



Sexual Health Promotion Programs in Iran and the World: A Systematic Review

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Abstract

Background: Lack of sexual health promotion programs in adolescents and young people is a significant public health challenge in the field of sexual health. The aim of this study was to understand sexual health promotion programs emphasizing life skills such as decision-making and self-assertiveness, with the target of enhancing sexual well-being and including studies to reduce biological adverse outcomes such as STIs or unwanted pregnancy in Iran and globally.

Methods: We conducted a systematic review by searching online data bases with the keywords, sexual health; health program; and Iran, using systematic reviews such as MEDLINE and CINAHL, ISI, Scopus, Google scholar, Pubmed med, Google, Magiran, SID, Science Citation Index Expanded, Iran Medex Web of Science, ProQuest, and Springer protocols with a focus on sexual health promotion programs in Iran and in the world. Studies with the inclusion criteria and which were conducted within the past 15 years on determining and designing sexual health programs in Iran and globally were included. After extracting the articles and conferences, the specifications of documents were entered and classified in the EndNote software and duplicate cases were excluded from the study.

Results: Based on the findings from the extracted studies, sexual health can be promoted through programs including sexual abstinence education and comprehensive sexual health education.

Conclusions: The problem of education and of the required skills for adolescents and young adults regarding self-control and sexual health is a religious or political issue, and includes social issues which involve many different subjects; so resolving this issue requires systematic planning.

Keywords: Sexual health; Health program; Iran; Systematic review.

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other sexually transmitted diseases, viral hepatitis, unwanted pregnancy due to the decreased menarche age and onset of sexual activity,^{3,4} and sexual violence are the most important global health issues and three of the eight millennium development goals include reduced child mortality, improved maternal health, fighting against HIV/AIDS, malaria, and other diseases.⁵ These challenges generally affect the lower and middle-income developing countries more severely than western industrialized countries.⁵

In the UK, approximately 400,000 new cases of STIs are diagnosed every year; from the year 2000, this rate has an increase of 30% per year. In the European Union, an increase of more than 27,000 new infections of HIV occurs each year, and about 44% of all pregnancies in Europe are unwanted. In Australia, there are about 170,000 cases of infection with hepatitis B, and 34% of women have experienced sexual violence in their lifetime, with 4% of women reporting at least one incident within the past 12 months.⁶⁻¹⁰ In the United States, statistics were considered as equal: each year we observe about 19 million STIs and approximately 50,000 new HIV infections; there are 1.2 million people with HIV/AIDS and 800,000 to 1.4 million patients with chronic hepatitis B; more than 1.8 million women have experienced unintended pregnancy and 1.3 million women have been raped. Notably, the teen birth rate in the United States is higher than in most other western industrialized countries.¹¹⁻¹⁷ In Iran, 27,041 cases of HIV/AIDS have been identified.¹⁸ Also, according to estimates presented by the World Health Organization (WHO) and UNAIDS in 2013, more than 70,000 [47,000-110,000] people were infected with HIV in Iran.¹⁹ Worldwide, genital cancer and other cancers associated with sexually transmitted infections, such as human papilloma virus and hepatitis B virus, as well as sexual function problems (e.g., erectile dysfunction, painful intercourse and low sexual desire), are major sexual health concerns, especially for middle-aged and elderly people.²⁰

In 2002, the WHO provided a functional definition of sexual health for managers and policymakers and others working in sexual and reproductive health.²¹ More recently, in the United States the Centers for Disease Control and Prevention, Health Resources and counseling services for the prevention of HIV, viral hepatitis and STD prevention and treatment have emphasized the importance of both the individual and the society in defining sexual health.

Sexual health promotion means applying strategies to improve the sexual health of the population by providing necessary tools to individuals, groups and communities to make informed decisions about their sexual health. Therefore, the definition of sexual health promotion includes studies with

