Explaining the Needs of Reproductive Health Literacy in Pre- Marriage Couples: A Qualitative Study

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ABSTRACT

Background: Education and consultation before marriage are opportunities to raise some matters among the pre-marriage couples. However, implementing any educational program requires a detailed identification of the needs of the target group, while failing to care for the expectations of this group of couples is a waste of money and manpower. Current study aimed to determine the needs for reproductive health literacy in pre-marriage couples. Method: A directed qualitative content analysis approach was conducted from June to December 2017 at Premarital Educational Center in Bandar Abbas (Iran), through in-depth semi-structured interviews with 11 pre-marriage peoples, and 13 married peoples who had got married maximally two years ago and participated in educational program, and 10 service providers that were selected through purposeful sampling. Sampling was continued until data saturation was reached. The MAXQDA 10 software was used for the management of data. Results: The themes were classified into four areas including sexual, physical, psychological-emotional and social needs for the reproductive health, and 10 main categories were obtained. The level of needs expressed for reproductive health literacy was at functional level and mostly associated with sexual health needs. Conclusions: Concerning the findings of the current work, the reform of the current educational content and the manner of its presentation to premarital couples for promotion of sexual and reproductive health is essential.

Key Words: *Couples, Health Literacy, Reproductive Health.*

eIJPPR 2020; 10(6):82-91

HOW TO CITE THIS ARTICLE: Fatemeh Dabiri, Sepideh Hajian, Abbas Ebadi, Sedigheh Abedini (2020). "Explaining the Needs of Reproductive Health Literacy in Pre- Marriage Couples: A Qualitative Study ", International Journal of Pharmaceutical and Phytopharmacological Research, 10(6), pp.82-91.

INTRODUCTION

Pre-marital education and counseling are opportunities to raise some topics of interest to pre-marriage couples, so that health professionals can significantly affect the pre-marriage couples' beliefs, behaviors and knowledge by providing the necessary information on reproductive health [1]. Premarital education programs have been a mandatory requirement for all pre-marriage couples since 1992 in Iran. Nevertheless, it seems that the educational content presented in premarital counseling classes to be insufficient. As a result, significant changes to modify the current process of education seem necessary [2, 3].

On the other hand, with development of the media and rapid dissemination of information via the internet, access to other resources has become much easier for the public which can affect their health status. Health literacy refers to numerous factors that affect the ability of individuals to gain access, understand and use health information from many resources in ways which promote and maintain good health [4]. According to the Nutbeam classification,

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Relevant conflicts of interest/financial disclosures: The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.
Received: 24 May 2020; **Revised:** 02 November 2020; **Accepted:** 06 November 2020

this concept from the lowest to highest levels contained three functional (skills in reading and writing), interactive (extract information from different resources) and critical (analysis and use of information) levels ; respectively [5].

Lack of information or misinformation about reproductive health increases the risk of marital problems [2]. Also it has been determined that, sexual and reproductive health literacy can contribute to some of the goals of sustainable development such as: gender equality by helping girls to stay in schools, reducing gender gap in education, etc. [6]. However, most health providers know little about the impact of healthcare receivers' health literacy on following the advice and recommendations provided by such services [7]. The results of research studies conducted in Iran have suggested that the level of health literacy among Iranian people has been inadequate [8, 9].

Considering the limited knowledge of reproductive health literacy in Iran, the evidence has suggested that some of the complications such as unwanted pregnancy (30.6%) [10], high prevalence of high-risk sexual behaviors among Iranian young adults (34%) that makes them more susceptible to sexually transmitted diseases [11], have high prevalence, which could be due to the inadequate sexual and reproductive health literacy [12]. Based on the census conducted by the Statistics Center of Iran in 2016, it was found that 20.2% of the population aged 10-19 years in Bandar Abbas were married that 17.5% of them were women. Also, 2% of this population were illiterate [13]. Since this population might have little opportunities to receive formal education for self-care and health promotion, it seemed that they had challenges at the lower levels of health literacy. As, in a study conducted in Hormozgan province, the low levels of women's health literacy in this region was one of the barriers to achieve better perinatal outcomes, and their study's results manifested the necessity of paying specific attention to promote reproductive health literacy of women [14].

