



Knowledge about reproductive health among adolescent high school girls (rural) in Karapa mandal, East Godavari district

S. Appala Naidu¹, Bodhi Sri Vidya Vennam², K.V.S.Prasad³

Department of Community Medicine. 1- Professor & HOD, Andhra Medical College, Vishakapatnam. 2- Senior Resident. Andhra Medical College, Vishakapatnam. 3- Assistant Professor, Rangaraya Medical College, Kakinada.

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Corresponding Author:

Dr.V.Bodhi Sri Vidya, M.D., Senior Resident, Dept. of Community Medicine, Andhra Medical College, Visakhapatnam, Andhra Pradesh. Email: suryasri.t@gmail.com

Abstract:

Knowledge regarding reproductive health among adolescent girls is very essential to lead healthy lives and protect themselves from reproductive health problems. Main objective of the study is to assess the knowledge about reproductive health among adolescent high school girls. **Materials and Methods:** It was a descriptive cross-sectional study conducted among one hundred and twenty adolescent girls in a high school located in rural area. A pre-designed, pre-tested questionnaire was used. Data on knowledge regarding pubertal changes, menstruation, legal age at marriage, conception, HIV/AIDS was collected. Data obtained were analyzed statistically by simple proportions using Micro-soft Excel. **Results:** Mean age of adolescent girls was 13.6 ± 0.85 yrs and their mean age at menarche was 11.5 ± 3.7 yrs. More than half of girls had knowledge about pubertal changes but only 14.2% of the girls knew that uterus is the organ responsible for menstruation. Knowledge regarding menstrual hygiene was poor. Majority had idea about legal age for marriage as 18 years. More than half of them said that uterus as site of fetal growth. More than 80% heard about HIV/AIDS but only 30% had knowledge about routes of spread. **Conclusion:** knowledge about reproductive health among study subjects was observed to be patchy and necessary health education is greatly needed.

Key words: Adolescent; High school girls; Knowledge; Reproductive health; Rural

Introduction

World Health Organization has defined adolescence as progression from appearance of secondary sexual characters to sexual and reproductive maturity and development of adult

mental processes. Adolescence or puberty is the transitional period linking childhood to adulthood and involves physical, biological and psychosexual changes. Adolescence includes age group between 10 and 19 years.

There are 1.2 billion adolescents across the world, nine out of ten of these young people live in developing countries [1]. India is home to more than 243 million adolescents, accounting for a quarter of the country's population [1].

The National Population Policy 2000 identifies adolescents as an underserved group for which health, specifically reproductive and sexual health interventions are to be designed. The National Curriculum Framework 2005 for School Education explicitly highlights the need for integrating age appropriate adolescent reproductive and sexual health, including HIV/AIDS messages into the school curriculum. This framework is translated into the National Adolescence Education Programme, which proposes 100 per cent coverage of all secondary and higher secondary schools with HIV/AIDS prevention and adolescent reproductive and sexual health (ARSH) messages [2]. Adolescent reproductive health has been identified as a key strategy in the Reproductive and Child Health (RCH-II) program.

In order to lead healthy, responsible lives and protect themselves from reproductive health problems adolescents need to be knowledgeable about themselves and need adequate information about the physical, physiological changes that takes place during puberty, menstruation and childbirth. Knowledge regarding reproductive health is very essential to reduce the maternal, infant mortality.

It is important to have information regarding level of knowledge related to reproductive health among adolescent girls, so that appropriate interventions can be planned. The present study assessed knowledge regarding reproductive health such as pubertal changes, menstruation, legal age at marriage, conception and HIV/AIDS among high school girls.

Materials and Methods

Objective of the study is to assess knowledge about reproductive health among rural adolescent high school girls.

Study design: A descriptive cross-sectional study. Study area: Field practice area (of Rangaraya medical college) at primary health centre, Karapa, East Godavari district. A high school situated at Karapa was randomly selected for this study. Study population and sample: 120 girls (of age group 10 to 19 years) from 8th, 9th, 10th classes were selected (40 from each class. Sampling method: Simple random sampling by lottery method. Duration of study: two months (October and November 2011).

Study tool: A pre-tested, semi-structured questionnaire was applied. Data on pubertal changes (growth spurt, breast enlargement, pubic and axillary hair growth, usual age at menarche), knowledge about source of menstrual blood, duration of menstrual cycle, duration of flow, legal age at marriage for girls, place where does the fetus grow, information about HIV/AIDS and routes of spread, and about source of information regarding reproductive health was collected.

Consent: After taking permission from the school authority, verbal consent was obtained from the girls after explanation about the purpose of the study.

Data analysis: Data obtained were collected and analyzed statistically by simple proportions using Micro soft Excel 2007.

Results

Mean age of girls was 13.6±0.85 yrs. Their mean age at menarche was 11.5±3.7 yrs and 11 out of 120 girls not yet attained menarche.

