Prospective Brides' Experiences of Reproductive Health and Premarital Care: A Scoping Review

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ABSTRACT

Background: Reproductive health and premarital services are important aspects of marriage preparation to prevent health hazards for the bride and groom. There are still many prospective brides who have limited knowledge about reproductive health and the benefits of premarital screening and counseling. Low utilization of premarital services can increase the risk of pregnancy complications, sexually transmitted infections, as well as early marriage, which poses a high risk to maternal and child health. This study aims to explore the experiences of prospective brides related to reproductive health and premarital services through a systematic review using the scoping review method.

Method: This study employed a scoping review using the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) Flowchart approach. The literature search was performed in the main databases such as PubMed, ScienceDirect, and Wiley, using keywords determined based on the PEOS (Population, Exposure, Outcome, and Study Design) framework. The literature review was conducted on scientific publications in English, primary research articles or reviews relevant to the same theme, as well as studies published within the last 10 years. In addition, it was analyzed thematically to identify patterns of key findings.

Result: The level of knowledge of future husbands and wives' reproductive health and premarital services still varies, with most individuals having limited understanding before undergoing educational interventions. Interventions such as premarital courses, counseling, and brochure-based counseling are effective in improving the knowledge and attitudes of future husbands and wives. However, there are barriers to the implementation of premarital services, such as limited access, social stigma, and a lack of rules regulating obligatory premarital examinations. Therefore, stronger policies are needed from the government, as well as ongoing education in schools and universities to increase public awareness of the importance of reproductive health before marriage. *Correspondence fitrimeiriska95@gmail.com

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INTRODUCTION

Improvement of reproductive health, especially in basic health services, is carried out through promotive and preventive efforts supported by innovation and utilization of technology. These efforts are carried out by introducing reproductive health according to the stages of an individual's development. Various efforts have been made by the government to overcome reproductive health problems. However, the results obtained have not been in line with expectations. This is indicated by the high MMR (Maternal Mortality Rate) in Indonesia which is still a serious concern. Based on the latest data from the 2022 of Inter-Census Population Survey (SUPAS), Indonesia's MMR reached 189 per 100,000 live births. This figure is still far from the 2030 SDGs target of 70 per 100,000 live births.(1)

In comparison, Malaysia, which has a more established maternal health system, recorded a MMR of around 40 per 100,000 live births in the same period.(2) In contrast, developed countries such as Japan and Germany have achieved a much lower MMR of around 5 per 100,000 live births. This disparity highlights the urgent needs for Indonesia to improve maternal health services, strengthen reproductive health education, and increase access to quality antenatal and postnatal care to meet SDGs targets.

Most of the maternal mortality causes can be prevented by improving the quality of health services, especially for women as future mothers. Reproductive health is an important aspect that must be understood by future husbands and wives to support family health in the future. Unfortunately, there are still many prospective brides who have limited knowledge about reproductive health and premarital services. According to the theory of the Premarital Screening Program: Guidelines for implementation shows that many prospective bride do not understand the importance of reproductive health. A survey showed that 40-60% of premarital couples in Indonesia do not have sufficient information about contraception, reproductive organ health, or sexually transmitted diseases.(3)

The low access to premarital services indicates that premarital service programs, such as counseling or health checks, have not been utilized optimally. According to the Indonesian's National Population and Family Planning Board (BKKBN) report, only around 20-30% of couples participate in premarital counseling services provided by the government.(4)This lack of understanding can have an impact on the increased risk of pregnancy complications, sexually transmitted infections, and early marriage; which has a high risk of maternal and child health. Problems related to reproductive health often trigger family problems. Prospective bride who are less prepared in terms of health, sometimes do not know their own health problems. This incident will lead to blaming each other.(5)

Based on research conducted by Setiawati, there are still couples who do not know about the importance of premarital health checks. This will increase the risk of health problems in the future. Therefore, to avoid this matter, prospective brides must have sufficient knowledge about premarital preparation.(6) This study aims to explore the experiences of prospective bride about reproductive health and premarital services. The scoping review method was chosen in this study because this approach allows a broad exploration of the literature that addresses the experiences of prospective bride related to reproductive health and premarital services. Scoping review is more flexible than systematic review or meta-analysis, which usually focus on more specific research questions and are strict in their inclusion of randomized controlled trialbased studies. In addition, this method is suitable for identifying gaps in existing research, mapping key concepts, and presenting multiple perspectives that can be used to design more effective premarital health policy and program recommendations.

