Study of Knowledge, Attitude and Practices regarding Reproductive and Sexual Health among School Going Adolescent Girls in Rural Area of Maharashtra

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Abstract

Background: Adolescents have many misconceptions regarding reproductive and sexual health and lack access to age and gender appropriate health information. So, they find out about the same from inauthentic sources of information. Attitudes and decisions based on such information greatly influence a woman’s health.

Objectives: This study was carried out to study the knowledge, attitude and practices regarding reproductive and sexual health and to study the sources used to obtain information on reproductive and sexual health.

Methods: A cross-sectional descriptive study was conducted among 400 school-going adolescent girls in rural area of Maharashtra. Self-structured and pre-tested questionnaire was used to assess their knowledge and attitude regarding reproductive and sexual health and study menstrual practices.

Results: Total 400 adolescent girls participated in the study. The knowledge and attitude of 164 (41.0%) and 315 (78.8%) participants respectively was poor. The menstrual practices of 271 (67.8%) participants were poor.

Conclusion: The knowledge, attitude and practices regarding reproductive and sexual health of more than half the participants was poor. For development of healthy attitudes and practices, age and gender appropriate health education is a must.

Keywords: Attitude, Adolescents, Knowledge, Menstrual practices, Reproductive and sexual health

Introduction

Today, 1.2 billion adolescents stand at the crossroads between childhood and the adult world.¹ India has the largest population of adolescents in the world, with adolescent girls forming about 22% of the country’s female population.²

Most adolescent girls have many misconceptions about the physical and emotional changes taking place and lack access to age and sex appropriate health information, skills and services that add to their vulnerability. In India, even the mere mention of menstruation or sexual matters has been a taboo in the past and even to this date cultural and social influences appear to be a hurdle for inter-generation talk on
these subjects. So, a major share of their knowledge comes from equally ill-informed peers, inauthentic information in magazines and the internet. Decisions based on such half-cooked knowledge, experimentation and inability to seek proper advice may have dire consequences. All this has a substantial impact on girls and women’s health, emotional state, mentality and lifestyle.3

However, the problems are preventable. A number of approaches to reducing problems by modification of the contributing factors will serve to promote good health among young. These approaches include the use of appropriate and innovative ways to disseminate information about factors that influence and determine young people’s sexual, contraceptive and reproductive decisions and behavior. Considering this background, the present study has been undertaken to assess the knowledge, attitude and practices regarding reproductive and sexual health of adolescent girls and to study the sources they use to obtain information on reproductive and sexual health.

Material and Methods

The Institutional Ethical Committee’s (IEC) approval was obtained before starting the study. The study was carried out from March 2015 to October 2015 in educational institutes of rural area of District Ahmednagar of Western Maharashtra.

Girls of classes 9th standard to 12th standard from English and Marathi (vernacular) medium who had attained menarche were included in the study. Girls who were not willing to participate were excluded from the study. The sample size for the present study was calculated using the formula $N=\frac{Z^2(1-P)}{d^2}$, where $Z$ is the value corresponding to 95% confidence level and $d$ is the absolute precision which was taken as 5%. $P$ was taken as 50% as that would give the highest sample size.4 The minimum sample size obtained was 384 which was rounded to 400.

The study was carried at four institutes and 100 participants were selected from each institute. The Principals/Headmasters of the educational institutes were contacted and were explained the purpose and methodology of the study. Written informed consent was obtained from them to conduct the study at their institution. The girls meeting the inclusion criteria were asked to assemble in the school common hall during recess where they were explained about the study. A list of girls who were willing to participate was made and 100 participants were selected by systematic random sampling. A predesigned questionnaire was used for data collection. This questionnaire was translated into Marathi by forward and back translation and a pilot study was done for validation, practicality and applicability of questionnaire. The participants were free to choose between the questionnaires according to their preference. They were asked to fill the questionnaires without writing their name on it to maintain anonymity. The participants were asked to fold the questionnaire after completing and drop it in the box provided. The study questionnaire contained four parts that included socio-demographic data (age and residence) and most commonly used source of information on reproductive and sexual health, 12 questions were framed to assess their knowledge of the same, 6 questions to see the attitude of the participants, 7 questions on their menstrual practices. Each correct answer was given 1 mark. The marks were totaled separately for knowledge, attitude and menstrual practices and graded as:

- Knowledge: 0-4 as Poor, 5-8 as Average, and 9-12 as Good.
- Attitude: 0-3 as Poor, and 4-6 as Good.
- Practices: 0-3 as Poor, 4-5 as Average, and 6-7 as Good menstrual practices.

