

A Study on Water Sanitation and Hygiene [Wash] in Rural Area of Allahabad, Uttar Pradesh, India

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Abstract— Background: Adequate drinking water, sanitation and hygiene are all essential ingredients to ensure health. Most often related to unsafe drinking water, poor sanitation and inadequate hygiene causes Diarrhea and leads to death among children under five. It kills more children than Malaria or HIV/AIDS.

Objective: To determine Knowledge of Hygiene and Sanitation among respondents.

Methods: A community based descriptive study was conducted among 305 respondents from 6 villages of Allahabad from February to March 2018 systematic random sampling method was adopted to choose the respondents above 18 year. The data were collected using a pretested semi-structured interview schedule, through the house to house visits.

Results: Half (50%) of the respondents were farmer whereas 27.5% had business, 19.3% were labourer in occupation and 3.3% were unemployed. 97.7% of the respondents were not treating drinking and cooking water. 2.3% of the respondents filter water use for drinking and cooking. 6.6% of the respondents used soap for hand wash before eating, 5.6% before cooking, 85% after toilet and 2.2% after feeding.

Conclusion: The study reveals that knowledge and practice about Water Sanitation and hygiene was limited among rural population in Allahabad.

Key words: Knowledge, Practice, Water Sanitation and Hygiene

I. INTRODUCTION

Hygiene is a set of practices performed to preserve health. According to the World health Organization (WHO), "Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases. Adequate drinking water, sanitation and hygiene are all essential ingredients to ensure health. World Health Organization (WHO) and UNICEF estimates that at minimum 1.8 billion people around the globe use fecally-contaminated drinking water. It also estimates that every US dollar invested in improved drinking water and sanitation, there is an economic return of four US dollars resulting from health and productivity gains. Hygiene poses another global health challenge. Despite the fact that hand washing with soap could save 300,000 people annually. Safe drinking water and sanitation in the absence of hygienic behavior will not prevent feco-oral infections. Most often related to unsafe drinking water, poor sanitation and inadequate hygiene causes Diarrhea and leads to death among children under five. It kills more children than Malaria or HIV/AIDS.

II. OBJECTIVE

The study was conducted to determine Knowledge and practices of Hygiene and Sanitation, to ascertain the Sanitation.

III. MATERIALS & METHODS

A. Study type and setting

The community-based, descriptive study was conducted in the rural area of Allahabad duringa 2-month period from February to March 2018.

B. Study area

Allahabad districts of Uttar Pradesh was selected. There are 20 blocks in 8 Tehsils in Allahabad district, out of that Chaka block was selected purposively for the study.

C. Study population

The study populations were mure than 18 year of 6 village of chaka block of Allahabad.

D. Sampling

The sample size was calculated using the formula $[10]^{\circ} N = \frac{Z^2 Pq}{d^2}$, taking a proportion of the prevalence of Superficial fungal infection as 27.6%.sample size for this study was306.

E. Data collection tools and techniques

- Interview schedule was prepared after pre-testing.
- A pre-structure questionnaire was used to obtain the data from the respondents.

F. Data analysis

The collected data was compiled,coded and analyzed by IBM SPSS (Version 20; SPSS Inc., Chicago).

G. Ethical considerations

The study participants were explained about the purpose of the study and informed consent wastaken.

IV. RESULTS

A. Demographic profile of subjects

Total of 306 subjects were enrolled in the study out of which More than half (83.7%) respondents were male whereas 16.3% were female in which they were belonging age group followed as 33.7% were 18-28 year,30.4% were 38-48 year,21.9% were above 48 year and 14.1% were18-28 year, and 89.9% of the respondents were married . Majority (59.1%) of the respondents belonged to SC/ST caste whereas 84% of the respondents were Hindu. The literacy of the respondents as fallowed 14.4% were graduates, 23.2%

were higher school passed, 25.5% primary school passed and 36.9% of the respondents were illiterate. Half (50%) of the respondents were farmer whereas 27.5% had business, 19.3% were labourer in occupation and 3.3% were unemployed.

