

Challenges of Premarital Education Program in Iran

Zahra Bostani Khalesi¹, Masoumeh Simbar^{2*}

¹Department of Midwifery, Assistant Professor, School of Nursing and Midwifery, Guilan University of Medical Sciences, Rasht, Iran

²Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Professor, Department of Midwifery and Reproductive Health, ShahidBeheshti University of Medical Science, Tehran, Iran

*Corresponding author: Reproductive Endocrinology Research Center, Research Institute for Endocrine Sciences, Professor, Department of Midwifery and Reproductive Health, ShahidBeheshti University of Medical Science, Tehran, Iran
E-mail: msimbar@sbmu.ac.ir

Received: 2015May 10; Accepted: 2015October 16

Abstract

Introduction: Divorce, unwanted pregnancies and failed marriages inflict severe mental, emotional, physical and financial damages on individuals, families and the community. Meanwhile, premarital education programs are considered one of the effective factors to prevent such problems.

Objective: The present study aimed to determine challenges of premarital education program in Iran.

Materials and Methods: This systematic review was conducted by searching the PubMed, Elsevier, Magiran, IranMedex, SID Irandoc, Medlib, and Google scholar databases in order to find papers in Farsi and English with the keywords of couples, training, consultation, premarital, Iran, health program, preparation for marriage, educational needs, and divorce. We reviewed different case-control, descriptive, and descriptive-analytical studies on premarital education. Of the 28 published papers on premarital education, 17 articles met the inclusion criteria.

Results: Factors and challenges associated with premarital education can be divided into two main categories: policy making challenges and operational challenges.

Conclusion: The results showed that marrying couples need the knowledge and skills that are not provided in the current premarital education. Complete execution of premarital education in Iran is possible only in the light of awareness, sufficient resources, considering the needs of the target group, and the presence of an accountable system.

Keywords: Marriage, Education, Iran

Introduction

The efforts for strengthening marriage in Iran have focused on premarital education in recent years [1]. Premarital education is a great opportunity to increase couples' knowledge about their role in establishing a proper and fruitful relationship and influence their attitude and behavior [2]. Premarital education is a relatively new approach for the prevention of

dissatisfaction with and failure in marriage [3] and is based on the concept that the couple can learn how to have a successful and stable life [4]. Such education covers a wide range of knowledge about the purposes of marriage, understanding the psychology of men and women, sexual health and skills required for marital life [5].

Premarital education dates back to 1931 [6]. Such education was ratified in Iran in 1991 and the first educational booklet called “Smaller Families: More Prosperous, Healthier” was published in 1993. Subsequently, all health centers in provinces were assigned to offer premarital education and the head of marriage registrar offices were obliged to register marriages only if they had health certificates indicating undergoing necessary lab tests and passing educational courses. Currently running as Marriage, and emotional and social relationships, this program is a source of education with the aim to promote couples’ knowledge of Islamic ethics, law, their mutual rights, mental health, communication principles and skills, prevention of diseases and healthcare centers [7]. Although family experts emphasize the efficacy of education, the premarital education program is facing challenges in Iran [8], and many needs of young couples are not met yet [9]. Operational challenges such as non-need-based educational content, insufficient duration and improper physical space have exposed the program to many difficulties and reduced its efficacy [10]. Policy making and proper execution of the premarital education can somewhat diminish these problems and facilitate their success [11]. Premarital education should be executed in a coordinated, satisfying and high quality manner [12], because participating in these educational programs might be the couples’ first encounter with the healthcare system and their satisfaction with the services plays an effective role in their reuse of healthcare services [13]. In order to achieve a comprehensive and effective premarital educational program, like other health programs, this educational program should be investigated, and its quality should be regularly surveyed to remove its weaknesses and update it [14]. Many studies have been conducted on premarital education in Iran, however, lack of a disciplinary and analytical knowledge of the results of the studies and their

applications have led to incomplete actions and their limited effects. The results of the present review can provide valuable information as the basis for strategies and interventions to promote premarital education in Iran. Therefore, this study was conducted to classify the findings of studies over the past two decades on premarital education in order to identify the challenges of the current premarital education program.