Data coding and entry was done in MS-Excel and descriptive and inferential statistical analysis was done by using SPSS version 21 (Statistical Package for Social Sciences) software.

Results

A total of 400 girls participated in the study. The participants were from 9th to 12th academic standards from both English and Marathi (vernacular) medium. The mean age of the participants was 15.44 (±1.33) years, the minimum age was 13 years whereas maximum was 18 years. The socio-demographic characteristics and sources of information used to obtain information on reproductive and sexual health is given in Table 1.

Table 1: Distribution of participants according to socio-demographic characteristics and most commonly used source of information on reproductive and sexual health (n=400)

| Variable          | No. of participants (%) |
|-------------------|-------------------------|
| **Academic standards** |                         |
| 9th               | 104 (26%)               |
| 10th              | 96 (24%)                |
| 11th              | 100 (25%)               |
| 12th              | 100 (25%)               |
| **Mean age (±SD) in years** | 15.44 (±1.33)          |
| **Residence**     |                         |
| Hostel            | 258 (64.5%)             |
| Parents           | 142 (35.5%)             |
| **Source**        |                         |
| Parents           | 14 (3.5%)               |
| Teachers          | 35 (8.8%)               |
| Friends           | 171 (42.8%)             |
| Internet / magazines | 118 (29.5%)          |
| Pornography       | 62 (15.5%)              |
| **Total**         | 400 (100%)              |
The menstrual practices of 67.8% (271) of the participants were poor. Only 2.5% (10) participants had appropriate menstrual practices [Table 2]. Out of 400 participants, 65.0% (260) used sanitary pads and 35.0% (140) used cloth as an absorbent during menstruation. Less than 30% participants maintained appropriate genital hygiene. Among sanitary pad users, around 60% (153) correctly disposed of their sanitary pads. Out of those who used cloth, 20.7% (29) cleaned and dried their cloth correctly. Majority of the participants i.e. 81.0% (324) did not follow isolation during menstruation.

**Discussion**

In this study, the knowledge of nearly half (41.0%) of the participants regarding reproductive and sexual health was poor. Majority of the participants (78.8%) had poor attitude towards matters of reproductive and sexual health and over 60% participants had poor menstrual practices.

This study was compared with similar studies conducted elsewhere. A study conducted in Navi Mumbai by Nemade D et al. among adolescent girls also showed poor knowledge about reproductive and sexual health. Similarly, Manjula R et al. revealed that about 75.9% of the pre-university adolescent girls were in low-quintile scores and none with a high score regarding knowledge about growth and development during adolescent period. The overall poor knowledge of the adolescents in matters of reproductive and sexual health may be partly due to the sources used by them to obtain information. In this study it was also found that majority of the participants used friends or media (magazines/internet) as the source of information on reproductive and sexual health and the preference for such sources over parents and teachers increased with age. Studies by Kumar J et al. and Kotecha PV et al. have also shown majority of the respondents receiving information on this subject from informal sources such as book/movie/media and friends and very few talking to parents or teachers about reproductive and sexual health matters. Though adolescents find talking to their peers on these matters easier, peers can be equally ill-informed and may not serve as an appropriate source of information. The easy access to information available in magazines, internet or pornography which often contains uncensored, inauthentic and incorrect information coupled with absence of formal adolescent health education may cause the adolescents to acquire incorrect knowledge.

In contrast to our findings of attitude, a study by Busari AO et al. in Bangladesh showed that 62% participants had positive attitude towards menstruation. Studies on menstrual practices by Thakre SB et al. and Boratne AV et al. also showed that a high proportion of adolescent girls had poor menstrual practices. Though the chapters in biology help to provide adolescents with correct knowledge, they fail to develop the right attitude and practices. The teaching emphasizes on biological aspects menstruation

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**Figure 1. Sources of information on reproductive and sexual health used by participants of different academic standards**

Various sources of information were used by the participants to obtain information on reproductive and sexual health [Table 1]. Out of all participants, maximum i.e. 42.8% (171) used friends as a predominant source of information, followed by magazines/internet by 29.5% (118) participants. Parents and teachers were the least used source. The proportion of participants using parents and teachers as a source decreased from 9th to 12th standard. However, the proportion of participants using magazines/internet and accessing pornography increased over the academic standards ($\chi^2 = 28.545$, d. f. = 12, $P = 0.005$) [Figure 1].

