

# Evaluation of Female Youth Educational Needs about Reproductive Health in Non-Medical Students in the City of Qom

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## Abstract

**Objective:** To evaluate reproductive health education which is essential to the prevention of sexual risk behavior and its associated adverse outcomes of unwanted pregnancy, AIDS and other sexually transmitted disease in adolescents. Little is known about youth educational needs about reproductive health in Iran. The aim of this study is evaluation of female youth educational needs about reproductive health in non-medical universities in the city of Qom, north central of Iran.

**Materials and methods:** The study was descriptive-analytical type conducted in nine non-medical universities (400 students). A questionnaire was constructed to meet the purpose of the study based on similar studies of knowledge and attitude in different countries, yet it was modified according to Iranian culture and social norms.

**Results:** The findings showed that a majority of participants have moderate knowledge about all components of reproductive health. Approximately, one - third of the participants reported difficulties to discuss about sexual health with mothers. The most of the participants believed insufficient female youth reproductive health services and low knowledge about reproductive health were the main barriers for female youth reproductive health aims.

**Conclusion:** The participants in this study are representatives of an important subgroup in Iran in order to evaluate female youth reproductive health educational needs. The study identified many misconception and negative attitude that need to be addressed. A health education program through parents, peers, mass media campaign and more comprehensive family planning curriculum in universities are recommended to overcome misconception and spread awareness.

**Keywords:** Youth, Reproductive health, Knowledge, Attitude

## Introduction

After the International Conference on Population and

Development (ICPD) held in Cairo in 1994, the terms reproductive and sexual health were widely disseminated among all community sectors. Reproductive health was defined “ as a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters related to the reproductive system and to its

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functions and processes “(1). The definition of reproductive health includes many components, among which are family planning, maternal and child health, prevention of harmful practices, reduction of the spread of reproductive tract infections and other sexually transmitted diseases (STDs), including HIV/AIDS, and provision of treatment for STDs and their complications (2). Adolescent girls are increasingly vulnerable to negative reproductive health outcomes; they are at risk for HIV/AIDS, STDs, violent and unwanted sex, botched abortions, limited access to contraceptives, early or forced marriage, and social isolation (3). The health needs of young people are often inappropriately lumped together with conventional adult healthcare and are never met. Almost 50% of women in the developing world are infertile through sterilization, and another 25% use intrauterine devices (IUDs); neither method is suited for adolescent girls (4). To begin to address the tremendous health needs of adolescents, especially girls, the ICPD proposed increased sex education, sexual and reproductive health services, and technologies protecting against disease, along with broader life opportunities reached by education, vocational training, and employment (5). Reproductive health education is essential to the prevention of sexual risk behavior and its associated adverse outcomes of unwanted pregnancy, AIDS and other sexually transmitted disease in adolescents (6). The delay in receiving formal reproductive health education may account for the early age at which some youth have first sexual intercourse. As many as one in four adolescents reported that they did not receive sex education before they initiated sexual activity (7-9).

Little is known about youth educational needs about reproductive health in Iran. In one survey that was conducted by Simbar M et al.(2003), nearly half of students have not had essential knowledge about reproductive health (10). Therefore, it is essential to assess the reproductive health educational needs of the youth female population concerning different issues related to reproductive health. The aim of this study is evaluation of female youth educational needs about reproductive health in non-medical universities in the city of Qom, north central of Iran. This could then enable us to implement appropriate programs to improve the reproductive health of female youth and fight the spread of HIV infection and other problems related to reproductive health.

## Materials and methods

The study design was descriptive analytical and cross-sectional.

### *Selection of population and study sample*

The study was conducted in the city of Qom, north central of Iran. The study was carried out from March 2008 to March 2009 in nine non-medical universities. The study population was all female students in B.S or lower degree who was educating in non-medical universities.

The sample size was determined based on our primary endpoint, e.g., educational needs which have been evaluated mainly based on knowledge and attitude participants in a pilot study.

Taking into account the twenty percents in non-response for questions, the finally sample size was at least 385 cases.

