

Reproductive and Sexual Health Facilitators and Needs of Vulnerable Adolescent Girls

Razieh Pourkazemi¹, Mojgan Janighorban², Firoozeh Mostafavi³, Zahra Boroumandfar²

¹ PhD Candidate, Department of Reproductive Health, Student Research Committee, School of Nursing and Midwifery, Isfahan University of Medical Sciences, Isfahan, Iran

² Assistant Professor, Department of Reproductive Health and Midwifery, School of Nursing and Midwifery AND Nursing and Midwifery Care Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

³ Professor, Department of Health Education and Promotion, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran

Corresponding Author: Zahra Boroumandfar; Assistant Professor, Department of Reproductive Health and Midwifery, School of Nursing and Midwifery AND Nursing and Midwifery Care Research Center, Isfahan University of Medical Sciences, Isfahan, Iran

Email: boroumandfar@nm.mui.ac.ir

Qualitative Study

Abstract

Background: Meeting the reproductive and sexual health needs of vulnerable adolescent girls is a priority of every community. Lack of attention to this dimension of health can be associated with issues such as unwanted pregnancy, unsafe abortion, sexually transmitted infections. Thus, the identification of these needs is a necessary step for purposive planning, operational intervention, and resource and facility allocation. The present study was conducted to explain the needs and facilitators of reproductive and sexual health in vulnerable adolescent girls.

Methods: The present qualitative study was a part of an extensive study conducted using a mixed method to develop a reproductive and sexual program for vulnerable adolescent girls. Purposive sampling as utilized in the present study to select 16 adolescent girls of 12-19 years of age and 22 well-informed key experts. The experts participated in semi-structured interviews to provide the article with their experiences about the needs and facilitating factors of vulnerable adolescent girls' sexual and reproductive health. The data were coded and classified following content analysis using MAXQDA software.

Results: After scrutinizing and analyzing the data, the category of the needs were obtained under the title of the vulnerable adolescents' reproductive and pregnancy health needs. The category of facilities was also obtained under the title of targeted prevention of adolescents' vulnerability.

Conclusion: Risky sexual behaviors in adolescent girls are associated with negative physical and psychological consequences for reproductive health. Family and the Welfare Organization play a significant role in supporting vulnerable adolescent girls and meeting their reproductive and sexual health needs.

Keywords: Vulnerable adolescent girls; Need; Facilitator; Reproductive and sexual health; Qualitative research

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Introduction

Reproductive health includes components such as counseling, information, education, and treatment of reproductive system infections and sexually-transmitted diseases (STDs), especially AIDS, timely and appropriate prevention and treatment of complications of abortion, providing information, education, and counseling on sexual relations, and creating responsibility in both sexes by observing the cultural conditions of the community, family planning and providing services in this area, education and providing prenatal care, providing a safe delivery and postpartum care, especially education and promotion of breastfeeding, and preventing infertility and appropriate treatment of infertility (Kayvani Sadr et al., 2014). Development of programs related to reproductive health and investigation of its various components and dimensions at the national and international level is one of the basic steps in ensuring the health of the community and the family (with a focus on the health of women and girls) (Hatami, Eftekhari Ardabili, & Majlesi, 2016).

Adolescents are amongst the most important target groups in reproductive health programs due to their greater exposure to drug and alcohol abuse, and hence, to risky sexual behaviors (L'Engle, Mangone, Parcesepe, Agarwal, & Ippoliti, 2016). Therefore, ensuring their health in all aspects, including reproductive health, should be a priority of the health programs of any community (Simbar, Alizadeh, Hajifoghaha, & Golezar, 2017). Studies conducted around the world have shown that adolescents in general (especially those under 18 years of age) are more exposed to drug use, smoking, and alcohol consumption, and as a result, to high-risk sexual behaviors due to their lack of ability to cope with difficulties and crises, and to make timely and suitable decisions (El Mhamdi, Wolcarius-Khiari, Mhalla, Ben Salem, & Soltani, 2011).