The distribution of the participants according to knowledge and attitude regarding reproductive and sexual health and menstrual practice grades is given in Table 2.

**Table 2. Distribution of participants according to knowledge, attitude and practice grade**

| Grade   | Knowledge | Attitude | Practices |
|---------|-----------|----------|-----------|
| Good    | 59 (14.8%)| 85 (21.3%)| 10 (2.5%) |
| Average | 177 (44.3%)| NA       | 119 (29.8%)|
| Poor    | 164 (41.0%)| 315 (78.8%)| 271 (67.8%)|
| Total   | 400 (100%)| 400 (100%)| 400 (100%)|

The knowledge of 164 (41.0%) study participants was poor regarding reproductive and sexual health matters. Out of 400 participants, only 59 (14.75%) had good knowledge [Table 2]. Maximum unawareness was seen regarding anatomy and physiology of female reproductive tract with less than half participants correctly answering questions based on them. However, the participants were aware about HIV with more than 60% of them answering the questions on HIV correctly.

More than three quarters of the participants i.e. 78.8% (315) had poor attitude regarding reproductive and sexual health matters [Table 2]. A little over 30% participants agreed that girls should have information about reproductive and sexual health and that it should be given by parents or teachers. About 24.3% (97) participants agreed that girls should talk openly about menstruation.

The proportion of participants using parents and teachers as a source decreased from 9th to 12th standard. However, the proportion of participants using magazines/internet and accessing pornography increased over the academic standards ($\chi^2 = 28.545$, d. f. = 12, $P = 0.005$) [Figure 1].

In this study, the knowledge of nearly half (41.0%) of the participants regarding reproductive and sexual health was poor. Majority of the participants (78.8%) had poor attitude towards matters of reproductive and sexual health and over 60% participants had poor menstrual practices. This study was compared with similar studies conducted elsewhere. A study conducted in Navi Mumbai by Nemade D et al. among adolescent girls also showed poor knowledge about reproductive and sexual health. Similarly, Manjula R et al. revealed that about 75.9% of the pre-university adolescent girls were in low-quintile scores and none with a high score regarding knowledge about growth and development during adolescent period. The overall poor knowledge of the adolescents in matters of reproductive and sexual health may be partly due to the sources used by them to obtain information. In this study it was also found that majority of the participants used friends or media (magazines/internet) as the source of information on reproductive and sexual health and the preference for such sources over parents and teachers increased with age. Studies by Kumar J et al. and Kotecha PV et al. have also shown majority of the respondents receiving information on this subject from informal sources such as book/movie/media and friends and very few talking to parents or teachers about reproductive and sexual health matters. Though adolescents find talking to their peers on these matters easier, peers can be equally ill-informed and may not serve as an appropriate source of information. The easy access to information available in magazines, internet or pornography which often contains uncensored, inauthentic and incorrect information coupled with absence of formal adolescent health education may cause the adolescents to acquire incorrect knowledge.

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and reproduction, the practical and social aspects of them remaining untouched. This is due to the social stigma surrounding the subject that hinders free discussion on these matters between adolescents and an informed adult such as parent or teacher. This coupled with half cooked knowledge from various sources may cause adolescents to develop poor attitude and menstrual practices.

This study helped find out the gaps in knowledge, attitude and practices of adolescent girls regarding their own health and how these can be filled. However, it was a cross-sectional questionnaire-based study. This was a limitation of this study as the participants might have written the answers that seemed appropriate rather than their actual attitude or menstrual practices.

**Conclusion**

This study shows poor knowledge, attitude and menstrual practices of the adolescents in matters of reproductive and sexual health. To achieve development of healthy attitudes and practices, age appropriate adolescent health education should be initiated early. It should be a part of the curriculum rather than a one-time activity. Their quest for information on reproductive and sexual health can be fed by making sure that adolescents have access to authentic and correct source of information. This can be achieved by making available age appropriate scientific material, books, videos those are preferably in regional languages in the library. In the long run, it is very important that social inhibitions on discussion on reproductive and sexual health matters be minimized so that adolescents can freely talk and seek advice from an informed adult regarding the same.

**Conflic of Interest:** None

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