METHOD

This study aims to review the literature on the experience of prospective brides about reproductive health and premarital services by applying the scoping review method. This method is designed to identify the steps to develop a research protocol. The scoping review research design was chosen because the reference sources used by researchers are varied, consisting of journal articles and websites. A scoping review is a systematic review that can be used to interpret results in an evidence-based manner, as well as to describe the concepts underlying the sources of evidence, the types of evidence available, and relevant research areas.(7) The stages carried out in the implementation of this scoping review include:

1. Identification of review questions

Review questions using the PEOS (Population, Exposure, Outcome, and Study Design) framework, cited from the Colorado State University library page, is a framework that is particularly useful when investigating the prognosis or likelihood of developing certain conditions as a result of pre-existing conditions or exposures.(8)In this outcome, population refers to the patient or group under study, while exposure is anything that has happened or been experienced by the group in the context of the study. The research questions formulated were: "How do prospective brides experience reproductive health and premarital services?"

Table 1. Framework (PEOS)

Population	Exposure	Outcomes	Study design
			All study
	Reproductive		types
Prospective	health and	Eunonionaa	(quantitative,
bride	premarital	Experience	qualitative,
	services		and mixed
			methods)

2. Identification of relevant articles

The second step involved searching for relevant articles. The databases used, namely PubMed, ScienceDirect and Wiley, in order to generate suitable literature studies. This process started by filtering the titles from both databases using predefined keywords. In the literature search process, the keywords designed based on the framework were expanded using Boolean operators to include relevant synonyms.

The following keywords were used for this scoping search:

Truncation:(ExperienceORKnowledgeORPerception)AND(Prospectivebride)AND(ReproductiveHealthORHealthEducation)AND(Premarital EducationORPremarital Guidance*)

Table 2	. Inc	lusion	and	exc	lusion	criteria	ł

Incl	usion criteria	Ex	clusion criteria
1)	Scientific	1)	Comment articles.
	publications in	2)	Studies that are not
	English		peer-reviewed or are
2)	Primary research		general reviews
	articles or reviews		without empirical
	related to the same		research are excluded
	theme		because they lack
3)	Studies conducted in		rigorous evaluation
	the last 10 years to		by experts, may not
	ensure relevance.		provide original data
			or analysis, and could
			be biased or less
			reliable for drawing
			scientific conclusions
		3)	Articles that do not
			provide full access to
			the text.

3. Article selection

In searching the databases accessed, an initial identification of 2,226 articles using search keywords from each database was identified. Furthermore, the exact completion of articles from the three databases, and the results of 2,130 articles found in Google Scholar. 63 articles were obtained from Wiley Online Library, 5 articles obtained from PubMed, and 28 articles generated from Science Direct. After 2,226 articles were obtained, data filtering was carried out including duplication, abstract screening, full text and PRISMA Flowchart. After searching articles from the three databases, 2,226 articles were found. There were 32 duplicated articles. 2,194 articles were screened for titles and abstracts and there were 2,097 irrelevant articles. Then the remaining 97 articles were screened full text, and 83 articles that were excluded.The remaining 14 articles were then screened again, and there were 4 articles excluded, including 3 articles that did not discuss reproductive health, and 1 article that did not discuss premarital screening. In the end, the final result was 10 articles that met the inclusion criteria. So, from these 10 articles, a critical appraisal was carried out.

The researcher used the PRISMA Flowchart to describe the article selection procedure that had been carried out. PRISMA Flowchart is an evidence-based tool designed for reporting in systematic reviews and meta-analyses, which consists of a minimum set of items that must be reported. This instrument is considered suitable to improve the quality of publication reporting.