The research conducted by Sarrami, Ghorbani, and Minooei (2013) shows that alcohol consumption is increasing among adolescents. Factors like having an unstable family as a result of the father's separation from the mother, death of one of the parents, and/or imprisonment of one of them turn youths and adolescents into vulnerable individuals highly prone to seeking refuge in narcotics in order to cope with their problems (Sarrami et al., 2013). Sexual relationships, especially in unprotected forms, lead to the creation of problems with irreparable consequences. The statistics show that likelihood of sexual relations establishment before marriage and at 21 years of age is 3.7 times higher in contrast to 18 years of age (Vakilian, Mousavi, & Keramat, 2014). Research findings in Iran indicate that 56% of adolescents have experienced sexual relations (Zadehmohammadi & Ahmadabadi, 2008). Moreover, according to the results of a study conducted at the Centers for Disease Control (CDC) in 2013, 46.8% of high school students reported that they had had sexual intercourse (Kann et al., 2014).

Statistics released by the Welfare Organization also show that 50% of street women referred to rehabilitation centers are 15 to 19 years of age (Garmaroudi, Makarem, Alavi, & Abbasi, 2010).

The ascending trend of the reduction in the sexual relations establishment age to below 15 during recent years (18.6%) (Goncalves et al., 2015) and an increase in illegal sex (55.6%) between the ages of 16 and 21 has set the grounds for infliction with sexually transmitted infections and unwanted pregnancies (Sarrami et al., 2013) and a shift in AIDs transmission from injection to sexual contact (UNICEF, 2015), and this adversely influences not only the individual, but also his or her family and the society.

According to global statistics, 41% of people under the age of 15 and older have been affected by a variety of STDs (UNICEF, 2010). Statistics obtained from the international community on the prevalence of HIV among adolescents indicate that 250,000 adolescents aged 15-19 years have recently been affected by STDs, of which 23% are girls and 17% are boys (UNICEF, 2011). In Iran, the third wave of AIDS, transmitted through sexual relationships, is on the rise. According to the latest data collected by the National Center for AIDS Prevention in Iran (2014), 30,183 people have been diagnosed with the infection in Iran, of which 85% are men and 15% are women, and 52% of recorded cases are within the age group of 21- 35 years (National Center for AIDS Prevention in Iran, 2014).

In addition to AIDS, other STDs such as chlamydia, syphilis, and gonorrhea are on the rise among young people and adolescents, leading to pelvic inflammatory disease (PID), infertility, and ectopic pregnancies (Centers for Disease Control and Prevention, 2014; British Association for Sexual Health and HIV, 2006).

One of the other most important outcomes of sexual relations in adolescent girls is unwanted pregnancy, and the resulting side effects and problems. Since adolescents are physically between childhood and adulthood and may not have reached full maturity in some aspects, pregnancy in adolescents is within the high-risk range and more problematic than other age groups (World Health Organization, 2018). This issue is important from a health, economic, cultural, and social point of view (Shafieian, Bhadoran, Amini, Amini, Jafarpour, & Hematian, 2014).

In fact, adolescents are more likely to engage in risky behaviors than other age groups because they are simultaneously experiencing physical and psychological changes, have abandoned their former childish habits, and have adopted new patterns of behavior and attitudes. Statistics published in recent years in this regard have also confirmed this issue and highlighted the necessity of needs assessment and planning to prevent the occurrence of harmful behaviors in regards to reproductive health. The development of such a program, which not only affects the individual and family, but also has wider impacts, is the basis for promoting the economic, social, and cultural growth of society. The aim of this study was to explain the needs and facilitators of reproductive and sexual health in vulnerable adolescent girls.

Methods

The present qualitative research was conducted between April 2019 and June 2020. After acquiring the ethics code (IR.MUI.RESEARCH.REC.1398.396) from the research vice chancellorship of Isfahan University of Medical Sciences, Iran, the researcher took measures in line with the use of purposive sampling for selecting 16 vulnerable 12-19-year-old adolescent girls as the study sample and performing semi-structured interviews with 22 key individuals including 5 midwives, 3 reproductive health specialists, 2 gynecologists, 1 psychiatrist, 1 expert in social harms, and 2 policy-makers in the area of adolescents' health. Sampling was continued until data saturation (when the interviews were not making any contribution to the data). The data were coded and classified using qualitative content analysis in MAXQDA Software (version 10; VERBI GmbH, Berlin, Germany).

