

The Role of Premarital Nurses in Promoting Health Awareness and Guidance for those About to Get Married: An Analytical Study of Training and Development Needs

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Abstract

Premarital counseling is one of the health promotion activities provided by maternal and child health services programs. These services target the young age groups who are about to get married with the aim of guiding, educating and preparing them to form a healthy family [1]. Premarital counseling is considered one of the most important strategies used to prevent genetic birth defects and many medical and psychosocial problems associated with marriage [2]. Genetic counseling, which is one of the most important components of premarital counseling, focuses on providing prospective couples with accurate knowledge, possible expectations and their proportions, and leaving the decision to the concerned parties between them and the treating physician [2,3]. Premarital counseling includes communication between people, reducing conflict by addressing expectations within the marriage, and medical and genetic counseling.

Keywords: health, premarital counseling.

1. Introduction

Premarital counseling is one of the health promotion activities provided by maternal and child health services programs. These services target the young age groups who are about to get married with the aim of guiding, educating and preparing them to form a healthy family [1]. Premarital counseling is considered one of the most important strategies used to prevent genetic birth defects and many medical and psychosocial problems associated with marriage [2]. Genetic counseling, which is one of the most important components of premarital counseling, focuses on providing prospective couples with accurate knowledge, possible expectations and their proportions, and leaving the decision to the concerned parties between them and the treating physician [2,3]. Premarital counseling includes communication between people, reducing conflict by addressing expectations within the marriage, and medical and genetic counseling.

Medical counseling explains basic reproductive health and family planning issues to couples in terms of teaching them the facts related to the male and female reproductive parts, how menstruation, ovulation and fertilization occur, and methods of family planning [4]. Premarital screening is considered the most effective means of prevention that can reduce the birth of affected children, by reducing the marriage of carriers of genetic blood disorders [5]. It is also the most appropriate procedure, as it is generally accepted religiously and rationally.

Nurses play a pivotal role in premarital screening and care. Nurses communicate with clients in both verbal and nonverbal ways, requiring advanced skills in dealing with various aspects of individuals' lives [6]. Accordingly, the nurse must take into account a range of biological, psychological, social, cultural, spiritual, and environmental factors while providing care [7]. The role of the nurse in this context is complex and diverse, as she interacts with clients in many roles. In addition to being a health care coordinator, an active member of the medical team, a provider of comprehensive care, and a contributor to the promotion of individuals' health, nurses also act as researchers and promoters of public health [8,9].

Therefore, this study aims to explore and analyze the role of nurses in the premarital department, and to identify attitudes and knowledge related to health screening and counseling provided to those about to get married.

2. Materials and Methods

Study Design

The current study is a descriptive quantitative cross-sectional study through an online survey to explore and analyze the role of nurses in the premarital department, and to identify attitudes and knowledge related to health screening and counseling provided to those about to get married in Saudi Arabia.

Study participants

Participants were selected through simple random sampling from the Saudi population aged 20-40 years while attending healthcare centers for various reasons during the study period. The age group selection criterion was set to reflect the expected marital age in Saudi Arabia. The purpose of the study, as well as the methodology, were explained in detail. All potential participants received an information sheet covering all aspects of the study, and their inquiries were answered. Candidates who agreed to participate in the study were asked to sign a consent form and were provided with the researchers' contacts for any further inquiries. A total of 230 people were contacted, and 208 (90.4%) of them agreed to participate in the study. However, 8 questionnaires were excluded from the study due to incomplete answers. Thus, a total of 200 participants were included in the analysis.

Study instruments

A self-administered questionnaire was used to collect data under the supervision of qualified nurses and health educators. Based on the available literature on health awareness and guidance for those about to get married, a questionnaire was developed with items that do not conflict with

the culture of Saudi society [10,11,12]. The questionnaire was divided into two parts. The first part was designed to obtain the socio-demographic characteristics of the respondents, including gender, age, income, educational level, etc. The second part included 10 items and investigated the concerning premarital counselling and examination in Saudi Arabia. A five-point Likert scale (strongly agree - strongly disagree) was used. The survey was conducted from August 2024 to October 2024.

Data collection

The survey was distributed electronically through online channels, including email and social media platforms (WhatsApp and Facebook groups). Participants were informed that participation was voluntary and that they could withdraw, and participants’ identities were kept confidential to encourage open and honest responses. The survey was conducted in both English and Arabic to accommodate the linguistic diversity of participants.

