

Research Article

A study on knowledge and practices regarding menstrual hygiene among urban adolescent girls

Kartik Ramachandra*, Sahana Gilyaru, Adarsh Eregowda, Sreekrishna Yathiraja

Department of Pediatrics, Rajarajeshwari medical college, Bangalore, Karnataka, India

Received: 17 October 2015

Revised: 08 November 2015

Accepted: 10 December 2015

***Correspondence:**

Dr. Kartik Ramachandra,

E-mail: dockartiksowmya@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Adolescent girls often lack knowledge regarding reproductive health including menstruation hygiene which can be due to socio-cultural barriers in which they grow up.

Methods: To explore the knowledge, practices and sources of information regarding menstruation and hygiene among adolescent girls in Bangalore, India. **Methods:** An epidemiologic study was undertaken using cross-sectional study method among 550 school-going adolescent girls aged 13-16 years. Data was collected using a pre-tested questionnaire and analyzed using SPSS version 15.

Results: Around 34% participants were aware about menstruation prior to menarche, and mothers were the main source of information among both groups. Overall, 69% of adolescent girls were using sanitary napkins as menstrual absorbent, while 6% were using both cloth and sanitary napkins. Almost half of the rural participants dried the absorbent inside their homes.

Conclusions: There is a need to equip the adolescent girls with knowledge regarding safe, hygienic practices to enable them to lead a healthy reproductive life.

Keywords: Adolescent girls, Menarche, Menstruation, Hygiene, Practices

INTRODUCTION

Adolescence is a significant period in the life of a woman. Adolescent girls often lack knowledge regarding reproductive health including menstruation which can be due to socio-cultural barriers in which they grow up. These differences create various problems for the adolescent girls. The need of the hour for girls is to have the information, education and an enabling environment to cope with menstruation issues.¹

The hygiene-related practices of girls in the adolescent period related to menstruation can have an effect on their health.² The event of menarche may be associated with

taboos and myths existing in our traditional society which has a negative implication for women's health, particularly their menstrual hygiene.³ Studies have shown that the girls lack knowledge about menstruation and due to lack of hygiene, they are likely to suffer from RTI's.⁴

Attitude of parents and society in discussing the related issues are barriers to the right kind of information, especially in the rural areas. Menstruation is thus considered to be a matter of embarrassment in most cultures. It was therefore decided to conduct a study to explore the level of knowledge and practices regarding menstrual hygiene among the adolescent girls in

Bangalore recommend interventions to improve health among adolescent girls.

METHODS

An epidemiologic study was undertaken using the cross-sectional study method among 550 school-going adolescent girls in the age group of 13-16 years in Bangalore, Karnataka, India.

Due clearance was obtained from the institutional ethics committee. Willingness to participate in the study was obtained by written consent from the participants after explaining the objectives of the study. A pre-designed, pre-tested semi-structured questionnaire was used. Care was taken to ensure privacy and confidentiality. The participants were made comfortable by maintaining anonymity in the questionnaire administered to them. The pre-tested questionnaire was administered under supervision of the investigator to prevent the participants from sharing responses. The semi-structured questionnaire included topics relating to knowledge regarding menstruation, source of information regarding menstruation and hygiene practiced during menstruation. Following data collection, queries from the participants relating to menstrual and reproductive health were clarified by the investigator. Data obtained was analyzed using the SPSS Version 15, and findings were reported in the form of descriptive statistics.

RESULTS

A total of 550 adolescent girls from urban areas participated in the study. The overall mean age of the participants was 13.98 with a range of 10-16years. The mean age of the urban adolescents was 12.39 years and that of the rural adolescents was 12.31 years respectively. Mothers of most of the respondents were house wives, followed by unskilled workers.

