



Review Article

High-risk sexual behaviour in adolescence

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Abstract

Adolescence comprises the period between ages 10 to 19 of an individual's life period. It is a transitional phase from puberty to adulthood, characterised by distinct physical, physiological and psychological changes. "High-risk sexual behavior" has multiple definitions. Broadly it includes sexual activity that can expose a person to sexually transmitted infections, unplanned pregnancy, sex with someone who is neither a spouse nor a cohabiting partner, early age of sexual debut, unprotected premarital sex, paid sexual relationships, multiple sexual partners, and being in a sexual relationship(s) before being mature enough to know what makes a healthy relationship. Physical, and psycho-social harms often accompany high-risk sexual behavior. As per NFHS-5, 39% of men aged 15-24 who had sexual intercourse in the last 12 months had higher-

risk intercourse (defined in the survey as sex with a non-marital, non-cohabiting partner) in the 12 months preceding the survey. The same statistics was reported by 2 % of women

aged 15-24. Various individual, personal, family-related, and peer-related factors contribute to high-risk sexual behaviors. Enrolment in school, comprehensive sex education, and HIV prevention programs addressing relationship issues, as well as consent and safety from an early age in schools and other settings in which young people congregate, can prevent these behaviors.

Introduction

Adolescence which comprises the period between ages 10 to 19 of an individual's life period is a transitional stage of physical,

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physiological, and psychological development from puberty to legal adulthood (Sivagurunathan et al., 2015). It is a period of overwhelming changes and challenges that expose adolescents to high-risk behaviours. Around 17% of the world's population (Alimoradi et al., 2017) and about 21% of the Indian population are adolescents (about 243 million). They are the future of the nation, forming a major demographic and economic force (Sivagurunathan et al., 2015).

While sexual behaviour and expression of sexuality are natural phenomena, the context in which sexual behaviour is expressed may make the behaviour abnormal or risky. "High-risk sexual behaviour" has been defined variously as sexual activities which expose the person to risk of contracting sexually transmitted infections (STIs), including human immunodeficiency virus (HIV), unplanned pregnancy, and being in a sexual relationship before being mature enough to know what makes a healthy relationship (Alimoradi et al., 2017). Other definitions include anal/oral sexual intercourse, or vaginal intercourse without a condom or other contraception; sexual intercourse, with someone who is neither a spouse nor a cohabiting partner; early age of sexual debut, premarital sex without protection; paid sexual partners; multiple casual partners; having intercourse with an intravenous drug user; sexual behaviour that increases the chance of a negative outcome (Chawla and Sarkar, 2019). The negative consequences of high-risk sexual behaviour have been defined in the form of family conflicts, damage to relationships, legal disputes, or financial problems (Chawla and Sarkar, 2019).

Compared to adults, adolescents' physical, cognitive, and emotional immaturity increases the risk and severity of their reproductive and sexual adverse consequences (Alimoradi et al., 2017). High risk sexual behaviour is often accompanied by physical and psycho-social harm. In many developing countries, 15-19-year-old adolescents make up for almost half

of the 19 million new cases of STIs every year, and half of new HIV cases in the world are reported in 15-24-year-old adolescents. It is seen that the majority of Acquired Immunodeficiency Syndrome (AIDS) patients have contracted the disease in their adolescence because a large proportion of the adolescent population has high-risk behaviours that expose them to the risk of sexually transmitted infections (Alimoradi et al., 2017).

National Family Health Survey (NFHS-5), 2019-21, the Demographic and Health Survey- India conducted with the help of the United States Agency for International Development (USAID) and International Institute for Population Sciences (IIPS) reports in detail regarding high-risk sexual behaviour amongst adolescents and young adults (International Institute for Population Sciences (IIPS) and ICF, 2021).

High-risk sexual activity: Thirty-nine percent of men aged 15-24 who had sexual intercourse in the last 12 months had higher-risk intercourse (defined in the survey as sex with a non-marital, non-cohabitating partner) in the 12 months preceding the survey. The same statistic was reported by 2 percent of women aged 15-24 (International Institute for Population Sciences (IIPS) and ICF, 2021).