Data analysis

Statistical analysis was carried out using the Statistical Package for the Social Sciences (SPSS Inc., Chicago, IL, USA), version 26. Frequency and percentages were obtained for the categorical variables, while mean and standard deviation (SD) were calculated for the scale variables. Various inferential statistical tests were employed to identify significant variations within the study groups, including the independent t-test, one-way analysis of variance (ANOVA), Pearson’s correlation (r), multiple linear regression, and logistic regression.

3. Results

Socio-Demographic Characteristics of the Respondents

A total of 200 responses collected. The study group falls within the age group of 24-40 years. About (34.0%) of the participants are less than 25 years old, (28.5%) are between 25 – 30 years, followed by (37.5%) are between 31 – 40 years. Among the study groups, (74.5%) male, (25.5%) Female. Half of respondents said Monthly Family Income 2000-6000 SAR (51.0%). Besides, most participants had education Level Graduate & above (70.0%), as shown in table (1).

Table 1.demographic traits of participants (n=200)

	Categories	Frequency	Percent %
sex	male	149	74.50%
	Female	51	25.50%
Age (years)	< 25 years old	68	34.00%
	25-30 years old	57	28.50%
	31-40 years old	75	37.50%
Level of education	High school level	60	30.00%
	Graduate & above	140	70.00%
Employment	Unemployed	90	45.00%
	Employed	110	55.00%
Monthly Family Income (SAR)	2000–6000	102	51.00%
	6000–12,000	57	28.50%
	>12,000	41	20.50%

Assessing attitudes and knowledge towards premarital screening and counselling

Table 2. Distribution of the study sample according to attitudes towards premarital medical examination (n=200)

Attitudes towards premarital medical examination		Male		Female	
		N	%	N	%
Tests and counseling should be done before marriage.	Agree	90	90.0%	92	92.0%
	Neutral	4	4.0%	3	3.0%
	Disagree	6	6.0%	5	5.0%
If the medical examination proves that there are health or genetic obstacles to your marriage to the one you love, will you respond to the results?	Agree	80	80.0%	85	85.0%
	Neutral	10	10.0%	10	10.0%
	Disagree	10	10.0%	5	5.0%
Accepting a premarital medical examination	Agree	85	85.0%	90	90.0%
	Neutral	10	10.0%	4	4.0%
	Disagree	5	5.0%	6	6.0%
Confidentiality of medical examination results	Agree	60	60.0%	70	70.0%
	Neutral	10	10.0%	15	15.0%
	Disagree	30	30.0%	15	15.0%
Do you support consanguineous marriage?	Agree	3	3.0%	5	5.0%
	Neutral	2	2.0%	10	10.0%
	Disagree	95	95.0%	85	85.0%

Table (2) shows that the majority of the sample (91%) confirmed the importance of premarital examination and counseling, while (82.5%) of the sample would abandon the relationship if the examination result was positive, while (87.5%) of them agreed to undergo a medical examination before marriage, and the majority of the sample (90%) did not support marriage between relatives, and the results were close between males and females. These results are attributed to awareness and information about genetic diseases and the importance of examination in preventing genetic diseases, as pre-marriage nurses continuously raise awareness in Saudi society through many activities and events. These results are consistent with the results of another study conducted in the Kingdom of Saudi Arabia which found that the attitudes of outpatients in Jeddah were positive regarding the importance of premarital medical examination, and that they would abandon marriage if the examination proved the presence of any obstacles [13].

Table 3. Distribution of the study sample according to knowledge towards premarital medical examination (n=200)

knowledge towards premarital medical examination		Male		Female	
		N	%	N	%
Premarital counseling contributes to reducing the spread of genetic diseases	Agree	87	87.0%	80	80.0%
	Neutral	3	3.0%	5	5.0%
	Disagree	10	10.0%	15	15.0%
In the event of incompatibility, counselors must discuss the outcome, present the options, and leave the decision to them	Agree	90	90.0%	92	92.0%
	Neutral	4	4.0%	4	4.0%
	Disagree	6	6.0%	4	4.0%
Giving advice on premarital testing is one of the roles of nursing	Agree	96	96.0%	95	95.0%
	Neutral	4	4.0%	3	3.0%
	Disagree	0	0.0%	2	62.0%
Do you support adding infertility, AIDS, and mental illness testing to premarital testing	Agree	90	90.0%	95	95.0%
	Neutral	7	7.0%	3	3.0%
	Disagree	3	3.0%	2	2.0%
Do you support issuing a law prohibiting marriage in the event of incompatibility	Agree	60	60.0%	70	70.0%
	Neutral	16	16.0%	16	16.0%
	Disagree	34	34.0%	14	14.0%

Table (3) shows that the majority of the sample (91%) agree with the necessity of providing advice regarding the test results, presenting options, and leaving them free to choose. This is attributed to the student's knowledge of advice and its rules. The study results also showed that (95%) of the sample agree that providing advice before marriage is one of the roles of nursing because it is taught in nursing curricula, and one of the most important roles of nursing is providing advice. While (88%) of the sample support laws that require the examination to be conducted before marriage in practice, while only (65%) support issuing a law prohibiting marriage in the event of disagreement with the result of the premarital examination, considering that this matter is private and personal, and most of them support the freedom to make a decision about it. which showed that more than half of the samples support the non-mandatory examination [13].

