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# Personal Hygiene Habits among School-Going Children in Rural Areas of Jaipur, Rajasthan, India.

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## **ABSTRACT**

Personal hygiene is important in every stage of life, but good cleanliness habits start from early childhood. The study was conducted to analyze the level of personal hygiene of the school going children in rural area of Jaipur. The total sample consisted of 400 school going children of the rural areas of Jaipur, Rajasthan. Children were administered on the basis of personal hygiene questionnaire used form the Department of P.S.M., S.M.S. Medical College, Jaipur (Rajasthan). Content analysis of the 20 items of the questionnaire was done and results showed that most of the school going children of rural area had developed a good sense of hygiene and the awareness towards keeping themselves clean. Sense of hygiene was found to be increasing among the children of the rural area. It was concluded that the school going children of the rural area are having a good sense of hygiene. They take care of their cleanliness regularly and also spread awareness regarding personal hygiene among others in their locality. Implications and limitations of the study were stated.

**KEYWORDS**: children, personal hygiene, rural, Jaipur.

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#### INTRODUCTION

Personal hygiene involves those practices which are performed by an individual to care for one's bodily health and well being, through cleanliness which is important in every stage of life. Good cleanliness habits start in childhood. Motivational factors behind personal hygiene practices include reduction of personal illness, healing from personal illness, optimal health and sense of well being, social acceptance and prevention of spread of illness to others. Kids who learn what personal hygiene is and how to follow proper hygiene practices will usually carry those habits into their adulthood too. What is considered proper personal hygiene may be culture specific and may change over time. Hygiene education usually starts with the family, and eventually youngsters learn what to do and how to follow cleanliness rules on their own.

## Definition

Personal hygiene generally includes cleanliness of the body and proper maintenance of personal appearance. This generally covers all body areas and clothing. Hygiene is an old concept related to medicine, as well as to personal and professional care practices related to most aspects of living. In medicinal, domestic and everyday life settings, hygiene practices are employed as preventative measures to reduce the incidence and spreading of the diseases. Kids do not naturally understand the importance of personal hygiene and how to maintain it. They learn about it from their family and usually need assistance until they get older and are able to do it on their own.

# Effects of Poor Personal Hygiene

Hygiene practices prevent or minimize disease and the spreading of disease. Microbial growth due to germs may lead to various infectious diseases specifically among children. Kids with poor personal hygiene may get teased by the other children for having a dirty body, dirty clothing or greasy hair. This type of criticism may harm their self esteem and make them even more negligent towards themselves. Adults mayalso get a poor impression of the child and may even suspect parental neglect if the child is young enough to be dependent on his parents for keeping him clean.

## **Types**

Practices that are generally considered under proper hygiene practices that include bathing regularly, washing hands regularly and especially before handling food, washing scalp hair, keeping hair

short or removing hair, wearing clean clothing, brushing one's teeth, changing toothbrush regularly, cutting finger nails, washing undergarments daily, avoiding the intake of substances as tobacco etc.

Other personal hygienic practices would include covering one's mouth when coughing, disposal of soiled tissues appropriately, making sure toilets are clean, making sure that food handling areas are clean, keeping the sources of drinking water clean, preventing spitting on roads etc.

Thus, there are several basic types of hygiene for kids. Most important is cleanliness of the body, which alleviates dirt and odor. A child should be taught to bath or shower every day and to wash her hands frequently. Brushing of the teeth should be done at least twice a day, once in the morning and once at night. Ideally the child should learn to brush after every meal too <sup>1</sup>.

## Age Appropriate Hygiene

Personal hygiene expectations for children take place according to their specific age. Youngsters may start to learn hygiene basics as toddlers. For example, they can learn to wash their hands and brush their teeth with parental modeling, although they will still require assistance with bathing, showering and dressing. Parents may make bath time fun with toys and games in the early years. Kids may gradually do these activities independently as they reach school age.

## Warning

Bad personal and environmental hygiene may harm a child's health in several ways. Unclean kids are more prone to illness as cold, fever, diarrhea, flu etc. due to excessive exposure to germs either carried by itself or others. Cavities and gum diseases are caused by neglected oral hygiene and can lead to premature loss of teeth<sup>2</sup>.

# Review of Literature

Many studies have been conducted about the personal hygiene of the school going children at both national and international level. Some of the studies are stated below:

Studies showed that Soil-Transmitted Nematode Inflections caused due to unhygienic conditions are the most common helminthes infections among the world population as it causes serious infections in developing countries, mainly in South Asia and Africa. The relationship between the prevalence and intensity of risk factors for Ascaris infection among primary school children in Badulla district in Sri Lanka was explored using standard parasitological techniques in order to study the independent association of factors for Ascaris infection. Results showed that socio economic conditions, de-worming

and rate of infection are highly co-related with each other. It was concluded that authorities and people should pay more attention on these factors in order to control the rate and spread of infection<sup>3</sup>.