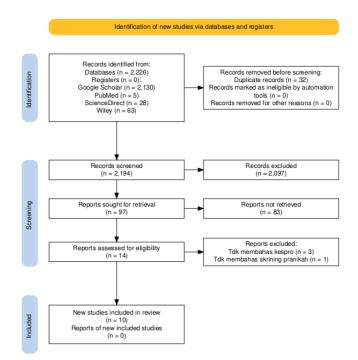


Figure 1. PRISMA flow diagram

4. Charting Data

At this stage all articles that had been selected would be input into a table. The author recorded information from the existing data and then collected the findings from the article and then presented it in the form of a table 3.

Each research method has different critical appraisal criteria. We used the A, B, and C scale-based scoring system to evaluate the quality of the 10 articles that had passed the critical appraisal stage. These articles were then categorized into three quality levels: Score 20-36: Good (A), 10-19:Fair (B), 0-9:Poor (C). (See table 4)

Based on critical appraisal using the JBI (Joanna Briggs Institute) checklist, all articles evaluated in this document were of high quality (Grade A). This means that the research results are reliable, have good methodology, and make a significant contribution to the field of study.(19)

No	Title/ Author/Year/ Grade	Country	Aim	Type of Research	Partici pants/ Sample Size	Result
1	Pre-Marriage Course Regarding Health Reproductive: knowledge and attitude of Bride and Groom Candidate in Preparing Health Status Before Pregnant in Grobogan Regency/ Nugrahaeni, et.al /2020/A	India	To examine how prospective brides attitudes and knowledge about reproductive health in Grobogan Regency differed before and after the intervention.	Quantitative: Quasi Experiment	31 people	The results showed that there was an effect of premarital course intervention on knowledge ($p = 0.001$), but did not have a significant effect on the attitude of the prospective brides ($p = 0.209$).
2	Knowledge, Perception and Attitudes Towards Premarital Screening Program in Qatar: A Cross- Sectional Study/Al- Shafai, et.al/2022/A	Qatar	To explore knowledge and perceptions and attitudes towards premarital screening and predictors of premarital knowledge and attitudes.	Quantitative: Cross sectional study	376 people	 The results showed that 376 (79%) knew about premarital screening. Adolescent girls from Qatar, not carrying out genetic screening of family members, and not being informed about premarital screening are closely related to the low level of knowledge. About 56% of students received inaccurate information about premarital screening. Study participants who canceled their marriages (37.4%) were due to poor premarital screening.
3	Premarital Screening and Genetic Counseling Program Studies from and Endogamous/Abdu Ibari, et.al//2019/A	Qatar	To explore Qataris' knowledge, attitudes and practices towards pre-marital check- up programs	Quantitative: Cross sectional study	people	 The findings demonstrated that there is still a lack of community awareness and attitudes about the Premarital Screening and Genetic Counseling Program (PMSGC). The program's implementation at colleges and universities, as well as its motivation and enforcement, are crucial. The community views

Table 3 Charting data

						improving counseling and introducing new subjects for counseling on mental, chronic, and hereditary disorders; creating a healthy family; and fertility and reproduction as major objectives
4	Awareness of Premarital Screening and Genetic Counseling Among Saudi Citizens and Its Relation to Sociodemographic Factors: A Nationwide Study/Al-Shroby, et.al/2021/A	Saudi Arabia	to evaluate the general Saudi population's knowledge, attitudes, and behaviors about premarital screening and genetic counseling (PMSGC) and how they relate to sociodemographic traits.	Quantitative: Cross sectional study	6.263 people	 All 6263 research participants had heard of PMSGC, according to the data; however, only 575 (9.2%) had acceptable understanding, while 3283 (52.4%) had fair knowledge. Of the 3986 individuals who were married or engaged, 2911 (73.0%) had had a premarital test, of whom 360 (12.4%) had revealed that were inappropriate; 98 (37.1%) decided to stay married in spite of this knowledge. There are gaps in understanding, attitudes, and practices about PMSGC despite Saudi Arabia's advancements in public health care initiatives.
5	The Impact of Premarital Orientation Program on Sexual and Reproductive Health: A Step to Increase Awareness of Rural Adolescent Girls/Omar, et al/2021/A	Mesir	to assess how a program of premarital orientation affects teenage girls' knowledge of sexual and reproductive health.	Quantitative: QuasiExperim ent	180 people	 The premarital orientation program was successful in improving the knowledge of the teenage girls who had participated. This was according to the findings (p.0.001). Health care clinicians who oversee premarital counseling clinics in rural health facilities are advised to participate in continuing education training programs on adolescent sexual and reproductive health concerns.
6	Effect of counseling-based program on	Egypt	To evaluate the effectiveness of counseling-based	Quantitative: QuasiExperim ent	245 people	1.According to the statistics, 73.5% of the female students had good

