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A youth-led reproductive health program in a university setting

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Abstract

Background: Reproductive health problems affect youths in all countries. There is an urgent need to enhance youths reproductive health services to provide a healthy life for this group. In this regard, the present study aimed to evaluate the Reproductive Health Peer Education Program based on the opinion of university students.

Methods: This interventional study was conducted in Qazvin University of Medical Sciences through the peer education method. The participants of this study were 24 peer educators who received training in a 40 hour peer educator training course. The peer education program was implemented in the university. In order to evaluate this community- based intervention, 329 students were selected through the stratified sampling method and their opinion was assessed. Descriptive statistical methods were used by SPSS software for data analysis.

Results: The results of the study revealed that peer education was accepted by 64.7% (n= 213) of the students, according to their opinion. The educational priorities of the students were as follows: pre-marriage counseling (78%, n= 166); STI/AIDS (17%, n= 36); and contraception (5%, n= 11). The peer education program was recognized as the most required reproductive health service in the university by 55.3% (n= 118) of the students. They believed that the most important duties of the peer educators were: education (33.5%, n= 71); counseling (30.4%, n= 65); referring to a counseling center (21.6%, n= 46) and referring to a therapeutic center (14.5%, n= 31). Also, the students stated that confidentiality (53%, n= 113), suitable communication (26%, n= 55) and sufficient knowledge (21%, n= 45) were desired characteristics for the peer educators.

Conclusion: According to the students' opinion, peer education could provide suitable reproductive health services and could also be beneficial for reproductive health promotion and might reinforce positive behaviors in youths. Reproductive health peer- counseling is a sensitive process, and it is best to be conducted under the supervision of specialists.

Keywords: Reproductive Health, Peer Education, Youth.

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Introduction

The population of youths aged 20 to 24 years in Iran is more than 8 million; of whom, about 35% study at universities, which can provide training on youth health promotion for the students (1). As young people are at risk of some negative outcomes such as unwanted pregnancy and sexually transmitted infections (STI) due to an unhealthy reproductive life, there is an essential need to provide health services to this group to help them enjoy a healthy re-

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productive life (2, 3). Undoubtedly, university students, like other young groups, are at risk of sexually transmitted infections and related problems. Some studies found that at least 10% of university students have a sexual experience, and another study verified that 10.9% of the university students were infected by STI, 28.4% had experienced pregnancy and 49% aborted their fetus (4-7). The attitudes of peers strongly influence the choices that adolescents make about sexual activity. In some studies, reproduction health peer education and counseling was proposed as an effective health promoting method (8, 9).

A qualitative study which was conducted in Iran's universities of medical sciences proposed peer education as an accessible and acceptable method for youth health promotion (2). The analysis of interventional studies on youth health promotion in Iran revealed that only 20% of youth health projects were conducted in universities, and 7% of them used peer education method (10). Based on the related experiences, the peer-based interventions are known as cost effective methods that lead to considerable results (8, 11, 12). Peers should receive special training and be provided with reproductive health education (13).

As mentioned above, a considerable proportion of Iranian young people are being educated in universities (1). A study conducted in Iran revealed that university students believed that the reproductive health services that are available to them are inadequate (14). The universities, particularly medical sciences universities, are appropriate environments for health promotion interventions. Implementing these interventions not only helps to promote students' health but also could be beneficial in promoting health of other adolescents of the community through educated students.

In this regard, an interventional study based on the peer education method was conducted in Qazvin University of medical sciences. The present study aimed to evaluate the Reproductive Health Peer Education Program based on the opinions of the university students.

Methods

This was a community- based interventional study which was conducted in Qazvin University of Medical Sciences. The deputy of research and technology of MOHME and the institutional ethics committee approved this study. The interventional method used in this study was peer education counseling; and the design of the study was formed according to the community trial, benefiting from partnership, capacity building, intervention, monitoring and evaluation.