Introduction

Nations around the world are faced with significant public health challenges in optimizing sexual health, including increased human immunodeficiency virus (HIV) acquired immunodeficiency syndrome (AIDS), sexually transmitted infections (STIs), unwanted pregnancy, sexual violence, and reduced side effects of social and economic factors. In response, some countries have addressed this syndemics (which is the accumulation of two or more diseases in a population) with national strategies and other efforts focused on promoting more comprehensive and integrated methods.¹ Results will guide the development of population-focused HIV/AIDS knowledge and attitude in Iran, which is lacking in both the general public and health-care settings.² Public health challenges related to sexual behavior, including HIV/AIDS,

the aim of promoting life skills such as decision-making and self-assertiveness with the purpose of enhancing sexual well-being, as well as studies to reduce adverse biological outcomes such as STI or an unwanted pregnancy.¹ There are programs to promote sexual health, including: allocation of problems; focusing on health; focusing on positive and respectful relationships; acknowledging the impact of sexual desires on general health; and having a point of view with a systemic approach to prevention.²²

Effective sexual health education is one of the most central issues of the WHO. Society requires knowledge and adequate information to prevent a variety of diseases, because maintaining public health can make the move toward sustainable development possible. Sexual education is one of the important topics in the field of education, which plays an important role in the formation of human personalities, thoughts, feelings and behaviors. Despite the importance of this issue, especially in our country, there is no appropriate and systemic educational program and the majority of adolescents receive sexual information from improper sources and incorrect methods; there is not enough information about these problems. In western countries, despite having sexual education, it seems that many adolescents still lack the necessary knowledge in this area.²³

No regular care program or project has been implemented for the control of infectious diseases as a result of sexual contact for Iranian women, or if any plan was implemented, it was not comprehensive enough to improve women’s sexual life. In our country, we still have not observed any documentation in this field. If there has been any research and study, it has been limited or has not been spread for several reasons: firstly, it is culturally and socially acceptable that we should not talk about sexual issues. Secondly, there is a notion that sexual issues related to females are linked to family honor and social character and should be kept confidential. However, it is likely that our women do not want to admit that sexual phenomena are part of their identity, and sexual issues are an important part of their lives. So, they do not visit a gynecologist until they have a problem with their reproductive system or fertility.

The aim of researchers’ programs to promote sexual health in this literature review study is to classify the findings of articles in which existing programs on using a comprehensive approach in sexual health promotion of individuals and communities in Iran and in the world are described. This is in the field of sexual health education and to sexual health promotion programs for both adolescents and youth adults.

Materials and Methods

This review study is the result of literature review of 11 systematic reviews. Searching the internet and library research on sexual health promotion programs with the keywords sexual health, health program, Iran, followed by a systematic review using databases such as MEDLINE and CINAHL, ISI, Web of Science, ProQuest, The Chocran Library, Ovid, Science direct,

Scopus, Google scholar, PubMed, Google, Magiran, SID, Science Citation Index Expanded, and Iranmedex.

For example, in the database of Scopus, we used a steps-search strategy for this review. An initial limited search with full text will be undertaken followed by an analysis of the text words contained in the title and abstract, and of the index terms describing the article. A second search using all identified keywords, sexual health and health program, was selected.

Inclusion criteria using PICOS included the following features for the reviewed studies: a) group and curriculum based on self-restraint, sexuality, sexually transmitted diseases and HIV training and sexual health promotion programs; b) focus primarily on sexual behavior; c) focus on adolescents from middle school or high-school age; d) measure the impact of the program on one or more of the following sexual behaviors; initiation of sexual activity, frequency of sex or number of sexual partners, using condoms or contraception, composite measures of sexual risk (e.g., frequency of unprotected sex), pregnancy rate, birth rate and STD rate; e) implementation in Iran and the world, and these criteria have been analyzed and discussed.

Results

We retrieved 63 records through database screening of MEDLINE, Science Citation Index Expanded, Scopus, ISI, Google Scholar, Iran Doc, SID, Magiran, and Iran Medex. Of 28 references considered potentially eligible for this review, 17 studies were excluded after screening the titles and abstracts and no study were excluded after reviewing full texts. Finally 11 studies were included for review (table 1) and (figure 1).

