

Sexual and Reproductive Health Awareness among Adolescents in Hyderabad, Telangana: A Questionnaire-Based Study

Dr. Poojitha Yadav¹, Dr. Bushra Shereen²

¹Mallareddy Medical College for Women, Hyderabad, Telangana, India
Email: [poojitha2007\[at\]gmail.com](mailto:poojitha2007[at]gmail.com)

²Associate Professor, Department of Obstetrics and Gynaecology, MRMCW

Abstract: Sexual and reproductive health awareness is an important component of adolescent healthcare. This study assessed awareness among 500 adolescents aged 14–19 years from five educational institutes in the suburban region of Hyderabad, Telangana. A 25-item questionnaire covered STIs, prevention, contraception, cervical cancer prevention, vaccination, safe abortion, screening, sexual and reproductive rights, the Protection of Children from Sexual Offences (POCSO) Act 2012, and school-based sexual health education. Awareness was high for STIs (96.2%), STI prevention (95.8%) and contraception (90.4%). Awareness was lower for safe abortion (34.8%), cervical-cancer vaccination and protective measures (36.8%), STI screening (39.4%), cervical-cancer screening (36.8%) and the POCSO Act (43.8%). Only 32.8% reported having received a sexual health class at school. The results showed high reported awareness of some basic topics but lower awareness of several clinical, preventive and legal topics. More structured adolescent sexual and reproductive health education is warranted.

Keywords: Adolescents; Sexual and reproductive health; Sexually transmitted infections; Health awareness; Health education

1. Introduction

Sexually transmitted infections (STIs) are caused by bacteria, viruses and parasites and are transmitted mainly through sexual contact. Common STIs include chlamydia, gonorrhoea, syphilis, trichomoniasis, HIV, human papillomavirus (HPV), herpes simplex virus (HSV) and hepatitis B [1]. Untreated infection can lead to infertility, pelvic inflammatory disease, ectopic pregnancy, adverse pregnancy outcomes, cervical cancer and other serious complications.

Adolescence is an important period for acquiring knowledge about sexual and reproductive health. The 2011 Census reported that people aged 10–19 years accounted for about one-fifth of India's population [3]. The study background also reports that adolescents made up approximately 19% of the population of Telangana. In India, programmes such as the Adolescent Reproductive and Sexual Health Strategy and Rashtriya Kishor Swasthya Karyakram (RKSK) have been developed to address adolescent health needs [9].

Studies from Southeast Nigeria, Mexico and rural Central India have examined sexual and reproductive health knowledge and behaviour among adolescents [10–12]. Local data are useful because access to information, school education and attitudes towards sexual health vary between communities. This study therefore assessed sexual and reproductive health awareness among adolescents in the suburban region of Hyderabad, Telangana.

2. Literature Survey

Previous studies have examined adolescent knowledge of STIs, contraception, sexual behaviour and reproductive health in different social settings [10–12]. Their findings

indicate variation in adolescent awareness across topics such as STI prevention, screening and access to sexual and reproductive health services [10–12].

In India, the ARSH Strategy and RKSK were introduced to improve adolescent health education, counselling and access to services [9]. The present survey was undertaken in this broader setting to identify topics in which adolescents in Hyderabad had limited awareness.

3. Problem Definition

Adolescents may be familiar with terms such as STIs and contraception but may have less information about screening, vaccination, safe abortion, reproductive rights and legal protection. Lack of reliable information may affect preventive behaviour and timely use of health services. The study was undertaken to measure these areas of reported awareness in an adolescent population from Hyderabad.

4. Methodology / Approach

Study design and setting: This was a descriptive questionnaire-based study conducted among adolescents aged 14–19 years in five educational institutes in the suburban region of Hyderabad, Telangana. The study area was described as the Medchal-Malkajgiri district/suburban region of Hyderabad.

Participants: The study included 500 students. Participants were informed about the study objectives, their rights and measures for protecting their information. Written informed consent was obtained from participants, with parental or guardian consent where applicable.

Questionnaire: A 25-item questionnaire assessed awareness of STIs and their prevention, contraception, cervical cancer, vaccination, safe abortion, screening, sexual and reproductive rights, intimate hygiene, the POCSO Act 2012, school-based sexual health education, and complications of unsafe abortion and teenage pregnancy.

Statistical analysis: Categorical variables were summarized as frequencies and percentages. Proportions were presented with 95% confidence intervals calculated using the Wilson method. Because the available dataset contained aggregate questionnaire responses without individual-level demographic and response data, subgroup comparisons and multivariable analyses were not performed. The study therefore reports descriptive estimates rather than associations between participant characteristics and sexual and reproductive health awareness. Informed consent was obtained from participants, with parental or guardian consent where applicable.

5. Results and Discussion

All 500 participants were included in the analysis. The main responses to binary questions are shown in Table 1.

Table 1: Selected questionnaire responses among adolescents (n=500).