Through a participatory research approach, we envolved students and the related key informants including the local policy makers, key religious leaders and other key stakeholders of the reproductive field in a direct collaboration with the research team.

To achieve local advocacy, a comprehensive seminar, on the various aspects of the topic, was held for the university students and other related stakeholders. The view points of the audience were discussed to further clarify and modificy the project. Subsequently, based on the predefined inclusion criteria on RH knowledge, interest, attitude and communication skills and through performing a test and semi structural interview, 24 peer educators were selected among the volunteer students. The criteria of the peer educator selection were charismatic personality, credibility, good communication and ability to establish relationships with other students.

According to the proportion of the target group's gender in the Qazvin University, 15 peer educators were female and 9 were selected from male candidates. Afterwards, the moral competence of the selected students was confirmed by the University Dean. In the final step, the selected peer educators, who were 19-25 years of age received training through a RH peer education course. The participants were studying in several fields of medical sciences, but most of them were medical students. The

Table 1. The agenda of educational course for peer educators in Qazvin Medical Sciences University

Topic	Training Method
First Day	
Opening and Project presentation	Presentation
Reproductive physiology and anatomy	Presentation
Reproductive health	Presentation
Reproductive rights	Presentation & Group discussion
Healthy reproductive life	Team work & Case studies
Psycho-dynamism of consultation	Group discussion
Questions and answers	Q&A
Second Day	
Motivators of healthy life	Presentation & Group discussion
Motivators of healthy reproductive life	Role playing
STI/AIDS	Presentation
Sexual risky behaviors	Team work & Case studies
Confidentially principles	Presentation & Group discussion
Education and counseling principles	Group discussion & Role playing
Questions and answers	Q&A
Third Day	
Peer communication	Presentation & Group discussion
Peer education	Presentation & Group discussion
Peer counseling	Presentation & Case studies
Peer education & counseling practice	Role playing
Unwanted Pregnancy	Presentation
Illegal abortion and its consequences	Presentation & Group discussion
Questions and answers	Q&A
Forth Day	
Problem Solving	Presentation & Group discussion
Problem Solving practice	Role playing
Family planning	Presentation
Contraceptive methods	Presentation & Case studies
Peer education & counseling practice	Role playing
Questions and answers	Q&A
Fifth Day	
Health educational methods in sensitive subjects	Presentation & Group discussion
Health counseling skills in sensitive subjects	Presentation & Case studies
Peer education & counseling practice	Role playing
Clarification of referral way	Presentation
Questions and answers	Q&A
Closing and certifying	Presentation

training course was given by six trainers who were gynecologists, maternal and child health specialists, general practitioners, psychiatrics and psychologists. The training course consisted of three main topics: reproductive health, peer education and counseling and communication skills. The agenda of this training course is present in Table 1.

This course was highly interactive, involving group discussions, brain storming, role playing and team work. During the training course, the trainers shared their lessons learned with their peers. Trained peer educators created an educational and counseling core that was named MADAD. In Persian, this name means "to help" which is associated with the aim of peer counseling.

By holding another complimentary seminar, the trained peer educators were introduced to the university students. Then they provided formal and informal education and counseling services to the students through the peer education method for a period of nine months, with the consideration of ethical issues. It is noteworthy to mention that due to the importance and sensitivity of the issue, the practice intangibly was monitored and controlled by the scientific committee of the project; and in complicated cases the peer educators were advised to refer the cases to appropriate health service units.

To evaluate the RH peer education program, data collection was performed using

stratified sampling. The students' list was obtained from the vice-chancellor for education of the university. According to this list, the students were stratified based on their educational field. The students were selected randomly with proportion to size from each stratum. The proportionate allocation of this sampling depended on each student's proportion to the total population of the students. Using this approach, 329 students were recruited from various medical sciences fields based on stratified sampling to respond to the validated questionnaire.

Participation in this survey was voluntary, and self-administered questionnaires were filled anonymously by the students after the researcher explained the aim of the study to the participants and obtained their consent.