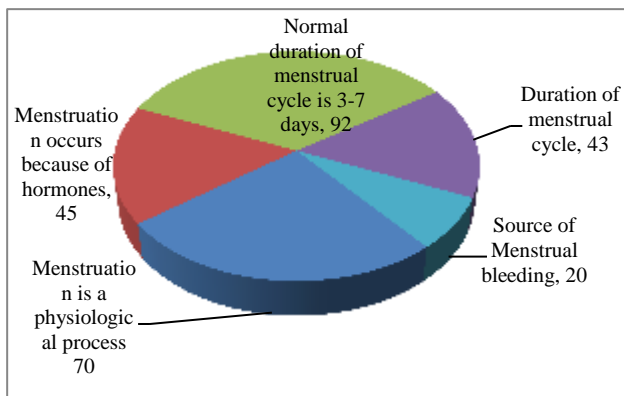


Figure 1: shows the respondents of awareness of normal duration of menstrual cycle i.e. 3-7 days, regarding knowledge in normal interval between menstrual cycles.

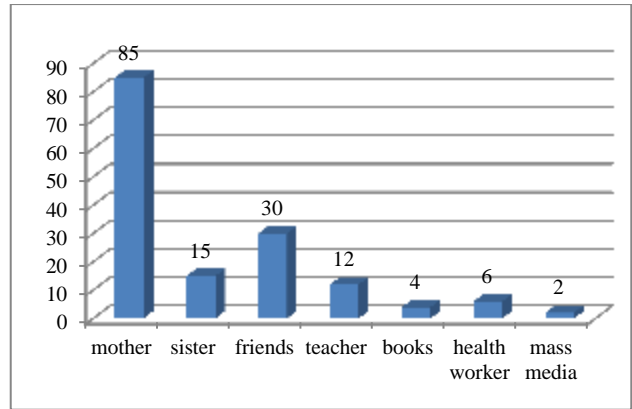


Figure 2: Shows that the main source of information about menstruation after attaining.

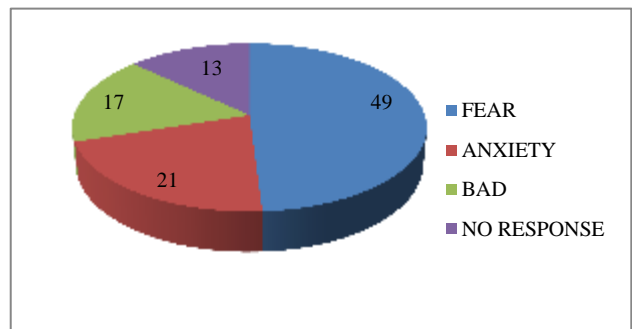


Figure 3: Response to first menstruation.

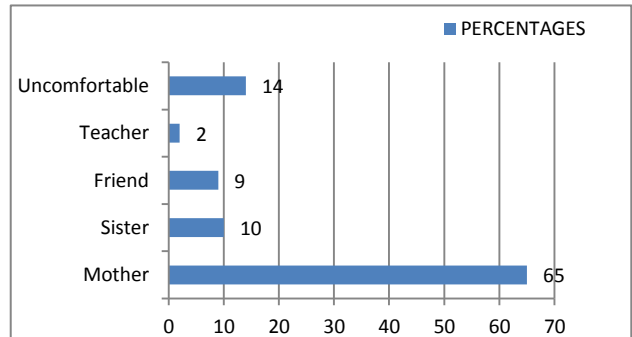


Figure 4: Comfort level of respondents to discuss menstrual issues.

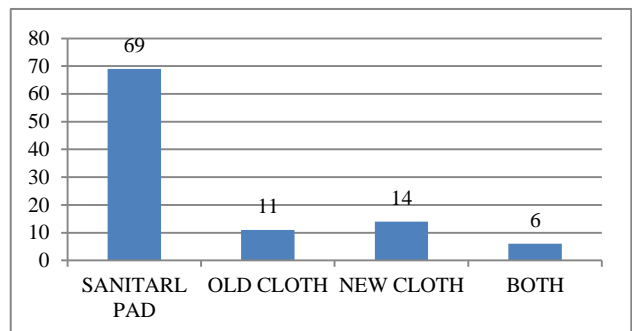


Figure 5: Type of absorbents used during menstruation.

