Understanding Sexual and Reproductive Health Needs of Unmarried Adolescents and Youths: Evidence from Formative Study in Two Urban Slums of Uttar Pradesh, India

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Abstract

Background

Unmarried adolescent and youth (AY) in many developing countries including India face multiple challenges related to sexual and reproductive health (SRH). The present study explores the SRH need of AY to gain a holistic understanding of the SRH landscape in context of urban slum settings in India.

Methods

A formative study was conducted in two urban slums in Uttar Pradesh (Varanasi and Firozabad) using qualitative research techniques such as in-depth interviews (IDI) and focus group discussions (FGD). Thematic analysis was guided by principles of grounded theory and narrative inquiry, both inductive and deductive approaches.

Results

The study found a range of challenges faced by unmarried youth, including limited awareness and comprehensive knowledge SRH issues. Social and economic constraints, communication gap, social network and source health provider were the majorly contributed to misinformation and misconceptions. Information through social media and online sources serves as a key source of SRH knowledge among adolescents, but concerns remain about the accuracy and reliability of this information.

Conclusion

The study highlighted SRH knowledge, source of knowledge, major concern, and opportunity of SRH knowledge about youth and adolescents in urban slums. Multi-faceted strategies, targeted sexual health education among the vulnerable population, Correct SRH information in online contents is essential for dispelling myths and providing accurate information.

Key Words: sexual and reproductive health (SRH), adolescents, unmarried, India, Urban

Plain Summary

Using qualitative data from two urban slums of Uttar Pradesh, this paper explores the limited knowledge about sexual and reproductive health (SRH), sources of information, extent of physical intimacy, contraceptive use, and engagement with the healthcare system among unmarried youth aged 15-24 years. While traditional norms may disapprove of premarital sex, physical intimacy among unmarried youth is increasing in some parts of India. The major source of sexual and reproductive health knowledge were peers and sisters-in-laws for boys and girls respectively. However, the social network of boys was wider than that of girls. There is an increasing tide of information through online content in social media, which serves as a key source of knowledge among adolescents, but concerns remain about the accuracy and reliability of this information. Comprehensive knowledge about contraception is limited, mostly aware of method such condoms and pills; however, in-depth knowledge is lacking. Healthcare worker outreach among the unmarried youth was minimal that calls for policy and programme intervention.

Background

Universal access to the right and adequate knowledge of sexual and reproductive health (SRH) is a basic human right associated with achieving sustainable development goals (SDGs). However, in many settings across the globe, unmarried adolescents and youth engaged in romantic and intimate relationships, lack adequate knowledge and experience [1]. Although this relationship has positive social integration, personal happiness, and overall wellbeing, many young people face consequences due to the possibility of unprotected and risky sexual behaviour that results in high-risk pregnancy at an early age. These vulnerabilities are more often seen in poor resource settings in developing countries where SRH knowledge and awareness are deficient [2-4].

Adolescents and youth aged 15–24, comprising around a fifth of the global population, are considered as the drivers of social and economic changes in many low - resource settings. Hence, many governments priorities this population in their programme and policy agenda [1]. Many donor and non-governmental organizations invest in lot of intervention programme to reduce the risk and vulnerability of various priorities (education, health, and employment etc.) in this age group [5]. People often relate these age groups with high emotion and curiosity, which results in many impulsive activities [6, 7]. Moreover, youth living in urban slums face unique challenges which is characterized by high levels of unemployment, crime, poor sanitation, substance abuse, poor schooling facilities, and lack of recreational facilities. They are at greater risk for HIV infection, risky sexual behavior, early childbearing, and other adverse sexual and reproductive health outcomes than those in formal settlements. In addition, they live in an environment where knowledge about contraceptive use is inadequate and access to contraceptive methods is limited [3, 8-10].