The first draft of the questionnaire was developed based on the literature review and the opinion of the stakeholders. Then the validity of the questionnaire was confirmed through the peer-reviewed literature by eight experts, and the test-retest was used to confirm its reliability (Cronbach's alpha: 0.9). The final questionnaire included 48 closed questions that covered demographic data, RH beliefs and participants' opinion about RH peer education programs.

The collected data were processed using SPSS software version 20 and data analysis was done by descriptive statistics, chi–squared test and fishers test. Statistical significance level was set at $p< 0.05$ (two-tailed).

Results

A total of 329 university students participated in this study; most of whom were female (87.5%, n= 288) and single (88.6%, n= 286). The mean (± SD) age of the participants was 20 ± 2/04 years, and the median age was 22 years. Most of the participating students were aged 20-24 years (89.8%, n= 295). Table 2 demonstrates the demographic characteristics of the participants.

Based on the analysis of the participants' RH beliefs, 81.4% (n= 268) of them thought that they are never threaten by the risk of unwanted pregnancy, STI, and

Table 2. Participant's demographic characteristics

Characteristics		N	%
Gender	Female	288	87.5
	Male	41	12.5
Age(years old)	≤ 19	12	3.6
	20-24	295	89.7
	25-29	19	5.8
	≥30	3	0.9
Marital Status	Single	286	88.6
	Married	34	10.4
	Divorced	2	0.6
	Widowed	1	0.4
Religion	Muslim	327	99.4
	Other	2	0.6
Educational Course	Medicine	30	9.1
	Dentistry	21	6.4
	Midwifery	31	9.5
	Nursing	79	24.1
	Operative technician	39	11.9
	Laboratory Science	22	6.7
	Professional Health	39	11.9
	Public Health	7	2.1
	Environment Health	28	8.5
	Anesthesia	13	4.0
	Health Services Management	19	5.8
Educational Level	First year	32	9.6
	2nd year	171	52.8
	3rd year	39	11.8
	4th year	39	11.8
	5th year	46	14

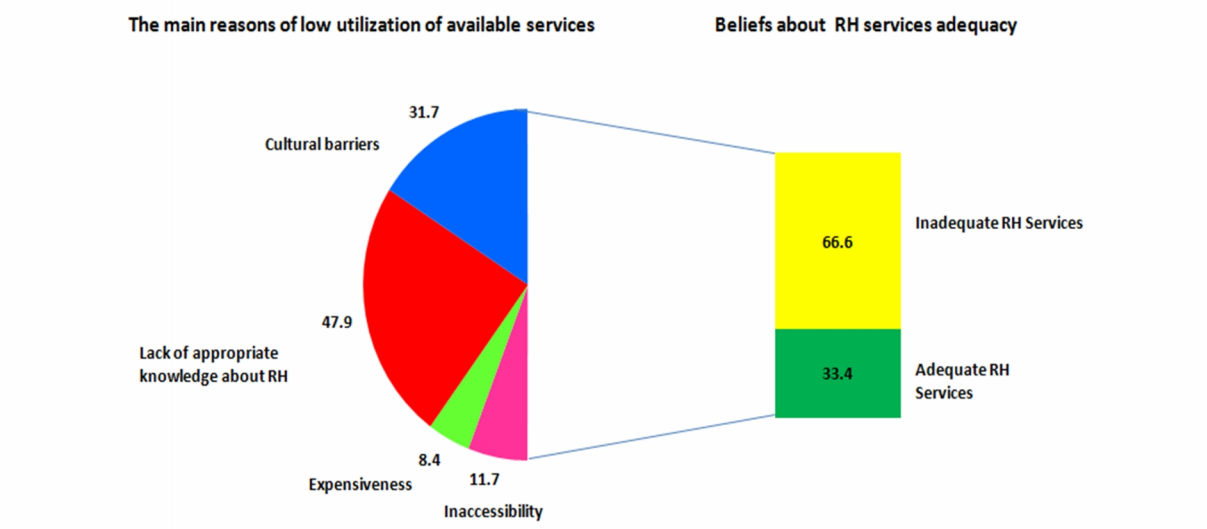

Fig. 1. The main reasons of available services' low utilization (In percent)

HIV/AIDS. Surprisingly, 78.9% (n= 211) of them said that unwanted pregnancy or STI/AIDS have considerable negative effects on different aspects of the person's occupational and social life. The students who were studying at the primary levels felt the lowest risk of unwanted pregnancy and STI/AIDS students (p= 0.04).

