Determining the Most Common Reproductive Health Needs of Rural Women of Reproductive Age, Iran, 2017

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Abstract

Objectives: The first step in designing a plan is need recognition. Given the fact that rural women are among the most deprived groups in terms of healthcare services, this study aimed to determine the most common reproductive health needs of rural women of reproductive age, which can provide the foundation for designing proper programs with regard to budget constraints.

Materials and Methods: This cross-sectional study was conducted on rural women of reproductive age referred to rural healthcare centers of Neyshabur, Iran, during 2016-2017. In total, 405 subjects were selected through randomized sampling. The data collection tool was standardized questionnaire evaluating sexual and reproductive health needs. This instrument consists of seven sections, including background information, safe motherhood, family planning, sexual behaviors, sexually transmitted infections, HIV/AIDS, and physical and sexual violence. The answer to each question was categorized into 2 groups of favorable (Score 1 was given to it) and unfavorable (Score 2 was given to it), so low scores were indicative of favorable condition, whereas high scores reflected unfavorable status. Data analysis was performed using descriptive tests in SPSS version 17.0.

Results: In this study, about half of the women were within the age range of 31-40 years, and 44.2% of them were illiterate or had low literacy levels. In addition, 84% of the subjects were housewives. Safe pregnancy domain had the most proper status (14.12±10.55), whereas HIV/AIDS domain was the least favorable condition (47.65±21.63).

Conclusions: We recommend designing focused programs to improve the health of rural women in the domains of HIV/AIDS and sexually transmitted diseases (STDs), which are the most prioritized areas of reproductive health.

Keywords: Needs assessment, Reproductive health, Rural women

Introduction

Health and all its aspects is a basic human right (1), for which the government is responsible (2). Reproductive health is defined as the complete physical, mental, and social health in all aspects related to the reproductive system and its efficiency (3). The development and economic performance of nations around reproductive health depends on how each country protects and promotes the health of women (4).

Rural women account for a quarter of the world's population. In developing countries, 43% of the agricultural workforce is comprised of rural women, who are responsible for the production of a large proportion of food in the society. Therefore, they play an important role in food supply.

The significance of this issue is so high that October 15th in 2008 was introduced as "Global Day of Rural Women" for the first time by the United Nations (5). Rural women are faced with several limitations in having access to proper health services in rural areas.

This problem can be due to high cost of services, restrictions on the mobility of women, as well as limited access to transportation facilities. Therefore, there is a great need for comprehensive health services, which can properly cover physical, mental, and emotional issues of rural women (6).

The studies have shown that the type and location of settlements (urban or rural) influence fertility behavior (8). In a study by Zanjani and Jazaieri, it was marked that urban women have better reproductive health compared to rural ones (9). In addition, Banerjee et al emphasized the limitations of young women's knowledge and agency around sexual and reproductive health in rural areas (10). As a result, accurate identification of unsatisfied health

needs is essential in determining defects in planning better reproductive services for these women (7).

Most of the studies conducted among rural women have emphasized their economic participation and paid little attention to their reproductive health. And no study was found that would have compared different aspects of reproductive health in rural women. Therefore, given the problems and deprivations of this vulnerable group, and with regard to their significant impact on health indicators of the country, there is a great need for more accurate evaluation of health needs of this population. Due to the limited budget of health, this study aimed to determine the most common needs of reproductive health for rural women of reproductive age so that the proper foundation is laid to focus on designing appropriate interventions.

Materials and Methods

This cross-sectional study was conducted on 405 rural women referred to rural healthcare centers in Neyshabur, Iran, during 2016-2017. According to the statistics, 35% of the total population of Neyshabur is comprised of rural individuals, which is higher than the national mean score (12). The subjects were selected using multistage random sampling. In addition, purposeful sampling was applied in the villages.

Data collection tool was Sexual and Reproductive Health Needs Assessment Questionnaire, consisting of 7 sections, that is, background information, safe motherhood, family planning, sexual performance, sexually transmitted diseases (STDs), HIV/AIDS, and sexual violence. Psychometric properties of the questionnaire were analyzed by Khani et al. Its content validity index was above 0.8 for all the items (13). In the first stage, the questionnaire was thoroughly assessed by researchers, and any item that required modification was extracted.

Eventually, the questionnaire comprised of 31 items in 6 domains of safe pregnancy (11 items), family planning (3 items), sexual behaviors (2 items), STDs (6 items), HIV/AIDS (4 items), and sexual violence (5 items). Following that, responses to each item were categorized into 2 groups of favorable and unfavorable. In case no problem existed, one score was assigned, while 2 scores were given to defective items.