Like global, the government of India also prioritize the adolescents and youth in its development agenda. Policies and programmes including the Adolescent Reproductive and Sexual Health Strategy (ARSH) (2005–2013), Rashtriya Kishor Swasthya Karyakram (RKSK), and National Adolescent Health Programme (2014–present) is implemented to support and escalate the demand for essential adolescent health services. Adolescent friendly health clinic are functioned in the health facility to provide adolescent specific health services [11]. However, 23% of women aged 20-24 years were married before 18 years of age and 6% of adolescents had already become mothers in 2019–21, as per the latest round of national family health survey [12]. The survey

evidently showed that 11% of unmarried boys and 2% of unmarried girls in the 15-24 age-group reported having sex with a disproportionate regional variation. Students and working adults of large cities including Mumbai, Pune, Delhi and Chennai have a high prevalence of penetrative and non-penetrative sexual activities [6, 13-16]. This prevalence may be underestimated as unmarried girls and boys in India consider premarital sex as sin. Misconceptions and myths about the various sexual reproductive needs among young boys and girls. The stigma and taboos related to sexual and reproductive health negatively influence their physical and emotional wellbeing ¹

On the other hand, social networks, and digital media increase awareness of SRH. An emerging body of literature found a paradigm shift in the information-seeking behaviour of adolescents where they prefer to receive SRH information from mass media and digital media platforms such as *television*, *Facebook*, *WhatsApp*, *YouTube*, etc. [17] . However, it also increases the risk of misinformation, which is an additional obstacle to consistent and effective use of contraceptives among adolescents. Although patients are exposed to digital media and social networks and interact with health workers, there is a positive change in their SRH behaviour and uptake of modern contraceptives. Despite these initiatives, unmarried adolescents face structural barriers such as social conservative norms, lack of female autonomy, shyness, and restricted social mobility that deter their chances of accessing accurate information on SRH [15, 16, 18, 19]. Studies have also found that health personnel and programmes often overlook and do not reach unmarried adolescents [20].

Many global and national commitments have been made to achieve the broad agenda of universal access to sexual reproductive health and rights. However, the focus is always on married couples to increase the prevalence of modern contraceptive rates and to reduce the unmet need. Although there are some focuses on the SRHR agenda of young adolescents, this is limited to their puberty and menstrual hygiene. Sexual intimacy and its consequences among the unmarried adolescents are less talked and considered as a taboo despite the change in social and traditional value system, norms, and improvement in economic condition in India [21]. However, with the increase in permissiveness towards premarital sex, it is seen higher occurrence especially in large cities/urban areas like Delhi, Pune, and Mumbai [13, 15, 18]. A dearth of studies in India have focused on unmarried adolescents and youth living in urban slums and their sexual and reproductive health

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 $^{^1\} https://www.hindustantimes.com/lifestyle/health/myths-related-to-sexual-and-reproductive-health-of-women-101653530049042.html$

needs. Thus, this formative research will add the understanding of this context, along with focusing on their social networks and their role as enablers and sources of information on sexual and reproductive health. In addition, there is a need to understand the perspectives of frontline health care workers in reaching this group and examine the need for capacity building and orientation required to break the provider's bias in reaching the young population and providing information and services related to SRH.

Study Setting

This study is based on data from a qualitative survey collected in two urban slums (Varanasi and Firozabad) of Uttar Pradesh in India. Uttar Pradesh is the most populous state of India with a population of 236 million, out of which a quarter is youth and adolescents². With the decline in child marriages over the past decades (59% in 2005–06 (NFHS 3) to 16% on 2019-21 (NFHS 5)), a huge number of adolescents and youth remain out of marriage for a longer time. Seventeen percent of boys and 6% of unmarried girls reported having had a premarital sex in 2015-16 [22]. Moreover knowledge about pregnancy, contraception, and risk of HIV/AIDS is also lacking [23].

Varanasi and Firozabad are two major cities in the state. Varanasi is one of the oldest inhibited cities in the world, a central place of tradition among Hindu pilgrimages and has a syncretic tradition of Muslim artisanship. As per Census 2011, Varanasi city has a population of 1.4 million with a sex ratio of 879 females to 1000 males. Similarly, Firozabad, on the other hand, is India's center of glassmaking industry and produces glassware products. The city had around 6 lakh population in 2011, with 53% male population.

