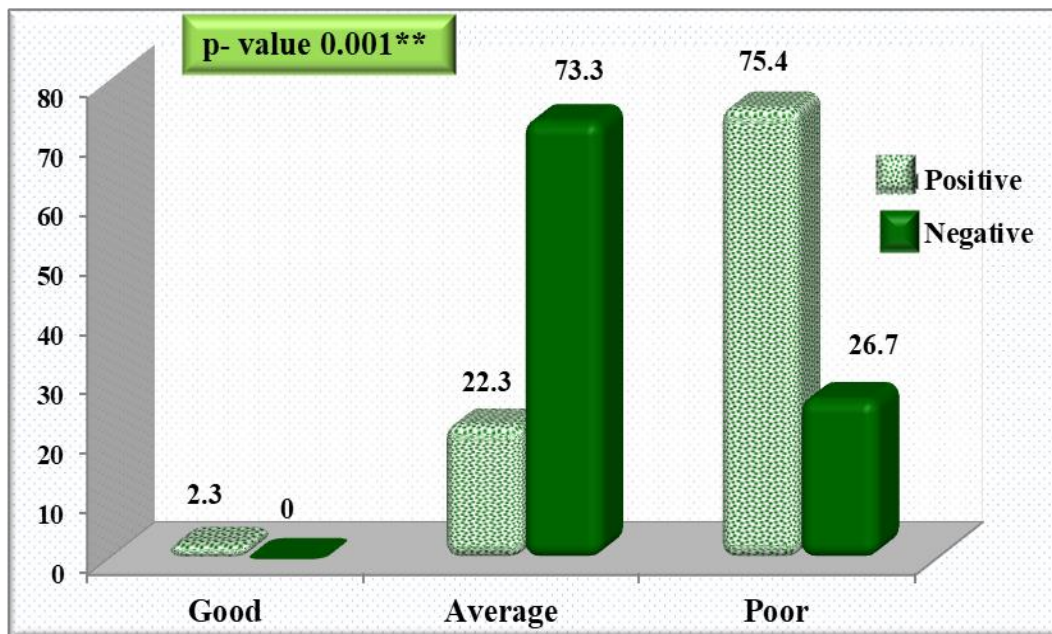
(*) Statistical significant difference (p-value < 0.05)

(**) Highly Statistical significant difference (p-value < 0.01)

Table (5): Relationship between the studied nursing students’ total attitude regarding premarital care and socio-demographic characteristics (N=190):

Socio-demographic characteristics	Students’ total attitude regarding premarital care				P-value
	Positive (175)		Negative (15)		
	N	%	N	%	
Age/ years					0.554
• <16 years	72	41.1	5	33.3	
• >16 years	103	58.9	10	66.7	
Residence					0.590
• Urban	117	66.9	9	60.0	
• Rural	58	33.1	6	40.0	
Mother's education					0.020*
• Illiterate	23	13.1	1	6.7	
• Read & write	21	12.0	0	0.0	
• Basic education	14	8.0	0	0.0	
• Secondary education	78	44.6	5	33.3	
• University education	39	22.3	9	60.0	
Mothers' occupation					0.005**
• Housewife	138	78.9	7	46.7	
• Employee	37	21.1	8	53.3	
Fathers' education level					0.193
• Read & write	38	21.7	0	0.0	
• Basic education	25	14.3	3	20.0	
• Secondary education	68	38.9	6	40.0	
• University education	44	25.1	6	40.0	
Fathers' occupation					0.137
• Farmer	28	16.0	0	0.0	
• Employee	89	50.8	12	80.0	
• Not work	5	2.9	0	0.0	
• Others	53	30.3	3	20.0	

(*) Statistical significant difference (p-value < 0.05) (**) Highly Statistical significant difference (p-value < 0.01)



(*) Statistical significant difference (p-value < 0.05) (**) Highly Statistical significant difference (p-value < 0.01)

Figure (4): Relationship between the studied nursing students’ total knowledge and attitude regarding premarital care (N=190):

Table (1): Illustrates that 59.5% of them had a (>16) years old with a mean and SD of 16.82 ± 0.95 , about 66.3% of the studied nursing students lived in urban areas. Regarding their mothers' characteristics, about 43.7 and 76.3% of them had a secondary level of education and were housewives respectively. Concerning their fathers' characteristics, about 38.9% and 53.2% of them had a secondary level of education and were employed respectively.

Table (2): Shows that mean and SD score of total knowledge about premarital care was 16.75 ± 7.07

Figure (1): Demonstrates that 71.6%, 26.3%, and 2.1% of the studied nursing students had poor, average and good knowledge respectively.

Figure (2): Reveals that 63.2% of the studied nursing students gained their information from health care providers; about 26.8%, 5.8% and 4.2% of them gained their information from social media. T.V & radio, and friends & family respectively.

Table (3): Clarifies that 98.4%, 96.3%, 90.5%, and 88.9% of the studied nursing students agreed with "I am ready to attend lectures on premarital counseling and examination", "Premarital counseling and examination are important for both fiancés", "Premarital counseling and examination have an important impact on the future of the family" and "School curricula should contain information about premarital counseling and examination" respectively.