Age at first sex: Thirty-nine percent of women aged 15-24 have ever had sex, compared with 21 percent of young men aged 15-24. Two percent of young women and 0.5 percent of young men reported having sex before age 15. Overall, the percentage of young people aged 15-24 who have had sex before age 15 has decreased insignificantly between NFHS-4 and NFHS-5 for women (from 3% to 2%) and men (from 0.9% to 0.5%)(International Institute for Population Sciences (IIPS) and ICF, 2021).

Premarital sex: Ninety-seven percent of never-married women and 89 percent of

never-married men aged 15-24 have never had sexual intercourse. Only 2 percent of never-married women and 7 percent of never-married men aged 15-24 years had sex in the past 12 months (International Institute for Population Sciences (IIPS) and ICF, 2021).

Multiple sexual partners: Among those who had sexual intercourse in the 12 months preceding the survey, less than 1 percent (0.3%) of women and 1 percent of men reported having more than one sexual partner in the past 12 months (International Institute for Population Sciences (IIPS) and ICF, 2021).

Use of condoms: Among never-married women and men who had sex in the past 12 months, 63 % of women and 62 % of men reported using a condom at last sexual intercourse. Among young women and men who had higher-risk sexual intercourse in the past 12 months, women were much more likely than men to have reported using a condom at last higher-risk intercourse (63% versus 58%). Condom use at last sexual intercourse with a non-marital, non-cohabitating partner is much higher among these women and men from an urban background (72 % women and 64 % men) as compared to rural background (59 % women and 54 % men) (International Institute for Population Sciences (IIPS) and ICF, 2021).

Self-reported Sexually Transmitted Infections (STIs): 12 percent of women and 9 percent of men aged 15-49 who have ever had sex reported having an STI and/or symptoms of an STI in the past 12 months (International Institute for Population Sciences (IIPS) and ICF, 2021).

Comprehensive knowledge about HIV and access to testing services:

Comprehensive knowledge about HIV was defined as knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of getting HIV/AIDS, knowing

that a healthy-looking person can have HIV/AIDS, and rejecting two common misconceptions about transmission or prevention of HIV/AIDS (content of specific misconceptions asked in the survey were not available in the final report). 20 percent of young women and 29 percent of young men aged 15-24 were reported to have comprehensive knowledge of HIV (International Institute for Population Sciences (IIPS) and ICF, 2021).

As per the NFHS-5 survey, seeking 'Testing Services' for HIV tests may be more difficult for young people than older adults because of their lack of experience in accessing health services for themselves, and often, there are barriers to young people obtaining services. There was no elaboration on the nature of barriers. Among young people aged 15-24 who have had sexual intercourse in the past 12 months, the proportion who were tested for HIV and received their results was higher among women than among men; 13 percent of women were tested and received the results, compared with only 3 percent of men (International Institute for Population Sciences (IIPS) and ICF, 2021).

Teenage pregnancy: 7 percent of women aged 15-19 have begun childbearing; 5 percent of women have had a live birth, and 2 percent are pregnant with their first child (International Institute for Population Sciences (IIPS) and ICF, 2021). The data regarding the marital status of these women was not available.

A study analysing high-risk sexual behaviour in adolescent boys and young men by analysing NFHS-2 and NFHS-3 data concluded that early sexual debut, lower prevalence of condom use at first sexual experience, the tendency of live-in-relationship, and alcohol consumption indicate the hazardous interconnection between such behaviours among adolescent boys over the last decade placing them at

higher-risk sexual behaviour as compared to young men (Sharma and Vishwakarma, 2020).

Contributing factors towards high-risk sexual behaviour amongst adolescents can be viewed as follows:

Personal factors: A lack of complete knowledge about safe sex practices amongst adolescents also points toward high-risk sexual behaviour and increased risk of sexually transmitted infections (Maheswari and Kalaivani, 2017). Also, increased alcohol consumption was associated with more risky behavior in adolescents (Cavazos-Rehg et al., 2011). Prediction of adolescents' risky behaviours based on positive and negative mental health was reviewed by Soleimani Nia (Soleymani nia et al., 2006). Negative predictors of mental health, including physical problems, anxiety, social dysfunction, and depression, were examined. The results showed a positive correlation between negative indicators of mental health and risky behaviour. Among the negative indicators of mental health, anxiety and health problems had the highest correlation with risky behaviour in teens.

