Empowering adolescent girls, is sexual and reproductive health education a solution?

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ABSTRACT

Adolescence is a period that is characterized by growth and development rapidly. They have only limited knowledge regarding sexual and reproductive health (SRH). Adolescents girls are more marginalized and face many problems in society. Owing to a lack of knowledge on SRH, they succumb to various situations such as unhealthy menstrual hygiene practices, unwanted sex, teenage pregnancy, unsafe abortions, reproductive tract infections (RTIs), and sexually transmitted diseases (STDs) such as HIV/AIDS. These have adverse effects on their mental health. This article reviews the literature to explore the knowledge, attitude, practices, and life skills regarding SRH among adolescent girls. Need for the inclusion of SRH and life skill education for adolescents in schools, strengthening health care programs, and involvement of various Non-Governmental organizations (NGO for adolescent wellbeing. A Search of relevant publications between 2011 and 2020 was done through multiple electronic databases such as MEDLINE, PUBMED, and Google scholar. A manual search on world health statistics, national programs regarding SRH was done.

Keywords: Adolescent girls, life skill education (LSE), sexual and reproductive health (SRH), schools, STDs

Introduction

The World Health Organization (WHO) defines adolescents as those between 10 and 19 years of age. [1] Adolescent girls account for over 600 million population in the world today. There are around five hundred million adolescents living in countries with low and middle income.^[2] Girls constitute half of the adolescent population. There is not much attention given to the specific challenges and problems faced by adolescent girls. [3] In India, the adolescent population constitutes about 21%(243 million) of the total population.[4]

According to WHO, "Sexual and Reproductive Health (SRH) encompasses dimensions of physical, emotional mental and social

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wellbeing in relation to sexuality; it is not merely the absence of disease, dysfunction or infirmity."[5]

The major public health challenges faced by adolescent girls include early pregnancy, higher rates of maternal and infant mortality, STD's, RTI's, and HIV/AIDS.[6]

The existence of social taboos regarding SRH renders women often forgo health services. Around eight lakh adolescent girls give birth every year in low and middle-income countries. The 2014 World Health Statistics reveals that the average birth rate among 15-19 years olds is 49 per 1000 girls globally..^[7,8] Complications arising due to pregnancy and childbirth constitute the second leading cause of death for 15- to 19-year-old girls globally, next to suicide. [9] Each year 3.9 million girls aged 15-19 years undergo unsafe abortions, and around 39,000 child marriages happen every day. In the year 2013, about 60% of new cases of HIV infections among the age group between 15 and 24 years occurred among adolescent girls and young women. [10]

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The lack of SRH knowledge makes them adopt various risk-taking behaviors, affecting their mental as well as physical health. They are not trained at the secondary school level in coping with various critical life situations; as a result, they don't have the skill of prompt response to these situations. Hence, a comprehensive SRH and Life skill education is necessary, which will empower them in decision making and adopting a healthy sexual and reproductive lifestyle.

Materials and Methods

A systematic search of all articles and publications were searched between years 2011 and 2019 through various Databases. Information was retrieved from the Government of India (GOI) and State Government portals. Statistical data from the WHO website and 2011 statistics in India.

Sources used for the review are:

A preliminary search of the literature using electronic databases like MEDLINE, Google Scholars, PUBMED, using the Medical Subject Headings (MeSH terms), and keywords are Adolescent girls, Sexual and Reproductive health (SRH), life skill education (LSE), schools, STD's. A manual search in google about various adolescent health programs in India was done. A manual search about World Health Agencies such as WHO, UNESCO, and various ministries like the Ministry of Health and Family Welfare (MOHFW) was done.

Sexual and Reproductive Health issues of adolescent girls

Teenage pregnancy is one challenge faced by the world, more likely occurring in marginalized communities with poverty, lack of education, and employment. The number of unintended pregnancies every year among adolescent girls in the developing world is around ten million.^[11] Teenage pregnancy has adverse outcomes affecting the health of adolescent girls. They are prone to pregnancy-related complications such as eclampsia, puerperal endometritis, and systemic infections.

Most of them being unwanted pregnancies, they often go for unsafe abortions, contributing to maternal mortality and morbidity. Early childbearing is not the only threat to mothers but also the growing fetus with increased risk of low birth weight, preterm delivery, IUGR, and increased infant mortality rate.

Adolescent pregnancy is one that has a devastating effect on their mental health. Available data suggest that adolescent mothers experience severe mental illness such as depression, both prenatally and postpartum, compared to other adult mothers and their non-pregnant peers. The rates of depression are estimated to be between 16% and 44%, which is double the lifetime prevalence of major depression among non-pregnant adolescents and adult women. They are also at risk of developing symptoms of posttraumatic stress disorder (PTSD) as they are subjected to community and interpersonal violence by her partner, neglect, and abuse by a parent.

