

DETERMINANTS OF REPRODUCTIVE HEALTH SERVICES NEEDS FOR BRIDES AND GROOMS IN BREBES DISTRICT

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ABSTRACT

The utilization of reproductive health services for brides and grooms is still far from the national target (80%), that is 15.8%. This service is deemed lacking in meeting the needs of the bride and groom with various factors. This study aims to analyze the factors that influence the need for reproductive health services for the brides in Brebes District. This research method is quantitative observational research with cross-sectional approach. The population of this research is all brides who have registered in all Religious Affairs Office in Brebes District are 528 people. Primary data were collected through interviews using a structured questionnaire with 165 respondents selected through cluster sampling techniques. Bivariate data analysis was performed by Chi-Square test and multivariate data analysis was performed by logistic regression test. The results of this study indicate that there is a relationship between sex, knowledge, norms and culture of the community, and service technology (p -value < 0.05) with the reproductive health service needs for brides and grooms. Meanwhile, the level of education, attitudes, and risk factors are not related to the reproductive health service needs for brides and grooms (p -value > 0.05). The strongest factor affecting the reproductive health service needs for brides and grooms is knowledge (OR = 2.736, 95% CI = 1,383-5,414). The recommendations of this study are service providers conducting surveys and needs for reproductive health services for brides and grooms continuously, branding by involving community leaders and health cadres, and the use of service technology that is practical, interesting and not boring, and can be accessed wherever and whenever they are.

Keywords: Bride and groom, Needs, Reproductive Health services

INTRODUCTION

One area in Central Java Province that has been highlighted by the complexity of the problems of mothers and children in the past 5 years is Brebes District, especially in terms of maternal and infant mortality⁽¹⁾. The cause that influences the high number of maternal health problems in Brebes District is the lack of local government attention to reproductive health for brides and grooms in the premarital period. This can result in a lack of readiness in optimizing health status before pregnancy to prevent maternal and infant death.

Reproductive health services for brides and grooms that will hold marriages are carried out in health care facilities in the form of communication, information, and education (IEC) for sexual and reproductive health for brides and grooms, and health checks. In its implementation, the Ministry of Health collaborates with the Ministry of Religion in the Premarital Course, where reproductive health services for brides and grooms are integrated. The legal basis for this collaboration is Government Regulation No. 61 of 2014 concerning reproductive health and Regulation of the Minister of Health No. 97 of 2014 concerning pre-pregnancy, pregnancy, childbirth, and postnatal health services, provision of contraceptive services, and sexual health services⁽²⁾. Both regulations are strengthened by the existence of Regulation of the Director General of Islamic Community Guidance Number: DJ.II / 542 of 2013 concerning Guidelines for Pre-Marriage Course and MoU Collaboration between Community Health Centre and the Local Religious Affairs Office (KUA) as the service providers^(3,4).

Based on observations of reproductive health services for brides and grooms in Brebes District, the implementation of this service has not been maximized. This can be seen from the proportion of and grooms visits to utilize the service by 15.8%. This proportion has not met the expected visit target, which is 80%. Whereas the reproductive health service program for brides and grooms in Brebes District has been running for the last few years, especially in 2015/2016^(5,6).

During the program carried out in the past 5 years, an evaluation of the effectiveness of its implementation was assumed to be lack. The low active participation of brides and grooms to utilize reproductive health services because of the lack of socialization related to reproductive health services integrated in Premarital Course program. This can be seen from the absence of any promotional media related to this service at the Local Religious Affairs Office (KUA), for example posters, banners, leaflets, or others. On the other hand, some brides and grooms claim that they cannot attend in pairs when utilizing services because one of them does not get permission from the workplace, and almost all brides and grooms who use this service in all Community Health Centre only aim to obtain a health certificate as a condition for marriage registration at the Local Religious Affairs Office (KUA), so that brides and grooms seem to be in a hurry and tend not to focus when the service is in progress.