Question / indicator	Yes, n (%)	No, n (%)
Aware of STIs	481 (96.2)	19 (3.8)
STIs can be prevented	479 (95.8)	21 (4.2)
Aware of contraception / birth control	452 (90.4)	48 (9.6)
STIs can cause cancer	388 (77.6)	112 (22.4)
Aware of cervical-cancer vaccination / protection	184 (36.8)	316 (63.2)
Aware of safe abortion	174 (34.8)	326 (65.2)
Willing to discuss sexual-health concerns	122 (24.4)	378 (75.6)
Willing to seek professional care	384 (76.8)	116 (23.2)
Aware of sexual / reproductive rights	234 (46.8)	266 (53.2)
Aware of STI screening	197 (39.4)	303 (60.6)
Aware of cervical-cancer screening	184 (36.8)	316 (63.2)
Maintain intimate hygiene regularly	460 (92.0)	40 (8.0)
Aware of POCSO Act 2012	219 (43.8)	281 (56.2)
Received a sexual-health class at school	164 (32.8)	336 (67.2)
STIs can lead to infertility	431 (86.2)	69 (13.8)

Among the 500 respondents, awareness of STIs was 96.2% (95% CI: 94.1–97.6%), while awareness that STIs can be prevented was 95.8% (95% CI: 93.7–97.2%). Awareness of contraception was 90.4% (95% CI: 87.5–92.7%). In contrast, awareness of safe abortion was 34.8% (95% CI: 30.8–39.1%), cervical-cancer vaccination or protective measures was 36.8% (95% CI: 32.7–41.1%), STI screening was 39.4% (95% CI: 35.2–43.7%), and cervical-cancer screening was 36.8% (95% CI: 32.7–41.1%). Awareness of the POCSO Act 2012 was 43.8% (95% CI: 39.5–48.2%). Only 32.8% (95% CI: 28.8–37.0%) reported receiving a sexual-health class at school. Reported awareness varied considerably across questionnaire domains. Because individual-level demographic and questionnaire data were not available, differences according to age, sex, educational level or institution could not be evaluated. Awareness was highest for STIs (96.2%), prevention of STIs (95.8%) and contraception (90.4%). Awareness was much lower for safe abortion

(34.8%), cervical-cancer vaccination and protective measures (36.8%), STI screening (39.4%) and cervical-cancer screening (36.8%). Only 32.8% of respondents reported having attended a sexual health class at school. A relatively high proportion of respondents reported willingness to seek professional care for sexual-health concerns (76.8%; 95% CI: 72.9–80.3%). However, willingness to discuss sexual-health concerns with family members, friends or teachers was considerably lower (24.4%; 95% CI: 20.8–28.4%). Reported willingness to seek professional care was 52.4 percentage points higher than willingness to discuss sexual-health concerns with family members, friends or teachers. Because individual-level paired responses were unavailable, no formal statistical comparison was performed. The multiple-choice questions showed similar gaps in specific awareness. Most respondents (79.6%) identified both having multiple sexual partners and not using protection as risk factors for STI transmission. HPV vaccination was identified as the vaccine protecting against cervical cancer by 58.2% of participants. However, 49.4% selected 18 years or older as the age at which HPV vaccination should begin. For STI protection, 45.8% selected condoms, while 42.8% selected all of the listed options. For symptoms of Chlamydia trachomatis and Neisseria gonorrhoeae, 53.6% selected all of the listed symptoms.

Responses showed higher awareness of broad STI-related concepts than of specific preventive and clinical topics. The low proportion reporting formal school-based sexual health education is relevant in this context. The survey also shows that willingness to seek professional care was considerably higher than willingness to discuss sexual-health concerns with people in the adolescent's immediate social environment. This difference should be considered when designing adolescent sexual-health education and counselling.

Selected multiple-choice responses are presented in Table 2.

Table 2: Selected multiple-choice responses among adolescents (n=500)

Question	Most selected response	n (%)
STI transmission risk factors	Multiple partners + no protection	398 (79.6)
Vaccine protecting against cervical cancer	HPV vaccine	291 (58.2)
Age to start HPV vaccination	18 years or older	247 (49.4)
Birth-control method protecting against STIs	Condoms	229 (45.8)
Symptoms of Chlamydia/Gonorrhoea	All of the above	268 (53.6)
Complications of unsafe abortion	All of the above	397 (79.4)
Complications of teenage pregnancy	All of the above	411 (82.2)
Direct cause of cervical cancer	HPV	184 (36.8)
Which are considered STIs	All of the above	375 (75.0)

The multiple-choice responses further demonstrated variation across specific topics. Although 58.2% selected HPV as the vaccine protecting against cervical cancer, only 36.8% identified HPV as the direct cause of cervical cancer. These responses indicate variation in awareness even within related cervical-cancer topics.

6. Conclusion

Among the 500 adolescents surveyed, reported awareness was high for STIs, STI prevention and contraception but lower for safe abortion, screening, cervical-cancer prevention, reproductive rights, POCSO and formal school-based sexual-health education. These findings identify specific areas for adolescent sexual and reproductive health education in this study population. Because the study used aggregate questionnaire data and did not assess actual sexual-health practices, the findings should not be interpreted as evidence of behavioural change.

7. Future Scope

Future studies should collect individual-level demographic and questionnaire data to permit subgroup analysis and multivariable modelling. A validated knowledge score could be developed from the questionnaire, allowing assessment of factors associated with higher sexual and reproductive health knowledge scores. Prospective pre- and post-intervention studies could then evaluate whether structured educational programmes improve knowledge and healthcare-seeking intentions.

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Author Profile



Dr. Poojitha Yadav is a medical graduate from Mallareddy Medical College for Women, Hyderabad, Telangana, India. She demonstrated an academic interest in adolescent health, sexual and reproductive health, health surveys, clinical research and evidence-based medicine.