For instance, if an individual had adequate number of visits to obtain prenatal care, she would obtain one score. On the other hand, insufficient number of referrals was designated 2 scores. Given the unequal number of items in each domain of the questionnaire, 0-100 scale was used to adjust the item weights. To this end, we determined the number of items in each domain and score of each item. Thereafter, the minimum and maximum scores of each domain (multiplying the number of items by the minimum and maximum scores) were calculated and the mean percentage was obtained using the following formula:

$$\frac{(\text{minimum score of an area-total obtained score}) \times 100}{(\text{difference between the minimum and maximum score})}$$

With regard to the scoring system, low scores were indicative of favorable condition, whereas high scores reflected unfavorable status. Prior to the study, all the participants were assured of confidentiality of their personal information. In addition, the results could be provided for them if desired. After obtaining informed consent from the subjects, questionnaires were completed by the researcher through interviews. Data analysis was performed using SPSS version 17.0.

Results

The majority of research participants were in the age range of 31 to 40 years (in women group 49.6% and in spouses group 47.7 %). The majority of women at the time of marriage were between 15 and 19 years old (45.7%) and their husbands were 20 to 25 years old (40.2%). Most women had reading and writing literacy (41.0%) and 84.0% of them were housewives. Their husbands had mostly secondary education level (33.1%) and 44.0% of them were Worker (without land and livestock ownership). Moreover, 62.2% of the participants had a marriage duration of more than 10 years, and most participants had insufficient family income (76.5%) (Table 1).

Results reflected that rural women had the highest mean (most disorders) in the domain of HIV/AIDS (Table 2).

Discussion

In the present study, various dimensions of reproductive health of rural women were assessed. Safe pregnancy, delivery, and postpartum care, ratio of deliveries by educated individuals, delivery at a proper location, and C-section are the known indices of tracking progress toward safe motherhood at an international scale (14).

According to the statistics reported by the World Health Organization (WHO), 95% of rural population of Iran had access to local health services in 2012, and the rate of delivery by educated personnel was reported to be 95%. Further, 97% of pregnant rural women received prenatal care (15). In the current study, the domain of safe pregnancy was at a favorable level. Given the beneficial impact of healthcare workers, approaches such as improving the knowledge of caregivers and eliminating the challenges of the referral system can be effective.

According to the results of the present study, the domain of contraceptive methods was apparently at a favorable condition. In addition, coitus interruptus method (23%) was regarded as a family planning method. Therefore, use of contraceptive methods had increased by 96%. By excluding the coitus interruptus method, the rate of contraceptive methods use would reduce to 73%, which is not favorable. On the other hand, unwanted pregnancy can have serious health implications for women.

Examining the reasons for unwanted pregnancy showed

Table 1. Frequency Distribution of Demographic Characteristics of the Participants

Characteristics	No. (%)
Age of woman (y)	
≤20	23 (5.7)
21-30	137 (33.8)
31-40	201 (49.6)
≥40	44 (10.9)
Age of spouse (y)	
≤20	2 (0.5)
21-30	97 (24.0)
31-40	193 (47.7)
≥40	113 (27.9)
Age of woman at the time of marriage (y)	
<15	100 (24.7)
15-19	185 (45.7)
>19	120 (29.6)
Age of husband at the time of marriage (y)	
<20	131 (32.3)
20-25	163 (40.2)
>25	111 (27.4)
Educational level of woman	
Illiterate	13 (3.2)
Reading and writing literacy	166 (41.0)
Secondary education level	82 (20.2)
Diploma	127 (31.4)
Academic education	17 (4.2)
Educational level of husband	
Illiterate	15 (3.7)
Reading and writing literacy	132 (32.6)
Secondary education level	134 (33.1)
High school diploma	100 (24.7)
Academic education	24 (5.9)
Occupational status of woman	
Housewife	340 (84.0)
Employed	65 (16.0)
Occupational status of husband	
Unemployed	37 (9.1)
Worker (without land and livestock ownership)	178 (44.0)
Agriculture and animal husbandry	148 (36.5)
Others	42 (10.4)
Marriage age (y)	
≤10	153 (37.8)
>10	252 (62.2)
Adequacy of family income from the perspective of woman	
Yes	95 (23.5)
No	310 (76.5)

that most women had not used any contraceptive methods or if they had used effective methods, they would have not had enough motivation to use these methods regularly and correctly or they did not have enough knowledge of how to use these methods correctly (16). In a study by Manzouri et al, total use of contraceptives (modern and traditional) was reported in 89.5% of the individuals. Moreover, the most frequently used contraceptive method was condom and the mean rate of unwanted pregnancies was 18% (14). Therefore, our findings were in line with the results obtained in the aforementioned study.