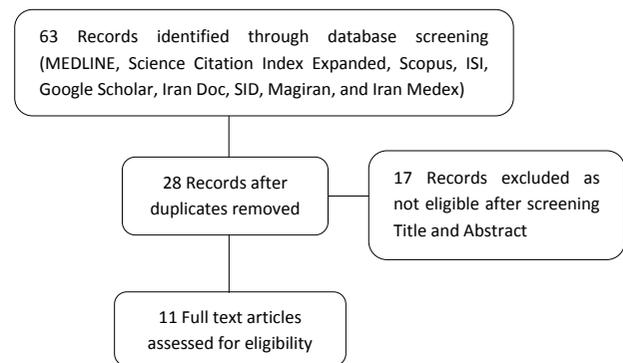


Figure 1. Flow diagram of the progress through the phases of review

Sexual health can be promoted based on the following programs and factors. One of the factors influencing sexual decisions is religious beliefs; those who have religious lifestyles do not have sexual deviations.^{24,25} Historically, there is a very strong sociocultural and religious system affecting sexual relations, in the way that any sexual relationship is limited to the time after marriage and any sexual contact before marriage is considered to be a sin.²⁶ religious life style of sex has been set in such a way to provide both sexual pleasure and prevent its negative consequences. Religion, on the one hand,

Table 1. Characteristics of published articles by researchers on online databases over December 2015

Authors	Year	Sample number	The most important findings
Jemmott III (36)	1988	659	12.5% who had sexual intercourse in the group abstinence vs. 21.5% control p -values = 0.02 reporting consistent condom use in the group abstinence vs. control p -values = 0.05
Angela D (37)	2002	4200	The vast majority of parents were in support of school-based sexual health education (SHE), with 94% of parents either agreeing (40%) or strongly agreeing (54%) that SHE should be provided in school. Almost all parents (95%) felt that both the school and parents have a role to play in SHE, with 33% agreeing and 62% strongly agreeing that the school and parents should share this responsibility. Thus, 65% of parents felt that SHE should begin in elementary school and 97% felt that it should begin in elementary or middle school.
Tina Penhollow (25)	2005	408	Results indicated that religiosity variables, especially frequency of religious attendance and religious feelings, were significant predictors of sexual behavior.
Mohammad-Reza Mohammadi (35)	2007	539	91.0% of parents need to receive information on puberty, physical and psychological changes. 86.5% of parents need to receive information on STIs such as AIDS. 72.6% of parents need to receive information on genital systems and reproduction.
Pamela K (38)	2008	1719	Adolescents who received comprehensive sex education were significantly less likely to report teen pregnancy (ORadj = .4, 95% CI = .22–.69, p = .001) than those who received no formal sex education, whereas there was no significant effect of abstinence-only education (ORadj = .7, 95% CI = .38–1.45, p = .38). Abstinence-only education did not reduce the likelihood of engaging in vaginal intercourse (ORadj = .8, 95% CI = .51–1.31, p = .40), but comprehensive sex education was marginally associated with a lower likelihood of reporting having engaged in vaginal intercourse (ORadj = .7, 95% CI = .49–1.02, p = .06). Neither abstinence-only nor comprehensive sex education significantly reduced the likelihood of reported diagnoses of STDs (ORadj = 1.7, 95% CI = .57–34.76, p = .36 and ORadj = 1.8, 95% CI = .67–5.00, p = .24, respectively).
Marla E. Eisenberg (39)	2008	1605	89.3%, of parents supported teaching about both abstinence and contraception (comprehensive sexuality education). (63.4%–98.6%) All specific sexuality education topics received majority support.
DB Kirby (33)	2008	56	Study results indicated that most abstinence programs did not delay initiation of sex and only 3 of 9 had any significant positive effects on any sexual behavior. In contrast, about two thirds of comprehensive programs showed strong evidence that they positively affected young people's sexual behavior, including both delaying initiation of sex and increasing condom and contraceptive use among important groups of youth.
Ghaffari Mohtasham (40)	2009	314	57% of this sample planned to remain abstinent until marriage. Another 23% rejected the notion of remaining abstinent, and 20% were uncertain.
S Das (41)	2011	3052	Clearly indicate that there is a positive association between religiosity and perceptions about premarital sex in general, meaning that people are more conservative when they are more religious. This pattern is obvious in all time points. Indicates that associations between beliefs about premarital sex and a few demographic factors, such as gender, marital status, and age support our expectations as outlined earlier, whereas the association between race and the belief does seem consistent over time. Depicts the pattern of associations between two variables, outlining social capital and the beliefs about premarital sex. These associations are somewhat inconsistent over longitudinal points.
KafuliAgbemenu (42)	2015	7000	93% of participants were receptive to teaching Comprehensive Sex Education (CSE) themselves or having it taught in schools. Of mothers, 67% believed rightly that teaching CSE would lead to delayed sexual activity. Interventions reduced incidence roughly from 6 to 7 out of 100 people (17% relative risk reduction [RRR]). Interventions focused on abstinence had no effect, while comprehensive education programs aiming at improving skills and promoting safe sexual practices reduced risk by 4% (23% RRR). In particular, interventions that taught condom use skills or communication and negotiation skills, reduced incidence of STIs by 3%–4% (30% RRR). Finally, interventions that decreased frequency of intercourse or number of sexual partners and interventions that increased condom use, also reduced incidence of STIs by 5%–7% (28%–36% RRR). Overall, properly designed interventions with the above-mentioned characteristics can achieve a 30% reduction of STI incidence.
Dafina Petrova (43)	2015	289	