In the first step of the data coding process, all interviews and notes were transcribed. Then, the main topics of the texts were discovered before coding through reviewing them several times. The discovery of important and key phrases led to the formation of a unit of analysis. Then, initial codes were extracted based on the understanding of the researcher. Subsequently, codes with similar concepts were

merged using the inductive method and placed in one category, and formed the sub-sub-themes. Then, the sub-sub-categories were compared and sub-categories were formed through the classification of similar sub-sub-categories. Finally, the sub-themes with similar concepts were categorized and formed the themes. In order to evaluate the quality of data and findings, the 4 criteria of credibility, dependability, confirmability, and transferability were used.

Credibility of data in this study increased as a result of using the method of continuous and prolonged engagement with data, reviewing texts of interviews and manuscripts several times, member checking, peer debriefing, using various methods of data collection, and bracketing.

To achieve data credibility, a complete and continuous method of recording decisions and activities on the way of collecting and analyzing data was used and the initial codes were provided for each class by interpreting participants' experiences and examples of ways of extracting themes and a summary of texts of interviews. The data were also reviewed by an expert researcher as an outside observer.

For confirmability of data, the entire research process and decision-making process were recorded by the researcher, so that others could follow the results of the research, if necessary. Moreover, the text of a number of interviews, codes, and extracted themes were provided to peers and a number of faculty members who had knowledge on the analysis of qualitative research and did not participate in the research, and they were asked to correct the data coding process and their views on classes and classifications were applied.

Finally, for transferability of the data, the findings were reviewed by several people who had characteristics similar to the participants in the study, but did not participate in the present research process.

Results

Out of the 16 adolescent girls of 12-19 years of age who participated in the research, 12 were studying in high school, 2 in primary school, and 1 in university, and 1 of them was illiterate. The age at which they had sex for the first time was below 15 in 4 of participants and above 15 in the rest of them; 6 of them had led to pregnancy all of which ended in abortion. Over 70% of the participants were addicted to drugs or alcohol, or both. In half of them, the parents' addiction history was evident. In the present study, 22 well-informed key individuals were interviewed.

Findings of the present study regarding the reproductive and sexual health needs of vulnerable adolescent girls emerged in the form of the category of the need for comprehensive care during reproduction and pregnancy, including the 2 sub-categories of the need for psychological support during reproduction, and the need for physical care during reproduction (Table 1).

Table 1. Reproductive health needs of vulnerable adolescent girls

Category	Sub-category	Sub-sub-category
The need for comprehensive care during reproduction and pregnancy	The need for psychological support during reproduction	Psychological needs due to unwanted pregnancy Psychological needs caused by abortion The need for treatment of psychological disorders in vulnerable adolescent girls
	The need for physical care during reproduction	The need for care and follow-up after sexually transmitted infections The need for physical care in pregnant adolescent girls The need for physical care in terminating pregnancies in vulnerable adolescent girls

The need for comprehensive care during reproduction and pregnancy

The data analysis showed that vulnerable adolescents have risk factors for vulnerability or are harmed after entering the vulnerability cycle, and thus, they need physical and psychological support.

Psychological needs due to unwanted pregnancy

Following an unwanted pregnancy, adolescents experience a variety of psychological complications, such as depression during pregnancy, suicidal ideation, and self-harm, which require psychological support from multiple sources.

“When the adolescent becomes pregnant, she fights with everyone except the person who made her pregnant. They believe that they are undergoing a process that can find no way out of, and thus, they get depressed during pregnancy and tend to commit suicide. Therefore, they must be supported so that they can overcome their problems in this period” (Faculty member).

Psychological needs caused by abortion

An unwanted pregnancy and the subsequent attempt for abortion are associated with numerous psychological consequences and neglecting them can have irreparable consequences.

“Four months have elapsed since that issue. I burst into tears without any reason. I have stress. My heart beats faster, and I wake up all of a sudden with anxiety and high heartbeat. I am under so much pressure. I like being completely alone; I do not want to see anyone. I am struck by the thought of releasing myself from this life because nobody cares for me after that event, so why should I stay alive” (a participating adolescent).

The need for treatment of psychological disorders in vulnerable adolescent girls

Many vulnerable adolescent girls have numerous psychological problems that are often not diagnosed and/or subjected to treatment and follow-up.

“Some of the adolescents that we examine ... have borderline personality disorder (BPD) and do not distinguish between good and bad, so they easily trust anyone who loves them. I have a client who is a 21-year-old girl who has BPD, and she cannot distinguish between good and bad at all” (psychologist).