4. Discussion

Premarital counseling is a therapeutic approach for couples who are about to get married. It is a skill that provides couples with knowledge about how to strengthen their relationship. Premarital therapy has emerged as a means of reducing divorce rates while increasing marital satisfaction after marriage. Couples who receive premarital counseling are more likely to have good psychological health and significant relationship problems [14]. As a result, this study aims to explore and analyze the role of nurses in the premarital department, and to identify attitudes and knowledge related to health screening and counseling provided to those about to get married.

The results of this study indicate that the majority of participants strongly agree with premarital counselling and screening services, with 91% of them acknowledging the importance of such screenings and counselling. This is in line with the primary goal of counselling, which is to provide individuals with the information they need to make informed decisions about their health and marriage, as well as to prevent genetic and medical complications in the future. The results highlight the crucial role nurses play in counselling and educating individuals about genetic disorders, reproductive health and family planning [15]. Nurses play a pivotal role in raising awareness and guiding individuals through making informed decisions about their premarital health. In addition, the results of this study show that (95%) of the participants considered providing premarital screening counseling as a primary responsibility of nurses. This finding is consistent with previous studies that have emphasized the crucial role of nurses in providing premarital screening information [16]. This study also showed that most participants (91%) perceived that premarital counseling contributes to reducing the spread of genetic diseases, reflecting widespread awareness of the importance of genetic screening in preventing future health problems. These results confirm that nurses are ideally positioned to provide such crucial health education, which is in line with the goals of premarital counseling [17]. In contrast, the results of this study conflict with some previous studies regarding participants' preferences for mandatory premarital screening laws [18]. In this study, there was a marked division in participants' opinions regarding the enactment of laws that would prohibit marriage in the event of genetic incompatibility. While 65% of participants supported such laws, 35% opposed them, preferring to preserve personal autonomy in marriage decisions. This reflects a more nuanced perspective compared to other studies where there was a stronger consensus in favor of

mandatory premarital screening laws [12]. This difference may reflect different cultural attitudes or regional differences in Saudi Arabia regarding the balance between public health goals and personal freedom.

Regarding the role of nurses, the results of this study also reinforce previous findings that highlight the essential role nurses play in premarital counseling. However, the study also suggests that more targeted training is needed to equip nurses with the skills to provide information and emotional and psychological support [19]. Given the sensitive nature of genetic counseling and the potential emotional impact of negative outcomes, nurses need to be prepared to provide comprehensive care that includes medical advice and emotional guidance.

5. Conclusion

The results of this study indicate that premarital screening and counseling enjoys broad support from participants in Saudi society, with an emphasis on the role of nurses as a key element in providing these services. However, there are differences between this research and previous studies regarding opinions on imposing mandatory premarital screening laws, as the current study showed a greater tendency towards freedom of decision-making. Based on these results, there is a need to improve the ongoing training of nurses in the field of premarital screening and counseling, while ensuring respect for individuals' cultural and personal values, and to enhance awareness programs that contribute to spreading awareness about the benefits of these health services.