Of the participants, 66.6% (n= 219) mentioned that youth RH services are inadequate and the main reasons of the low utilization of the available services were lack of appropriate knowledge about RH, cultural barriers, inaccessibility and expensiveness (Fig. 1).

Of the students, %74.5 (n= 163) said youth reproductive health services are inadequate and believed that such services as MADAD are needed in universities.

This study showed that 73.6% (n= 242) of the university students believed that they are seriously responsible to their peers' health. Data analysis demonstrated that about half of the participants (125) have been well informed about the projects' goals and process (88% female and 12% male). It is noteworthy to mention that the information source of 57% (n= 71) of the students was their friends and 19% (n= 24) were informed through the introducing seminar of MADAD project.

In response to this question: "What is the duty of the MADAD group?" They responded that the most important duties of peer educators are education (33.5%, n=42); counseling (30.4%, n= 38); referring to counseling center (21.6%, n= 27) and referring to a therapeutic center (14.5%, n=18).

According to the participants' opinion, the most advantage of MADAD project was creating the feeling of empathy among the peers due to their similar conditions (60 %, n= 197). Another point that was mentioned by the students was knowledge promotion through interactive communication with educated peers.

The opinion of the students about peer educators (MADAD group) practice is presented in Table 3.

In this study, 74.0% (n= 92) of the students who were familiar with MADAD group believed that peer educators have been selected appropriately and they were more successful in educating rather than counseling. The students were worried about disclosure of their secrets (39.0%, n=49) and 13.0% (n= 16) of them believed that peer educators did not have enough experience for counseling.

Most of the students (64.7%, n= 81) who were familiar with the MADAD project approved peer education. This belief was expressed in informed participants more

Table 3. Opinion of students toward peer educators (MADAD) practice

Questions	Weak		Moderate		Strong	
	N	%	N	%	N	%
Peer educators are appropriate.	33	26	53	42.7	39	31.3
I satisfied from their communication.	34	27.2	45	36	46	36.8
I satisfied from their educational practice.	44	35.2	52	41.6	29	23.2
I satisfied from their counseling practice.	51	40	37	30	37	30
I satisfied from their confidentially.	33	25.6	29	23.6	63	50.8
Peer educators are successful in RH promotion.	26	19.8	55	44.5	44	35.7

than the others (64.7% vs. 44.8%; p= 0.02). The preferred characteristics of the peer educators which were mentioned by the participants were faithfulness and confidentiality (53.0%, n= 174), suitable communication (26.0%, n= 85) and adequate knowledge (21.0%, n= 69). Also, the students preferred that the peer educators would be married (63.4%, n= 208) and highly educated (50.6%, n= 166).

Finally, pre- marriage counseling, STI/AIDS, and contraception methods, with respectively following required rates; (78.0%, n= 166), (17.0%, n= 36), and (5.0%, n= 11) were the three top educational priorities.

Discussion

Based on the Millennium Development Goals (MDGs) and WHO proposed action area, (15-17), we conducted a peer interventional study and made evaluations and provided evidence for the policy makers by encouraging the participation of the key stakeholders (18, 23).

The inadequacy of youth RH services was revealed through this interventional study. Our health system focuses on children and adults, but attending to the needs of adolescents and youths should also be considered (19). Some countries such as Nepal suffer from this problem as well. Therefore, creating youth- friendly services is also essential (24). Similar to our study's results, some studies found that the students agreed with the necessity for RH education (23, 25). The results of the related studies revealed that normal sexual behavior, psychological aspect of sexual health and contraception are the main topics needing to be addressed (23). Nonetheless, our study's participants mentioned pre-marriage counseling, STI/AIDS and contraception as the main topics. This difference between our finding and that of other studies may be due to cultural differences (26).