Table 1: Distribution based on knowledge on pubertal changes

Knowledge on pubertal changes (n=120)	
Growth spurt	70 (58.3%)
Breast enlargement	67 (55.8%)
Pubic & axillary hair growth	78 (65.0%)
Usual age at menarche	92 (76.7%)

More than half of girls had knowledge about growth spurt, breast enlargement, pubic and axillary growth, usual age at menarche (table-1). Only 40% had knowledge about menarche prior to attainment.

Table 2: Distribution based on knowledge on menstruation

Knowledge on menstruation (n=120)	
a. Menstruation blood comes from	
Correct response (Uterus)	17 (14.2%)
Incorrect response/ don't know	103 (85.8%)
b. Duration of flow (3-6 days)	112 (93.3%)
c. Duration of cycle (28-30 days)	75 (62.5%)

Only 14.2% of the girls answered correctly about the organ responsible for menstruation.

Majority (93.3%) of girls had knowledge about the duration of flow and more than two-third of them knew about duration of cycle.

Knowledge about menstrual hygiene:

One fourth (25%) of the girls correctly responded about the material that should be used during menstruation (sanitary pads or clean cloth). Most (65%) of the girls said that cloth can be reused after washing with soap but only few (15%) knew that drying the washed cloth under sunlight is necessary. Others (5%) had no knowledge about the proper material that should be used during menstruation.

Knowledge about legal age at marriage:

Ninety percent of the girls were aware that minimum legal age of marriage for girls as 18 years as stated in the marriage restraint act [3].

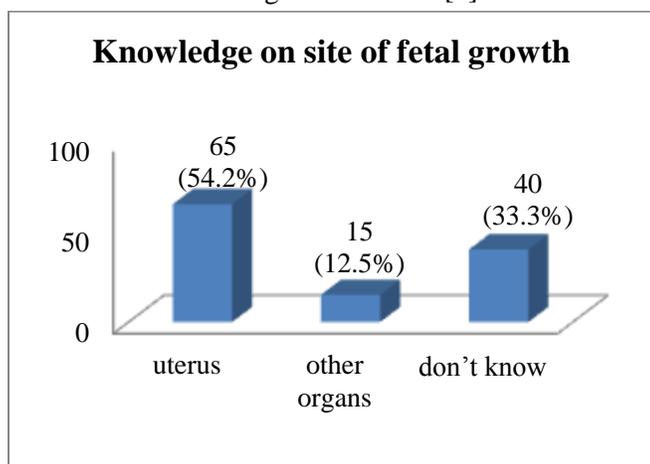


Figure 1: Chart showing frequency of girls based on knowledge on site of fetal growth

(Fig-1) More than half (54.2%) of the girls said, uterus as site of fetal growth. The major source (77.5%) of information about reproductive health was mother.

HIV/AIDS:

More than eighty percent heard about HIV/AIDS but only 30% of the girls had knowledge about routes of transmission of HIV/AIDS.

Discussion

Three fourths (76.7%) of the girls in the study had knowledge about usual age at menarche but less number of girls knew about growth spurt (58.3%), Breast enlargement (55.8%), pubic and axillary hair growth (65%). This finding was similar to the studies conducted by Saraswati et al and Ahuja et al, who said that majority of adolescent girls knew about age at menarche but only few of them responded about pubertal changes [4-5].

In the present study only 40% of the girls said that they had knowledge about menarche prior to attainment, which is similar to the finding in the study conducted by Nair P et al [6].

Only 17 girls out of the 120 (14.2%) knew that menstruation blood comes from uterus and more than half of them told that it was impure blood and others had no knowledge. Majority of them (93.3%) had good idea about duration of flow (3-6 days) but only around two third (62.5%) of the girls had knowledge regarding duration of menstrual cycles (28-30 days).

Only few (25%) girls responded correctly about the usage of material (sanitary pad or clean cloth) during menstruation. This reflects poor knowledge about menstrual hygiene among the most of the girls.

Majority of the girls (90%) responded correctly about legal age at marriage, similar finding was observed in the study conducted by Pattnaik D et al [7]. Knowledge about site of fetal growth was present among half of them only and in the study by Saraswati et al only 37.5% of the girls knew about development of fetus [4]. Even though majority of the girls heard about HIV/AIDS, only 30% of them had knowledge on routes of spread of HIV/AIDS and similarly in the study conducted by Akther N et al among adolescent girls in Bangladesh revealed that majority of the girls heard the disease AIDS but only half of them had idea about causative agents [8]. The major source of information regarding reproductive health was mother similar to the finding given in study by Kundan M et al [9].

Conclusions

The study reflects poor knowledge about organ responsible for menstruation, menstrual hygiene, site of fetal growth, and routes of spread of HIV/AIDS. Great effort is needed in various ways to bridge the prevailing knowledge gap among adolescent girls regarding important reproductive health issues. Training programmes to school teachers by health professionals, involving parents in the health education programs, are some important steps that can be taken.

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