The lack of active participation from the brides and grooms is also due to many brides and grooms assessing that the reproductive health

services they obtain are not in accordance with the needs they feel at the moment. This is because the services provided are limited to providing TT immunization and briefing on reproductive health when Premarital Course is implemented. Short counseling methods like this are assumed to be less effective for brides and grooms because of limited time and situations and conditions that are not conducive, so they are not free to ask.

The brides and grooms assessment of the lack of effectiveness of reproductive health services for them begins with the growing awareness of the brides and grooms partner in fulfilling information related to reproductive health. In terms of information needs, many brides and grooms hope to get wider material to the planning and preparation for pregnancy, as well as how to choose the right method of contraception. In addition, reproductive health services for brides and grooms are aimed more at young populations who are ready to get married, so the educational material provided should take into account the development of reproductive problems among young people and the effect of globalization on changes in sexual culture, as well as addressing concerns about the causes of sexual problems at the level individual and interpersonal⁽⁷⁾.

The information needs of brides and grooms regarding sexual and reproductive health are shaped by their perceptions of current issues related to sexual and reproductive health, as well as gender roles. Meanwhile, the felt need for reproductive health services for the bride and groom is defined as the gap between current service conditions and the expected types and models of services to improve knowledge and skills through providing information to brides and grooms. The needs assessment is important to understand, especially by policymakers and service providers, especially if there is a gap between the needs of the community as users and the priority programs provided by providers^(8,9).

Analysis and identification of felt needs in reproductive health services for brides and grooms is a relevant step to address the challenges of the complexity of women's health, so this has the opportunity to increase the utilization of reproductive health services and reduce maternal and infant mortality. Therefore, it is important to analyze the brides and grooms' needs to find out what needs they are feeling right now, especially in the context of preparing their health status before becoming pregnant, so that the reproductive health service program for the brides and grooms can adjust alternative activities. As for several factors that may influence the felt needs of the brides and grooms for reproductive health services for

brides and grooms in Brebes District according to Andersen, developed by Dever and referring to consumer behavior, such as socio-demographic, socio-psychological, epidemiological, and socio-cultural factors^(9,10). Determinants of the perceived needs of users of reproductive health services used vary, but most use socio-demographic and socio-psychological indicators, while socio-cultural and epidemiological indicators that are also possible to influence reproductive health service needs are still rarely used⁽¹¹⁻¹³⁾.

In the case in Indonesia, a study of factors that influence the reproductive health services need is generally carried out in big cities with the target being adolescents. In contrast to the previous studies, this research was conducted in areas that have specific characteristics, namely high Maternal Mortality Rate [MMR] and Infant Mortality Rate [IMR]. In addition, this research is focused on brides and grooms because they are considered as an individual entering a crucial period with its own dynamics and needs. This study aims to determine the factors that influence the needs of reproductive health services for brides and grooms in preparing their health status before becoming pregnant in Brebes District.

RESEARCH METHODS

This research is an observational quantitative study with a cross-sectional approach. This study adopts Alan Dever's health service utilization model which focuses on aspects of consumer needs in health care and consumer behavior models. The independent variables in this study, namely socio-demographic factors (sex and education level), socio-psychological factors (knowledge and attitudes), epidemiological factors (risk factors), and socio-cultural factors (community norms and culture, and service technology). While the dependent variable is the needs of reproductive health services for brides and grooms.

The population of this study are all the brides and grooms who registered their wedding plans in all Religious Affairs Office in Brebes District in July 2019, they are 528 people. The research sample is calculated using the Lemeshow Formula and 165 samples are obtained. Sampling with the cluster sampling technique is based on the division of the region in the Brebes District, namely coastal areas, lowland areas, and mountainous regions. Data collection is carried out with ethical approval by the Health Research Ethics Commission of the Faculty of Public Health, Diponegoro University.

Primary data on gender, education level, knowledge, attitude, risk factors, community norms and culture, service technology, and reproductive health service needs for brides and grooms in

this study are collected through interviews using structured questionnaires that have been tested for validity and reliability. The cumulative results of each respondent are categorized according to operational definitions and the frequency of each category is sought. Next, cross-tabulation is carried out to look for trends of each variable and tested the relationship with the Chi-Square test. Variables that have a meaningful relationship are analyzed again using the logistic regression test to see which variable is most dominant in influencing the needs of reproductive health services for brides through the OR (Odds Ratio) value.