On the other hand, the domain of history and sexual behaviors seemingly enjoyed a favorable status. However, the items in this domain did not evaluate sexual performance of the subjects and only included age at the time of the first sexual intercourse and marital status. In this respect, it seems that further assessments are required.

Given that the total prevalence of sexual disorders in Iran was reported to be 48% (17) and women were more involved with sexual disorders (18), further accurate assessments of the subjects using more appropriate questionnaires is essential. On the other hand, studies have shown that women with lower socioeconomic status were more affected by sexual disorders (19), which is indicative of vulnerability of rural women.

The obtained mean scores in the domain of STDs were not favorable. According to the reports by WHO, 500 million individuals are annually diagnosed with STDs. In addition, it was estimated that one million people are diagnosed with STDs, including HIV, every day. In the developing countries, STDs and their complications are among the main five diseases observed in adults, which requires medical care (20). The prevalence rate of STDs varies depending on the region.

Gouya and Nabai marked that the rate of STDs was 3.11%, that is, 2%, 3.5%, and 4% of the cases were involved with gonorrhea, *Chlamydia trachomatis*, and *Trichomonas vaginalis*, respectively. The highest rates of infection were observed in the individuals aged 25-29 years (21). Moreover, Teimouri et al reported that 1.96% of the cases were positive for herpes (22).

In the majority of the studies, Pap smear results were evaluated to determine the prevalence of STDs. However, the actual measurement of the prevalence of STDs in rural women is challenging due to low participation of these individuals in Pap smear tests.

Former studies pinpointed the unfavorable status of the HIV/AIDS. Contraception is recognized as the main technique to prevent HIV, and one of the most important barriers to prevention is lack of knowledge of individuals regarding various aspects of this disease (23). In a study by Amini et al, only 38% of the participants knew three routes of AIDS transmission (24).

Furthermore, Asaduzzaman et al pointed out that only 63% of the rural women aged 15-49 years had heard about AIDS (25). Their results demonstrated the importance of

Table 2. The Most Common Reproductive Health Needs of Rural Women

Domain	No. of items	Minimum and Maximum Scores of Each Domain (1-2)	Score Calculation Formula According to 0-100 Scale	Mean ± SD of each domain
HIV/AIDS	4	4 to 8	$\dfrac{(total\ obtained\ score - 4) \times 100}{(8-4)}$	47.65 ± 21.63
STDs	6	6 to 12	$\dfrac{(total\ obtained\ score - 6) \times 100}{(12-6)}$	37.24 ± 17.37
Sexual violence	5	5 to 10	$\dfrac{(total\ obtained\ score - 5) \times 100}{(10-5)}$	31.95 ± 21.92
Family planning	3	3 to 6	$\dfrac{(total\ obtained\ score - 3) \times 100}{(6-3)}$	26.99 ± 30.32
History of sexual behaviors	2	2 to 4	$\dfrac{(total\ obtained\ score - 2) \times 100}{(4-2)}$	22.10 ± 26.78
Safe pregnancy	11	11 to 22	$\dfrac{(total\ obtained\ score - 11) \times 100}{(22-11)}$	14.12 ± 10.55

education in this area. However, given the specific texture of rural societies, more in-depth evaluations and serious planning are required.

In addition, it seems that the domain of sexual violence had an unfavorable status. Results obtained by Amiri Majd et al were indicative of violence in 46.5% of the cases in rural societies (abusing: 57%, abused: 36%). Evaluation of demographic characteristics revealed that place of residence in village, young age at marriage, unemployment, history of drug abuse by the spouse, physical punishment during childhood, forced marriage, and remarriage of men and women could predict domestic violence (26). Given the negative impacts of various types of violence on different aspects of life, this issue must be specifically emphasized, especially in the vulnerable group of rural women.

The limitations of this study included the implementation of sampling only in the rural healthcare centers. Moreover, we did not use additional diagnostic tests.

Conclusions
According to the results of the present study, it seems that safe pregnancy had the most favorable status, whereas the worst was HIV/AIDS, indicating the need for more efforts in this area. It should be noted that friendly relationship between healthcare workers and rural women was mostly observed in distant villages. Therefore, this potential must be considered in future planning. In sum, our findings highlighted the need for prioritization of reproductive health needs of rural women.

Conflict of Interests
Authors have no conflict of interests.

Ethical Issues
The study was approved by the Ethics Committee of Shahid Beheshti University of Tehran with the code of IR.SBMU.RETECH.REC.1395.588.

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