The need for contraception among adolescent girls is accentuated by an inability to access to contraceptive services, stigma, lack of autonomy, ensuring the correct method, and consistent use of a contraceptive method.

Various studies revealed that they do indulge in pre-marital sex at an early age, which predisposes them to RTI's and STI's including HIV/AIDS.^[17] Urbanization has resulted in the disruption of family relationships, social networks, and traditional values, leading to opportunities for sexual encounters. Lack of information regarding STI and its prevention, symptoms, treatment facilities put them at risk of STI. The government of India (GOI) has launched, Reproductive Maternal Newborn Child Health + Adolescent Health (RMNCH + A) program, under which Adolescent Reproductive and Sexual Health (ARSH) services offer a package of preventive, promotive, curative, counseling, referral, and outreach services through the existing public health care facilities.^[18]

In recent years, there has been a surge in the use of social media among adolescents like Facebook, YouTube, Instagram, WhatsApp, Twitter, and other online handles.^[19] Apart from the benefits, social media has given rise to threats such as cyberbullying and online sexual harassment. Cyberbullying has been defined as "repeatedly and intentionally harassing and mistreating others using electronic devices."^[20] Cyberbullying includes humiliation, hacking of accounts, posting vulgar messages, stalking, etc., which cause serious mental and emotional trauma.

According to a survey conducted in Delhi, around 9.2% of 630 adolescents had experienced cyberbullying. [21] Thus, this results in a serious impact on mental health issues such as depression, anxiety, increased suicidal tendencies more commonly among girls.

Knowledge regarding SRH

SRH has been a major public health concern for many years. There are several studies conducted in India to assess the knowledge regarding SRH among adolescents. Most of the adolescent girls had no awareness of menstruation prior to its onset. For most of the girl's source regarding menstruation was mother.^[22]

In India, early marriage among girls is very common, and awareness about safe sex practices is not satisfactory. The adolescent girls residing in rural areas, belonging to below the poverty line, and belonging to a backward class community are not aware of contraception and contraceptive practices. Awareness levels were around between 18.7% and 47.9%. [23-25] Adolescent girls do not have knowledge regarding symptoms of STD's and RTI's affecting health-seeking in them. Various studies showed poor knowledge regarding STDs and RTIs. [25]

Attitude and practices regarding SRH

Even with the advancement of technology and ever-growing knowledge, there still exists stigma and taboo regarding sexual and reproductive health in society. They are constrained of their activities such as schooling, attending any occasion during menstruation. Various studies showed isolation is followed during menstruation. [22]

Coming to practices related to SRH, adolescent girls still use a cloth as absorbents during menstruation. [22] The practice of reuse of absorbents is more common. In a study, clothes were reused by 73% of them. [26] In India, most schools lack the provision of dustbins and hand soaps. Toilets are dirt with doors broken. [27] A study showed only 42% changed their pads/clothes in the school due to the non-availability of dustbins and soaps. [26,28]

To address and solve problems faced by adolescent girls in neither being able to afford nor having access to sanitary napkins, GOI launched Menstrual Hygiene Scheme (MHS) in 2011 as part of the ARSH component in RMNCH + A under the National Health Mission (NHM) in 112 selected districts in 17 states, where a pack of six sanitary napkins called "Freedays" is provided to rural adolescent girls by Accredited Social Health Activist (ASHA) for Rs. 6.^[29]

An impressive "Khushi scheme" was launched similar to MHS by the Government of Odisha in the year 2017 to provide free sanitary napkins to school girls across the state to promote health and hygiene among school-going girls and to reduce school dropouts. [30] In the year 2018, the Minister of Petroleum and Natural gas has launched the "Ujjwala Sanitary Napkin" initiative in Bhubaneswar city for improving accessibility to sanitary pads and to create employment opportunities for women. [31]

Education regarding SRH

The GOI has launched Rashtriya Kishor Swasthya Karyakram (RKSK), a national program for adolescents, in the year 2014. This program has shifted its focus from clinical-based services to comprehensive health care, which includes promotion and prevention by reaching adolescents through schools, families, and communities. Though the program emphasizes on providing education through schools but not all the schools in India, have included SRH education in their teaching curriculum. In view of taboo regarding SRH in the society, few states have banned sex education such as Maharashtra, Madhya Pradesh, Gujarat Karnataka, Rajasthan, Kerala, Chhattisgarh, and Goa. [32]