RESULTS AND DISCUSSION

Based on table 1, the majority of respondents who took part in the study are female, totaling 103 people (62.4%). Age classification of respondents

at the time of the study showed that the highest number of respondents is in the age group of 20-25 years with the number of 118 respondents (71.5%), where the majority of the final education level of respondents is equivalent to high school graduation with a total of 62 people (37.6%). Characteristics of respondents from the type of work obtained data that the distribution of respondents' livelihoods, including entrepreneurs (26.7%), labor (23%), planters / farmers (15.2%), civil servants (4.2%), and fishermen (1,8%). However, most respondents do not have a job (29.1%) because the number of female respondents is higher than the number of male respondents and some women choose to stay at home. In terms of access to reproductive health information, as many as 100 respondents (60.6%) stated that they often access reproductive health information through mass media, both print and electronic media.

Table 1. Frequency Distribution of Respondent Characteristics

Characteristics	Frequency (n)	Percentage (%)
Sex		
Male	62	37,6
Female	103	62,4
Age		
<20 years old	6	3,6
20 – 25 years old	118	71,5
26 – 30 years old	41	24,8
Education Level		
Not completing Elementary School	5	3
Graduated from Elementary School	23	13,9
Graduated from Junior High School	52	31,5
Graduated from Senior High School	62	37,6
Graduated from University	23	13,9
Occupation		
Not Working	48	29,1
Labour	38	23
Farmer	25	15,2
Fisherman	3	1,8
Civil Servant	7	4,2
Entrepreneur	44	26,7
Access to reproductive health information through mass media		
Rarely	65	39,4
Often	100	60,6
Total	165	100

Source: Primary research data processed

Hypothesis testing is carried out with two stages of analysis, namely bivariate analysis with Chi-Square test and multivariate analysis through logistic regression tests. Variables that have a significant relationship (p-value <0.05) with the need for reproductive health services for brides and grooms in the bivariate test are declared to

pass the selection of the multivariate test. These variables include gender, knowledge, community norms and culture, and service technology. Meanwhile, the variable level of education, attitudes, and risk factors do not have a significant relationship with the needs of reproductive health services for brides and grooms (p-value> 0.05),

so they do not pass the multivariate test selection. Although the attitude variable in the bivariate test is stated not to be related to the need for reproductive health services for the brides and grooms, the p-value of the variable was <0.25, so that it could be declared to pass the multivariate analysis selection. Therefore, there are five variables that have passed the multivariate analysis selection, namely gender, knowledge, attitudes, norms and culture of the community, and service technology.

In multivariate analysis with the Enter method in table 2, the attitude variable must be excluded because it has a value of p-value = 0.399 (p-value > 0.05) and the greatest value among the other variables. Therefore, the final results of the multivariate analysis obtained four variables that simultaneously influence the need for reproductive health services for brides and grooms with a probability value of 80.32%. The four variables, namely type, gender, knowledge, norms and culture, and service technology.

Table 2. Results of Bivariate Analysis Selection Through Logistic Regression Analysis

Variabel	B	S.E.	Wald	df	Sig	Exp (B)	95% C.I. for Exp (B)	
							Lower	Upper
Sex	0,836	0,361	5,370	1	0,20	2,308	1,138	4,683
Knowledge	0,963	0,352	7,489	1	0,006	2,620	1,314	5,221
Attitudes	0,298	0,353	0,713	1	0,399	1,347	0,674	2,691
Norms and Culture	0,756	0,360	4,416	1	0,036	2,131	1,052	4,315
Service Technology	0,793	0,353	5,041	1	0,025	2,211	1,106	4,419