Currently, the educational content of pre-marriage courses has almost been the same, and often presented to women, and their personal and gender-related needs have been overlooked. So, significant changes to modify current educational process seem necessary that these changes should be based on the needs of the target group, because the implementation of any educational program requires the recognition of the needs of the target group. Regarding the aforesaid evidence, the present study aimed to explain reproductive health literacy needs of pre-marriage couples in Bandar Abbas city.

METHOD

A directed qualitative content analysis approach was conducted from June to December 2017 at the only Premarital Educational Center in Bandar Abbas (Iran) with participation of 34 participants. The researchers used a qualitative design for several reasons: to make a link between existing knowledge of reproductive health needs of couples, identify the gender sensitive reproductive health literacy needs, and to explore possible barriers to access the reproductive health services for young peoples.

Participants were selected through purposeful sampling, including11 pre-marriage peoples, 13 newlywed peoples, and 10 service providers. A purposive sampling method was used to recruit the couples using the following inclusion criteria: fluency in Farsi language, living in Bandar Abbas city, the first marriage experience and willingness to take part in the study. Inclusion criteria for newlywed couples were: who were married for the first time, living in Bandar Abbas city, and got married maximally two years ago, because it seemed due to marital life experience, they had a better understanding of the training needs necessary for the beginning of marriage.

To identify problems associated with reproductive health literacy, individual in-depth interviews were performed with service providers and counseling service providers. The inclusion criteria for the service providers were as follow: at least two years of work experience in young couples' health education, and had sufficient experiences concerning premarital education, and were familiar with responsibilities and policies of reproductive health affiliated with Ministry of Health and Hormozgan University of Medical Sciences, Iran.

The exclusion criteria of the study were the lack of willingness to continue participation in the study. Efforts were made to select the couples with the maximum variation in age, occupation and educational level. To access to those couples who participated in the marriage counseling courses, their ID information and contact details were found in directory book. Prior to each interview, the aim of the study was stated to the participants.

For data collection, semi-structured interviews were used. The place of interviews was the Premarital Educational Center or workplace of the participant. Sampling was continued until data saturation was reached, when no new data was collected through further sampling.

Each interview session lasted from 45 to 60 minutes. The next interview was performed only after coding the previous interview. There was no need to repeat the interviews. Interview guides were used to direct the focus of the interviews. For interviews with men in all interviews, with agreement of the interviewer and the interviewee, the marriage counseling center's doctor who was familiar with research methods, preformed the interviews. But if the interviewee agreed, the first author of the article was present to guide and facilitate the

interviews that all men agreed. The interview guide was prepared on the basis of a literature review and a pilot study. Each interview was started using a general question as "what information do you think couples need at the beginning of their marital life?"

Content analysis is a research method for the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns. Data was analyzed using a directed content analysis method. According to the second strategy for coding the data proposed by Hsieh and Shannon, the researcher started the coding process without primarily highlighting the text. This way provided an opportunity for the researcher for recognizing missing texts related to the predetermined codes and newly emerged ones, and increased the trustworthiness of findings [15]. The definition of reproductive health by the World Health Organization (WHO) was used in the following four themes: 'sexual', 'physical', 'psychological-emotional' and 'social' needs of reproductive health [16]. Interviews were recorded by voice recorder and transcribed verbatim. The transcriptions were read several times, and the meaning units were highlighted and were converted to codes. Two weeks after the initial coding, regardless of previous codes, coding was redone, and then the results of the two coding were compared together. The codes describing the couples' needs of reproductive health literacy were assigned to categories and subcategories. The research team tried to ensure the consistency of the coding process. Primary coding was reviewed by two authors of this article independently, and the modifications were made, if needed. Next, the final codes were assigned to subcategories according to their mutual characteristics. Also, related subcategories were included under one single category. Next, categories with a common concept were assigned to a theme. The MAXQDA 10 software was used for the management of data.

For rigor, Guba & Lincoln's trustworthiness criteria were used in terms of credibility, confirmability, transferability, and dependability of data [17]. Credibility was obtained through the long-term engagement with data, and using continuous data comparison. Also member checking was done, and 3 participants were asked to read their transcripts and primary coding, and get feedback from them to ensure that their actual opinion were reflected (p: 3, 6, 10). For conformability, some quotations, codes and extracted categories were reviewed by three researchers with experience in qualitative research who confirmed the accuracy of the coding process. For transferability, thick description of participants, sampling method and context and research field were used. Also researchers used maximum diversity of participants in terms of age, education level and job. Dependability of data was checked through the use of co-workers revisions to make appropriate decisions about data by describing how data was kept and the accuracy of data.