WORKS CITED

- Ho YL, Mahirah D, Ho CZ, Thumboo J. The role of the family in health promotion: a scoping review of models and mechanisms. *Health Promot Int*. 2022 Dec 1;37(6):daac119. doi: 10.1093/heapro/daac119. PMID: 36398941; PMCID: PMC9673498.
- Altaany Z, Khabour OF, Alzoubi KH, Alkaraki AK, Al-Taani G. The Perception of Premarital Genetic Screening within Young Jordanian Individuals. *Public Health Genomics*. 2021;24(3-4):182-188. doi: 10.1159/000517162. Epub 2021 Jun 30. PMID: 34192692; PMCID: PMC9984666.
- Biesecker B. Genetic Counseling and the Central Tenets of Practice. *Cold Spring Harb Perspect Med*. 2020 Mar 2;10(3):a038968. doi: 10.1101/cshperspect.a038968. PMID: 31570379; PMCID: PMC7050579.
- Bener A, Al-Mulla M, Clarke A. Premarital Screening and Genetic Counseling Program: Studies from an Endogamous Population. *Int J Appl Basic Med Res*. 2019 Jan-Mar;9(1):20-26. doi: 10.4103/ijabmr.IJABMR_42_18. PMID: 30820415; PMCID: PMC6385533.
- Al-Nood H, Al-Hadi A. Proposed low-cost premarital screening program for prevention of sickle cell and thalassemia in Yemen. *Qatar Med J*. 2013 Dec 23;2013(2):33-7. doi: 10.5339/qmj.2013.13. PMID: 25003062; PMCID: PMC4080493.
- Jelly, Pangkey, and Erna Rochmawati. "Interventions to Improve Nurse Therapeutic Communications in the Context of Palliative Care: Literature Review." *Jurnal Keperawatan Komprehensif (Comprehensive Nursing Journal)* 8.3 (2022).
- Murgia, Carla, et al. "Spirituality in nursing: A concept analysis." *Nursing Ethics* 27.5 (2020): 1327-1343.
- Karam M, Chouinard MC, Poitras ME, Couturier Y, Vedel I, Grgurevic N, Hudon C. Nursing Care Coordination for Patients with Complex Needs in Primary Healthcare: A Scoping Review. *Int J Integr Care*. 2021 Mar 19;21(1):16. doi: 10.5334/ijic.5518. PMID: 33776605; PMCID: PMC7977020.

- Karam M, Chouinard MC, Couturier Y, Vedel I, Hudon C. Nursing Care Coordination in Primary Healthcare for Patients with Complex Needs: A Comparative Case Study. *Int J Integr Care*. 2023 Feb 2;23(1):5. doi: 10.5334/ijic.6729. PMID: 36819614; PMCID: PMC9912854.
- Ahmed Hassan, Basma Abdo, and Soad Sayed Elkhateeb. "Assessment of students' Knowledge and attitude regarding Premarital Examination at Aswan University." *Assiut Scientific Nursing Journal* 12.46 (2024): 73-84.
- Al-Farsi, O.A., Al-Farsi, Y.M., Gupta, I. et al. A study on knowledge, attitude, and practice towards premarital carrier screening among adults attending primary healthcare centers in a region in Oman. *BMC Public Health* 14, 380 (2014). <https://doi.org/10.1186/1471-2458-14-380>
- Ibrahim, Nahla Khamis Ragab, et al. "An educational program about premarital screening for unmarried female students in King Abdul-Aziz University, Jeddah." *Journal of infection and public health* 4.1 (2011): 30-40.
- Hussain, Abdullah Mohammed. "Premarital Screening and Genetic Counseling Program, Sickle Cell Anemia and Thalassemia in Saudi Arabia." *Advances in Clinical and Experimental Medicine* 10.1 (2023).
- Osman, Hanaa Tharwat, Zeinab Ali Ali Baraia, and Inaam Hassan Abdelati. "Awareness and attitude of university students regarding premarital counseling and examination." *Trends in Nursing and Health Care Journal* 3 (2021).
- Kisanga E, Mutagonda R, Myemba DT, Njiro BJ, Simon F, Marealle AI, Mikomangwa WP, Kilonzi M, Sambayi G, Bwire GM. Premarital genetic screening and care of Tanzanian children with sickle cell disease: a qualitative study on parents' views and experiences. *J Community Genet*. 2021 Oct;12(4):515-523. doi: 10.1007/s12687-021-00539-y. Epub 2021 Jul 21. PMID: 34287808; PMCID: PMC8554897.
- Ali, Maha, et al. "Perception about premarital screening and genetic counseling among males and females nursing students." *IOSR Journal of Nursing and Health Science* 7.1 (2018): 51-57.
- Al Eissa MM, Almsned F, Alkharji RR, Aldossary YM, AlQurashi R, Hawsa EA, AlDosari SM, Alqahtani AS, Alotibi RS, Farzan R, Alduaiji R, Sulimani SM, Alomary SA, Assiri AM. The perception of genetic diseases and premarital screening tests in the central region of Saudi Arabia. *BMC Public Health*. 2024 Jun 10;24(1):1556. doi: 10.1186/s12889-024-19029-0. PMID: 38858722; PMCID: PMC11165879.
- Al-Shafai, Mashael, et al. "Knowledge and perception of and attitude toward a premarital screening program in Qatar: a cross-sectional study." *International journal of environmental research and public health* 19.7 (2022): 4418.
- Kamal Habib, Heba, et al. "Effect of Educational Program about Premarital Counseling for Nursing School Students." *Egyptian Journal of Health Care* 15.2 (2024): 1543-1554.