Materials and Methods

A systematic review was conducted by searching the databases of PubMed, Elsevier, Magiran, IranMedex, SID Irandoc, Medlib and Google scholar to find articles in Persian and English language. The following keywords were used to find resources related to research purposes: couples, training, premarital, Iran, health program, preparation for marriage, educational needs, and divorce. The present study was conducted to have a systematic review of studies on the premarital education and find its challenges. The primary criterion for selecting papers was the relationship with the premarital education program and having one of the key words in the title. The inclusion criteria were as follows [1]: having Iranian authors and having been published in a local or foreign journal [2]; addressing one of the areas of educational needs, effectiveness of education, or a comparison of two premarital educational contents (including special education content and educational content approved by Ministry of Health) [3]; publication time from the initiation of the program in Iran (1993) until the time of this review (2016) [4]; local papers published in scientific journals.

Quality Assessment of the Papers

Two reviewers independently searched for papers. After finding the papers in the databases using the above-mentioned keywords, all papers were evaluated by

two raters using the Critical Appraisal Checklists Skill Program (CASP) standard check list. Any disagreements between the raters were reconciled by mutual agreement.

The relevance of the papers to the purpose of this study was assessed in three stages for the titles, abstracts, and full text of the papers.

After the above steps, the papers covering the following objectives were selected:

In descriptive studies:

1. Assessing the quality of the current premarital education program
2. Assessing the content of the current premarital education program
3. The views of marrying couples about the current premarital education program
4. The views of experts about quality of the current premarital education program
5. Needs assessment of marrying couples

6. Assessing the degree of satisfaction of marrying couples with the current premarital education program

In interventional studies:

1. Assessing the effectiveness of the current premarital education program
2. Comparing the effectiveness of different premarital education programs
3. Strategies and interventions promoting premarital education programs

In the first stage, 28 papers were found in the databases, 11 of which were excluded due to not meeting the inclusion criteria, lack of transparency in the methods, or just working on one specific aspect of premarital education such as reproductive health (Table 1). Among the published papers, only 17 papers met the inclusion criteria (Fig. 1).

Table 1. Results of searching the databases

Article deleted	The number of articles	Database
5 articles, because the paper was unrelated aimed	15	SID: Couples", " training ", " premarital", " Iran", " health program", " preparation for marriage, "" educational needs "and" divorce "
11 articles, duplicate article	12	Magiran: Couples", " training ", " premarital", " Iran", " health program", " preparation for marriage, " educational needs"and "divorce "
11 articles, duplicate article	11	Iran Medex: Couples", " training ", " premarital", "Iran", " health program", " preparation for marriage, ""educational needs "and"divorce "
2 articles, because the paper is unrelated aimed	6	Pub Med: Couples", " training ", " premarital", " Iran", " health program", " preparation for marriage, "" educational needs"and"divorce "
2 articles, because of addressing only one issue	4	Elsevier: Couples", " training ", " premarital", " Iran", " health program", " preparation for marriage, "" educational needs "and" divorce "
11 articles, duplicate article	11	Iran doc: Couples", " training ", " premarital", " Iran", " health program", " preparation for marriage, "" educational needs "and" divorce "
12 articles, duplicate article	12	Med lib: Couples", " training ", " premarital", " Iran", " health program", " preparation for marriage, "" educational needs "and" divorce "
1 article, because of the lack of transparency in the method	19	Google scholar: Couples", " training ", " ", " premarital", " Iran", " health program", " preparation for marriage, " educational needs "and" divorce "

As many Persian journals are indexed in most Iranian databases, many Persian papers were repeated in various databases.