This study was verified by Ethical Committee in research at Shahid Beheshti University of Medical Sciences (ethical code: IR.SBMU.PHNM.1395.692). The written consent was obtained from the participants prior to the participation; also, the confidentiality of data was ensured, and they could withdraw from the study at any time.

RESULTS

In this study, 24 people (14 women and 10 men) participated in the individual interviews. The mean age of the women and men were 22.7±5 and 26.3±3 years; respectively. Table 1 represents the demographic characteristics of the couples participating in the research. In this study, 10 service providers took part, whose demographic characteristics have been presented in Table 2.

Following the interviews, 543 primary codes were achieved. After classification and deletion of similar codes in the constant comparison process, 57 final codes were assigned to 23 subcategories. Also, 10 categories were embedded in four themes of the reproductive health needs. Likewise, according to the definition of health literacy by Nutbeam, this concept was included at three functional, interactive and critical levels [6]. The expressed needs were included at some predetermined levels with regard to the nature of each need (Table 3).

1. Sexual needs of reproductive health

The sexual needs were included in all three functional, interactive and critical levels of health literacy where the largest needs accounted for the functional and interactive levels of health literacy. The sexual needs of health literacy at the functional level were pertaining to sexual education and self-care, so that the participants expressed the need for sexuality education as their greatest need.

1. a. Functional level:

Concerning the right time for sex education to couples, they mostly believed that the time of marriage was not suitable for education, and it should be started at the school: "*If we wish to achieve the favorite result, we have to begin it soon in the past. However, we have some limitations at high schools, which should not be. If we do not talk about sexual issues, marriage and contraceptive methods with our students and young population, they will achieve wrong information from non-scientific and non-standard sources such as the internet*" (p26).

One of the needs expressed by the participants was the presence of a male service provider for pre-marriage education to men, because the majority of males received no gender-sensitive education at the time of marriage. A

male partner stated: "*I expected to receive appropriate education, but I was said that no course is held now*" (p10). A service provider also confirmed this situation and said: "*We have many problems when it comes to men, because someone called 'midwife' is available to teach to women as she knows how to teach women. There is no person like a midwife to teach men, and the most accessible option is a doctor. Now, the problem is that whether the doctor would like to provide education to men or not*!" (p25).

Another need expressed by the participants was education about planned childbearing as follows: "*Contraceptive methods should be educated so that the couples who do not want to get pregnant know how to prevent pregnancy. They should not feel fear and anxiety following every sexual intercourse*." (p20).

1. b. Interactive level:

All participants demanded the continuation of education after marriage, or asked for the introduction of a valid educational resource by the Ministry of Health indicating where they could refer and acquire information. One participant commented: "*Everyone has a mobile phone nowadays, and unfortunately, people mainly are not much interested in reading books. Therefore, a valid instructional network has been provided by the Ministry of Health to make this end*." (p3).

One reason for gaining information from the internet was either their shame to receive it from their families or embarrassment of families, doctors or other healthcare staff to provide such information that is located in perceived barriers subcategory. For example, one participant stated: "*I would like to receive sex education, because I feel ashamed to ask my father or friends, and I do not know which books are suitable for reading*" (p22).

1. c. Critical level:

Concerning the sexual needs of critical health literacy, the expressed needs were included in the following two subcategories: "uncertainty in decision making" and "decisiveness". Since the media and social networks have maximum access to information resources, many users still remain confused due to the contradictions in information and uncertainties about the content of educational materials. For example, a participant stated: "*My husband and I joined a virtual network, which was better than nothing to search for information. However, I sometimes feel that some contents may not be accurate*" (p2).

The analysis of data received from other people indicated the participants' abilities to judge this information: "*Sometimes, when I discuss about sexual issues with my married friends, I notice that their advice is different from what I have learned in educational classes. That is the reason why I do not accept their words and I tell them that they are wrong*" (p24).