Figure (3): Clarifies that 92.1% and 7.9% of the studied nursing students had positive and negative attitude respectively

Table (4): Illustrates that there were no statistical significant relationship between the studied nursing students' total knowledge and age, residence, mother's education, mothers' occupation, fathers' education level and fathers' occupation at p -value > 0.05 .

Table (5): Clarifies that there was highly statistical significant relationship between the studied nursing students' total attitude and mothers' occupation at p -value < 0.01 , there was statistical significant relationship between the studied nursing students' total attitude and mother's education at p -value < 0.05 , and there were no statistical significant relationship between the studied nursing students' total attitude and age, residence, fathers' education level and fathers' occupation at p -value > 0.05 .

Figure (4): Illustrates that there was a highly statistical significant relationship between the studied nursing students' total knowledge and attitude regarding premarital care at p -value < 0.01 .

Discussion:

The current study shows that, in terms of overall knowledge about premarital care, less than three quarters, more than one quarter, and just 2.1% of the

nursing students under review had inadequate, average, and good knowledge, respectively. In a similar vein, (Osman et al., 2021) conducted a study in Egypt to evaluate university students' awareness of premarital counseling and examinations. They found that less than one-sixth of the women in the study had satisfactory knowledge of these topics, and the majority of the women had unsatisfactory knowledge. Additionally, Zaien et al. (2021) conducted a study in Egypt to examine the impact of an empowerment-based educational intervention on women's attitudes, knowledge, and self-efficacy regarding premarital counseling and genetic screening (PMSGC). They discovered that, prior to the intervention, over three-quarters, less than a tenth, and less than a sixth of the female participants had fair, poor, and good knowledge, respectively, about PMSGC. Based on this understanding, it is investigated whether there is a critical need to strengthen that knowledge gap by offering nursing students an ongoing educational program about premarital counseling and care.

Conversely, Saleh et al. (2022) conducted a study in the United Arab Emirates to evaluate university students' awareness of the premarital screening program. Their findings revealed that, correspondingly, less than one-third, over two-fifths, and over one-quarter of the students under investigation possessed inadequate, mediocre, and excellent knowledge regarding premarital screening. Additionally, a study conducted by Fetohy Khalil et al. (2020) evaluated the knowledge, attitudes, and behaviors of female students at King Saud University (KSU) in Riyadh with regard to the national premarital screening program (PMS). The results indicated that, respectively, one-fifth, more than one-half, and one-quarter of the studied females had poor, average, and good knowledge about PMS.

On the sources of information on premarital care, a real study showed that over 75% of nursing students under study learned about it from healthcare providers, and over 25% learned about it via social media, radio, and television. Furthermore, fewer than 10% of them got their information from family and friends, respectively. In a similar opinion, Mahmoud & Ahmed (2018) conducted a study in Egypt to evaluate the impact of teaching STD education sessions on secondary school students' knowledge and attitudes. They found that less than 10% of the students in the study learned about STDs from friends and family.

In line with earlier research, Al-Shroby et al. (2021) found that fewer than 25% of the study participants learned about certain genetic and STDs from medical professionals. Their research was conducted in Saudi Arabia with the aim of identifying and reducing the prevalence of these diseases.

Regarding the overall attitude level toward premarital care, the current study found that, respectively, the vast majority and less than ten percent of the nursing students under study had favorable and negative attitudes toward premarital care. Similar findings were published by **Zaien et al. (2021) & Osman et al. (2021)**, demonstrating that most of the female participants in the study had favorable attitudes on premarital screening. Every prior investigation that supported the current study was conducted on a comparable setting of the same country.

Two studies that assessed students' knowledge and attitudes toward premarital examination in Egypt **Anwr et al., 2023 & Kammel et al., 2019** illustrated different findings. They showed that, respectively, less than half and more than half of the studied clients had a positive and negative attitude regarding premarital counseling.

According to the current study, the majority of the studied nursing students agreed with the following statements about premarital care: "I am ready to attend lectures on premarital counseling and examination," "Premarital counseling and examination are important for both fiancés," "Premarital counseling and examination have an important impact on the future of the family," and "Premarital counseling and examination should be covered in school curricula."

The majority of nursing students surveyed agreed that "utilization of premarital counseling are important for couples," according to similar findings published by **(Hebatallah 2019)**, who conducted a study to evaluate nursing students' perceptions regarding premarital counseling and examinations. Additionally, **(Al-Kindi et al., 2019)** highlighted that the majority of the examined students consented to get premarital counseling. The study was conducted in Oman to investigate high school students' awareness and attitude towards premarital screening (PMS).

And **(Zaien et al., 2021)**, who showed that the vast majority of the female participants in the study agreed with the statements that premarital counseling is crucial, that it can shield children from inherited illnesses, and that it promotes a happy and fulfilling marriage. All of the earlier research shows the good trend that was observed among women, which offers them motivation to increase their understanding of premarital counseling.