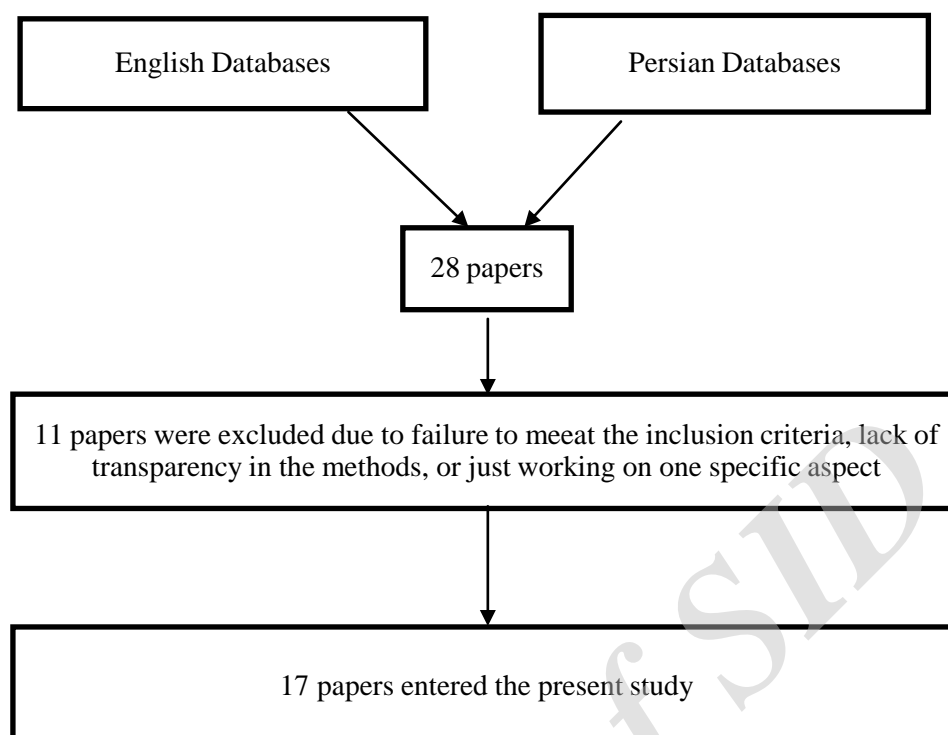


Figure 1. The process of assessing the studies

Results

The published studies information along with objectives, author and the number of participants, methods, and findings are presented in Table 2 (intervention studies) and Table 3 (non-intervention studies).

The study findings on challenges of premarital education program are presented in Table 4. The challenges are classified in two main categories of policy making and operational challenges and 6 subcategories of lack of evidence-based policy, financial resource management, human resource management, inattention

to indigenous and regional cultures, and operational challenges including challenges in structure, content, educators and monitoring and assessment systems. Categories were inductively extracted from the results of the studies. In this approach, the researcher studied the results of the studies several times without considering any predetermined categories and extracted the subcategories from the study data based on the questions and objective of the study. Then, main categories were formed through the semantic similarities of subcategories.

Table 2. Intervention studies on the premarital education program from 1993-2015

Purpose	Authors	Participants	Intervention	Consequences
The effect of premarital counseling on girls' knowledge	2004 Motamedi et al.	116 girls preparing to get married	3 sessions of education and completing questionnaires before and after the intervention	The knowledge score of the participants before and after education had a significant difference
The impact of education on sexual health of couples attending marriage counseling centers in Western Azerbaijan province	2004 Moshiri et al.	220 marrying couples	Completing questionnaires before and after education	Knowledge of couples about sexual health significantly increased after education
The effect of premarital counseling with particular educational content on the observing sexual health	2005 Pak Gohar et al.	46 marrying couples in intervention and control groups	Three 1-hour sessions of education and completing questionnaires before and after the intervention	Observing sexual health had a statistically significant difference between the intervention and control groups
The effect of premarital counseling on girls' knowledge	2005 Haji Kazemi et al.	600 girls preparing to get married	Four 2-hour sessions of education and completing questionnaires before and after the intervention	Counseling program was effective on girls' knowledge in the field of reproductive health and contraceptive methods, but not on the importance of using family planning methods
The effect of premarital education and counseling program on knowledge and attitudes of couples	2009 Ramezani et al.	250 marrying couples	12 sessions of education and completing questionnaires before and after the intervention	Although the current program is effective, it needs fundamental revision of the content
The effect of premarital education on the students' attitudes and expectations from marriage	2009 Salehi et al.	220 couples in two groups of intervention and control	4 training sessions and completing questionnaires	The premarital education had positive effects on students' attitudes and expectations from marriage
The effect of premarital education and counseling program on knowledge and attitudes of couples	2009 Ramezani et al.	250 marrying couples	3 sessions of education and completing questionnaires before and after the intervention	The knowledge score of the participants before and after education had a significant difference
The effect of premarital education on marrying students' expectations from marriage	2009 Omidvar et al.	46 marrying couples	7 sessions of education and completing questionnaires before and after the intervention	The expectations of marrying students from marriage were significantly improved after education
The effectiveness of the educational program of premarital counseling centers based on the theory of reasoned action	2013 Hazavehei et al.	200 marrying couples	5 sessions of education and completing questionnaires before and after the intervention	The effectiveness of conventional premarital education courses was very low
The effect of relationship enriching program on marital adaptability of the couples	2013 Nazari et al.	12 couples in intervention and control groups	4 sessions of education and completing questionnaires	Adaptability of the couples in intervention and control groups had a statistically significant difference and it was higher in the group receiving education
The effect of education on knowledge and attitude of marrying couples	2013 Moody et al.	250 marrying couples	3 sessions of education and completing questionnaires before and after the intervention	The couples' health knowledge increased significantly after education