Also, positive predictors of mental health, including autonomy, environmental mastery, positive interpersonal relations, having a purpose in life, self-acceptance, and personal growth, were examined. Positive mental health indicators showed a negative correlation between these indices and risky behaviour. This means that increase in scores of positive indicators of mental health was associated with reduced risk of high-risk behaviour. Other personal factors like - engagement in other high-risk behaviours such as alcohol use, low educational level, lack of proper sexual knowledge and attitude, and improper sexual information sources were reported to have a significant correlation with the incidence of high-risk sexual behaviours (Alimoradi et al., 2017).

Family-related factors: Having intact family structures with parents who are not addicted or not involved in high-risk behaviours were important factors in preventing risky sexual behaviours among adolescents (Mmari and Blum, 2009). Having good family relationships and family support, adolescents' self-esteem and approval in the family were reported as effective factors in protecting adolescents from sexual deviance (Alimoradi et al., 2017). The authoritarian parenting style was associated with lower risk-taking, while the negligent parenting style was associated with higher risk-taking behaviour in adolescents (Alimoradi et al., 2017). In another study, strict parental supervision did not prove to be a protective factor (Joshi and Chauhan, 2011).

The likelihood of ever having had sex and having had sex before age 15 among women aged 15-24 also varied greatly by wealth. The percentage who has ever had sex declines from 45% among women in the lowest wealth quintile to 28% among women in the highest wealth quintile, and the percentage who had sex before age 15 declines from 4% among women in the lowest wealth quintile to 0.4% among women in the highest wealth quintile (International Institute for Population Sciences (IIPS) and ICF, 2021).

Peer-related factors: Sexual permissiveness of peers is associated with a higher frequency of risky sexual practices like one-night stands and having multiple sexual partners (Potard et al., 2008). Peer relations also affect attitudes toward substance abuse which could contribute to high-risk sexual behaviour (van Ryzin et al., 2012).

Table 1 depicts various factors denoted as risk (-) and protective factors (+) that affect adolescent sexual behaviour, pregnancy, childbearing, HIV/AIDS, and STIs (Joshi and Chauhan, 2011; Mmari and Blum, 2009).

Table 1. Various factors denoted as risk (-) and protective factors (+) that affect adolescent sexual behaviour, pregnancy, childbearing, HIV AIDS and STIs (Joshi and Chauhan, 2011; Mmari and Blum, 2009)

Environmental Factors		Individual Factors
<i>Family</i>		<i>Sexual beliefs, attitudes, and skills</i>
Family structure	+ Father is present	- More permissive attitudes towards premarital sex
	- Stepfather is present	- More permissive attitudes towards premarital sex
	- Higher number of children in household	+ Greater skills to resist unsafe sex
<i>Mobility</i>	- Residential mobility	+ Positive attitudes towards condoms/contraceptives use
<i>Family modelling of sexual attitudes</i>		+ Lower perceived barriers of condoms use
	+Mother has traditional sex values	+ Believes condoms prevent HIV/AIDS
	+ Parents approve of condoms/contraception	+ Perceives social support for condom/contraceptive use
	- Parents' marriage in conflict	+ Greater self efficacy to talk to partner about condom/contraceptive use
	+ Postivite family dynamics	+ Visited by family planning worker
<i>Peer</i>		<i>Educational achievement</i>
	- Sexually active peers	+ In school
	- Peers have been pregnant	+ Literate
	- Friends Drink alcohol	+ Higher academic performance
		- Left school early
		- Repeated a grade
		<i>Union status</i>
		- Engaged
		- Divorced/separated/widowed
		<i>Biological factors</i>
		- Younger pubertal development
		<i>Living arrangements</i>
		- Lives out of home , Migrant
		<i>Relationship with partner</i>
		+ Longer duration of relationship before sex
		<i>Problem or risk-taking behaviours</i>
		-Substance abuse, attends discos/ clubs
		<i>Emotional well-being</i>
		- Low future aspiration
		<i>Exposure to media</i>
		- Views pornographic materials
		- Watches movies/videos regularly
		<i>Previous sexual behaviours</i>
		- Anal intercourse
		- Victim of sexual abuse/forced sex
		- Poor genital hygiene
		+ Regular use of condoms
		- History of STD
		-Genital discharge