students' perception women's premarital care after of reproductive knowledge and program health/Ezzat Said, attitudes implemented, with 60 et.al/2022/A regarding ages of 16 and 17. Pri health before the program's lat marriage. 41.2% of female studhad disapproving opin of their premarital care 2. Following implementation of counseling-based program, female studknowledge and att scores regarding scores regarding scores regarding increased in a h statistically signif manner. 3. A statistically signif difference was obse between the knowl and attitude total scow with a positive correl with a positive correl with a positive correl it and attitude total scow	was % of the or to nch, ents ions 5. the the ents' tude ling ghly cant cant tved
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between the two after	
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research suggests	that
premarital couns	0
should be included in	the
nursing curriculum.	
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Knowledge and knowledge and Quasi people demonstrated	a
Attitudes of attitudes towards Experiment statistically signif	
Medical and Non- premarital rise in attitude	and
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University evaluate the opinions rose from 5-	
Regarding effectiveness of to 66.0%, while an	0
Premarital educational non-medical stud	
Screening and programs in they rose from 49.00) to
Counseling / improving 57.5%.	
	alth
al/2015/A knowledge and education, their leve	
attitudes towards understanding incre-	
premarital but they were still lac	-
screening and in premarital scree	ning
counseling. and counseling.	
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Wellbeing effectiveness of Quasi people attitude were statisti	ally
Instruction on the well-being Experiment significant. Me	-

	Knowledge and		instruction on			students' overall
	Attitude of		university			knowledge score rose
	University Students		students'			from 23.3% to 54%, while
	on Pre-Marriage		knowledge and			non-medical students
	Screening and		attitudes about			increased from 21% to
	Counseling/Fattah,		pre-marital			41%, with statistical
	et.al/2020/A		screening and			significance.
			counseling			2. Due to insufficient
						awareness of premarital
						screening and counseling,
						there is a disparity in
						knowledge levels. In order
						to convey a positive and
						inspiring attitude toward
						premarital screening and
						counseling, research on
						this field need to be
			·			conducted.
9	Counseling By	Indonesi	To determine the	Quantitative:	30	1. The findings demonstrated
	Leaflet Media in	а	differences in	Quasi	people	that the P value score for the
	Increasing Brides		knowledge and	Experiment		statistical tests comparing
	and Groom's		attitudes of			counseling on knowledge
	Knowledge and		prospective brides			and attitudes was less than
	Attitude about		regarding			0.005.
	Reproductive		reproductive			2. Before and after receiving
	Health/Lamtioma, et.al/2023/A		health before and			counseling,prospective brides' attitudes and levels
	et.al/2025/A		after premarital			
10	Knowledge and	Yemen	counseling. To evaluate the	Quantitative:	306	of knowledge change. The findings revealed that
10	Attitudes of	remen	attitudes and	Cross	people	79.09% of students had a
	Secondary School		understanding of	sectional	people	favorable attitude toward
	Students towards		secondary school	study		premarital screening and
	Premarital		students in Taiz	study		counseling, 36.93% of whom
	Screening and		City, Yemen,			had enough information, and
	Counseling in Taiz,		regarding			41.5% of whom did not.
	Yamen/ Alhetar,		premarital			
	et.al/2024/A		screening and			
	0/2027/A		counseling			
			counsening			

5. Compile, summarize and report the results

The final stage involved compiling the results of the review in a structured report. This report included a

summary of the findings from the selected articles and an analysis of any patterns or trends found based on the gaps identified in the existing literature. Jurnal Promosi Kesehatan Indonesia Vol 20 / No. 3 / July 2025