Table 3. Non-intervention studies on the premarital education program from 1993-2015

Purpose	Authors	Participants	Type of study	Findings
A comparison of educational needs of men and women preparing for marriage in the Molla hadi premarital counseling center in Isfahan	2004 Davazdahemami et al.	300 marrying couples	Descriptive-comparative	The need to enrich the educational content, and scientific and professional improvement of the educators
Determining educational needs of premarital counseling classes according to the couples	2006 Abbaspoor et al.	120 marrying couples	Descriptive - cross-sectional	The need for more educational topics and increasing the number and duration of classes
The effect of premarital counseling on marital satisfaction	2007 Narimani et al.	74 couples	Correlations	The premarital counseling had a positive effect on marital satisfaction
Determining the quality of premarital counseling classes from the perspective of couples presenting to Shahid Fayyazbakhsh health center of Gonabad, Iran	2010 Salarvand et al.	102 marrying couples	Descriptive-analytical	The need for more educational materials and increased number of sessions
Determining premarital educational needs according to the couples	2010 Mokhtari et al.	212 marrying couples	Descriptive-analytical	The need for education in both groups was above average in all areas
Determining the quality gap of premarital education and counseling program according to the couples	2010 Ramezankhani et al.	600 marrying couples	Descriptive-analytical	Due to the negative gap between expected and received services, it is necessary to improve the quality of premarital education and counseling program
Educational needs assessment related to sexual and reproductive health of young people before marriage	2011 Poormarzi et al.	225 marrying couples	Descriptive	Insufficient available educational content for premarital counseling classes with the highest need in healthy sexual relationships
Educational needs assessment for premarital counseling classes	2011 Khaleghnejad et al.	369 marrying couples	Descriptive - cross-sectional	The need for education was above average in all areas
Analysis of sexual-health-related beliefs among marrying couples by using the Health Belief Model	2014 Barati et al.	200 marrying couples	Descriptive-analytical	Development of educational packages tailored to the needs of couples and removing obstacles for healthy sexual behaviors is essential in order to promote the knowledge and modify sexual-health-related beliefs
The views of couples about premarital classes in Tabriz	2014 Mohebi et al.	236 girls about to getting married	Descriptive-analytical	Health policymakers must work based on need and evidence
Sexual health educational needs of marrying couples: A qualitative study	2015 Bostani et al.	38 marrying couples	Qualitative	The educational needs of couples in four dimensions: Content, educator, technology and education time and setting

Table 4. Premarital education program challenges from 1993-2015

Main categories	Sub-categories
Policy making challenges	<ul style="list-style-type: none"> • Lack of evidence-based policy making • Financial resource management • Human resource management • Little attention to issues of local and regional cultures
Execution challenges	<ul style="list-style-type: none"> • Structure • Content • Educators • Lack of a monitoring and evaluation system

Discussion

Reviewing the relevant studies led to the extraction of the most important challenges in two main categories of policymaking and operational challenges.