### *Questionnaire design*

A questionnaire was constructed to meet the purpose of the study based on similar studies of knowledge and attitude in different countries (6, 8, 10). The questions were modified according to Iranian culture and social norms. The questionnaire contained data related to personal information, knowledge of pre marriage consolation (9 questions); knowledge of sexual health (11 questions); knowledge of sexual disease and AIDS (12 questions); knowledge of family planning (12 questions); and attitude toward reproductive health (23 questions). The knowledge question gave three options, "true", "false", "don't know" that were given a 1,-1 and zero scores, respectively. The scores were arbitrarily classified at three levels of knowledge: high (score +14 and above), moderate (score of -14 to +14) and low (score of -14 and less. Ten reproductive health experts reviewed the questionnaire (content validity; panel method). All items used in this study had test-retest reliability of  $\geq 0.60$  (11). The questionnaire was filled through direct interviews.

### *Ethical issues*

The volunteer students who expressed a willingness to participate, after explaining the purpose of the study to each individuals, were selected. The questionnaire was anonymous and participants were assured of the confidentiality of their responses. They were free to accept or refuse to take part in the study.

### *Statistical analysis*

Results were expressed as frequency (percent), mean and standard deviation (SD) for qualitative and quantitative data, respectively. The spearman correlation was used to examination the correlation between knowledge and attitude scores. The data were

analyzed using SPSS, version 13. A value of  $p < 0.05$  was considered statically significant.

## Results

A total 400 respondents were included in the study. The mean age ( $\pm$ SD) was 21.82( $\pm$ 1.14) years old. Among the participants, 281 cases (69.0%) were not married. Approximately, one -third of participants (152 cases, 37.8%) reported difficulties to discuss about sexual health with mothers. There was a positive significant correlation between total knowledge and attitude ( $\rho=0.32$ ,  $p<0.001$ ). A high proportion of participants have moderate level of knowledge about pre marriage consultation (238 cases, 59.2%); sexual health (239 cases, 72.9%); STDs and AIDS (250 cases, 62.2%); and family planning (300 cases, 74.6%). Medical staff was the main source of knowledge for 169 respondents (42%), followed book and magazine (143 case, 35.6%), and mother and relatives (143 case, 35.6%) (Table1). Approximately half of participants (199 cases, 49.5%) believed that the best time for reproductive health is at high schools. Insufficient female youth reproductive health services (222 cases, 55.2%) and low knowledge about reproductive health (222 cases, 55.2%) was the main barriers of the female youth reproductive health aim (Table 2). Less than half of participants (164 cases, 40.8%) reported that the pre-marriage genetic consultation is necessary, only at marriage with relatives. A majority of the participants gave a correct respond about sharing syringe and sharp

instruments (266 cases, 66.2%) as methods of HIV transmission. High proportion (213 cases, 53%) reported the possibility of transmission of HIV from the infected mother to her infant. On the other hand, more than half of participants believed incorrectly that HIV was transmitted by sharing bathroom and toilet (248 cases, 61.7%) and insect bites (232 cases, 57.7%).

Approximately one -fourth of the participants (172 cases, 42.8%) gave incorrect response about lower sexual desire in men with vasectomy. The most of participants (142 cases, 35.3%) believed that use of IUDs is suitable contraceptive method for nulliparous, but the most of participants (270 cases, 67.2%) gave correct response to use of condom is suitable method for prevention STDs and HIV transmission. Among the participants, 159 cases (39.6%) reported that IUDs is not a contraindication for anemic women. More than half of the participants believed that men education about family planning is less important than women (225 cases, 56%), and unmarried youth don't need to education about reproductive health because they haven't sexual relation before marriage (239 cases, 59.5%). Among the participants, 213 cases (53%) reported that reproductive health and sexual health education cause to increase prevalence of high risk sexual behaviors, STDs, AIDS and unwanted pregnancy. More than half of the participants (222 cases, 55.2%) reported that the content of family planning courses in universities should be more comprehensive.

**Table 1:** The knowledge Source of female youth non-medical students related to reproductive health in the city of Qom

Variable	n	%
Friends	129	32.1
Mother and relatives	143	35.6
Medical staff	169	42
Book & magazine	143	35.6
Television	96	23.9
Satellite	49	12.2
Internet	54	13.4

**Table 2:** The barriers against reaching the aims of female youth reproductive health

Variable	n	%
Insufficient of female youth reproductive health services	222	55.2
Low knowledge of female youth about reproductive health	222	55.2
Not suitable circumstance for providing female youth reproductive health	123	30.6
Not female youth access to reproductive health	136	33.6

## Discussion

Also, the family planning courses are necessary in Iran universities, but the present study findings showed that all participants have moderate knowledge about family planning. Therefore, more effective education about reproductive health for non-medical female students is necessary. A national study conducted by Zelnick and Kim (1982) found that adolescents who participated in a sex education courses were more likely to have fewer premarital pregnancies (12).