A study conducted among school-going adolescents revealed that around 70% to 99% of study participants favored sex education at schools. [33-35] Studies have revealed that adolescents preferred education to be given by professionals such as doctors and teachers. [35]

Life skills regarding SRH

WHO defines "Life skill (LS) as abilities for adaptive and positive behavior that enable individuals to deal effectively with the demands, challenges, and stress of everyday life?" In India, there is not much attention given to the development of LS. A study showed about 52% of adolescents had low life skills.^[37]

In India, where there are sparse resources and trained professionals, it would be better to involve and work with teachers as they interact with adolescents closely. Various studies explored the fact that knowledge regarding life skills on SRH is unsatisfactory among teachers. [38] One must ensure adequate training of teachers regarding LS teaching that could be imparted to adolescents.

Challenges for SRH education

There lies a huge gap between the SRH needs of adolescents and services provided by the Indian health care system. Existing cultural and traditional norms in society hinder SRH education to adolescents. SRH education at the school level has raised eyebrows from stakeholders such as parents, teachers, politicians, and is banned in many states of India. [32] Studies show that the acceptance rate of sex education among the majority of parents is very low. In a study, the majority of rural parents (89%) did not feel the necessity of imparting sex education to their children. [39]

According to the UNESCO report, barriers for comprehensive SRH education include lack of trained teacher and non-inclusion in the curriculum, a discrepancy in the distribution of teachers, variable class size for sexuality education. [40] Class size clearly affects the quality of implementation of SRH education. Other factors include lack of educational funding towards teacher training, and provision of materials, inadequate monitoring, and evaluation of SRH education.

Adolescent friendly initiatives so far

There has been a lot of investment for the welfare of adolescent's health at the international, national, and state-level. Globally, WHO supports countries to ensure the implementation of evidence-based health initiatives for adolescents. WHO supports national policy and programs, which includes the Global accelerated action for the health of adolescents (AA-HA!) This acts as a guiding framework for program managers at the national level.^[41]

The RKSK has been launched by MOHFW, GOI, for the holistic development of adolescents. Under this program, various services are being provided for adolescents: [Box 1]

Box 1[18]

Also, various Non-governmental organizations (NGO's) have contributed immensely to adolescents' health. National Health Mission (NHM) has selected Hindustan Latex Family Planning Promotion Trust (HLFPPT), an NGO, to reach adolescents. HLFPPT has partnered with UNICEF for MHM in the state of Uttar Pradesh. It also provides LS education as per WHO guidelines. [42]

Although RKSK is providing enumerable services for adolescents, most of them were not easily accessible, and are adolescents were not even aware of them. Monitoring the quality of services,

1.	Adolescent Friendly	Entrusted with clinical and counseling services to adolescents regarding SRH, along with nutrition, substance
	Health Clinics (AFHCs)	abuse, and mental health. The services are delivered through trained service providers such as Medical
		officers (MO), Auxiliary Nurse cum Midwife (ANM), and counselors.
2.	Peer Education	Adolescents in the community are covered through this program. The selected peer educator, namely
	Programme	Saathiya, ensured adolescents to be benefitted from the program. It is envisaged that this approach would
		facilitate the coverage of out of school adolescents. Saathiya facilitates the conduction of quarterly
		Adolescent Health Days (AHD) and Adolescent Friendly Club (AFC) meetings.
3.	Weekly Iron Folic Acid	Under Intensified National Iron Plus Initiative (INIPI) program Iron Folic Acid (IFA) supplementation is
	Supplementation (WIFS)	done every week in schools. Also, out of school adolescent girls are covered by Anganwadi Workers (AWW)
4.	Menstrual Hygiene	Under this scheme, sanitary napkins are provided in the name of freedays by Accredited Social Health
	Scheme (MHS)	Activist (ASHA) workers.

training of counselors, nodal officers are also equally important, which remains a challenge till now. A rapid review was conducted on aspects such as Governance, Implementation, Monitoring, and Linkages of adolescent health programming in India. It showed that Programme activities were not co-ordinated, the involvement of adolescents was low, lack of incentives, AFHCs were located par far, and there were no follow-up services. Adolescent Health days (AHD) were implemented in an ad hoc manner. Partnership with local NGO bodies remained a challenge. [43]

Box $2^{[44]}$

It is time that adolescent health comes of age. Adolescent health is a smart investment not only will it improve health and survival in the short term, it will bring benefits for future generations.

-Valentina Baltag, Adolescent Health, WHO

Investing in the health and well being of adolescents, especially adolescent girls, should be a top priority for natioal and international policy makers.