Evidence-based policymaking and the need to strengthen policy making in Iran's healthcare system and increasing its role in reforms have been continuously emphasized in Iran in recent years [7]. According to marrying couples, evidence-based policy making is the most important step in quality premarital programs [15]. The lack of the policy makers' direct contact with marrying couples have led to improper prioritization [10], which has failed the services to meet the couples' needs, hence creating a gap in service quality [16]. Policymakers should always monitor the structure and functions of the healthcare system and evaluate its results with respect to the objectives, efficiency, effectiveness and many other factors and thus identify problems in different parts and make policies based on the available evidence [17]. Better use of evidence in premarital education program policy making can reduce the incidence of divorces and increase marital satisfaction [18].

One of the challenges of premarital education program in Iran is the insufficient allocation of financial resources [16, 19, 20]. Today, the management of financial resources is the most essential tool for achieving the goals and effectiveness of programs in any organization [21]. Management of financial resources is one of the four fundamental

functions of the healthcare system [22] and optimal provision of health services needs sufficient and justice-based financial resources [23]. Fair allocation of resources is one of the most important challenges of any healthcare system and the main part of the decision-making process, which can hinder the execution and success of organized empowerment healthcare programs [24].

Human resource management and its importance in educating marrying couples were considered in some studies in the present review [25 –29]. For example, Salarvand et al. believed that cooperation between human resource managers and executives of premarital classes was one of the basic indicators of increased ability to effectively educate them [30].

Human resources are one of the major components of healthcare system [31]. Given the importance of human development and that human is considered the axis of development, human resources will have a great importance [32] and the performance of any system depends on a mix of skills, availability, and performance of its human resources [33]. Quality, efficiency, effectiveness and accessibility of services cannot be achieved without adopting policies that guarantee appropriate number of high quality and motivated forces at proper places, time and costs [34].

Some studies mentioned the lack of attention to indigenous and regional cultural issues in premarital education [19, 26, 35]. Cultural factors also affect the

results of premarital education [36]. For example, understanding the ineffectiveness of such education might need understanding the cultural traditions of that city or society [37]. These are factors that health sector executives cannot easily change [38].

The findings of this review showed that premarital education programs in Iran need structural reforms [20, 21, 26]. Inappropriate dates, inadequate duration, failure to discuss the raised issues [12, 15, 19], and few number of sessions were the structural challenges of the premarital education program [16]. Other structural challenges raised in the papers were lack of favorable physical facilities including building, classrooms, seats, ventilation [15, 16, 19], new equipment, and lack of using educational media by the educators [12, 16]. In addition to engaging more senses of the students, educational media diversify learning conditions, consolidate and preserve the learned materials for a longer period, and change the attitudes [39].

The results of most of the reviewed papers in this study showed that the content of premarital education classes was not adequate [19, 20, 26], and most marrying couples reported inadequate knowledge of sexually transmitted diseases [27]. About 320 million adolescents and young people under 30 years old are annually infected with sexually transmitted diseases in the world and one person is infected with HIV every 6 minutes [40]. Couples asked for courses in the field of psychology such as communication, coping with emotions and stress, decision-making, and problem solving skills [12, 19].

Other weaknesses of the premarital education program were the emphasis on lecture method [12, 16], limiting the educators to brief presentations [20], improper presentation of educational material, and not observing educational principles such as lack of an organized educational program [16] and low-skilled educators [12, 20]. Merzel and Afflitti also

considered training healthcare providers and specialists essential to the development of health education programs [41].

Since marriage changes the nature of people's needs and lack of information or misinformation increases the risk of family and marital problems, premarital education is absolutely necessary for couples. Reviewing several studies showed that many of these needs are not met in the current premarital education programs, hence, the policy making and execution of the program needs a fundamental reform. Policy making in programs should be evidence-based and efficient allocation of financial and human resources can improve the premarital program. In terms of planning and execution, the structure, content, and educators should be selected based on the needs of the target group. The results of this study will allow us to design programs to improve the premarital education program based on the perceived needs and sexual health of the couples.

