

A Study on Personal Hygiene and Sanitation Practices in a Village of Ranchi District of Jharkhand

Sangita Kumari¹, Dr. Asha Kumari Prasad²

¹Research Scholar, Department of Home Science, Ranchi University, Ranchi, India

²Head of Department, Department of Home Science, Ranchi University, Ranchi, India

Abstract: Sanitation and hygiene are critical to health, survival, and development. Many countries are challenged in providing adequate sanitation for their entire populations, leaving people at risk for water, sanitation, and hygiene (WASH)-related diseases. Throughout the world, an estimated 2.4 billion people lack basic sanitation (more than 32 % of the world's population) The goal of the study was to get a better insight about the level of awareness and explore knowledge on hand hygiene among middle and high school students` Objective: to find out the knowledge, attitude and practices about personal hygiene and sanitation. Materials and methods Type of study: Community based cross-sectional observational study. Place of study. One purposively selected High school situated in a rural area in Ranchi, Jharkhand, India. Duration of study: one month. Study population: Total 100 respondent were selected randomly from rural area. Study tool. A pre-designed, pre-tested and structured questionnaire. Result: In this study the most common time for hand washing mentioned by 100 % of the respondents was washing their hand before and after eating meal. Only (66 %) respondents reported that they washed their hands with soap and dettol. Out of 50 respondents, more than 50 percent (n=100) respondents did not follow any methods of water treatment and only 12 % respondent use RO water for drinking. The most common 84 % get drinking water from bore well. Conclusion: This study confirmed low knowledge and attitude levels of sanitation but good practice levels of hygiene. The knowledge and practice on hygiene and sanitation among the school of Nayatoli Simaliya was found to be fair.

Keywords: knowledge, attitude and practices, personal hygiene and sanitation

1. Background

Adequate sanitation, together with good hygiene and safe water, are fundamental to good health and to social and economic development. That is why, in 2008, the Prime Minister of India quoted Mahatma Gandhi who said in 1923, "sanitation is more important than independence"¹ Improvements in one or more of these three components of good health can substantially reduce the rates of morbidity and the severity of various diseases and improve the quality of life of huge numbers of people, particularly children, in developing countries.^{2,3} This paper focuses on sanitation. It seeks to present the latest evidence on the provision of adequate sanitation, to analyses why more progress has not been made, and to suggest strategies to improve the impact of sanitation, highlighting the role of the health sector. It also seeks to show that sanitation work to improve health, once considered the exclusive domain of engineers, now requires the involvement of social scientists, behavior change experts, health professionals, and, vitally, individual people. Throughout this paper, we define sanitation as the safe disposal of human excreta.⁴

Globally, 946 million people still open defecate (9 out of 10 live in rural areas), 2.4 billion people lack access to basic sanitation (7 out of 10 in rural areas), 663 million lack access to basic water sources, and diarrhea is the second leading cause of death in children under five much of which is preventable by clean water and sanitation (WHO/UNICEF JMP,2015;WHO,2017). Sanitation is one of the most important aspects of community well-being because it protects human health, extends life spans, and is documented to provide benefits to the economy.

Sanitation and hygiene are critical to health, survival, and development. Many countries are challenged in providing adequate sanitation for their entire populations, leaving people at risk for water, sanitation, and hygiene (WASH)-related diseases. Throughout the world, an estimated 2.4 billion people lack basic sanitation (more than 32% of the world's population). Basic sanitation is described as having access to facilities for the safe disposal of human waste (feces and urine), as well as having the ability to maintain hygienic conditions, through services such as garbage collection, industrial/hazardous waste management, and wastewater treatment and disposal.

The world did not achieve the United Nations' Millennium Development Goal (MDG) sanitation target (i.e., to halve the proportion of people without sustainable access to basic sanitation by 2015). Now, the United Nations' Sustainable Development goal (SDG) is for everyone to have "adequate and equitable" sanitation by 2030³.

Diarrhoeal Diseases

Diarrhoeal diseases are the most important of the faeco-oral diseases globally, causing around 1.6–2.5 million deaths annually, many of them among children under 5 years old living in developing countries. In 2008, for example, diarrhoea was the leading cause of death among children under 5 years in sub-Saharan Africa, resulting in 19% of all deaths in this age group.

Undernutrition

Poor sanitation, hygiene, and water are responsible for about 50% of the consequences of childhood and maternal underweight, primarily through the synergy between

diarrhoeal diseases and under nutrition, whereby exposure to one increases vulnerability to the other

Acute Respiratory Infections

With 4.2 million deaths each year (1.6 million among children under 5 years), acute respiratory infections are the leading cause of mortality in developing countries. Although sanitation is not directly linked to all acute respiratory infections, a recent study reported that 26% of acute lower respiratory infections among malnourished children in rural Ghana may have been due to recent episodes of diarrhoea. Thus, sanitation could be a powerful intervention against acute respiratory infections.

Neglected Tropical Diseases

According to the latest WHO report, as more districts, countries and regions eliminate NTDs, the number of people requiring treatments has decreased from 2 billion in 2010 to 1.6 billion in 2015. This is good progress but much remains to be done. The goal of the study was to get a better insight about the level of awareness and explore knowledge on hand hygiene among middle and high school students.

Demographic Profile

- Name of the area:-Nayagaon, Simliya, Bajra, Ranchi, Jharkhand, India.
- Block / tehsil:- Kanke
- Total households:- 1221
- Total population:-6523

Relevance of the Study

- Low education and ignorance among slum residents lead to continuation of wrong beliefs and unscientific attitudes towards health.
- The unhealthy and polluted environment, malnutrition, and absence of educational exposure affect children in slums.
- Low and stagnant income among slum people implies that the purchasing power remains a serious concerns which leads to food and nutritional in adequacy.

