

Original Research Article

Knowledge regarding menstruation among school-going adolescents of urban Bareilly

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Received: 15 April 2019

Revised: 19 May 2019

Accepted: 27 May 2019

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ABSTRACT

Background: Adolescence in girls has been recognized as a special period. Adolescents are a large and growing segment of the world's population. Adolescence in girls is a turbulent period of development, which includes stressful events like menarche. Some of the special problems of adolescents are nutritional problems, menstrual disorders, leucorrhoea, and psychological problems. Though menstruation is a natural process, it is linked with several misconceptions and practices in India due to different rituals in the communities, which sometimes result in adverse health outcomes. The objective of the study was to assess the knowledge about menstrual hygiene among urban adolescent girls in Bareilly.

Methods: The study was conducted in the urban area of Bareilly taking a sample size of 450 girls with multistage sampling technique.

Results: About 40% of participants had complete knowledge regarding menstruation, 64.9% of participants regarded menstruation as a curse of God, and 35.6% of the participants perceived urethra as the main source organ for blood during menstruation.

Conclusions: This research addressed the issues in managing their menstruation and maintaining a good standard of menstrual hygiene in adolescent girls.

Keywords: Adolescent, Menstruation, Menstrual hygiene

INTRODUCTION

The World Health Organization defined adolescence as being between ages of 10 and 19 years.¹ Adolescence in girls has been recognized as a special period, which signifies the transition from girlhood to womanhood.² Adolescents are a large and growing segment of the world's population.³ Adolescence in girls is a turbulent period of development, which includes stressful events like menarche, which is considered as the landmark of female puberty. Some of the special problems of

adolescents are nutritional problems, menstrual disorders, leucorrhoea, and psychological problems.⁴ Menstruation is the cyclical shedding of the inner lining of the uterus, the endometrium, under the control of hormones of the hypothalamopituitary axis. It is an important process that results in the sexual and reproductive capacity of women. Though menstruation is a natural process, it is linked with several misconceptions and practices in India due to different rituals in the communities, which sometimes result in adverse health outcomes.⁵ Healthy adolescent girls of today are tomorrow's healthy women, the future

of every society, and a great resource of the nation.⁶ If our aim is to improve the quality-of-life, then it is imperative that we give more importance to the needs of girls in this crucial period of life. Therefore, this study was aimed at assessing the knowledge of menstruation, menstrual problems, and the personal hygiene of adolescent girls.

Objective

To assess the knowledge about menstrual hygiene among urban adolescent girls in Bareilly

METHODS

A cross sectional study was done in the urban areas of Bareilly from November 2015 to October 2016 among school-going adolescent girls. Totally, 450 girls were interviewed for the study by taking a 50% prevalence of knowledge regarding mensuration (after pilot study). Selection of participants was done via multistage sampling technique applied in the urban area. Out of 70% wards, 10% of the wards were selected and from the 10% of the total schools were selected. All school-going girls of age group 10 to 19 years whose parents gave informed consent were included in the study. All the girls whose parents did not give consent for the study and also those who were absent on the day of study or had not attained menarche were excluded from the study.

Operational definition

Correct knowledge: Menstruation is a physiological phenomenon that is unique to females that begins in adolescence. It is a monthly uterine bleeding for 4 to 5 days occurring regularly every 28 days. Normally, females get 13 menses in a year and around 400 menses in her reproductive life. The first menstruation is termed as “menarche.” The age of menarche is between 10 and 16 years in India.

Incorrect knowledge: Those who have knowledge about three out of five points of correct knowledge.

No knowledge: Those who do not know any of the points of correct knowledge.⁷

RESULTS

Table 1 and Figure 1 represent the maximum number of participants having complete knowledge regarding menstruation as 184 (40%) followed by partial knowledge as 144 (32%) and no knowledge as 122 (27%) respectively. Figure 2 show (delete) the maximum number of participants having perception regarding reason of menstruation as a curse of God as 292 (64.9%), while 76 (16.9%) perceived it as a normal physical process. Only 60 (13.3%) consider it as a disease, while the rest do not know the reason and are 22 (4.9%) in numbers respectively. Table 2 shows that maximum

number of participants who perceived urethra as main source organ for blood during menstruation as 160 (35.6%), followed by the vagina as 117 (26%), uterus as 110 (24.4%), and do not know as 63, (14%) respectively.