References:

1. Jahanfar S, Molaenezhad M. Textbook of sexual disorders. 2th Ed. Tehran: Salami; 2014. [Persian].
2. Wright HN. The premarital counseling handbook. 3th Ed. Chicago: Moody Press; 2009.
3. Stanley S, Trathen, D, McCain S, Bryan M. A lasting promise: A Christian guide to fighting for your marriage San Francisco. 5th Ed. USA: Jossey-Bass Publishers; 2013.
4. Wright HN. Before you remarry. Eugene Oregon. USA: Harvest House Publishers; 2009.
5. Dennis R. Interviewing Your Daughter's Date: 8 Steps to No Regrets. Little Rock: Family Life Publishing; 2007.
6. Wright HN. The Premarital Counseling Handbook. Eugene Oregon. USA: Harvest House Publishers; 2007.
7. Parizadeh M, Khadivzadeh T. Premarital Health. In: Hatami H, Razavi M, Eftekhari Ardabili H, Majlesi F, Seyed nozadi M, Parizadeh M. Textbook of public health. 3th Ed. Tehran: Arjmand; 2013.p. 1223-87. [Persian].
8. Navabinejad SH. Marriage Counselling and Family Therapy. 4th Ed. Tehran: Anjomane Olya va Morabian. 2001. [Persian].