Methods

Focus group discussions (FGDs) and in-depth interviews (IDI), were conducted in two urban slums, Firozabad, and Varanasi – one slum in each city. To recruit the study participants, we applied purposive and snowball techniques. The description of activities and population covered is presented in Table 1. A total of 92 activities were conducted in two study areas, out of which 24 FGDs and 40 IDIs were conducted among unmarried boys and girls. FGDs were conducted among four community health workers (ASHA³) to understand the sexual and reproductive health

² Census of India. https://censusindia.gov.in/census.website.

³ Accredited Social Health Activist is the community health worker in India

needs and vulnerability among both married and unmarried adolescents and youth in the study areas. Data collection for IDIs and FGDs was conducted along with interactive activities such as card sorting, context building, and storytelling. Data collection processes included data quality assurance, monitoring, and adherence to study procedures. IDIs and FGDs were conducted at places that were convenient for the participants and ensured privacy and confidentiality. All interviews and discussions were transcribed and translated into the English language for coding.

Table 1. Data collection activities across two study sites, urban slums of Varanasi and Firozabad

	Activity description and population	Number of Interview
Focus Group Discussions		
1	Unmarried Boys and Men aged 15-24 years (distributed across 15-17 years, 18-20 years, 21-24 years)	12
2	Unmarried Girls and Women aged 15-24 years (distributed across 15-17 years, 18-20 years, 21-24 years)	12
3	Married Men aged 15-24 years (distributed across 15-19 years, 20-24 years)*	4
4	Married Women aged 15-24 years (distributed across 15-19 years, 20-24 years) *	4
5	ASHAs from intervention areas**	4
	Total FGDs	36
In-depth Interviews		
1	Unmarried Boys and Men aged 15-24 years currently in a relationship (distributed across 15-17 years and 18-24 years)	20
2	Unmarried Girls and Women aged 15-24 years currently in a relationship (distributed across 15-17 years and 18-24 years)	20
3	Married Boys and Men with one child aged 15-24 years	8
4	Married Girls and Women with one child aged 15-24 years	8
	Total IDIs	56
Data collection activities		92

Note: * In Varanasi, respondents aged 18 and above could be included among the married groups **There are no non-intervention areas in Varanasi. Thus, all ASHA fell under the intervention areas.

Thematic analysis was guided by principles of grounded theory and narrative inquiry, using both inductive and deductive approaches. Using data-driven themes from the literature, as well as codes that arose from the qualitative data collection and which also reflected from the participants'

language and discourse. Using an iterative process, the study team created and refined a formal codebook. Two qualitative research associates (RAs) coded all transcripts independently.

Findings

Socio-cultural status of the survey respondents

A total of 24 FGDs and 40 IDIs were conducted among unmarried adolescents and youth, those were currently in a relationship. The study majorly included participants from the lower socioeconomic groups living in urban slums of the two city. The majority of boys and girls included in the study are currently not continuing their formal education. The reasons for dropping the school among the boys included financial reasons, engagement in salaried work, and lack of interest in education. However, the familial obligation of taking care of households was a common occurrence for girls. Sometimes, due to fear of love affairs, parents do not allow their daughters to attend school. However, very few adolescents completed school and then moved on to study in college. Adolescents and youth often joined industrial training institutes (ITIs) after school to acquire vocational training and were also involved in bangle making and designing. Moreover, respondents stated their economic condition of household was low as the poor health conditions of the primary breadwinner was a common occurrence and eventually, they discontinued their study.

"If somebody is not well in the house or like my mother is operated on and she was in the hospital and came from the hospital today itself. My father also has some health issues. Parents want their daughter to get married till they are alive. My father used to say that if after marriage if your family allows you to do further studies then you can do it - Unmarried Girl, 21-24 Years, Varanasi."

Qualitative findings revealed that adolescent girls and women face major restrictions in terms of mobility and freedom, and they are expected to come home by evening as compared to adolescent boys in the study areas. These norms restrict women's desire to play sports and engage in any physical activity.