In the authors' experience, as part of practicing psychiatry in a Government setup, adolescents are brought frequently by law enforcement officers like women police constables or probation officers, under the aegis of the Protection of Children Against Sexual Offences (POCSO) Act, 2012 and the Juvenile Justice (Care and Protection of Children) Act, 2000. It is commonly observed that adolescent girl is brought under POCSO Act while adolescent boys are brought under JJ Act. In the majority of the cases, history reveals consensual sexual activity among the partners who have been in a relationship with the intent to marry, sometimes running away from the parental home. Parents often register the police case. This reflects a lack of knowledge regarding the legal age of marriage and consent. This highlights the need for increasing public awareness and educating children and adolescents in schools regarding the legal age for marriage and consent so that such instances decrease. Although the phenomenon of grooming may be suspected if the perpetrator is an adult male and the victim is a minor adolescent female.

Considering what can be done to tackle this public health issue, various research shows that comprehensive sex education and HIV prevention programs are effective in reducing high-risk sexual behavior in adolescents. Behavioral intervention programs that promote appropriate condom use and teach sexual communication skills to reduce risky behavior and delay the onset of sexual intercourse and protect sexually active youth from STDs, including HIV, in addition to unintended pregnancy. Behavior-based sex education and intervention programs are designed to help young people develop good decision-making and communication skills and increase knowledge about disease transmission and prevention (Johnson et al., 2003). Wider participation in education programs decreases the number of sex partners and increases the use of condoms. In

addition, participants develop better skills for negotiating lower-risk sexual encounters and increase the frequency of communications about safer sex (Johnson et al., 2003).

Schooling emerges as a definite protective factor; 71% of women with no schooling have ever had sex, while 8% had sex before age 15, compared with 33% of women with 12 or more years of schooling having ever had sex and less than 1% having had sex before age 15. Among young men who had sex in the past 12 months, the likelihood of having had higher-risk sex generally increases with schooling; 21-28% of men with no schooling or less than 5 years of schooling have had higher-risk sexual intercourse, compared with 57% of men with 12 or more years of schooling (International Institute for Population Sciences (IIPS) and ICF, 2021).

Gatekeepers and peers must communicate with adolescents and young people on issues of sex and sexuality, the risk of experimentation and empower them to make safe decisions to achieve better reproductive health outcomes. Individual level factors related to sexual beliefs, attitudes, and skills can be influenced by behavior change communication programs with the involvement of sectors that deal with adolescents, for example education sector, health sector, criminal justice system for juveniles, mass media, and social media sectors along with the provision of adolescent-friendly services (Joshi and Chauhan, 2011).

Sexuality education must be made universal and should address relationship issues, consent, and safety from an early age in schools and other settings where young people congregate. Programs must focus on the interventions on improving the protective factors, reducing risk factors, and not only on risk awareness alone. Adolescents' access to friendly services and an enabling environment in the community can improve their health-seeking behaviour.

Adolescents have many concerns, apprehensions, and lack of understanding regarding their needs. They feel shy, embarrassed, and hesitant in talking to adults, especially regarding matters that are related to sexual health. Most adolescents may avoid seeking care and guidance. They might discuss their concerns with their peers who may not have correct and scientific information. In addition to all this, adolescents may harbour myths and misconceptions regarding the development of sexual organs and reproduction, knowledge about health services offered, concerns about lack of privacy in local clinics, no transport or lack of affordability/money, the judgemental attitude of doctor/nurse (NCERT, 2020). In view of this, Adolescent Friendly Health Services (AFHS) are the need of the hour. AFHS can be fixed model or outreach model-based. The staff at AFHS should be able to show respect to adolescents, give them adequate time, treat them with patience, and know the importance of privacy and confidentiality. The infrastructure should be bright and colourful with awareness messages. The timings should be accessible to adolescents and not clash with school timings. The key role of AFHC is to monitor the growth and development of adolescents and provide information about the changes, promoting a healthy diet and preventing both malnutrition and obesity, counsel them on life skills related to sexual and reproductive health, tell them about prevention of diseases like HIV and STIs. Street youth, domestic helps, adolescents working in various industries, institutional inmates are adolescent groups who are at further higher risk (NCERT, 2020). Rashtriya Kishor Swasthya Karyakram mandates development of AFHCs. Kishori Shakti Yojana, Balika Samridhi Yojana, Reproductive and Child Health programme, National AIDS Control Programme are few other government programmes aimed at adolescent reproductive health (Ojha et al., 2019).

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