9. Khoshbin S, Andalib P, Nazari B. National program for family Planning & population. Tehran: UNICEF; 2002. p. 7-18.
10. Rafaei shirpak KH. The book of Public Health. 3th Ed. Tehran: Arjmand. 2013.p.1016-49.
11. Motamedi B, Soltanahmadi Z, Nikian Y. Effect of pre-marriage counseling on girls' knowledge. KAUMS Journal.2004; 8(1):101-107. [Persian].
12. Khaleghinejad K, Abbaspour Z, Afshari P, Attari Y, Rasekh A. Educational Needs in Premarital Counseling: Viewpoints of Couples Referring to Health Care Centers in Mashhad. Iranian Journal of Medical Education. 2008; 8(2): 247-252. [Persian].
13. Ferdusi S, Majd M, Motlag M, Ahadian R, Andalib P. Marriage and social relationships, marital relationships, family planning. 2th Ed. Tehran, Arvij : 2010.p. 9 -63. [Persian].
14. Kavooosi S M R, Saghai A. Customer Satisfaction Measurement Methods. 2nd Ed. Tehran: Ameh publications; 2005. [Persian].
15. Mohebbi P MP, Kamalifard M, Atri SB, Safaeiyan A, Alizadeh K. Clients' Viewpoints about the Quality of Services in the Premarital Counseling Classes in Tabriz Health Centers. International Journal of Preventive Medicine. 2014; 5(3): 365.
16. Ramezankhani A, MohammadiG, Akrami F, Ghanbari Sh, Arab Alidousti F. Quality gap in premarital education & consultation program in the health centers of Shahid Beheshti Medical University. Pejouhandeh. 2011; 16(4):169-77. [Persian].
17. Lavis J, Permanand G, Oxman D. Guide SUPPORT Tools for evidence-informed health Policy making (STP) 13: Preparing and using policy briefs to support evidence-informed uk. Policy making. Health Research Policy and Systems. 2009; 7(1):1-9.
18. Vural BK, Temel AB. Effectiveness of premarital sexual counseling program on sexual satisfaction of recently married couples. J sexual Health. 2009; 6(3): 222-232.
19. Hejazi F, Ramezani F, Eftekhari M, Rostami M. Evaluation of pre-marriage counseling in three province of Iran. Proceeding of the congress of sexual health in reproductive health: Tehran: Shahid Beheshti University of Medical Sciences; 2005. [Persian].
20. Bostani Khalesi Z, Simbar M, Azin A, Zayeri F. Public sexual health promotion interventions and strategies: A qualitative study. Electronic Physician. 2016; 8(6):2489-2496.
21. Barnett J, Taylor A, Hodge G, Links M. Resource allocation on the frontlines of public health preparedness and response: report of a summit on legal and ethical issues. Public Health Rep. 2009; 124(2):295-303.
22. Kuschner G, Pollard B, Ezeji-Okoye C. Ethical triage and scarce resource allocation during public health emergencies: tenets and procedures. Hosp Top. 2007; 85(3):16-25.
23. Daniel J, Jonathan M. Links Resource Allocation on the Frontlines of Public Health Preparedness and Response: Report of a Summit on Legal and Ethical Issues. Public Health Rep. 2009; 124(2): 295–303.
24. Dausey J, Moore M. Using exercises to improve public health preparedness in Asia, the Middle East and Africa. BMC Res Notes. 2014; 27 (7):474.
25. Davazdahemami Sh, Ghasemi S, Ehsanpour S. Comparison of premarital educational needs among Iranian would be spouses in Molahady center. Journal of Nursing and Midwifery Research. 2004.29. [Persian].
26. Bostani khalesi Z, simbar M, azin S A. Explaining sexual health education needs of pre-marriage couples: A Qualitative Study. Journal of qualitative Research in Health Sciences. 2015; 4 (3):290-303. [Persian].
27. Farnam F, Pakgozar M, Mir-mohammadali M. Effect of pre-marital counseling on marital satisfaction of Iranian newlywed couples, a randomized controlled trial. Sexuality & Culture. 2011; 15: 141-152.
28. Pakgozar M, Mirmohammadali M, Mahmoudi M, Farnam F. Effect of pre-marriage counseling on the sexual health. HAYAT. 2006; 11(3-4): 39-46. [Persian].
29. Amycoen C.Young people's reproductive health needs neglected. Population Action International.2010; 19.320-8.
30. Salarvand Sh, Bahri N, Heidary S, Khadive M. Assessing Quality of the Pre-marriage Family Planning Consulting Classes: Viewpoints of Participant Couples. Journal of Isfahan Medical School. 2011; 29(128): 138-146. [Persian].
31. Regan S, MacDonald M, Allan D, Martin C. Public health human resources: a comparative analysis of policy documents in two Canadian provinces. Hum Resour Health. 2014; 12: 13.
32. Joint Task Group on Public Health Human Resources. A Pan-Canadian Framework for Public Health Human Resources Planning. Ottawa: Government of Canada; 2005.
33. Ministry of Health Services. A Framework for Core Functions in Public Health: Resource Document. Victoria BC: Government of British Columbia; 2005.
34. Moodi M, Miri M, Sharifirad G. The effect of instruction on knowledge and attitude of couples attending pre-marriage counseling classes. J Educ Health Promot. 2013; 2: 52.
35. Zargar F, Foruzandeh E, Omidi A. Psychological Health and Marital Adjustment

- in Iranian Employed Veterans and Veterans Receiving Disability Pension Iranian. Red Crescent Medical Journal. 2014; 16(7).
36. Haji Kazemi E, Mohammadi R, Hosseini F. Study on the Effect of Premarital Health Counseling on Girls' Awareness. J Iran Univ Medical Sci. 2006;52:93-100. [Persian].
37. Asadi-Lari M, Sayyari AA, Akbari ME, Gray D. Public health improvement in Iran-lessons from the last 20 years. Public Health. 2004; 118: 395-402.
38. Moshiri Z, Mohaddesi H, TermeYosefi O, Vazife Asle M, Moshiri S. Survey of Education effects on sexual health in couples referred to marriage consultationcentersin West Azarbaijan. J Urima Nurs Midwifery Faculty. 2004; 3:135-42.
39. Farhang kermani F, Mehmandoost N. The role of coeducational instruments in the effectiveness of education. Behvarz. 2009; 20(2):7-9. [Persian].
40. Maartens G, Celum C, Lewin SR. HIV infection: epidemiology, pathogenesis, treatment, and prevention. Lancet. 2014; 19 (384):258-71.
41. Merzel C, D'Afflitti J. Reconsidering Community-Based Health Promotion: Promise, Performance, and Potential. Am J Public Health. 2003; 93(4): 557-574.

Archive of SID