Table 1: Distribution of adolescent girls according to their knowledge about menstruation (n=450).

Perception	Frequency	Percentage (%)
Correct knowledge	184	40
No knowledge	122	27
Partial knowledge	144	32
Total	450	100

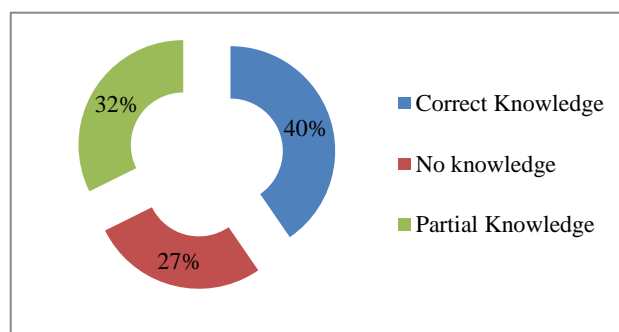


Figure 1: Distribution of study participants according to their knowledge regarding menstruation (n=450).

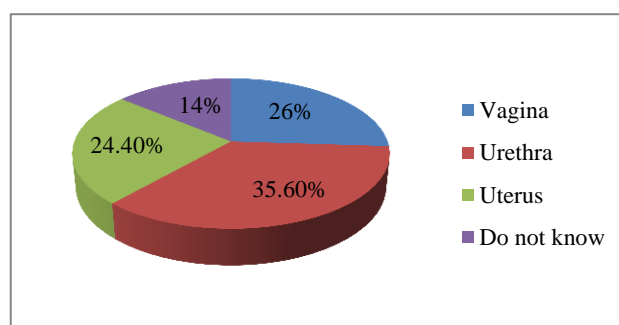


Figure 2: Distribution of adolescent girls according to their perception regarding the main reason for menstruation (n=450).

Table 2: Distribution of adolescent girls according to the perception of the main source organ for blood during menstruation (n=450).

Organ	Frequency	Percentage (%)
Vagina	117	26
Urethra	160	35.6
Uterus	110	24.4
Do not know	63	14

DISCUSSION

The perception and reaction of girls toward menstruation depend to a large extent on their knowledge about this phenomenon. Prior awareness regarding menarche and

menstruation among girls is generally low in most cultures. In our study, the maximum number of participants having complete knowledge regarding menstruation was 40% only. Similar findings were observed in another study done by Nair et al where nearly half (45.7%) of the girls had prior knowledge about menstruation.⁸ In another study by Dasgupta and Sarkar on 160 girls in West Bengal, it was reported that 67.5% adolescents were aware about menstruation prior to menarche.⁹ This finding was dissimilar to our study, in most cases, which highlighted that there is very little awareness about menstruation among girls when they first experienced it. The present study was in agreement with Seideman who stated that women's knowledge seemed to affect their practices during menstruation.¹⁰ In the existing Indian cultural milieu, the society is interwoven into a set of traditions, myths, and misconceptions, especially about menstruation and related issues. It was observed in this study that 16% girls believed menstruation to be a physiological process, and thus it was dissimilar to the above study conducted in Rajasthan by Khanna et al where nearly 70% believed that menstruation was not a natural process.¹¹ In our study, only 26% knew correctly that the main source of organ responsible for bleeding during mensuration is the uterus, 35.6% perceived urethra as the main source, followed by the vagina 26%, and 14% did not know about it. Similarly, in Maji's study, only 16% girls had the correct information about the organ from where bleeding occurs, i.e., the uterus, and the rest had wrong perceptions.¹² In another study by Sudeshna and Aparajita the findings were similar to us, with 54.2% stating that the vagina is the source of bleeding, the uterus by 17.9%, urinary bladder by 16.3%, and 11.6% were unaware respectively.¹³

CONCLUSION

The present cross-sectional study was undertaken to study the knowledge regarding mensuration in the school-going adolescents in seven wards. The absence of effective knowledge regarding mensuration leaves many adolescents to lifelong disease and severe health issues. This research addressed the issues in managing their menstruation and maintaining a good standard of menstrual hygiene in adolescent girls in the Bareilly area and in Uttar Pradesh (India) as well as in developing countries.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee

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Cite this article as: Mathur RN, Kaur D, Katyal R, Datta B, Mathur M. Knowledge regarding menstruation among school-going adolescents of urban Bareilly. *Int J Community Med Public Health* 2019;6:2871-3.