Infliction with psychological disorders and efforts for winning the support, attention, and affection of others are eventually accompanied with an increase in daring to engage in sexually risky behaviors.

“Some of our cases are inflicted with bipolar disorder ... due to this maniac disorder and because they need to be treated kindly by others, they are drawn to the opposite sex” (wellbeing organization’s psychologist).

The sub-category of the need for psychological support during reproductive period included the 3 sub-sub-categories of "psychological needs due to unwanted pregnancy", "psychological needs caused by abortion", and "the need for treatment of psychological disorders in vulnerable adolescent girls".

The need for care and follow-up following sexually-transmitted infections

Most vulnerable adolescent girls are affected by unprotected sex and STDs, such as gonorrhea, chlamydia, and genital herpes, and their complications such as pelvic infections, and constipation and hemorrhoids after anal sexual intercourse; in these cases, they try to self-medicate or refer to midwives, and in some cases to gynecologists.

“Other problems that girls who have unsafe sex suffer from are genital infections, genital warts, abnormal uterine bleeding (AUB), PID, anal problems such as constipation following anal sex and anal sphincter involvement in some cases,

they come to us after performing various self-treatments” (Obstetrician).

The need for physical care in pregnant adolescent girls

Some adolescents had unwanted pregnancies as a result of having sex, which often led to complications such as ectopic pregnancy, moles, severe pregnancy cravings, miscarriage, fetal abnormalities, etc., so they require special care and follow-up until the end of the pregnancy.

"Pregnancy in these children requires much care, since sometimes these children have abnormal pregnancies such as moles or ectopic pregnancy, followed by complications such as rupture of the uterus or terrible and sometimes fatal bleeding. In these cases, things get worse" (Reproductive Health Specialist).

The need for physical care at the end of pregnancy in vulnerable adolescent girls

Continuous effort to get rid of unwanted pregnancies leads to an increased rate of unsafe termination of pregnancy. Most of the adolescent girls who participated in the study with a history of pregnancy acknowledged that unsafe termination of pregnancy led to a number of physical complications, including excessive bleeding and increased need for medical services.

"I lay down on a bed, and then, I did not understand what happened. After I regained consciousness, I was bleeding for a few days. I really needed to go somewhere and get medicine. I was bleeding for a long time and my period was disrupted, and finally, went to the hospital (19-year-old adolescent).

The 3 sub-sub-categories of "the need for care and follow-up following sexually transmitted infections", "the need for physical care in pregnant adolescent girls", and "the need for physical care at the end of pregnancy in vulnerable adolescent girls" formed the sub-category of "the need for physical health during reproduction".

Findings of the study in explaining the factors facilitating the reproductive and sexual health of vulnerable adolescent girls revealed the role of the family in this regard in the category of targeted prevention of adolescents' vulnerability (including the 2 sub-categories of family awareness of adolescent vulnerability and protection of adolescents entangled in the vulnerability cycle) (Table 2).

Targeted prevention of adolescents' vulnerability

Family is amongst the main pillars and institutions in every community and it can play a significant role in supplying, preserving, and enhancing adolescents' health.

Parents' awareness of adolescents' reproductive and sexual health

Parents' awareness of puberty and high-risk sexual behaviors during adolescence leads to increased readiness and suitable management of the changes and developments of children in adolescence, and prevents the occurrence of many harmful behaviors in various aspects of health, including reproductive and sexual health.

Table 2. Factors facilitating reproductive health in vulnerable adolescent girls

Category	Sub-category	Sub-sub-category
Targeted prevention of adolescents' vulnerability	Family awareness of adolescent vulnerability	Parents' awareness of adolescents' reproductive and sexual health Continuous and efficient monitoring of children's performance
	Protecting adolescents entangled in the vulnerability cycle	Family support of the vulnerable adolescent girl Participation of the Welfare Organization in teaching reproductive health to vulnerable adolescents Welfare Organization supports in the form of providing pregnancy and childbirth care to pregnant adolescent girls

"I was shocked after my first menstruation and I was frightened. My mother told me that it is natural, everyone will start menstruating one day and it is related to maturity" (a 15-year-old girl).

Service providers emphasized the importance of paying attention to adolescent girls because of the physical and psychological changes during adolescence, and that parental awareness can reduce stress among adolescents.