In this study, more than half of the participants believed that reproductive health and sexual health education cause to increase prevalence of high-risk sexual behaviors, STDs, AIDS and unwanted pregnancy. Kirby(1999) has summarized evaluations of school-based sexuality and HIV education programs covering both abstinence and contraception, and has concluded that some of these programs can delay the onset of intercourse, reduce the frequency of intercourses, decrease the number of partners, and increase condom use (13). Importantly, formal reproductive health education is not associated with sexual activity (14). Formal instruction about birth control has been associated with further knowledge of contraceptive, which in turn, has been associated with contraceptive use at first intercourse, current contraceptive use and ever-use of contraceptive (15). Similarly, Dowson (1986) found that sexually active teens who received formal education on either pregnancy or birth control were more likely to use contraception compared to sexually active adolescent who did not receive instruction in these subject areas (8).

Youth received reproductive health education from multiple sources including formal education course (e.g., school or religious), parents, peers and the media(13, 16). The main sources of reproductive health in this study were medical staff, book and magazines, as well as mother and relatives, respectively. Our results disagree with a study conducted in Saudi Arabia in which friends were the main sources of information for males and booklets for females (17). A few studies have suggested that teen discussion with parents about sex offer no protective influence on adolescent sexual risk behaviors (18-20). However, other research has found that parent –child communicative is associated with less risky sexual behavior among adolescent(21-23). African-American adolescents who discussed with their parents were less likely to engage in sexual

intercourse (24). Other research has found that peer-led education is beneficial (25-29). It will be useful to explore the addictive effects of education by peers in future research on formal and parent reproductive health education. The media is an appealing strategy for improvement of youth reproductive health education because the potential to reach large numbers of youth and to introduce new ideas.

A majority of participants gave correct respondents about the methods of transmission of HIV, especially regarding blood transmission, but there were misconception about the risk from insect's bits and daily activities, which agreed with the findings of other studies (17, 30-31). Knowledge about family planning in this study is at moderate level. In a study conducted by Martins LB et al.(2006), they concluded that the knowledge of contraceptive methods was low in both public and private school students (32).

In this study, the most barriers in providing the aims of female youth reproductive health were insufficient female youth reproductive health services and low knowledge of female youth about reproductive health. Other studies showed the barriers to adolescent access to clinical services include long distance to service locations, unsafe or unavailable transportations, inconvenient hours of operation, concerns about privacy and confidentiality, negative service provider attitude, fear and embarrassment, cost of services, and laws and policies making serving youth difficult(33-34).

Approximately, half of the participants (199 cases, 49.5%) believed that the best time for reproductive health education is at high school. The delay in receiving reproductive health education may account for the early age at which some youth have first sexual intercourses. For African –American adolescents, more extensive contraceptive knowledge and effective contraceptive use at first intercourse were associated with contraceptive instruction prior becoming sexually active (24).

There are several limitations in this study. The sample size was small, which may have limited our ability to detect small effects. Participants were not representative samples of all adolescents and young adults; the results of this study may not be generalizable to other adolescents and young adults of other geographic region or different ethnic backgrounds.

Despite its limitations, our study provides insight into female youth reproductive health educational

needs. The findings of our study suggested that the potential for intervention in medical office that would complement female youth reproductive health education further than parents and formal education sources. By screening of high-risk female youths, practitioners can ascertain the female youth's reproductive knowledge, education background, and correct any deficits or misinformation using discussion, informational pamphlets, and other educational tools. Ideally, practitioners should help parents to discuss a wide range of sexual topics with their children as they ascend into sexual maturity. A health education campaign should be launched to fight misconception, improve knowledge and change attitude towards reproductive health in female youth. Finally, to determine how reproductive health education may function as protective or reactive, prospective studies should investigate the dynamic relationships among parental reproductive health education and female youth reproductive health knowledge and their sexual behavior. These studies will give policy-maker, executing agents and health managers a complete picture of this sensitive subject and will equip with necessary data to set up appropriate health programs concerning female youth reproductive health.

## **Conclusions**

The participants in this study are not necessarily representative of the population of Iran, but they are representatives of an important subgroup of Iran in order to evaluate female youth reproductive health educational needs. The study identified many misconception and negative attitude that need to be addressed. A health education program through parents, peers, mass media campaign and more comprehensive family planning curriculum in universities are recommended to overcome misconception and spread awareness.

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