Source: Primary research data processed

Table 3: Final Results of Logistic Regression Analysis

Variabel	B	S.E.	Wald	df	Sig	Exp (B)	95% C.I. for Exp (B)	
							Lower	Upper
Sex	0,861	0,359	5,736	1	0,017	2,365	1,169	4,782
Knowledge	1,006	0,348	8,353	1	0,004	2,736	1,383	5,414
Norms and Culture	0,757	0,359	4,444	1	0,035	2,132	1,055	4,308
Service Technology	0,779	0,352	4,893	1	0,027	2,179	1,093	4,345

Source: Primary research data processed

In this study, the needs of reproductive health services for brides and grooms are divided into 6 sub-needs, namely the needs of the type of service, the needs for service methods, the needs for material services, the needs of the service media, the needs of the service provider, and the needs for the duration of service. The results found that physical examination (95.8%), examination of nutritional status (88.5%), and giving TT immunization (87.3%) are the types of services most preferred by brides and grooms. Meanwhile, the most chosen service method is personal counseling (77%). The most chosen service material by brides and grooms, namely pregnancy planning and preparation (76.4%) and nutrition fulfillment material before pregnancy (71.5%) with film or video service media (69.7%) and service applications via mobile (58.2%). When it is viewed in terms of service providers and service duration, 72.1% of brides and grooms

require service providers who work as doctors with a duration of service delivery of about 1 hour.

Factors That Influence Reproductive Health Service Needs for Brides and Grooms

Sex is a characteristic of respondents from birth that is divided into male and female⁽¹⁴⁾. The results of this study indicate that there are more female respondents who need reproductive health services for marriage than male respondents. As for the causes found in the field, among others (1) brides are more susceptible to experiencing reproductive health problems than grooms with a ratio of 61:42; (2) brides interests tend to limit discussions about sexual and reproductive health; (3) brides will experience a first pregnancy where this can bring major changes in physical, social, and psychological aspects; and (4) women can be more objective in making decisions about various health service choices according to their felt needs.

However, 30.9% of men are considered as decision makers while women are only as a companion in matters of sexuality and reproduction. This is related to the concept of gender that men feel more powerful, have more power and a higher bargaining position, so that they are more free to make decisions than women^(14,15).

Sex has a significant influence on the need for reproductive health services for brides and grooms (p value = 0.017; Exp (B) = 2.365; 95% CI = 1.169-4.782). This is because the types of health needs between men and women tend to be different, as well as the presence of gender influences that make both have their own roles and portions of involvement⁽¹⁴⁾. The results of this study are in line with the concept of health service utilization, where sex is a socio-demographic factor as a determinant of needs⁽¹⁰⁾. Based on the results of research in Tehran, sex is related to the need for premarital courses in engaged couples (p value = 0.02)⁽¹⁶⁾. In contrast, different results are shown in qualitative research in Bangladesh, where sex is not associated with a strong need of sexual and reproductive health services for adolescents because of the same needs in counseling material between boys and girls. Regardless of sex and gender, premarital adolescents prefer the quality of service with experienced officers, stigma does not arise from the officers, and officers can maintain privacy during counseling⁽¹⁷⁾.

Knowledge is the most powerful factor influencing the brides and grooms to the needs of reproductive health services (p-value= 0.004; Exp(B)= 2.736; 95% CI= 1,383-5,414). Brides and grooms' knowledge is needed to determine the level of reproductive health service needs for the bride and groom in accordance with the conditions they feel. Knowledge can be the basis for someone to receive information well. In addition, knowledge is one of the factors that underlie the search behavior of health services. The results of this study are in line with Notoatmodjo's opinion that someone with a good level of knowledge will behave according to his/ her knowledge. Behavior will be long-term if based on knowledge, awareness, and positive attitude⁽¹⁸⁾.

There is something interesting about the results of the study, where some respondents have good knowledge regardless of their level of education. Respondents' knowledge about reproductive health, preparation of health status before pregnancy and risk factors for pregnancy may not only be obtained through formal education, but can also be obtained from non-formal education. Based on the results of the study, as many as 33 respondents (36.3%) have a good level of knowledge but do not need reproductive health

services for brides and grooms because 60.6% of respondents have obtained information through various health promotion media that developed at this time, both through social media, print media and electronic media.