Article	Article	Types	Article assessment	Grade
code	reference			
A1	(9)	Quantitative Quasi	The study received a score of 32, corresponding to a Grade A	Α
		Experiment	classification, indicating that it is of excellent quality	
A2	(10)	Quantitative Cross-	The study received a score of 34, corresponding to a Grade A	Α
		Sectional	classification, indicating that it is of excellent quality	
A3	(11)	Quantitative Cross-	The study received a score of 34, corresponding to a Grade A	
		Sectional	classification, indicating that it is of excellent quality	
A4	(12)	QuantitativeCross-	The study received a score of 36, corresponding to a Grade A	Α
		Sectional	classification, indicating that it is of excellent quality	
A5	(13)	QuantitativeQuasi	The study received a score of 36, corresponding to a Grade A	А
		Experiment	classification, indicating that it is of excellent quality	
A6	(14)	QuantitativeQuasi	The study received a score of 36, corresponding to a Grade A	Α
		Experiment	classification, indicating that it is of excellent quality	
A7	(15)	QuantitativeQuasi	The study received a score of 34, corresponding to a Grade A	А
		Experiment	classification, indicating that it is of excellent quality	
A8	(16)	QuantitativeQuasi	The study received a score of 29, corresponding to a Grade A	Α
		Experiment	classification, indicating that it is of excellent quality	
A9	(17)	QuantitativeQuasi	The study received a score of 32, corresponding to a Grade A	Α
		Experiment	classification, indicating that it is of excellent quality	
A10	(18)	Quantitative Cross-	The study received a score of 36, corresponding to a Grade A	Α
		Sectional	classification, indicating that it is of excellent quality	

Table 4. Critical appraisal

RESULT AND DISCUSSION

Based on the 10 articles selected in the scoping review related to the experience of prospective brides about reproductive health and premarital services, the results are as follows:

1. Characteristic of Articles

Of the 10 articles, all of them employed quantitative methods including quasi-experiment (6) and cross sectional (4). (see Figure 2)

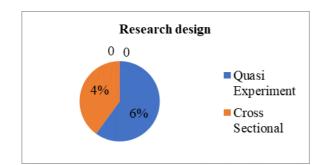


Figure 2. Analysis by the research type

Of the 10 articles, 1 article was obtained from India, 2 articles were obtained from Qatar, 1

article was obtained from Saudi Arabia, 4 articles were obtained from Egypt, 1 article was obtained from Indonesia, and 1 article was obtained from Yemen.

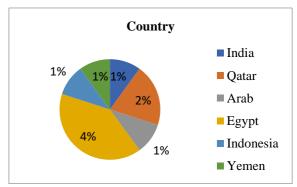


Figure 3. Analysis by country

To assess the quality of the articles, a critical appraisal was conducted using the Joana Brigs Institute (JBI). Of the 10 articles selected, all articles received grade A. The following themes are obtained from the results of the review that has been carried out on the 10 articles, displayed in the form of a table 5.

Table 5. Theme Mapping

Theme	Research article
Knowledge of premarital screening and counseling	
Knowledge level before and after the intervention	(A1, A2, A3, A4, A5, A6, A7, A8, A9, A10)
Factors that influence the level of knowledge	(A2, A3, A4, A5, A6, A7, A8, A10)
Differences in knowledge levels based on demographic groups	(A2,A3,A4,A6,A7,A8,A10)
Attitude towards premarital screening and counseling	
Attitude before and after intervention	(A1, A5, A6, A7, A8, A9, A10)
Relationship between attitude and knowledge level	(A1, A2, A4, A6, A7, A8, A10)
Factors that influence the attitude of prospective brides or young	(A2, A3, A4, A6, A7, A8, A9, A10)
women	
Effectiveness of educational or counseling interventions	
Benefits of premarital services on knowledge and attitudes	(A1,A5,A6,A7,A8,A9)
Effectiveness of educational methods such as leaflets, counseling, or	(A5,A6,A7,A8,A9)
orientation programs	
The role of educational institutions in raising awareness	(A6,A7,A8,A9)
Social and cultural factors affecting premarital screening	
The influence of social background on attitudes and knowledge	(A2,A3,A4,A10)
Obstacles in the implementation of public perception of premarital	(A2,A3,A4)
screening	
Public perception of premarital screening	(A2,A3,A4,A10)
Policy implications and recommendations	
The importance of government regulations and policies	(A3,A4,A5,A6,A7,A8)
Need for continuous education in schools and universities	(A3,A5,A6,A7,A8)
Recommendations for improving premarital screening services	(A3,A4,A5,A6,A7,A8)
	Knowledge of premarital screening and counselingKnowledge level before and after the interventionFactors that influence the level of knowledgeDifferences in knowledge levels based on demographic groupsAttitude towards premarital screening and counselingAttitude before and after interventionRelationship between attitude and knowledge levelFactors that influence the attitude of prospective brides or young womenEffectiveness of educational or counseling interventionsBenefits of premarital services on knowledge and attitudesEffectiveness of educational methods such as leaflets, counseling, or orientation programsThe role of educational institutions in raising awarenessSocial and cultural factors affecting premarital screeningThe influence of social background on attitudes and knowledgeObstacles in the implementation of public perception of premarital screeningPublic perception of premarital screeningPublic perception of premarital screeningNeed for continuous education in schools and universities