"They can go up to coaching and come back from there which is 1 km. If it is far then somebody will pick and drop to the coaching center. Due to fear they do so - Unmarried Boy, 15-17 Years, Varanasi"

"Yes, but they are boys and they are allowed to go anywhere alone. In fact, if they go somewhere their parents give them money to buy things - Unmarried Girl, 18-20 Years, Firozabad"

Romantic Relationship

Most of the respondents were in a romantic relationship. Some boys had more than one girlfriend. These romantic relationships majorly started through mutual friends, at weddings, and sometimes through family friends. One girl reported having boyfriends through facebook. Even when they meet in the presence of their friends, the boy usually initiates a conversation about having romantic feelings.

"I had been for a marriage and she was my friend's sister. My relatives asked me if I will marry and I told yes first show me the girl. So she had come along with the wedding party and my sister-in-law called me and asked me to meet her. So that time we fell in love with each other. Then her brother called me to meet and asked what I drink and eat and all. I told him that I drink beer and eggs only when I am outside the house. Then they came to meet us but then my father was against it - Unmarried Boy, 18-24 Years, Firozabad"

However, most respondents felt reluctant to express their views or experiences on their own sexual relationships and respondents reported the sexual/romantic experience of their friends. The lack of exposure and social restrictions amplify the desire to explore sexual intimacy and feed their curiosity. Respondents during in-depth interviews reported that couples prefer to meet in private places, their own homes when no other members were present, and in local hotels. Unmarried couples explored place for initiating physical intimacy—

"I said that we cannot be in the park because we cannot do these in the park openly. Then she said that she knows why I am asking her to be in the room. I asked her to come. She came and we went to OYO Hotel. I was talking to her and I kissed her on that day first time and had sex also. - Unmarried Boys, 18-24 Years, Varanasi"

Knowledge of contraceptive methods

Although adolescents heard about contraceptive methods, the breadth and depth of knowledge available to unmarried youth were limited and inconsistent. Many youths had never heard about the contraceptive methods other than condoms. Though knowledge of condoms was widespread, some feel that it offers a dissatisfying sexual experience. Some respondents reported about the traditional methods of contraception as young men understood withdrawal method and reported that it ensures sexual satisfaction in a way condoms do not. Beyond contraception, there seemed to be greater curiosity and insecurity around sexual drive. Unmarried girls have knowledge about contraceptive pills; however, they did not distinguish between oral contraceptive pills (OCP),

emergency contraceptive pills (ECP), and medical abortion (MA) pills. Girls were not aware of the correct way and periodicity for taking the pill.

A few excerpts from the interviews are:

"This was the one thing that a guy told me about, I have but I don't know much about it - Unmarried Boys, 15-17 Years, Firozabad"

"Pills and condom are there, Manforce condom, female condom - Unmarried Boys, 15-17, Firozabad"

"When she does a test and gets confirmation that she is pregnant, she should take a tablet. There is a kit to do a pregnancy test. She needed to take tablet after doing test (Knowledge about Medical abortion pills) - Unmarried Boy, 18-24 Years, Firozabad"

"I told him we need to abort, so he gave the (combi-pack) tablet and I gave it to my friend. Yes, I had brought this for my friend's girlfriend. I got it from the medical store - **Unmarried Boy, 18-24** Years, Firozabad."

Source of knowledge

The unmarried cohort finds numerous ways to engage with each other, which are categorized as offline and online networks. Considering that SRH is a taboo subject, information is often passively available to the unmarried adolescents and youth from various sources. However, the social network for males were much wider than that for females.

A. School and community friends

Friends from schools, colleges, or communities are the major source of information about sexual and reproductive health and contraceptive methods. These sources are often different for unmarried girls and boys, despite having similar friend circles. Girls share crushes, boyfriends and sexual intimacy with school friends who are disconnected from family. Conversations about intimacy and private life are more likely to be anecdotal. Conversations around contraceptives appear to be more prevalent among friends made in the community, who often circles within the family, for unmarried girls. Unmarried boys appeared to have similar conversations across groups from school and their community but might have a greater sense of comfort with friends from the community. Unmarried men usually have friends who are older than them who provide the information.