2. Physical needs of reproductive health

2. a. Functional level:

The most frequently expressed need by the participants was functional health literacy, awareness of the suitable time for pregnancy, and how to get pregnant. For example, one participant stated: "*I would like to know how to have sexual intercourse to have a baby sooner or what time is ok to get to the result sooner*" (p20).

2. b. interactive level:

Physical needs of reproductive health were included at the interactive level of health literacy. They were related to information resources and optimal services. The most important resources of information introduced by the participants were virtual networks of mobile phones and scientific websites, scientific books, TV, newspapers and magazines.

2. c. Critical level:

The need for data analysis empowerment, the need for searching more information and acceptance of information presented by the healthcare staff on physical health were included in critical health literacy. One participant stated: "*I have read several virtual pages about how to get pregnant, and I have compared them together. If information is as same as that is given in other pages, I accept it, and if it seems incorrect and different, I will not accept it at all*." (p20).

3. Psychological-emotional needs of reproductive health

3. a. Functional level:

Some of the needs were classified as emotional needs according to their subject matter .These needs expressed by participants were related to a lack of knowledge about how to communicate with the spouse in the beginning or during married life, and how to solve conjugal problems. A service provider stated: "*Behavioral skills and conduct with the opposite sex are parts of educational programs, which should be started and continued during school years, the brief educational programs exactly at the time of marriage cannot change individuals' behaviors and attitudes so much*" (p32).

3.b. Interactive level:

Another need raised by the participants was the consistency between provided information and the couples' needs in their marital life. One participant stated: "*I do not know how to communicate with my spouse. My husband permanently tells me that I do not know about my duties. I expected that these educational courses provide correct information and instructions, but they did not so*!" (p6).

3. c. Critical level:

Psychological-emotional needs were included in the critical level of health literacy under two subcategories of uncertainty in decision making and decisiveness. Inconsistencies associated with consultations were

expressed as reasons for inability for making decisions: "*Some psychologists have different attitudes and give some recommendations that are not acceptable in our culture*" (p34). Similarly, decisiveness made consultations acceptable for the couples. One participant stated: "*Some information given in the classes were very useful, and I could make an appropriate decision in my life*" (p13).

4. Social needs of reproductive health

4. a. Functional level:

Some needs such as public educational programs, social interactions, low awareness of the society on reproductive health issues, and the importance of sexuality education were mentioned by the participants as social reproductive health needs. The social needs of reproductive health were only included in the functional health literacy under two subcategories of educational needs and perceived barriers: "*Sexually transmitted diseases are ever increasing in the society, and I think that comprehensive knowledge on such diseases as well as knowledge on vaccination by which people take their kids for vaccination is necessary. So people can eradicate this problem in the society through self-care*" (p11).

In terms of perceived barriers, the importance of reproductive health was mentioned. An experienced service provider commented "*Sexual-reproductive health has been classified into critical categories all over the world. Sometimes, a presidential candidate does not win the election, because he/she forbids abortion for women*." (p25).

DISCUSSION

In the present study, the main needs expressed by the participants were under the functional level of health literacy, and the expressed sexual needs, particularly sexual health education. This finding was in line with those reported by some of the related studies performed in Iran [1, 2, 18-20], but only one study used a qualitative design. However, in this study, the main characteristic of reproductive health literacy needs was emphasizing on the sexual education that was mentioned more than other ones. It has been demonstrated that sexual education was considered the most vital need of young adults, because formal education was not presented in school-based or university curricula by any organization, and even by a private sector [21]. According to a report published by the WHO, sexual skills education is a need for both individuals that have not begun their sexual activities and those started it [2]. Iranian pre-marriage couples consider sexual issues as their priority, when getting married, because due to the sociocultural conditions of the Iranian society, people generally have limited access to receive formal sex education through reliable sources such as school, university, or public media [2].

Researchers noted that premarital educations were structural challenges in the healthcare system in Iran [22]. In the present study, the gender difference between the healthcare provider and the patient was mentioned as another structural barrier. Researchers have stated that one barrier to the provision of sexual health services was gender differences between the healthcare provider and the client [23]. Therefore, it seems that empowering male physicians in marriage counseling centers and creating material and spiritual motives for them in relation to sexual counseling and training on male client can be one of the best strategies in this regard.