Among the youth community, the use of appropriate communication channel is a determining factor in effective education and counseling. Buckley found that mass media and peer information networks were the most utilized resources in RH promotion (27). In this study, peer education was positively regarded by the participants, but they believed that RH counseling requires sufficient experience and it is preferable that the peers refer the clients to referral counseling centers.

Peers have a level of trust and comfort between themselves that allows them to have open discussions about sensitive topics, but confidentiality is a very important issue which should be seriously considered (28). The issue of confidentiality makes peer counseling a double- edged sword. Considering this aspect of peer counseling, our participants believed that the most important characteristic of peer educators should be confidentially. Appropriate selection of peer educators and acceptance by the target group is the key in the success of interventional programs (29).

Developing an educational course to train peer educators, better understanding of university students' educational needs, and obtaining real feedbacks of the students as the main key stockholders were great achievement of this study. However, we faced some limitations such as peer educators' different capabilities and skills and loss of some peer educators due to upgrading to high level courses or graduation.

We suggest that peer educators be supported by students' counseling centers at

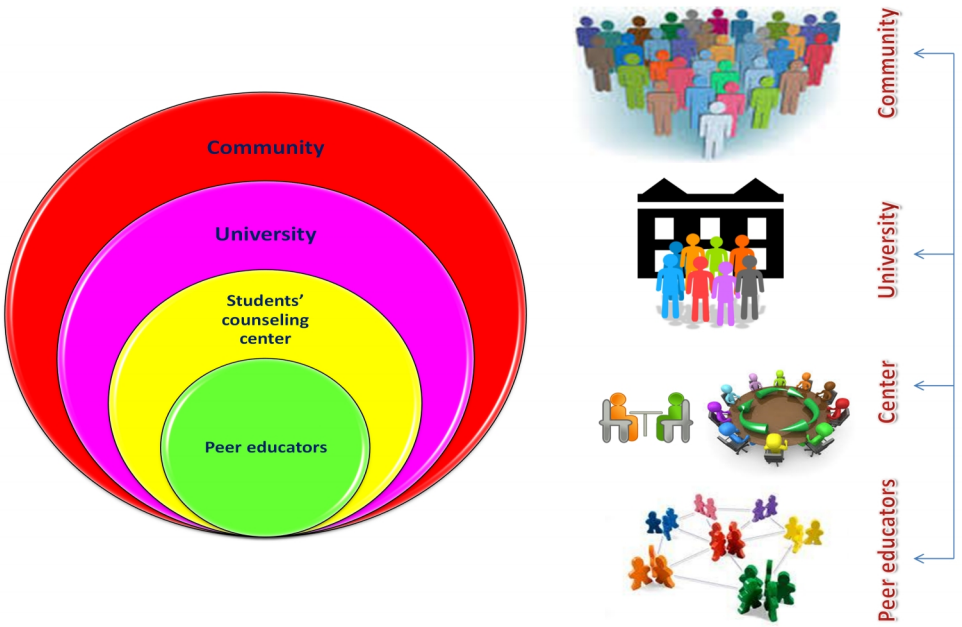

Fig. 2. Schematic scheme of peer educators' connections to other sectors

universities. Peer educators could help their peers formally and informally, but they should do this important task under the supervision of the specialists. Fig. 2 shows the schematic scheme of peer educators' connections to other sectors of the youth community.

Conclusion

Through this evaluation study, it is concluded that RH peer education is an accepted method among university students, but peer counseling should be done with conservative considerations. This finding provide evidence for future interventional planning, exploration of implementation methods, quality promotion of community-based studies and present reliable information for health authorities and policy makers on youth health promotion.

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