Knowledge of premarital screening and counseling

The study results showed that most of the prospective brides had a limited understanding of reproductive health and premarital services before receiving the educational intervention. This finding is in line with previous research, which revealed that a lack of access to adequate information can lead to low levels of knowledge about premarital screening.(20) In addition, educational factors, socioeconomic level, and exposure to health services also contribute to variations in the level of understanding of prospective brides regarding reproductive health and the benefits of premarital screening.(21)

In some communities, this lack of knowledge is due to a lack of socialization from health institutions, a lack of integration of reproductive health materials in the school curriculum, and limited community education programs that focus on marriage preparation. Studies show that couples who obtained information through premarital education programs experienced a significant increase in knowledge compared to those who did not.(13)

Factors that affect the level of knowledge are:

• Education level: the higher person's education, the more likely they are to understand the benefits of premarital screening.

- Access to health services: Urban areas have a higher level of awareness than rural areas.
- Family and religious influences: Some communities argue that pre-marital health testing is not necessary, as it reflects distrust of the couple.

Attitude towards premarital screening and counseling

The attitude of prospective brides towards premarital services also showed positive changes after the education. Most of the studies in this scoping review confirmed that the higher a person's knowledge about reproductive health, the more positive their attitude towards premarital services.(14) However, cultural and social factors are still an obstacle in changing individuals' attitudes towards premarital check-ups.

In some countries, such as Saudi Arabia and Qatar, mandatory premarital screening policies have increased public acceptance of these services. However, research shows that despite increased awareness, there are still groups of people who hold traditional beliefs that prevent them from undergoing premarital health screening.(22)Some individuals still believe that premarital screening may cause mistrust in the relationship or be perceived as an interruption in the planned marriage process.

Effectiveness of educational or counseling interventions

Educational interventions such as premarital courses, group-based counseling, and brochure distribution are effective in improving the understanding and attitudes of couples towards premarital services. The study by (15) showed that more interactive learning methods, such as group discussions and case simulations, were more effective than passive counseling methods based on information provision.(23)

Technology-based approaches, such as the use of social media and mobile applications, are also being implemented in some countries to increase the reach of premarital education services. Some studies suggest that information delivered through digital platforms is more accessible to young people and possibly increases their engagement in understanding reproductive health before marriage.(16)

Social and cultural factors affecting premarital screening

Social and cultural factors have a significant impact on people's acceptance of premarital screening. In some cultures, premarital health screening is still considered taboo because it can cause mistrust in the relationship or even lead to marriage annulment.(11)In some countries that have implemented mandatory premarital screening policies, such as Saudi Arabia and Iran, acceptance of these services are increasing as they are considered part of public health efforts.

In addition, this study found that economic factors also affect the access to premarital services. Some couples are reluctant to undergo premarital health checks due to the perceived high cost or the limited number of health facilities that provide these services for free. Therefore, policies are needed that can improve the accessibility and affordability of premarital services, especially for low-income classes.

