



PERSONAL HYGENIC PRACTICES AMONG ADOLESCENT GIRLS IN RURAL VARANASI

Jaya Krishna¹* PhD and CP Mishra² MD, PhD

¹Post Doctoral Fellow, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University.

²Professor Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University.

*Corresponding Author: Jaya Krishna

Post Doctoral Fellow, Department of Community Medicine, Institute of Medical Sciences, Banaras Hindu University.

Article Received on 20/05/2021

Article Revised on 09/06/2021

Article Accepted on 30/06/2021

ABSTRACT

Healthy hygienic practice of adolescent girls is primary concern for overall development of women. Hygiene is complementary for health promotion that required to maintain wellness. Poor hygiene leads to various illnesses and it can be improved by promoting hygienic behavior. A good hand washing protects against the spread of many illnesses, from the common cold to more serious illnesses such as Meningitis, Flu, Hepatitis- A, and Diarrhoea. Hand washing with soap is the single most cost-effective health intervention. Hand washing is also less expensive than immunization. The objective of this study was to assess personal hygiene and hand washing practices among adolescent girls. A community based cross-sectional design was adopted for this study. Four hundred adolescent girls were selected from rural Varanasi by adopting appropriate sampling technique. Socio demographic and hygiene related information were obtained from a predesigned and pretested schedule. The data thus obtained was analyzed using SPSSv 21.0 version. Majority (86.5%) of study subjects used foot were during defecation. Soap and water were used by 18.3% subjects for hand washing before eating. Only 11.0% subjects use separate towel. Nails of 56.2% subjects were unclean. History of passage of worms in previous year was present in 52.0% girls while 89.0% subject reported history of passage of worms ever in life. It can be concluded that adolescent girls have inappropriate practices about personal hygiene, hand wash and washing of clothes Therefore there is need for educational program for adolescent girls at school and family level.

KEYWORDS: Adolescent girls, Personal hygiene, Rural area.

INTRODUCTION

Personal hygiene is the practice of maintaining cleanliness of one's own body and clothing to preserve overall health and well-being, it is an important global public health issue refers to practices associated with ensuring good health and cleanliness. Healthy hygienic practices of adolescent girls are primary concern for overall development of women.

Good hygienic care as well as practices in terms of personal hygiene contributes to a large extent on factors relating to healthful living and prevention of hazards from diseases. The components of personal hygiene include body hygiene (skin care), oral hygiene (oral care), hand washing (hand care), face hygiene, fingernail and toe nail hygiene (nail care), ear hygiene, hair hygiene, foot hygiene, arm pit and bottom hygiene, clothes hygiene and menstrual hygiene.

Poor hygiene behaviour is a major problem in developing countries (Van Wijk et al, 2003).^[1] Hygiene and sanitation related diseases are a huge burden in

developing countries; causing many people to fall ill even to die (UNICEF, 1998).^[2]

Infections are one of the major health problems among adolescent girls. Diarrhoeal diseases, skin diseases, worm infestations and dental diseases are most commonly associated with poor personal hygiene. The primary causes of infections are contaminated water and poor sanitation, as well as poor hygienic practices. (M. Sarkar, 2013).^[3] These health risk factors are directly related to some important daily activities implicated with worthy operational actions and obligatory responsibilities, such as washing hands before meals and after defecation with soap, brushing teeth at least twice a day specially after breakfast and after meals, taking bath with soap regularly, keeping nails short and taking regular exercise (Ali et al, 2013).^[4]

Adolescence is the important phase of life for developing health promotion and influencing health-related behaviours (Haaple et al, 2004; Moon et al, 1999; Sidebottom, 1995)^[5,6,7], including hygiene-related behaviours. Personal hygiene includes skin care, bathing

practice (body hygiene), oral care (oral hygiene), hand care (hand washing), nail care (nail hygiene), eye care (eye hygiene), hair care (hair hygiene), regular use of footwear (foot hygiene) and clothes hygiene. Once habits are established in adolescence, they tend to be long-lasting and difficult to alter in adulthood (Wills et al, 2005).^[8]

OBJECTIVE: To assess personal hygiene and hand washing practices among adolescent girls.

MATERIALS AND METHODS

Methodology: This study was undertaken in four villages of Chiraigaon Community Development Block of Varanasi district in the state of Uttar Pradesh, India.

Setting: This study was undertaken in four villages of Chiraigaon Community Development Block of Varanasi district in the state of Uttar Pradesh, India.

Study Design: A community based cross sectional design was adopted for this study.

Study Sample: Four hundred adolescent girls were taken from rural area of Varanasi by using appropriate sample size estimation technique.

Sample Size: Sample size was fixed at 400 study sample, calculated by using sampling formula-

$$n = \frac{Z^2 x p q}{L^2}$$

Thus sample size is being fixed at 400

Sampling Methodology

Following steps were involved in the selection of study subjects.