Objective

The present study mainly focuses on health and sanitation practices aspects of ruler area Nayagaon, Simliya, Bajra, Ranchi, Jharkhand, India. Following objectives are framed for the present study using primary and secondary sources

- **To find out the knowledge, attitude and practices about personal hygiene and sanitation.**

2. Materials and methods

Type of study: Community based cross-sectional observational study.

Place of study: One purposively selected High school situated in a ruler area Nayagaon, Simliya, Bajra, Ranchi, Jharkhand, India.

Duration of study: Two months

Study population: Total 100 school children in grades VI to VII from the selected school, where the students come mainly from the neighboring slum locality.

Study tool: A pre-designed, pre-tested and structured questionnaire.

3. Results

Table no 1 shows regarding personal hygiene and sanitation practices in which the washing hands Before meal is 100% and washing hands after defecation with soap/dettol hand wash (80%) was higher than Water only. Only (20%) respondents reported that they washed their hands with water. In the study 48 % respondents reported that they were brushing teeth once time in a day and 58% changing their brush if they need to change. In this study 84% respondents get drinking water from bore well and 16% found drinking water from municipal tap and well/pond. In the study we get that 50 % respondents did not follow any methods of water treatment 24% respondents use water after boiled and only 16% respondents use RO/Filtered for drinking water. In our study, majority of the respondents 84% reported that they dispose solid waste in streets dustbins and among them 90% reported that they dispose solid waste cleaned followed by municipal on weekly. Study population by personal hygiene and sanitation practices given below:-

Characteristics	Frequency	Percent
Washing hand before and after meal		
Always		100%
Sometime	100	
Never		
Washing hand material		
Water	100	20%
Soap/Dettol		80%
Brushing teeth		
Once	100	48%
Twice		52%
Changing toothbrush		
Ever month		58%
After three month	100	10%
If need to change		32%
Toilet facilities at home		
Public toilet		
Personal toilet	100	98%
Open toilet		2%
Source of water		
Municipal tap		8%
Bore well	100	84%
Pond/Well		8%
Water treatment before drinking		
Boiled		24%
Filtered	100	14%
RO treated		12%
Original form		50%
Management of waste material		
On the street		14%
In dustbin	100	84%

4. Concluding Observations

- In our observations we found that even if the government facilities are reaching to the people they are

reluctant to maintain basic hygiene and sanitation in their surroundings.

- Most of the houses have toilet built in it but a very few people use it.
- In the area we found two public toilets out of which one was functional and other was in a very pathetic condition.
- The toilets built in the private school were also dirty and unhygienic and the students were forced to open defecation.
- The government hospital within the rural area was closed and people responded that it opens thrice a week.
- People in rural area have access to piped water supply which they use it for both drinking as well as day to day activities.

5. Conclusions

This study confirmed low knowledge and attitude levels of sanitation but good practice levels of hygiene. The knowledge and practice on hygiene and sanitation among the school of Nayatoli Simaliya was found to be fair.

6. Recommendations

- The people in the slums were suggested to boil the piped drinking water as it would cause several health related issues.
- They were also advised to eat green vegetables and pulses.
- Anganwadi and primary health centre needs to be revitalized and reoriented to improve the effective measure for the purpose.
- Government needs to make people aware about basic sanitary and health care practices in the slum

References

- [1] Ananthkrishnan S, Pani SP, Nalini P. A comprehensive study of morbidity in school age children. *Indian Pediatr* 2001;38:1009-17
- [2] Singh M. Opening address to the third South Asian conference on sanitation, New Delhi, 18 November 2008.
- [3] Esrey SA, Potash JB, Roberts L, Shiff C, Effects of improved water supply and sanitation on ascariasis, diarrhoea, dracunculiasis, hookworm infection, schistosomiasis, and trachoma. *Bull World Health Organ.* 1991; 69(5):609-21.
- [4] Water and sanitation associated with improved child growth.
- [5] Merchant AT, Jones C, Kiure A, Kupka R, Fitzmaurice G, Herrera MG, Fawzi WW *Eur J Clin Nutr.* 2003 Dec; 57(12):1562-8.
- [6] WHO, UNICEF. Progress on sanitation and drinking-water – 2010 update. Geneva: World Health Organization; 2010. 60
- [7] Deb S, Dutta S, Dasgupta A, Misra R. Relationship of personal hygiene with nutrition and morbidity profile: A study among primary school children in South Kolkata. *Indian J Community Med* 2010;35:280-4.

- [8] Arikan I, Dibeklioglu SE, Arik O, Gulcan A. Personal hygiene status among primary school students in an urban area in the West of Turkey. *Am J Res Commun (Internet)* 2014;2:23-36.
- [9] Davis K. Urbanization in India-past and future. India's urban future. Berkeley: University of California Press;1962.
- [10] Ramachandran H. Subramanian SV. Slum household characteristics in Bangalore, a comparative analysis 1973 and 1992, In: Schenk H, editor, *Living in India's slums*, New Delhi: Manohar Publication;2001.
- [11] Nangia S, Thorat S. Slum in a metropolis. Delhi: Shipra Publications;2000.
- [12] Kantor P, Nair P. Risks and responses among the urban poor in India. *J Int Dev*2003; 15: 957-967.