"If I have a boyfriend in the village and I talk to them then parents will get angry. If somebody tell them about him then parents will feel that it's an insult of them and they will decide to do my marriage - Unmarried Girls, 15-17 Years, Varanasi"

"My friend told me about it. He said that we need to use condoms so that sperm will not come out from it. He is 18 years old - Unmarried Boy, 15-17 Years, Firozabad"

B. Family

Among the girls, married sisters and sisters-in-law were the major sources of information to teenage girls. Sometimes mothers educate their daughter on aspects of sexual and reproductive health, such as the need to use contraceptives during sexual intercourse. However, boys share open relationships with their sisters-in-law (Bhabhi) and feel comfortable discussing sexual intimacy and precautions with them. If the same comfort is shared with the elder brother, he too becomes a confidante.

"My sister-in-law told me all this and she also told me about condoms. Because my sister-in-law told me that is why I know all this. She has 3 sons and 1 daughter, and they used condoms and after they got a son they have taken the injection for 5 years - Unmarried Girl, 18-24 Years, Varanasi"

"No. My sister-in-law knows but no one else. She is her relative. She does speak to her. No one really speaks to them as such otherwise - Sister-in-Law is Aware About their Relationship" Unmarried Boy, 18-24 Years, Firozabad"

Unmarried girls eavesdrop on conversations ASHAs with married women in the house and gather some surface level information on contraceptives. Apart from that, the school biology classes also contribute to their understanding of human reproduction and need of contraceptives.

C. Online engagement

Digital media such as social media apps, websites with pornographic content, television remained very commonly used medium among the youth to understand SRH issues. Adolescents made online friends, and it allows for open conversations related to boyfriends, sexual intimacy, contraceptives, and other aspects of sexual and reproductive health. However, there was a fear of the conversation being recorded and leaked, threatening the identity and image of the person sharing experiences. Thus, these comfort levels in these conversations take some time to develop. Because of these conversations, unmarried women passively gained knowledge of condoms, MA kits, and injectables. Unmarried boys aged 15-17 years usually have some older friends who talk

about sexual intimacy but not necessarily contraceptives. Online engagement might seem contingent on owning a phone.

"It is their thinking about the boys, parents give permission to their boys and not give freedom to their daughters and it's wrong. If I have a brother then they will definitely give it to him but don't give it to me. They give freedom to their son and don't give freedom to their daughters. We also can do everything but they don't understand it - Unmarried Woman, 18-20 Years, Firozabad"

This study revealed that unmarried young boys and girls were more prone to use social media apps such as Facebook, Tiktok, YouTube, and other social media activities to learn about topics that they were interested in. Content on sexual intimacy and contraception were consumed in various formats but primarily depended on YouTube videos.

"Sometimes on YouTube, I look for knowledge on sex. Sometimes I feel curious to know about something so I search on YouTube. Something which we cannot ask anyone. Like how twins are born - Unmarried Man, 18-20 Years, Varanasi"

Information about contraceptives is claimed to be acquired from advertisements and television programs, and through youtube, newspapers, and facebook. Knowledge of contraceptives like condoms was also acquired from shows such as "Savdhaan India⁴" and "Crime Petrol⁵". However, advertisements about condoms are seen on television and other media platforms, giving them basic knowledge of condoms. With increased access to the internet, similar roles of educating and influencing young married couples on family planning could also be played by online sources and networks.

Discussion and Conclusion

Using qualitative information from two urban slums in Uttar Pradesh, this paper offers an insight into the socio-cultural and individual contexts of romantic and sexual relationships, knowledge and attitudes surrounding contraceptives among unmarried youth. Although with increasingly more policies and programme targeted towards unmarried youth, the knowledge of SRH remained limited. The lack of knowledge further escalated in the vulnerable section of community—uneducated or school dropouts, and those living in urban slums. In this context, this paper

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^{4 5} Television show in India regarding crime and investigation

prioritizes the need for providing right and adequate knowledge to the unmarried youth living in slums, which will be helpful; in achieving the broad agenda of SRHR in India.