"At 12 years of age when adolescents are on the verge of maturity, they develop a series of tendencies. Some fathers and mothers really know what to do to help their children grow well because they know that their child's sexual desire changes at this time one way or another. The children may exhibit many sexual behaviors like masturbation, which are deemed as age-appropriate issues, and this awareness contributes to the resolving of the problem" (psychologist).

Continuous and efficient monitoring of children's performance

The parents' correct and continuous supervision of their children's relationships with their peers and friends can directly or indirectly prevent risk-taking among them.

"Some parents also supervise their children's friends and assist them in this regard so that they exercise due care in choosing friends. I have seen that these children act more successfully" (wellbeing center's psychologist).

The sub-category of family awareness of adolescent vulnerability included the sub-sub-categories of "parents' awareness of adolescents' reproductive and sexual health" and "continuous and efficient monitoring of children's performance".

Protection of adolescents entangled in the vulnerability cycle

Some vulnerable adolescent girls reported receiving parental care, empathy, and emotional support when entangled in the consequences of risky sexual behaviors.

"My mother really took care of me during my pregnancy. She constantly talked to me so that I may not lose myself. She procured supplements from the neighbors for me. She watched over me so as to notice my delivery pain" (17-year-old girl).

Involvement of the Welfare Organization in teaching reproductive health to vulnerable adolescents

Increasing the awareness of adolescent girls referred to centers affiliated with the Welfare Organization on issues related to reproductive and sexual health through health care providers working in these centers leads to reduced stress due to lack of sexual awareness and more caution in interacting with the opposite sex.

"Our children are not aware of sexually transmitted diseases and infections. Here, we tell them about STDs, pregnancy, and the ways to prevent them. Many children do not know about the problems caused by anal sex and they think that they will not have any problems, and we are here to teach them. When we teach them about STDs and infections, they become fearful and are more careful in their dealings with boys" (Welfare Center Psychologist).

Welfare Organization support in the form of providing pregnancy and childbirth care to pregnant adolescent girls

Pregnant adolescent girls enjoy pregnancy and childbirth services and care services under the support of the Welfare Organization. This factor is important in achieving the Millennium Development Goals through reducing the maternal mortality rate.

"When we are here, we take care of her during her pregnancy, and we have trained the dormitory instructor to call the center's physician immediately if she has spotting or reduced fetal movements, and then, transfer her to the hospital" (Social

Emergency Nurse).

The sub-category of protecting adolescents entangled in the vulnerability cycle included the sub-sub-categories of “family support of vulnerable adolescent girls”, “Involvement of the Welfare Organization in teaching reproductive health to vulnerable adolescents” and “Welfare Organization support in the form of providing pregnancy and childbirth care to pregnant adolescent girls”.

Discussion

The participants of this qualitative study were vulnerable adolescent girls and key informants in the field of adolescent health. This choice was made because in the study of needs and facilitators in the field of health, due to the complexity of these concepts, a comprehensive view and the opinion of experts is required to claim that the information obtained is reasonably credible (British Association for Sexual Health and HIV; 2006 World Health Organization, 2018).

Psychological and psychical needs during pregnancy are the outcomes of the exhibition of sexually risky behaviors.

Thus, adolescents need support from various sources such as their family, the health system, and other organizations involved in adolescent health more than ever.

High-risk sexual behaviors in most adolescent girls lead to an increased risk of lower genital tract diseases. In such cases, diagnostic and therapeutic measures are required to alleviate and improve the symptoms and training is necessary to prevent their recurrence. Since STDs are one of the present-day problems of the community, the World Health Organization (WHO) and Joint United Nations Programme on HIV/AIDS (UNAIDS) have emphasized the necessity to provide the conditions for receiving integrated health care such as providing peer education, empowerment, and promotion of condom use, and effective treatment of STDs in high-risk groups such as vulnerable women and girls (Baral et al., 2012; Rigmor Berg, 2008).

The results of studies conducted on vulnerable women and girls suggest that due to the prevalence of STDs in this group, sexual health information and services should be provided clearly and based on needs and by using various methods (Mironski, 2010; Kalhor, Aj, Alipour, & Eghdam Poor, 2015).