Policy implications and recommendations

Stronger policies from the government are needed to support premarital services. The study by (12) suggested that mandatory premarital screening policies could increase awareness and utilization of these services.(12)

From the results of this study, it appears that public health policies are key in increasing awareness and acceptance of premarital services. Countries such as Saudi Arabia and Iran have implemented mandatory premarital screening policies that have proven effective in increasing utilization of these services. However, in Indonesia and some other countries, premarital screening is still voluntary, leading to low levels of community participation.(24) Some policy recommendations that can be implemented to increase awareness and utilization of premarital services include:

- a. Integration of reproductive health education in school and university curricula to ensure that individuals receive adequate information at the adolescent age.(25)
- b. Increased access to affordable premarital services aims to provide free or subsidized premarital screening services for couples who are getting married.
- c. Broader socialization through digital media and communities aims to utilize technology to disseminate information on the importance of premarital health checks.
- d. Collaboration with religious and community leaders to encourage the religious and community leaders to support and encourage couples to undergo premarital screening.

Government policies on premarital screening

The implementation of premarital screening policies varies across different countries.(26)

- a. Indonesia: premarital screening is recommended but not mandatory, local governments encourage voluntary participation through health programs
- b. Saudi Arabia: Mandatory premarital screening has been implemented since 2004, primarily to detect genetic disorders such as sickle cell anemia and thalassemia
- c. Iran: Requires mandatory premarital health screening, including blood tests for infectious diseases such as HIV and hepatitis.
- d. United states: some states require blood tests before marriage, but there is no federal mandate for premarital health screening.
- e. Malaysia: Muslim couples are required to undergo HIV screening before marriage registration.
- f. European countries: Most countries provide voluntary premarital health screening services rather than making them mandatory.

Limitations of the study

Despite the valuable findings of this study, there are several limitations that need to be acknowledged.

- a. Sample representation: The study samples were primarily taken from specific geographic areas, which may not fully represent diverse populations with different cultural and socio-economic backgrounds.
- b. Self-reported data: The reliance on self-reported knowledge and attitudes may cause bias, as respondents might provide socially desirable answers rather than their actual belief.
- c. Short-Term Assessment: The study primarily assessed short-term changes in knowledge and attitudes, without

evaluating the long-term impact of premarital screening and counseling programs.

d. Limited focus on male participants: Most studies included in the review focused more on female participants, while male perspectives on premarital screening and counseling remain underexplored.

CONCLUSION

The results of the scoping review on the experiences of prospective brides related to reproductive health and premarital services show that many prospective brides still have a limited understanding of reproductive health. Educational interventions, such as premarital courses and counseling services, proved effective in improving their knowledge. Although most prospective brides have a positive attitude towards premarital screening after receiving education, there are obstacles to the implementation of this service, such as a lack of accurate information. limited access, and social and cultural factors. Leaflet-based education methods, premarital courses, and counseling are effective solutions in increasing awareness and readiness of prospective brides. Factors such as education level, access to health services, cultural norms, and spousal support play an important role in influencing the attitudes and understanding of prospective brides towards reproductive health.

To strengthen health promotion efforts, it is recommended to integrate reproductive health education into school and university curricula, provide free and easily accessible premarital counseling services in community health centers, and utilize digital platforms and social media for broader dissemination of reproductive health information. Collaboration with religious and community leaders can also enhance acceptance and participation in the premarital health program.

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Conflict of Interest

The authors declare that there's no conflict of interest.

REFERENCES

- 1. Badan Pusat Statistik. Badan Pusat Statistik. 2018. Survei Penduduk Antar Sensus (SUPAS) 2018.
- 2. Organization WH. Global Health Observatory (GHO) data. 2015. p. 6 March 2015 Maternal

mortality country profiles. Available from: http://www.who.int/gho/maternal_health/countries/ en/