Considering the data collected for the unmarried adolescents and youths, it reflected that their social circles played an influential role SRH awareness. Reporting of romantic partners was also significant and Many youths met their romantic partners through mutual friends or community functions. The escalation of a relationship to sexual intimacy is a relatively gradual process, which took around four months to one year. However, women were hesitant compared to men to initiate physical intimacy because of social shame, stigma, and fear of pregnancy. Young women often agreed to sexual intimacy as their boyfriend promised loyalty and marriage in return. Given the community taboos surrounding sexual intimacy among unmarried couples, they do not find conducive environment to adapt safe sex behaviour and sexual debut is often unplanned, unprotective, and impulsive.

Despite being sexually active, there was limited knowledge about correct way of using contraceptives and several misconception around sexual and reproductive health cloud young minds. The study found the respondents familiar with condoms and pills as modern contraceptive methods, but the breadth of knowledge varies. Most of the time SRH related information were gathered passively, but in the case of an emergency, information-seeking behaviour can be active as well. The decision of whether or not to adopt a method often shaped by the experiences of sexually active friends. The use of condoms usually occurs when intimacy was planned, and both partner were inclined towards adopting a method of contraception. The fear of an pregnancy prior to marriage mitigated by ECPs and MA pills, which were viewed as foolproof ways to counter a pregnancy. Sometimes, the inclination to adopt a modern contraceptive method was absent due to heavy reliance on traditional methods such as withdrawal.

The point of procurement for all mentioned contraceptives were usually medical stores. Even when the couple asks a friend to arrange contraception for them, the friend uses a medical store or his own clinic as his point of procuring contraceptives. While the respondents were familiar with how to use condoms, there was widespread dependency on both MA kits and ECPs.

There were many barriers which impact adequate knowledge of protective methods. Education among the respondents prevailed as window of opportunity for getting the knowledge about

various sexual reproductive matters through biology classes, in addition to sex education and life skill interventions beyond schools. Currently, through the RKSK programme adolescent health day, outreach to adolescents and youth has been improved and facilities provide the needful services. Moreover, through school health wellness programme, recently launched by the government is another potential platform to provide the information regarding various topics including SRH need of adolescents.

The study identified multilevel associated factors which limit adolescents and youth access to information on SRH, affect their utilization of SRH services, and limit their ability to understand SRH need. Unmarried girls have restrictions of movement and freedom which leads to less access and agency on decision making about the use of contraceptives. However, exposure to social networks through online and offline engagement accelerates knowledge about sexual and reproductive health and the use of contraceptives among the youth enabling agency and social norms may help in protecting harmful social media content on SRH and help in safe access to SRH knowledge and methods. Our study is in line with other studies which underline the dimensions of agency—decision making, mobility and gendered social norms are a major barrier in accessing SRH knowledge [2, 5, 14]. Though there is an optimum change in cultural values and norms related to SRHR, the procurement of contraceptives remained a difficult task for the unmarried youth. They always try to avail themselves of the method in name of another married person.

The study's recommendations underscore the imperative of enhancing sexual and reproductive health (SRH) knowledge among unmarried youth. It emphasizes the necessity for comprehensive awareness campaigns targeting both the youth and key gatekeepers who influence their access to contraceptives. Moreover, the research advocates for identifying unbiased sources of SRH information within communities, distinct from ASHAs, to improve uptake of contraceptives. Direct engagement between health workers and unmarried youth is proposed as a means to provide trustworthy guidance and address concerns. Furthermore, leveraging digital media platforms to disseminate accurate SRH content is highlighted as pivotal in dispelling misconceptions. These recommendations collectively stress the significance of multifaceted strategies encompassing education, community involvement, and digital outreach to foster healthier attitudes and behaviors regarding SRH among unmarried young populations.

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Availability of data and material: The datasets used and/or analyzed during the current study are available from the first author/corresponding author.

Declarations

Ethics approval and consent to participate: Appropriate consent have been taken from the participants during the data collection.

Declaration of competing interest: The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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