Stage 1: In the first stage, one Community Development Block (i.e. Chiraigaon) was selected from eight Community Development Blocks of Varanasi District by simple random sampling method.

Stage 2: In the second stage, in the selected block 4 villages was selected by stratified random sampling. Villages of Chiraigaon was divided into 2 strata according to distance (viz. <7 km and ≥7km) from Block headquarter. Then from each stratum two villages were selected by simple random sampling method. The selected villages were *Chakbasdev, Tilmapur, Ashapur and Ukathi*.

Stage 3: In the selected villages families was selected according to their probability proportion to size adopting simple random sampling. From each selected family an adolescent girl was selected by random technique. In case of nonavailability of adolescent girl in the selected family a nearby family having adolescent girl was taken.

Tools and Techniques of the study

The primary tool in this study was a pre designed and pretested interview and examination schedule for recording of information pertaining to subject and her family.

This interview schedule pertained to.

- (i) **General information:** viz. age, literacy status and occupation of subject, father and mother, caste, religion, marital status, family income, total members in the family, number of siblings etc.
- (ii) **Tool for personal hygiene assessment:** Predesigned and pretested interview and examination schedule was used for recording of information pertaining to personal hygiene of study subjects. The questionnaire covered the following indicators of personal hygiene i.e. combing hair, brushing teeth, washing hands before eating, washing hands after visiting toilet, trimming nails, taking bath daily, hair wash habit, wearing footwear during defecation and wearing clean clothes. Each student was also observed thoroughly to assess their status of personal hygiene, i.e. cleanliness of clothes, condition (clean and trimmed) of fingernails, cleanliness of eye and teeth, condition (clean and combed) of hair, presence of louse, etc.

To get relevant and reliable data from study subjects standardization of interview schedule was done. The schedule was pretested in non study village. Necessary modifications were done thereafter based on the experiences gained during the pretesting of the schedules.

Techniques of the study

Sociodemographic characteristics of the study subjects was obtained by interviewing them using predesigned and pretested proforma. Parents of subjects also contributed in providing information.

For the collection of data, a prior consent was taken from the study subjects and their parents. Investigator explained the purpose of the present study to adolescents and they were assured that their responses and information given about them will be kept confidential and used for research purpose only.

Ethical Clearance: This study was reviewed and approved by ethical review committee of Banaras Hindu University (BHU) Varanasi, India.

Statistical Analysis: Analysis of data was done using Personal Computer. Microsoft excel 10 and Statistical Package for Social Sciences (SPSS 21 version) were used for data handling.

RESULTS AND DISCUSSION

The present study reports the personal hygienic practices of rural adolescent girls of Varanasi. One hundred twenty-five (31.3%) adolescent girls have to go open

field for defecation, majority (86.5%) of them used foot were during defecation. Almost all the study subjects (98.0%) take bath every day, only eight (2.0%) of them do not took daily bath. Very few Only 11.0% subjects use separate towel. Similar to this a study conducted by Temitayo I.L. (2016)^[9] revealed that 99.6% respondents take bath every day. History of passage of worms in previous year was present in 52.0% girls while 89.0% subject reported history of passage of worms ever in life.

Soap and water were used by 18.8% subjects when washing their hands before eating while 81.7% were use only water for hand washing before eating. According to Anitha Rani *et.al.* (2013)^[10] 76.8% subjects always washed their hands before eating and 80.7% washed their hands before using the toilet or latrine. Overall, 19.2% of study subjects always used soap when washing their hands. Another study by Dongre *et al.* (2007)^[11] in rural India documented that 63.6% school going children (6-14 years) had practice of hand washing with soap after defecation and 67.8% had clean and cut nails before initiating hygiene education.

Nails of 59.7% subjects were unclean and untrimmed, only 89(22.3%) had clean and 72 (18.0%) trimmed their nails. Contrary to this study by Ghose *et al.*, 2012^[12] found slightly higher result where 74.2% of the students were found trimming their nail once a week.

On observation of eyes and teeth 98.0% and 77.5% subjects had clean eyes and teeth respectively in present study. Majority 93.0% subjects had combed their hair and 39.7% use oil on their hair at the time of observation. Three hundred seventy-seven (94.3%) adolescent girls did not wash their hair regularly. Louse was absent in 96.5% subjects at the time of observation. A study conducted by Temitayo I.L. (2016)^[9] on senior secondary school students of Nigeria reported that 65.9% of the respondents wash their hair daily followed by 14.1% which wash their hair monthly. On the observation of clothes, 92.3% subjects wear clean clothes and 89.7% changed daily their clothes in present study.