In contrast to earlier research, **(Mohammed et al., 2022)** showed that fewer than one-third of the studied students agreed that "pre-marital examination and counseling is a necessary step for a successful marriage" and fewer than one-fifth agreed that they were "ready to attend lecture on premarital counseling." Their study was conducted in Egypt to

assess the impact of educational programs on knowledge and attitude of technical school students regarding premarital counseling.

Furthermore, less than two-fifths of the studied students agreed with the statements "importance of including reproductive health in secondary education" and "acceptance to attend lectures about premarital screening and care" made by **Mohamed et al. (2015)**, who used their study on 400 single female students in Egypt to assess knowledge and attitude toward premarital screening and counseling among medical students at El Minia University and evaluate the effectiveness of educational program on improving the students' knowledge and attitude toward premarital screening and counseling.

Regarding the relationships between the total knowledge and attitude of the nursing students under study about premarital care, the current research shows that there was, at $p\text{-value} < 0.01$, a highly statistically significant relationship between the two. The same results were published by **(Almualm, 2022)**, who used their study to evaluate Hadhramout university students' knowledge and attitudes toward premarital counseling; **(Kamel et al., 2019)**; **(Esheaba et al., 2018)**, who focused their investigation on nursing students' knowledge, attitudes, and practices regarding a premarital program in Jeddah; and **(Anwr et al., 2023)**, who showed a highly statistically significant relationship between the studied nursing students' overall knowledge and attitude regarding premarital care at $p\text{-value} < 0.01$. This agreement showed the vital role of sufficient knowledge on guiding participant toward positive attitudes.

There are no statistically significant relationships between the total knowledge of the studied nursing students and age, residence, religion, mother's education, mother's occupation, fathers' education level, and fathers' occupation at $p\text{-value} > 0.05$, according to the study that points to relationships between the studied nursing students' total knowledge about premarital care and socio-demographic characteristics.

Similar findings were reported by **(Zaien et al., 2022)**. They conducted their study in Egypt to look into the factors that influence PMSGC knowledge and attitude in deaf and hard-of-hearing females. Their findings indicated that there was no statistically significant relationship between the age and education of the mother and the total knowledge of the studied females at $p\text{-value} > 0.05$. Additionally, **Mahmoud & Ahmed (2018)** showed that there was no statistically significant relationship between the studied secondary students' total knowledge and age, mother's education and fathers' education level at $p\text{-value} > 0.05$.

An alternative viewpoint was presented by (Hebatallah, 2019), who discovered that, at p-value <0.01, there were highly statistically significant relationships between the total knowledge of the nursing students under study and the educational background, occupation, and degree of education of their fathers. Additionally, (Al-Shroby et al., 2021) discovered that the age and educational attainment of the participants in the study were positively correlated with their overall knowledge.

Regarding the relationships between the overall attitudes of the nursing students under study and the socio-demographic factors, the data available indicates that there were significant relationships between the overall attitudes of the students and the occupation of mothers (p-value <0.01), between the overall attitudes of the students and religion and mother's education (p-value <0.05), and between the overall attitudes of the students and age, residence, fathers' educational attainment, and fathers' occupation (p-value >0.05). In line with other research, (Osman et al., 2021) showed that, at p-value >0.05, there were no statistically significant relationships between the overall attitude of the pupils under study and their place of residence, fathers' educational attainment, or fathers' occupation.

Anwr et al., (2023) showed different results, showing a very statistically significant relationship between the age of the tested clientele and their overall attitude. Additionally, (Zaien et al., 2022) demonstrated that there was a very statistically significant relationship between the overall attitude of the investigated females and where they lived. Neither the overall attitude of the investigated females nor the educational attainment of their mother showed any statistically significant correlation.

Regarding the personal characteristics of the nursing students under research, the actual study revealed that, with a mean and SD of 16.82±0.95, slightly less than two thirds of the students were urban dwellers and that, on average, slightly less than three fifths of them were older than 16 years old. In terms of the attributes of their moms, over two-fifths and over three-quarters of them were housewives and had only completed secondary school. In terms of their fathers' traits, slightly fewer than half of them were employed, and more than half had only completed secondary school.

According to earlier research (Mahmoud & Ahmed, 2018), the majority of the students in the study were over 16 years old, lived mostly in metropolitan areas, and had mothers with at least a secondary education. These findings are consistent with the findings of the present study. Furthermore, fewer than 3/5 of their

moms were stay-at-home moms. Less than two thirds of them were workers as well.

Conclusion:

Most of the studied nursing students had a poor knowledge and the majority of them had positive attitude regarding premarital care

Recommendation:

Based on the findings of the current study, the following recommendations are suggested.

- Constantly offering premarital health education programs in all secondary schools, as these students are among those who can contribute to the dissemination of this information to the community.
- Include material in school curricula regarding premarital counseling and exams.
- Holding counseling sessions in schools with social workers to educate students on premarital care.
- Make use of TV shows and media outlets to raise awareness among all nursing students at the Technical Girl's School in secondary education about premarital care.
- Further research to reproduce the findings in a different school with a different student body.

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