The participants in this study stated that they needed to pass necessary educational programs at the time of marriage concerning the use of contraceptives to plan their childbearing. The results of other studies indicated that the need for education about contraception methods has been an important educational need for pre-marriage couples [19, 24, 25]. Similarly, a study on young refugee people in Australia stated that they searched for accurate information on contraceptive methods, sexually transmitted diseases and pregnancy before initiating their sexual relationships [26, 27], because unwanted pregnancy was a health problem due to a lack of knowledge about suitable contraceptive methods [2]. Unwanted pregnancy puts women at greater risk, that one of the most important problems of unwanted pregnancy is abortion particularly unsafe abortion. Therefore, it seems that in order to prevent such problems, along with new policies to encouraging young people for childbearing, contraceptive methods for planned pregnancies should be taught.

The participants in this study mostly expressed that they found information on reproductive health on the internet. Promotion of self-care behaviors and participation in health-related behaviors can be done using digital media such as internet and mobile technology [28]. The researchers have demonstrated that education through digital media can influence health-based behaviors [29]. Another study indicated that the mean level of health literacy in young adults who are not the members of Telegram educational channels was moderate, but those individuals that joined such channels had more reading skills and a higher level of health literacy [30].

Cultural and structural barriers were one of the challenges in providing sexual information in this study. Shame and embarrassment were mentioned as cultural barriers of the participants. It has been demonstrated that discussion about sexual issues in Iranian society has always been accompanied with shame and fear [22, 23]. Researchers showed that shame was a barrier to access healthcare practitioners to receive information, consultation, and undergo treatment or screening [31]. Embarrassment is common among reproductive healthcare providers, and

causes communication problems in couples, parents, children and the public. Therefore, the healthcare system fails to identify sexual problems, and does not consider them priority [22].

In the present study, the participants mentioned that invalid information resources highlighted the necessity of education about sexual issues. Similarly in a study on married women, participants and key informants emphasized the necessity of premarital sexual health education, because of invalid information resources [32].

One of the expressed physical health need was education about how to get pregnant. Other studies on the needs of pre-marriage couples reported similar findings [1, 25, 33, 34]. According to a systematic review study on the reproductive health information needs of women, pregnancy education and prenatal care were mentioned as the most significant information needs [35].

The need for education about how to communicate with the spouse and resolve conjugal problems was the main psychological-emotional needs of women in the reproductive age. Other studies also stated that pre-marriage couples' needs and psychological-emotional needs were the basic needs of couples [20, 25, 34]. A meta-analysis study showed that marriage-related education and marital communication could positively influence couples' communicative skills [36]. It has been suggested that the level of health literacy can influence the quality and status of marital life in women. Insufficient health literacy leads to a lack of marital satisfaction affecting couples' relationships and the family foundations [37]. According to a meta-analysis, participation in premarital education was associated with the higher levels of satisfaction and commitment, and lower levels of conflicts [38].

The need for reproductive health education to the public was classified to the social level of reproductive health. Reproductive health education intends to provide healthy behaviors to preserve public health, and reduce both family and conjugal problems [2].

Concerning the importance of sexual and reproductive health education at individual and social levels, researchers stated that sexual health education was a long-term process through which people achieved information and knowledge on sexual health, and developed their attitudes and beliefs [19].

In a systematic review on the social-based interventions in reproductive health among young adults in underprivileged areas, counseling with young couples, families and community members increased the capacity of healthcare staff, enhanced the use of contraceptive methods, delayed pregnancy, and improved prenatal care [39]. A barrier to sexual health education was the sensitivity of sexual issue in the society. In a study, lack of access to reproductive health services by married adolescents, lack of confidentiality of data and privacy, and inappropriate healthcare services were shown as structural barriers to social-based reproductive health services [39].

The strength of this study was that the current research tried to explore the unexpressed needs of young couples before and after marriage in Bandar Abbas city. It can be an initial step for the promotion of healthcare services to the target group and improvement of existing services to respective customers.

As a limitation of the current study, the low sample size and lack of participation in pre-marriage educational programs could likely influence the exploration of the perceived needs of the target group. Also, recall bias might have affected the ability of the participants to present their perspectives of the study phenomenon.