The results of this study are in line with research in the Middle East Region, particularly in Iran, where the perspective of reproductive health education needs of engaged male and female couples is related to the level of knowledge of reproductive health⁽¹²⁾. Other studies state that the low knowledge of premarital adolescents can influence the fulfillment of reproductive health needs⁽¹⁹⁾. Based on the theory stated by Alan Dever, knowledge is a very important domain in shaping one's perception of what they need. On the other hand, Andersen's theory revealed that knowledge is one of the predisposing factors of one's needs for health services⁽¹⁰⁾.

Other factors in this study that are quite influential on the need for reproductive health services for brides-to-be are socio-cultural factors, namely the community's norms and culture (p-value = 0.035; Exp (B) = 2.132; 95% CI = 1,055-4,308), and service technology (p-value = 0.027; Exp (B) = 2,179; 95% CI = 1,093-4,345). The results of this study prove the theory of consumer behavior about community norms and cultural factors and technology of service which is a reflection of consumer behavior in describing the need for a health service⁽⁹⁾. In the life of society, norms and culture are often seen as obstacles in meeting the needs of the community to obtain adequate and timely health information and services. This is because the existence of norms in the community directly forms the priority scale of needs⁽¹²⁾.

The results of this study reinforce previous qualitative research which states that the need for reproductive health education services for engaged couples is related to the socio-cultural community. Because of cultural traditions and taboo assumptions regarding discussions on reproductive health topics, issues of reproductive health and sexuality tend to be hidden, including during the implementation of premarital courses⁽¹²⁾. An ethnographic study concludes that traditional practices that are thick with the cultural values of previous communities if not accompanied by health workers through counseling, will risk causing misperceptions about the reproductive health needs of the community itself⁽²⁰⁾.

Traditional practices that are thick in the community to date, including the community still considers taboo discussions related to reproductive health, especially for women, and the food taboos culture^(20,21). As many as 96 respondents (58.2%) revealed that the discussion on reproductive

health was not a natural thing for the community in their area and 102 respondents (61.8%) stated that there were several types of food and drinks that were never consumed by women who were preparing for pregnancy. Food taboos culture will be more specific when a woman has entered a pregnancy period, where 46.1% of the people in Brebes District tend to forbid pregnant women from eating shrimp and pineapple. If not addressed wisely, this culture will put women at greater risk during the pregnancy period. This is because certain types of food, such as shrimp, should be good for fetal growth and not consumed, so that the mother and fetus do not get the nutritional benefits from these foods⁽²¹⁾.

The efforts to reduce norms and cultural barriers to meeting the needs of reproductive health services for brides and grooms can be done through the efficient use of technology in service. Research in the field found that reproductive health services for brides and grooms in Brebes District so far have been carried out manually through lecture or counseling methods using leaflets. 65.5% use of leaflets was considered inefficient by brides and grooms because leaflets brought home were often lost due to forgetfulness to save or tear. On the other hand, submitting information manually is considered to require a long time so that information delays can occur (44.2%) compared to the delivery of information through the use of applications on smartphones or websites (77.6%). In this case the lack of technological efficiency in services can reduce the level of reproductive health service needs for brides and grooms.

The results of this study are supported by the results of research in Latin America and the Caribbean, where the fulfillment of reproductive health service needs and the dissemination of information about reproductive health include how much technology is used in services, especially electronic-based information technology (eHealth)⁽²²⁾. Electronic Health (eHealth) refers to health services and the dissemination of health information through the internet or similar technologies, such as the use of mobile phone technology (mHealth). The benefit of eHealth is the achievement of universal health coverage because all levels of society, including people in remote areas, are increasingly made easy to access information and health services according to their needs. This can potentially increase the population's health literacy. In addition, the use of digital technology such as eHealth can support the cost-effectiveness of health services⁽²³⁾. Although there are many benefits of using eHealth, previous studies suggest that there is no relationship between the use of information technology and

the need for reproductive health services. This is because the context of interpersonal relationships in life needs to be considered and greater satisfaction in service tends to occur when users meet with health workers directly⁽²⁴⁾.