-Natalia Kalem, Executive Director, UNFPA

Investing in adolescent health is key to unlocking lifelong health, productivity, and national prosperity.

-Stefan Peterson, Chief Of Health, UNICEF

Way Forward

For improvement of adolescent health and to provide SRH and LSE, various measures are in place. Still, there remains a significant gap between the desired and what has been achieved. For this gap to be filled, the following measures can be made.

1. Inclusion of SRH in the school curriculum

- 1.1 In India, due to diversity in school structures and curricula such as ICSE, CBSE schools, and state-owned government schools, there exists a disparity in SRH education provided by them. Most of the government schools lack SRH education, especially vernacular schools in many states.
- 1.2 Most of the teachers in Indian schools are not much trained regarding SRH; as a result, they do not provide required SRH education to school-going adolescent girls. School is the first point of contact for children in education; hence adequate training of school teachers in SRH and LS education and incorporating it in school curriculum will ensure a comprehensive SRH education.
- 1.3 While imparting SRH education, it should be interesting and understandable. For this, various activities such as brainstorming sessions, role plays, quizzes, poster presentations, etc., can be included.

1.4 Many school-going girls hesitate to communicate SRH related problems to school authorities; for this, a grievance or complaint box can be kept in order to assess and meet their SRH needs. Adolescent girls feel comfortable when their educator is of the same sex; hence more female teachers, trained counselors, or peer educators should be employed for imparting LSE to them.

2. Co-ordination between School Mass Education and Department of Health

- 2.1 Telehealth programs can become a novel way of delivering SRH education for distant areas where schools of a designated zone can be linked to medical colleges. Further, a day should be prefixed by the school authority for online training on awareness generation and problem-solving LSE sessions. Family physicians can also play a crucial role in training teachers and providing SRH education.
- 2.2 Strengthening of existing health care programs and systems for adolescents such as RKSK, AFHCs, training of health care personnel such as ASHA, ANM, AWW regarding SRH are equally important in solving health issues of adolescents. More emphasis should be made on menstrual hygiene management (MHM), Khushi scheme. Apart from National programs, various NGOs should be encouraged to strengthen MHM and SRH. Their Mental Health is a key issue for which new policies have to be made and implemented at all levels of health care. Cybersecurity for adolescents has to be ensured through strict legislative laws.

3. Primary Care Physicians/Family Physicians role in SRH of Adolescents

- 3.1 Primary care physicians with proper privacy should educate adolescents regarding MHM, safe sex practices, and the prevention of STD's. Adolescent mental health is grossly neglected. Family physicians can take up a key role in providing mental health support for them.
- 3.2 They can train Front line health workers such as ASHA, AWW, on SRH, which will help them in conducting effective Adolescent Health days (AHD).

4. Role of Media on SRH

There should be standard helpline numbers for adolescent health,

especially mental health. The media should take responsibility for projecting key issues, health services, and helpline numbers for the benefit of adolescents.

Conclusion

Adolescent girls constitute a vulnerable group in society as they face many issues regarding their SRH in day to day life. They are usually unaware of the menstruation process. Menstrual hygiene practices remain poor among them, and many a time leads to school dropouts. Most Indian schools lack proper toilet facilities, which affects menstrual hygiene in them. There exist higher rates of teenage pregnancy, unsafe abortions, RTIs, STIs, and unsafe sex practices leading to reproductive health issues in the future. Their mental health is a significant issue that has not been given importance so far. The rates of depression, anxiety, and suicidal tendencies remain high among them. Cyberbullying has become rampant in recent years affecting their mental health. GOI has launched several welfare programs for adolescent welfare such as MHS, which issues free sanitary napkins called "Freedays." Under the RKSK program, various services such as AFHCs, WIFS, SRH education in schools are being provided. However, SRH education is not being implemented in most of the schools; its acceptance rate is very low that it is even banned in some states of the country. There are several NGOs working for adolescent health; HLFPPT is one of the pioneer organizations. However, the services provided lack co-ordination, quality implementation, and effective linkages with the state governments, which has to be taken care of for the success of the programs. The paper provides an insight into the issues faced by adolescents on SRH and the need of primary care physicians who can take up an active role in training school teachers and front line health care workers on SRH, thereby increasing the outreach of SRH education. More importantly, the provision of mental health services will have a massive impact on adolescent mental health in the future.

Ethical Approval

Since it is a narrative review that doesn't involve any humans or animal experiments, ethical approval was not taken.

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Conflicts of interest

There are no conflicts of interest.

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