Table 1: Personal hygiene practices of adolescent girls.

| Particulars | Number | Percentage |
|--|--------|------------|
| Defecation habit | | |
| Open field | 125 | 31.3 |
| Latrine | 275 | 68.7 |
| Use of footwear during defecation | | |
| Not used | 54 | 13.5 |
| Used | 346 | 86.5 |
| Bath everyday | | |
| Yes | 392 | 98.0 |
| No | 8 | 2.0 |
| Use of separate towel | | |
| Yes | 35 | 11.0 |
| No | 365 | 89.0 |
| History of passage of worms | | |
| Previous year | | |
| Yes | 208 | 52.0 |
| No | 192 | 48.0 |
| Ever in life | | |
| Yes | 356 | 89.0 |
| No | 44 | 11.0 |
| Hand washing before eating | | |
| Water | 327 | 81.7 |
| Soap + Water | 73 | 18.3 |
| Nails | | |
| Clean | 89 | 22.3 |
| Unclean | 225 | 56.2 |
| Trimmed | 72 | 18.0 |
| Untrimmed | 14 | 3.5 |
| Observation of Eyes | | |
| Clean | 392 | 98.0 |
| Dirty | 8 | 2.0 |
| Observation of teeth | | |
| Clean | 310 | 77.5 |
| Dirty | 90 | 22.5 |
| Observation of Hair | | |

| | | |
|-------------------------------|-----|------|
| Combed | | |
| Yes | 372 | 93.0 |
| No | 28 | 7.0 |
| Use of oil | | |
| yes | 159 | 39.7 |
| No | 241 | 60.3 |
| Washed Daily | | |
| Yes | 23 | 5.7 |
| No | 377 | 94.3 |
| Louse | | |
| Present | 14 | 3.5 |
| Absent | 386 | 96.5 |
| Observation of clothes | | |
| Clean | 369 | 92.3 |
| Dirty | 31 | 7.7 |
| Changed daily | | |
| yes | 359 | 89.7 |
| No | 41 | 10.3 |

CONCLUSION

It can be concluded from the present study that practice of personal hygiene among the adolescent girls in rural area of Varanasi, India is not satisfactory, so there is a need to design and implement an intervention program for adolescent girls to adopting good and healthy personal hygienic practices because they are future of nation and only by changing their behavior towards good hygienic practices can make them stronger and healthier.

ACKNOWLEDGMENTS

Author's single acknowledge to participants of the study. Without whose cooperation these whole works have been not possible.

REFERENCES

1. Van Wijk C., Tineke M. Motivating Better Hygiene Behaviour. Importance for Public Health Mechanisms of Change. Edited by: Steven E. The Hague, Netherlands: IRC International Water and Sanitation Centre, 2003.
2. UNICEF. A manual on school sanitation and hygiene. Towards Better Programming Water, Environment and Sanitation Technical Guidelines. New York: UNICEF, 1998.
3. Sarkar M. Personal hygiene among primary school children living in a slum of Kolkata, India. *J Prev. Med. Hyg.* 2013; 54: 153-158.
4. Ali M.Y., Rahman M.M., Siddiqui M. H. Exploring degree of awareness about healthcare and hygienic practices in Secondary School Students residing in semi- urban areas of Bangladesh. *CBMJ*, 2013; 2(1): 55- 62.
5. Haaple I., Probart C. Food safety knowledge, perceptions and behaviour among middle school students. *J Nutr Educ Behaviour*, 2004; 36: 71-6.
6. Moon A.M., Mullee M.A., Thompson R.L., Speller V., Roderick P. Health-related research and evaluation in schools. *Health Education*, 1999; 1: 27-34.
7. Sidebottom D. School health education: do too many cooks spoil the broth? *Health Education*, 1995; 6: 17-23.
8. Wills W., Backett-Milburn K., Gregory S., Lawton J. The influence of the secondary school setting on the food practices of young teenagers from disadvantaged backgrounds. *Health Educ Res*, 2005; 20: 458-465.
9. Temitayo I.L. Knowledge and Practices of Personal Hygiene among Senior Secondary School Students of Ambassadors College, Ile- Ife, Nigeria. *Texila International Journal of Public Health*, Dec 2016; 4(4): 1-12.
10. Anitha Rani, Sathiyasekaran BWC. Personal hygienic practices of school going adolescents- A cross sectional study in Chennai. *IJCM*, 2013; 25(2): 197-199.
11. Dongre AR, Deshmukh PR, Boratne AV, Thaware P, Garg BS. An approach to hygiene education among rural Indian school going children. *Online J Health Allied Sci*, 2007; 6(4): 1-6.
12. Ghose J.K., Rahman M.M, Hassan J., Khan M.S.R., Alam A.A. *Microbes and Health*, 2012; 1(1): 34-37.