DISCUSSION

The study shows that the mean age at menarche was 12.39 years (S.D±0.908) in the urban schools with overall mean age of 13.98 years. Age at menarche of the participants ranged between 11 to 15 years (88.5%) which is comparable to the study conducted in Rajasthan by Khanna A et al, who reported the mean age at menarche to be 13.2 years and a study conducted by Jain K et al, where mean age at menarche was noted to be 13.16 years while Deo DS and Ghattargi CH highlighted that the age of menarche in their study ranged from 12 to 17 years with the maximum number of girls between 13 and 15 years of age.⁷⁻⁹

The present study showed that only 83 (33.27%) the urban had awareness about menstruation prior to menarche. Similar findings were observed by other researchers.^{1,5,6,10} Interestingly, a study conducted by Adrija et al, reported that 72.1% of the urban participants and only 39.1% rural participants had knowledge prior to menstruation.¹¹ There was no significant difference regarding awareness on menstruation between urban and rural participants in the present study.

Mothers followed by friends and sisters were the more common sources of information. Similar findings were reported by other authors where mother was the first informant. An Indian Council for Medical Research (ICMR) study and research carried out by A Dasgupta A and Sarkar M, Omidvar S and Begum K, Ray S et al, and other researchers also reported similar findings.¹²⁻¹⁷

The varied reactions to menarche may depend on the extent to which the girls have been prepared regarding the same. Fear and panic was the reaction observed in the study conducted by Dube S and Sharma K and Deo DS and Ghattargi CH.^{9,10} Majority 88.5% of urban participants expressed negative reactions to menstruation. It highlighted the fact that girls with no previous knowledge about menstruation felt more scared at menarche. These negative feelings associated with menstruation could be because of participants not being psychologically prepared for attaining menarche which is an important milestone in their life. This could also be a reflection of the culture and taboos in the society regarding menstruation.

The unawareness of girls about menstruation might be the cause for the girls in the present study to feel embarrassed, anxious or scared at onset.

It is observed in the present study that use of sanitary napkin is higher in the urban area (75.9%) compared this could be due to the awareness and literacy of the mothers. Similar findings were also reported in a study conducted by Ray S et al, Majority (77.4%) of the participants desired for more information regarding menstruation and hygienic practices in the present study which is comparable to the study reported by Omidvar S and

Begum K (76%).^{13,14} The important finding reported in this study is that teachers were considered neither as a good source of information nor were they preferred to provide education regarding these matters. During the informal interaction session, the participants opined that they did not feel comfortable broaching the subject of reproductive health with their teachers. And it was also observed that when the teachers were approached, they expressed being embarrassed and hesitant in discussing these issues with their students. This is a matter of concern as teachers could be important points of contact in providing information on reproductive health to students. The secrecy associated with the reproductive health issues hitherto considered taboo are some of the underlying reasons for the silent spread of RTIs.

Activities related to dissemination of health education are being carried out by health personnel in schools to increase awareness regarding menstruation and hygiene including using of sanitary pads manufactured at low cost are made available to girls and women in rural areas. Better literacy level of mothers in the local area and awareness as well as the influence of media could also contribute to the almost equal knowledge seen between rural and urban participants in this population.

CONCLUSION

There is a need to provide education and equip them with skills regarding safe and hygienic practices and to make appropriate choices so as to enable them to lead a healthy reproductive life and prevent the risk for reproductive tract infections. There is also a need to empower mothers and teachers to function as primary sources of information on menstruation including reproductive health as they are accessible to handle adolescent issues and facilitate referrals as the need arises.

ACKNOWLEDGEMENTS

We gratefully acknowledge the active participation of adolescent girls and the principal and faculty for their co-operation in supporting the study.