New and innovative ways are needed in the delivery of reproductive health information to support the brides and grooms obtain better service. The results found that 49.7% of respondents considered the use of smartphone-based service applications as a good idea as an innovation in reproductive health services for brides and grooms. This is supported by the need for reproductive health services for brides and grooms using online discussion methods (63%) as well as media application services via smartphones (58.2%). The use of smartphone applications, especially for brides and grooms, can facilitate brides and grooms in seeking information about premarital reproductive health and help raise awareness of risk factors for pregnancy and health status preparation before pregnancy, especially related to nutrition during the preconception, whenever and wherever they are.

Factors That Have No Effect on the Need for Reproductive Health Services for Brides and Grooms

Factors that do not affect the need for reproductive health services for brides, namely the level of education, attitudes, and risk factors (p -value > 0.05). The level of education does not affect the need for reproductive health services for the bride and groom because individuals with low or high education levels still need services of the same quality and tend to utilize these services in one room. The attitude shown by brides and grooms at the time of the study also did not show a significant relationship with the needs of reproductive health services for the bride and groom (p -value > 0.05). Although the respondents showed a positive attitude, this did not significantly affect the level of reproductive health service needs for the brides and grooms. Though ideally a positive attitude of brides and grooms can encourage the creation of a strong need for this service.

The research found 33.9% of brides and grooms gave a negative response to the importance of reproductive health services to prepare quality pregnancies. This is driven by discomfort (uncomfortable) when discussing reproductive health with others (30.3%), so that some brides and grooms are encouraged to seek reproductive health information and pregnancy preparation independently via the internet. The consequence is that brides and grooms can draw incorrect conclusions about reproductive

health and preparation for pregnancy, especially if the site accessed is not from an official health sector. The strategy for implementing reproductive health service policies for brides and grooms can be focused on improving brides and grooms attitudes through cross-sectoral cooperation, such as the Premarital Course Program. It can increase knowledge and attitudes about premarital reproductive health and pregnancy preparation for brides and grooms to minimize the cause of death during pregnancy, as well as provide marital relationship satisfaction^(7,25). Nevertheless, this service provider must always pay attention to the educational needs of the brides and grooms in terms of content, counselor, technology use, as well as the time setting of Premarital Course Program.

Another factor that does not affect the need for reproductive health services for the bride and groom, is the risk factor (p -value > 0.05). The absence of a relationship between the two variables is likely because pregnancy risk factors are often not realized by brides and grooms. In this case the brides and grooms tend to pay less attention to health status in the pre-conception period. This lack of awareness is a result of the lack of knowledge and negative attitudes exhibited by the brides and grooms at the time of the study, such as respondents still not correctly answering questions related to the size of Measurement of Upper Arm Circumference which is a risk factor for Chronic Energy Deficiency during pregnancy (44.2%), the portion of Fe tablet consumption to prevent anemia (47.3%), and HIV transmission through syringes (55.2%). This shows that some respondents do not understand about pregnancy risk factors and how to prevent them. In addition, a negative attitude is also shown by some brides and grooms, where they assumed that anemia is not a dangerous health problem (34.5%), the size of Upper Arm Circumference <23.5 cm would not affect fetal development during pregnancy (44.2%), and the assumption that they do not need to know the signs of Reproductive Tract Infection and Sexually Transmitted Infections (24.2%).

To maximize the use of reproductive health services for brides and grooms, the felt needs of the brides and grooms must be increased first. After that, brides and grooms can be directed to find the right service. Felt needs for reproductive health services for the brides and grooms will arise if they are aware of the importance of premarital reproductive health, so as to minimize the risk factors for pregnancy. Individual awareness in this case is very closely related to the level of individual knowledge, where the higher the individual's knowledge about risk factors and consequences

caused by an illness, the higher the prevention efforts undertaken⁽¹⁸⁾. Therefore, reproductive health service providers need to put more emphasis on the education of brides and grooms about their reproductive health, its influence on pregnancy preparation, and how to make full use of the facilities.