recognizes sexual instincts and focuses on enjoying sex and confronts those who have adopted methods to suppress these instincts, and on the other hand, it does not recognize sexual freedom and proposes marriage and self-restraint to satisfy sexual instincts. Greater spirituality and religiosity in people will lead to more protection against deviant behavior.²⁷ Spirituality can reduce the high-risk of sexual behaviors and giving up to unreasonable demands, and sexual abstinence is one consequence of spirituality.²⁴

Self-abstinence sexual programs: self-restraint is the power to restrain your desires and the ability to wait. A person who is sexually abstinent avoids high-risk sexual activities. This self-restraint is due to various personal, moral, religious, legal and health-care reasons. Regardless of inhibiting factors such as religious beliefs and spirituality in the prevention of illegitimate sexual relations, self-restraint is another issue that may prevent high-risk behaviors such as sexual behaviors.²⁸

Ghaffari et al. in their study in Tehran on adolescents, reported that 57% decided on self-restraint in sexual activity before marriage.^{27,29} In some developed countries, this method is one of the best ways to avoid sexually transmitted diseases, AIDS and unwanted pregnancies among adolescents.^{30,31} In our country, this method can also be used because of cultural and religious contexts to protect against sexually transmitted diseases, and to avoid a lot of social stigma such as unwanted pregnancy, loss of virginity, unsafe abortion, and emotional and psychological consequences of a sexual relationship.

Comprehensive sexual education programs: comprehensive sexual education does not only recognize self-restraint as the best way to avoid sexually transmitted diseases and unwanted pregnancies, but also teaches about using condoms and contraceptive methods to reduce the risk of unwanted pregnancy and infection with sexually transmitted diseases, including HIV. It also teaches interpersonal and

communication skills and helps youth to discover their own values, goals and options. In a review study, some interventions including teaching self-awareness, real myths, self-efficacy, self-respect, motivation, and verbal and nonverbal communication skills can cause sexual empowerment (making informed decisions on sexual issues), sexual behavior (choice of sexual partner, learning STDs and contraception) and biological outcomes (perceived sexual diseases).³² To promote sexual health, sex education helps people with sanitation with regards to sexual activity and to avoid high-risk behaviors and maintain their physical and mental health. Naturally, the lack of information and misinformation about sex increase the risk of sexual disorders, high-risk behaviors, sexually transmitted diseases and unwanted pregnancy. Several studies have proven the effectiveness of sex education and family planning services.³³

A study by Kirby in 2008 showed that comprehensive sexual education is effective regarding the onset of sexual activity, number of times of sexual intercourse, number of sexual partners, using condoms and contraceptive methods.³⁴ Most teens only know three or four methods of contraception. The most well-known technique among teenagers is the condom. Teenagers know condoms only as a prevention of pregnancy, and they are uninformed about its most important role in preventing the transmission of STDs. AIDS is the most well-known sexually transmitted disease and teenagers have no information about other diseases. Many young people think that there is no possibility of pregnancy in the first sexual contact.³⁵ Given the amount of sexual activity among adolescents, it should be considered that teenagers might have greater susceptibility to HIV/AIDS and other sexually transmitted diseases. Sexual relationships are the most common way of HIV transmission in developed countries³¹ and even in Iran, and education-based prevention should be implemented. According to statistics reported by the WHO in 2010, the prevalence of HIV/AIDS in Iran is 2 per 1,000 people, or 147948 cases of the total population. According to the Ministry of Health and Medical Education Center for Disease Control, a total of 28,357 cases of HIV/AIDS were identified in the country in 2014. Considering that the average life expectancy of men and women is 75 years old, and given the fact that if the infectious cases are teenagers they will pass many useful years of their lives with this disease and its consequences, we will find out the lack of comprehensive sexual education programs.