Pregnancy is one of the main adverse consequences of sex outside the family in adolescent girls. It is associated with more adverse consequences at this age than other ages. The increasing of access to education, contraceptive programs, and appropriate prenatal care leads to a reduction in adverse maternal and neonatal outcomes and occurrence of unwanted pregnancies in adolescent girls [Udo, Ekott, & Ekanem, 2013]. Results of several studies indicate that improving the index of access to services and care will reduce complications during pregnancy (Panagopoulos et al., 2008; Alexander & Cornely, 1987; Godha, Hotchkiss, & Gage, 2013).

After realizing that they are pregnant, many teenage girls try to have an abortion, often unsafe. Illegal and unsafe abortions, in addition to individual effects on the physical and psychological dimensions, are also associated with various economic, political, cultural, and social consequences, such as the economic burden of treating the complications of unsafe abortion and increasing maternal mortality (Salter, Johnson, & Hengen, 1997). Providing facilities for adolescent girls to use abortion-related services will reduce its complications. In this regard, the WHO emphasizes the importance and necessity of increasing health care for the appropriate management of physical and psychological complications after abortion (Coleman, Coyle, & Rue, 2010). Results of several studies conducted in developing and

developed countries also show that, from the perspective of service providers and clients, receiving counseling and follow-up after abortion leads to a reduction in the number of complications (Lok, & Neugebauer, 2007; Gould, Perrucci, Barar, Sinkford, & Foster, 2012; Hajnasiri, Behbodimoghddam, Ghasemzadeh, Ranjkesh, & Geranmayeh, 2016; Droudchi, Chief, Qudsi, Wali, 2016).

In addition to the physical consequences, reproductive health damage in vulnerable adolescent girls is associated with psychological complications. Findings of several studies show that the process of vulnerability in adolescents has psychological consequences such as guilt, neurological disorders, depression, and suicidal ideation (Otten, Harakeh, Vermulst, Van den Eijnden, & Engels, 2007), thus resulting in an increased need for psychological support from various social resources, especially the family. Meeting this need will reduce the impact of peer pressure on adolescents' decisions and increase empowerment. Making suitable and responsible decisions on issues related to reproductive health reduces the likelihood of recurrence of risky sexual behaviors (Taleghani, Merghati Khoie, Noroozi, Tavakoli, & Gholami, 2017). The findings of Baral et al. (2012) and Rigmor Berg (2008), which are consistent with the results of the present study, indicate that parents' support and supervision are inversely associated with such risky behaviors as drug abuse, alcoholic drinks consumption, and risky sexual relations.

Increasing parents' awareness of issues related to reproductive and sexual health in adolescence leads to correct responses to their children's sexual problems and reduced drug use, alcohol consumption, and high-risk sexual intercourse (Dick, Viken, Purcell, Kaprio, Pulkkinen, & Rose, 2007; Urindwanayo & Richter, 2020; Tehrani Moghadam & Pourabbasi, 2019; Abedini, Tabibi, Ziaee, & Zarezade Kheibari, 2016; Aziato et al., 2016). Moreover, adequate parental monitoring of adolescents' health leads to increased empowerment in maintaining their reproductive and sexual health (Taleghani et al., 2017; Roshandel Arbatani & Amiri, 2011; Raji Saeeadabad, 2015; Kohan, Mohammadi, Mostafavi, & Gholami, 2017).

In addition to family, the Welfare Organization is one of the most important organizations involved in social harms as its actions and decisions have a direct role in reducing high-risk behaviors in society. Findings of studies on the role of the Welfare Organization in the prevention of social harms also indicate that social workers in centers affiliated to the Welfare Organization play an effective role in preventing crime and harm in society through informing the target group of harmful factors and the ways to prevent them, and timely identification of vulnerable people and supporting them to achieve high levels of health (Shojaei, 2015; Zeinali, 2013).

Conclusion

The present study's participants referred to role of the family and Welfare Organization in providing full-scale support in regard to vulnerable adolescent girls' reproductive and sexual health. They asserted that family is the primary source for the provision of essential health needs and that it occasionally plays this role through supplying facilities and sometimes as a supervisor, an advisor, or a companion of the adolescents. In so doing, it leads to the maintenance and promotion of adolescents' health in various dimensions, including reproductive and sexual health that might be the most important aspect of health during adolescence.

Conflict of Interests

Authors have no conflict of interests.

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