Despite contributing to the current literature, this study has limitations, including the measurement of pregnancy risk factors only by asking general symptoms of several types of risk factors and not making further anamnesis. Checks are only carried out on risk factors for Chronic Energy Deficiency by measuring MUACs on female respondents. In addition, researchers did not conduct an analysis related to respondents' perceptions of reproductive health service needs for brides and grooms.

CONCLUSION

Based on the results of research data and discussions that have been presented, it can be concluded that the need for reproductive health services for brides and grooms, including physical examination services (95.8%), methods of service with personal counseling (77%), educational material in the form of pregnancy planning and preparation pregnancy (76.4%), media services when educated with film and video as the media (69.7%) and smartphone application media (58.2%). Meanwhile, the need for service providers is directed at health workers who work as doctors with a service duration of about 1 hour (72.1%).

Factors related to the need for reproductive health services for brides and grooms in Brebes District (p -value <0.05), namely (1) Socio-demographic factors, namely gender, (2) Socio-psychological factors, namely knowledge, and (3) Socio-cultural factors, namely community norms and culture and technology in service. Meanwhile, socio-demographic factors from the level of education and socio-psychological factors from attitudes do not show a significant relationship with the need for reproductive health services for brides and grooms in Brebes District (p -value > 0.05). The biggest factor influencing the need for reproductive health services for brides is knowledge (p -value = 0.004; Exp (B) = 2.736; 95% CI = 1.383-5.414).

There are recommendations of the research results that researchers can provide. They are service providers conducting surveys of needs and requests for reproductive health services for brides and grooms continuously, including analyzing the utilization and level of community satisfaction as service users, as an evaluation material to improve service quality. In addition, reproductive health service providers for brides and grooms need to do branding by involving community

leaders and health cares and using service technologies, such as m-learning media that are equipped with educational videos and question and answer forums as a form of service innovation so that brides and grooms can learn about health premarital reproduction and preparation of health status before pregnancy whenever and wherever according to their needs. The researcher also recommends the next researcher to study aspects of the supply of reproductive health services for brides and grooms from the provider's perspective, so that reproductive health services for brides and grooms can develop and provide the best results for integrated reproductive health services.