Discussion

From the results of the present study, it can be mentioned that religion is considered as one of the major social phenomena that plays a major role in the beliefs of people, especially in the prevention of sexual relations before marriage. The relationship between spirituality and sexual behavior in adolescents is not only considered in our culture,⁴⁴ but many other societies and cultures have also emphasized its inhibitory role.⁴⁴ In a study on adolescents who have understood the importance of spirituality, the likelihood of risky behaviors such as drinking alcohol and having sex was lower.⁴⁵ Sexual self-restraint is used as a preventive strategy in programs for reducing the risk of sexually transmitted diseases and AIDS in developing countries.³⁰ Addressing this program requires a link

between religious beliefs and society and adopting some social policies for sexual activity, to at least reduce the prevalence of dangerous diseases such as AIDS.

Comprehensive sexual education is effective in stable sexual identity, learning proper methods for effective relations between two genders, knowledge of gender-appropriate behaviors, gender identity and finding optimal sexual modeling. Such training, especially during youth and adolescence, is so important and should be provided according to the gender, cognition level, social and cultural contexts, and proper time. Due to the spread of sexual diseases, increased sexual disorders, increased rates of sexually transmitted diseases through sexual activities and relationships, AIDS, etc., emphasis on sexual education is a necessity.³² Teens should be taught about sexual relationships in various fields and this would be possible only through the help of parents, teachers and reliable information sources such as providers of reproductive health services in the society. Providing an appropriate curriculum according to different age and cultural levels based on needs of students can also be helpful.⁴⁶

Parents have a decisive role in sexual and reproductive health programs for teenagers. Parents should be advised to establish a good relationship with their teenage children. They should discuss the morals, values and conventions of their familiar community with their children.³⁸

According to the obtained information, there is an emphasis on using comprehensive sexual health education which can affect people's health and sexual decision-making.

Sexual health education, like any other important matters along with teaching religious and social convictions in Iranian and Islamic culture, plays an important role in the physical and mental health of adolescents and subsequently of society and our next generation.

Due to the prevalence of marriage, commitment to marriage and early age marriage, these issues occur less frequently; but a progressive increase in the prevalence of sexual relations at an early age because of the decreased menarche age,³ having multiple sexual partners, unwanted pregnancy and sexually transmitted diseases, cannot be ignored.

This study shows that in cases of sexually transmitted diseases and AIDS, unwanted pregnancy and psychological and social issues, there have been few to no studies.

The problem of education and required skills for adolescents and young people regarding self-control and sexual health is both a religious and political issue and also a social issue which includes many different subjects, so resolving these issues requires systematic planning. Tools, guidelines and technologies are available to implement an effective strategy for sexual health. Open public debates are needed to change the notoriety of issues related to sexual health. Social participation and responsibility to achieve a general orientation toward sexual health are very important. National campaigns to promote sexual health and informing the population are also required.

Health messages must provide detailed information, encourage debate, reduce stigma, encourage the use of health services, and improve responsible sexual behavior. In addition, a national sexual health strategy should provide a framework for comprehensive and coordinated services and facilitate local action according to the needs of the society, and it should include at least three main components.

Providing high quality sexual health services. Sexual health services should be incorporated into primary care. Providing integrated services for young people should be developed.

Providing comprehensive sexual education. Sexual and reproductive health-care are the elementary key issues for adolescents and young adults.

Only self-restraint in sexual education is not effective. No one is a fan of pro-restraint for a lifetime. Public health workers, families and governments are responsible for providing accurate and comprehensive information to protect the health of adolescents and their readiness to make decisions responsibly. Government funds spent only on self-restraint should be removed. The inclusion of these behaviors in religious beliefs and cultural practices within Iranian society will be more helpful to our people. Perhaps instead of denying and closing our eyes to the normality of sexual health issues, it is better to apply rational and effective strategies to prevent adverse physical, mental and social consequences.²¹

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Conflict of Interest

The authors declared that they have no conflict of interest.

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