- 3. Kementerian Kesehatan RI. Laporan Kesehatan Reproduksi di Indonesia Tahun 2022. Jakarta: Kemenkes RI; 2022.
- 4. BKKBN. Jakarta. 2021. Statistik Kependudukan dan Program KB di Indonesia 2021.
- Yeubun Y. Reproduksi dan Pernikahan Dini: Dampak Psikologis dan Sosial. J Kesehat Masy Indones. 2020;36(3):198–204.
- 6. Sharma P, Kapoor A GS. Premarital Health Education and Its Role in Preventing Genetic Disorders. Indian J Med. 2020;151(6):586–92.
- Tricco AC, Lillie E, Zarin W, O'Brien K, Colquhoun H, Kastner M, et al. A scoping review on the conduct and reporting of scoping reviews. Vol. 16, BMC Medical Research Methodology. 2016. p. 31–46.
- 8. Colorado State University Library. PEOS framework for systematic reviews. Colorado:CSU Press. 2021.
- Nugraheni A, Purnami CT, Mawarni A. Pre-Marriage Course Regarding Health Reproductive : Knowledge and Attitude of Bride and Groom Candidate in Preparing Health Status before Pregnant in Grobogan Regency. 2020;11(03):1150– 4.
- Al-Shafai M, Al-Romaihi A, Al-Hajri N, Islam N, Adawi K. Knowledge and Perception of and Attitude toward a Premarital Screening Program in Qatar: A Cross-Sectional Study. Int J Environ Res Public Health. 2022;19(7).
- Abdulbari Bener, Mariam Al-Mulla AC. Premarital Screening and Genetic Counseling Program Studies from and Endogamous. Int J Appl Basic Med Res. 2019;9(20):6.
- Al-Shroby WA, Sulimani SM, Alhurishi SA, Dayel MEB, Alsanie NA, Alhraiwil NJ. Awareness of premarital screening and genetic counseling among saudis and its association with sociodemographic factors: A national study. J Multidiscip Healthc. 2021;14:389–99.
- Omar A, Hasaneen S, Hassen S, Mostafa M. Effect of Premarital Orientation Program Regarding Sexual and Reproductive Health: A step to Increase Rural Adolescents' Female Awareness. Assiut Sci Nurs J. 2021;9(24.0):116–25.
- 14. Ezzat Said N, Gomaa W. Effect of counsellingbased program on technical nursing students' perception regarding reproductive health. Egypt J Heal Care. 2022;13(2):1906–22.
- 15. Abedel-Azim Mohamed H. Improving Knowledge

and Attitude of Medical and Non-Medical Students at El Minia University Regarding Premarital Screening and Counseling. Am J Nurs Sci. 2015;4(5):270.

- Fattah H. Effectiveness of wellbeing instruction on the knowledge and attitude of university students on pre-marriage screening and counseling. Int Egypt J Nurs Sci Res. 2020;47(4):300–8.
- Lamtioma R, Susanto T AR. Counseling by Leaflet Media in Increasing Brides and Groom's Knowledge and Attitude About Reproductive Health. Int J Community Med Public Heal. 2023;9(6):165–71.
- Alhetar SZM, Sobhy SI, Shuaib FMNED, Alkubati SA, Zoromba MA, El-Gazar HE, et al. Knowledge and Attitudes of Secondary Schools students Towards Premarital Screening and Counseling in Taiz, Yemen. J Multidiscip Healthc. 2024;28(17):5641–51.
- Aromataris E, Lockwood C, Porritt K, Pilla B JZ. JBI Manual for Evidence Synthesis. JBI Manual for Evidence Synthesis. 2024.
- 20. Nugrahaeni Y, Indrayani PC, Mawarni A. Pre-Marriage Course Regarding Health Reproductive:

Knowledge and Attitude of Bride and Groom Candidate in Preparing Health Status before Pregnant in Grobogan Regency. Indian J Public Heal Res Dev. 2020;11(3):345–350.

- Al-Ghamdi H AS. Barriers to Premarital Screening Programs in the Gulf Region. Saudi J Public Heal. 2020;36(3):198–204.
- 22. Ahmed S, El-Sayed H. Sociocultural Barriers to Premarital Health Screening: A Review. J Public Heal. 2020;9(1):1–7.
- Johns Hopkins University. Baltimore: Johns Hopkins Press; 2021. Premarital Counseling: A Path to Healthier Marriages.
- 24. Obasi AN, Uchenna N. Awareness and Utilization of Premarital Screening Among Rural Populations in Nigeria. Afr J Med Heal. 2022;11(4):455–62.
- 25. UNFPA. State of world population. United Nations Popul Fund [Internet]. 2011;1–132. Available from: http://foweb.unfpa.org/SWP2011/reports/EN-SWOP2011-FINAL.pdf
- Khalid R, Abdulla M, Salem A. Public Perception of Premarital Screening in Middle Eastern Communities. J Arab Soc Public Heal. 2023;28(2):309–317.