REFERENCES

1. Dinas Kesehatan Provinsi Jawa Tengah. Profil Kesehatan Provinsi Jawa Tengah Tahun 2018. Semarang: Dinas Kesehatan Provinsi Jawa Tengah; 2019.
2. Kementerian Kesehatan RI. Buku saku bagi penyuluh pernikahan kesehatan reproduksi calon pengantin. Jakarta: Kementerian Kesehatan RI; 2016.
3. Kementerian Agama RI. Peraturan Direktur Jenderal Bimbingan Masyarakat Islam Nomor: DJ.II/542 Tahun 2013 Tentang Pedoman Penyelenggaraan Kursus Pra Nikah. Jakarta: Direktur Jenderal Bimbingan Masyarakat Islam; 2013.
4. Farianita R, Nugraheni SA, Kartini A. Kolaborasi pada program kursus calon pengantin di Kabupaten Grobogan. *Jurnal Kebijakan Kesehatan Indonesia*. 2020;09(01):9–19.
5. Kementerian Kesehatan RI. Pedoman pelayanan kesehatan reproduksi terpadu di tingkat pelayanan kesehatan dasar. Jakarta: Kementerian Kesehatan RI; 2015.
6. Dinas Kesehatan Kabupaten Brebes. Profil kesehatan Kabupaten Brebes tahun 2018. Brebes: Dinas Kesehatan Kabupaten Brebes; 2019.
7. Farnam F, Pakgohar M, Mir-mohammadali M. Effect of Pre-Marriage Counseling on Marital Satisfaction of Iranian Newlywed Couples : A Randomized Control Trial. *Sex Cult*. 2011;15:141–52.
8. Harris J, Nimmo S. Placement learning in community nursing: A guide for students in practice. United Kingdom: Elsevier Ltd; 2013.
9. Yuniarti V. Perilaku konsumen: teori dan praktik. Bandung: Pustaka Setia; 2015.
10. Supriyanto S, Ernawati. Pemasaran industri jasa pelayanan kesehatan. Yogyakarta: Andi Offset; 2011.
11. Hamzehgardeshi Z, Shahhosseini Z, Tonekaboni S, Yazdani F. Sexual and reproductive health education needs and its associated factors in couples participating in premarital counseling. *J Nurs Midwifery Sci*. 2019;6(1):38–43.
12. Khaledi ZB, Simbar M, Azin SA. A qualitative study of sexual health education among Iranian engaged couples. *Afr Health Sci*. 2017;17(2):382–90.
13. Jones HE, Calixte C, Manze M, Perlman M, Rubin S, Roberts L, et al. Primary care patients' preferences for reproductive health service needs assessment and service availability in New York Federally Qualified Health Centers. *Contraception* [Internet]. 2019;xxx(xxxx):226–30. Available from: <https://doi.org/10.1016/j.contraception.2019.12.003>
14. Heise L, Greene ME, Opper N, Stavropoulou M, Harper C, Nascimento M, et al. Series Gender Equality , Norms , and Health 1. Gender inequality and restrictive gender norms : framing the challenges to health. *Lancet*. 2019;393:2440–54.
15. Behrman JA. Women's land ownership and participation in decision-making about reproductive health in Malawi. *Popul Environ*. 2017;38(4):327–344.
16. Pourmarzi D, Rimaz S. Sexual and Reproductive Health Educational Needs in Engaged Couples in Tehran in 2010. *Sex Res Soc Policy*. 2014;11(3):225–32.
17. Yunus S, Sharmin S, Huq NL, Haseen F, Imam A, Nahar Q. Expectations of adolescents to receive reproductive health information and services from health service system: a qualitative study in Bangladesh. *South East Asia J Public Heal*. 2017;7(2):19–26.
18. Notoatmodjo S. Ilmu perilaku kesehatan. Jakarta: Rineka Cipta; 2014.
19. Kyilleh JM, Tabong PT, Konlaan BB. Adolescents' reproductive health knowledge, choices and factors affecting reproductive health choices : a qualitative study in the West Gonja District in Northern region, Ghana. *BMC Heal Hum Rights*. 2018;18:6:1–12.
20. Hardon A, Pell C, Taqeban E, Narasimhan M. Sexual and reproductive self care among women and girls: insights from ethnographic studies. *BMJ*. 2019;365:11333:1–4.
21. Diana R, Rachmayanti RD, Anwar F, Khomsan A, Christianti DF. Food taboos and suggestions among Madurese pregnant women : a qualitative study. *J Ethn Foods* [Internet]. 2018;5(4):246–53. Available from: <https://doi.org/10.1016/j.jef.2018.10.006>
22. Nigenda G, Torres M, Ja A. Health information technologies for sexual and reproductive

- health: Mapping the evidence in Latin America and the Caribbean. *J Public Health Policy*. 2016;37(suppl 2):213–31.
23. Kim H, Xie B. Health Literacy in the eHealth Era: A Systematic Review of the Patient Educ Couns [Internet]. 2017;100(6):1073–82. Available from: <http://dx.doi.org/10.1016/j.pec.2017.01.015>
24. Eleuteri S, Saladino V, Verrastro V, Eleuteri S, Saladino V, Identity VV, et al. Identity, relationships, sexuality, and risky behaviors of adolescents in the context of social media adolescents in the context of social media. *Sex Relatsh Ther* [Internet]. 2017;1–12. Available from: <https://doi.org/10.1080/14681994.2017.1397953>
25. Nugraheni S, Martini, Kartasurya M, et al. The change of knowledge and attitude of bride and groom candidate after reproductive health pre-marital course by KUA officer. *J Kesehat Masy*. 2018;14(1):126–32.