CONCLUSIONS

The couples in this study emphasized on the education on sexual health; however, they lacked higher level of other aspects of reproductive health literacy. Therefore, the promotion of reproductive health literacy; particularly sexual health; among young adults at the reproductive age requires more attention by policy makers because the provision of sexual health education for single individuals in the society is relatively forbidden. Also, it is necessary to reform current educational contents for the education of pre-marriage couples in terms of a more focus on sexual and reproductive health issues.

Further studies in a different sociocultural context with more variable samples to determine the needs of reproductive health literacy at the beginning of marital life, are recommended.

ACKNOWLEDGMENTS

This study was a part of the first author PhD dissertation supported by Shahid Beheshti University of Medical Sciences [grant no. 16849]. The authors would like to thank all couples and service providers who participated in this study.

Conflict of Interest: None declared.

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Table 1. Demographic characteristics of couples participating in the study

Number	gender	Age (years)	Education level	Marital status
P1	female	26	Bachelor's degree	married
P2	female	26	Bachelor's degree	married
P3	male	31	Bachelor's degree	married
P4	female	18	diploma	On the eve of marriage
P5	male	24	diploma	On the eve of marriage
P6	female	28	Bachelor's degree	married
P7	male	31	Bachelor's degree	married
P8	male	24	Diploma	On the eve of marriage
P9	male	23	Student	On the eve of marriage
P10	male	21	Diploma	On the eve of marriage
P11	female	27	Master's degree	On the eve of marriage
P12	female	20	Student	married
P13	female	32	Bachelor's degree	married
P14	male	26	Bachelor's degree	married
P15	male	31	Associate Degree	married
P16	female	18	Elementary education	On the eve of marriage
P17	female	16	High school education	On the eve of marriage
P18	female	28	Diploma	married
P19	male	28	Master's degree	married
P20	female	20	Diploma	married
P21	female	16	Elementary education	On the eve of marriage
P22	male	24	Diploma	On the eve of marriage
P23	female	17	Middle school education	On the eve of marriage
P24	female	27	Diploma	married

Table 2. Demographic characteristics of the service providers participating in the study

Number	Gender	Age (years)	Field of Study	Education level	Job Position
P25	Male	51	medicine	MPH and M.D	Deputy of Health Department of Population, Family and Schools of the Ministry of Health
P26	Female	52	midwifery	Bachelor's degree	Director of Department of Family and Schools Health and Hormozgan University of Medical Sciences
P27	Female	50	midwifery	Bachelor's degree	Health Reproductive Health Unit, Ministry of Health and Medical Education
P28	Female	51	midwifery	Bachelor's degree	Former head of the Department of Reproductive Health of Hormozgan University of Medical Sciences
P29	Female	33	midwifery	master of science(MSc)	Head of the Department of Reproductive Health of Hormozgan University of Medical Sciences
P30	Female	45	midwifery	Bachelor's degree	Head of the Department of Reproductive Health of Bandar Abbas Health Center
P31	Female	32	medicine	Expert physician	Assistant Professor of Hormozgan University of Medical Sciences
P32	Female	48	Family counselor	master of science(MSc)	Family counselor in private sector
P33	Female	48	midwifery	Bachelor's degree	Counseling service provider
P34	Female	49	midwifery	Bachelor's degree	Counseling service provider

Table 3 - Themes, Main and sub categories of reproductive health literacy needs in this study

Themes	Main categories	Sub-categories
Sexual needs of reproductive health	Functional level of health literacy	needs of sexual education
		self-care
		perceived barriers
	Interactive level of health literacy	optimal services
		human resources
		information resources
	Critical level of health literacy	uncertainty in decision making
		decisiveness
Physical needs of reproductive health	Functional level of health literacy	The dynamics of the needs of marital life
		seeking for physical health
	Interactive level of health literacy	Productivity of optimized services
		information resources
	Critical level of health literacy	uncertainty in decision making
		decisiveness
Psychological-emotional needs of reproductive health	Functional level of health literacy	educational needs
		Changes in psycho-emotional needs
		perceived barriers
	Interactive level of health literacy	counseling service providers
		information resources
	Critical level of health literacy	uncertainty in decision making
		decisiveness
Social needs of reproductive health	Functional level of health literacy	educational needs
		perceived barriers