Table 1: Frequency distribution of subjects as per socio-demographic profile (N=306) Knowledge and practice of subjects

Table 2 Shows the details regarding respondent's knowledge and practice of reproductive health. Though 118 (34.70%) respondents said that preferred marriage age for girls less than 15 years of age group and for boys (39.50%) of respondents said that marriage age of boys more than 20 years age group. Though 132(38.80%) of the subjectssaid that preferred age for child bearing is 20 years. Though 163(47.90) of the respondents knowledge about gap between 2 child as 2 years, followed by 1 year 128(37.70%), 3 years 47(13.80%) and others 2(.60%). The majority 233(65.50%) of the respondents knew about condom and 49(14.4%) respondents not having knowledge about contraceptives. Through 216(63.50%) of the respondents having knowledge about institution for abortion in government hospitals, followed by private hospital 71(20.90%), clinic41(12.10%) and other 12(3.50%) respectively. The 180(52.90%) of respondents do not know about RTI/STD and 160(47.10%) respondents were reported having knowledge about RTI/STD. Majority of 99(58.20%) female respondents were using clean cloth used and discard during menstruation, 37(21.80%) using sanitary pad, 29(17.00%) respondents using clean cloth washed and sundry and 5(13.00%) of female respondents using cotton homemade pad during menstruation.

KNOWLEDGE ABOUT WASH	YES	NO
Hand wash technique	9.8%	90.2%
Wash hand before cooking	97.2%	2.8%
wash your hand before eating	99.7%	0.3%
wash your hand after toilet uses	100%	00%
wash your hand before feeding children	83%	17%
Wash hand after handling animal	88%	12%
Water should treat before Drinking/cooking	97.2%	2.8%
Kitchen room should be separate	98%	2%
Toilet should be in every houses	100%	00%
Vessels should clean before and after use	100%	00%

Hand Washing	No	Yes
Before eating	0.3%	99.7%
Before cooking	0.3%	99.7%
After toilet	2%	98%
After handling dunk/Feeding/Cleaning	0.6%	99.4%

Hand washing	Water	Ash	Soap	Other
Before eating	93.1%	00%	6.6%	00%
Before cooking	94.1%	00%	5.6%	00%
After toilet	0.3%	0.3%	85%	12.4%
After handling dunk/Feeding/Cleaning	97.2%	00%	2.2%	00%

V. DISCUSSION

Washing hand with disinfectant is plays major role to prevent the diseases in this study 6.6% of the respondents used soap for hand wash before eating, 5.6% before cooking, 85% after toilet and 2.2% after feeding which is higher than findings found in Bangladesh 55.9% after toilet, 4.4% before cooking and 4.9% before eating (Raihan *et.al.*2017) . Safe disposal of human excreta can reduce the communicable diseases burden in the community. More than half (85%) respondents had toilet which is higher than the findings found in Karnataka 82% (Sheetal MP *et.al.*2016). In the observation it was found that most of the latrine made by government. This study revealed that 84% of the respondents were disposed child feces by rinse in to latrine and 16% of the respondents were left in open. 54.2% of the respondents had pet animal in which majority of the respondents had buffalo at their home.

VI. CONCLUSIONS

The present descriptive Study on "Water, Sanitation and Hygiene [WaSH] was conducted in rural area of Allahabad Uttar Pradesh. The main objectives of this study was to determine knowledge, practice and situation of Hygiene and Sanitation among respondents. The study was conducted in 6 villages and 306 respondents of Chaka block were selected. Maximum (36.9%) respondents were illiterate. Farming was main occupation of maximum (50%) respondents with low income. The study found that the maximum of the houses was cemented without separate kitchen.

In the present study it was observed that practices of WaSH was less according to their knowledge. Sanitation and hygiene was not up to the mark. It was found that 16% of the respondents were still disposing child feces in open area. Education & economy were the major factors affecting respondents sanitation and hygiene practices.

It concluded that if the knowledge will be practised properly it will help in improving the quality of sanitation and hygiene among the rural population of chaka block in the selected village. This practice will help in improving the quality of life.

VII. RECOMMENDATIONS

On the basis of findings of study and researcher's field observation, some recommendations have been made for the improvement in sanitation and hygiene sector.

A. Individual level:

- Behaviour change communication program should be conducted with maximum use of appropriate channel.
- Special package of training or orientation on sanitation and hygiene should be developed and launched.
- While constructing house kitchen should be constructed separately
- Education level of the community should be raised.

B. Community level:

- Household based orientation and education programme should be introduced for targeting hygiene.

- Awareness programme should be conducted through cultural activities.
- School health programme regarding the sanitation and hygiene should be conducted
- Income generating programme should be carried out.

C. Government level:

- Education should be compulsory up to class 12th .
- Programme should be carried out on sanitation and hygiene practices.
- Management of waste and drainage system
- Hygiene and sanitation should be included in school curriculum from the primary level.

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