Funding: No funding sources

Conflict of interest: None declared

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

REFERENCES

1. Thakre SB, Thakre SS, Reddy M, Rathi N, Pathak K, Ughade S. Menstrual Hygiene: Knowledge and Practice among Adolescent School Girls of Saoner, Nagpur District. *Journal of Clinical and Diagnostic Research.* 2011;5(5):1027-33.
2. Dasgupta A, Sarkar M. Menstrual Hygiene. *Indian Journal of Community Medicine.* 2008;33(2):77-80.
3. Kumar A, Srivastava K. Cultural and Social Practices Regarding Menstruation among

- Adolescent Girls. *Social Work in Public Health.* 2011;26(6):594-604.
4. Mudey AB, Keshwani N, Mudey GA, Goyal RC. A cross-sectional study on the awareness regarding safe and hygienic practices amongst school going adolescent girls in the rural areas of Wardha District. *Global Journal of Health Science.* 2010;2(2):225-31.
 5. Bhatia JC, Cleland J. Self-reported symptoms of gynaecological morbidity and their treatment in south India. *Studies in Family Planning.* 1995;26(4):491-5.
 6. Mehra S. Adolescent Girl: An Indian perspective. MAMATA Health Institute for Mother and Child, Saket, New Delhi. 1995:75-8.
 7. Khanna A, Goyal RS, Bhawsar R. Menstrual practices and reproductive problems: A study of adolescent girls in Rajasthan. *Journal of Health Management.* 2005;7(1):91-7.
 8. Jain K, Garg SK, Singh JV, Bhatnagar M, Chopra H, Bajpai SK. Reproductive health of adolescent girls in an urban population of Meerut, Uttar Pradesh. *Health and Population: Perspectives and Issues.* 2009;32(4):204-9.
 9. Deo DS, Ghattargi CH. Perceptions and Practices Regarding Menstruation: A Comparative Study in Urban and Rural Adolescent Girls. *Indian Journal of Community Medicine.* 2005;30(1).
 10. Dube S, Sharma K. Knowledge, Attitude and Practice Regarding Reproductive Health among Urban and Rural Girls: A Comparative Study *Ethno Med.* 2012;6(2):85-94.
 11. Datta A, Manna N, Datta M, Sarkar J, Baur B, Datta S. Menstruation and menstrual hygiene among adolescent girls a school based comparative study of West Bengal, India. *Global Journal of Medicine GJMEDPH.* 2012;l(5):50-7.
 12. Indian Council of Medical Research (I.C.M.R.). Knowledge and practices of adolescent girls in Reproductive health. ICMR annual report, New Delhi. 2005-2006:60-76.
 13. Omidvar S, Begum K. Factors influencing hygienic practices during menses among girls from south India- A cross sectional study. *International Journal of Collaborative Research on Internal Medicine & Public Health.* 2010;2(12):411-23.
 14. Ray S, Aparajita D. Determinants of menstrual hygiene among adolescent girls: a multivariate analysis. *National Journal of Community Medicine.* 2012;3(2):294-301.
 15. Nair P, Grover LV. Awareness and practices of menstruation and pubertal changes amongst unmarried female adolescent in a rural area of East Delhi. *Indian Journal of Community Medicine.* 2007;2(2):156-7.
 16. Nemade I, Anjenaya S, Gujar R. Impact of health education on the knowledge and practices about menstruation among the adolescent girls of Kalamboli, Navi Mumbai. *Health and Population: Perspective Issues.* 2009;32(4):67-75.
 17. Mitra RS, Roy S, Ghosh A, Das BM. The menstrual characteristics: A study of adolescents of rural and urban West Bengal, India. *Ann Human Biol.* 2010; 37(5):668-81.

Cite this article as: Ramachandra K, Gilyaru S, Eregowda A, Yathiraja S. A study on knowledge and practices regarding menstrual hygiene among urban adolescent girls. *Int J Contemp Pediatr* 2016;3:142-5.