Oyibo calculated that the average knowledge and practice scores related to basic personalhygiene among the schoolchildrenwere 74.6 % and 54.9 % respectively. This high level of knowledge related to basic personalhygiene exhibited by the children was not totally reflective of their practices of basic personalhygiene; as 29.4 %, 37.0 % and 46.3 % of them washed their hands after using the toilet, wash their uniform daily and wash their hands after playing respectively. The result of physical inspection of the children revealed that 17.9 %, 45.2 % and 57.4 % of them had dirty hair, dirty uniform and dirty nails respectively. It was concluded that although a sizeable number of the children studied had adequate knowledge related to basic personalhygiene, their practices related to same was poor<sup>4</sup>.

Kakkaret. al studied the morbidity status of the school children & elicit relationship of healthy habits with morbidity pattern. Observational study Methodology was used in which a cross sectional survey was done to find out the morbidity pattern on 757 school children (340 boys and 417girls), aged 5-16 years studying in class I-VIII in five different schools of Dehradun. Overall student attendance was 78.2%. Results revealed that worm infestation was higher in boys (65.1%) as compared to Girls(57.3%). Dental Caries (53.1%) and dermatitis (16.3%) were more in boys. Healthy habits like daily bathing (82.6%), daily teeth brushing (61.1%), mouth rinsing after meal (53%) and hair clean/combed (80.2%) were more in girls as compared to boys while the habit of trimming the nails was equally (55%) noticed among both the groups. It was concluded that morbidities found amongst students are basically due to low awareness & negligent behaviour about personal hygiene which are the key areas of concern and by active involvement of school teachers and improvement in personal hygiene of school children, the reduction in related morbidities may be achieved<sup>5</sup>.

Long-term impact of health education in intestinal helminthes infection control in rural Bangladesh was also studied, where a longitudinal study was conducted to compare knowledge, awareness and practice for intestinal helminthes between four communities: two receiving health education and two not receiving health education. The conclusion of the study was that this long-term follow-up study showed the lack of sustainability of knowledge and awareness in the long-term after health education interventions<sup>6</sup>.

Oral health is fundamental to general health and well being. Schools can provide a supportive environment for promoting oral health. School policies and education on health-related matters are imperative for the attainment of good oral health and control of related risk behaviors. The study was conducted to assess oral health-related knowledge, attitude, and practices among 12-year-old schoolchildren studying in rural areas of Panchkula, India. Based upon the findings of the study it was observed that the knowledge, attitude, and practices of the surveyed children with regard to oral health is poor. Oral health-related knowledge of girls was significantly better than that of boys. Hence, there is a need for regular oral health education of the children, as well as their parents and school teachers<sup>1</sup>.

A similar study was conducted by Kamath et. al which aimed at assessing awareness regarding oral hygiene practice amongst children toward oral health in rural population of Mangalore city. Data on oral hygiene practice were collected by means of self-administered questionnaire. This survey revealed that 52% children brush their teeth twice a day and 98.9% children brushed in horizontal direction. Other oral hygiene aids were sparsely used (5.3%). None of the school children had any form of interactive sessions on oral hygiene practice with their respective class teacher. Thus, basic oral hygiene knowledge and practice of the participants was good but advanced knowledge needs to be improved. Systematic community-oriented oral health promotion programs and awareness amongst teachers are needed to improve oral health of school children<sup>7</sup>.

As far as other aspects of hygiene are concerned apart from oral hygiene, Kumar et. al in their study focused on teachers and health service providers for the propagation of awareness on hygiene and various other diseases among adolescents which highlighted the importance of prevention against contagious germs. It was observed that teachers and health service providers are expectedly the educated stakeholders who may provide the adolescents the needed nutrition and health guidance<sup>8</sup>.

#### MATERIAL AND METHODS

## **Objective**

Keeping in view the importance of the personal hygiene in the lives of human beings especially children, the present study is focused on analyzing the level of personal hygiene of the school going children in rural area of Jaipur (Rajasthan, India).

#### Variable

- Personal hygiene
- School Children (belonging to rural area)

## Sample

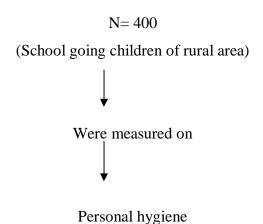
The total sample consisted of 400 school going children of the rural areas of Rajasthan. The age group ranged from 8-14 years. The sample was selected on an availability basis. Purposive sampling was done and children were administered on the basis of personal hygiene questionnaire.

#### Measurement Device

The questionnaire analyzing the level of personal hygiene was used form the Department of P.S.M.(Preventive and Social Medicine), S.M.S. Medical College, Jaipur (Rajasthan).

## Research Design\ Plan

A qualitative design was used.



#### **Controls**

- 1. The subject was made to sit comfortably. The environment was made calm and quiet and without any kind of external cues or disturbances.
- 2. A good rapport was established with the children.
- 3. No prior knowledge of the tests was given to the subject.
- 4. It was taken care that the children should not get bored while filling the questionnaire.
- 5. Subject will be treated very friendly and patiently so that he or she could perform the task well.

## Statistical Analysis

Content analysis was done of all the 20 items of the questionnaire and percentage was calculated out of the total sample.

#### RESULTS AND DISCUSSION

The purpose of the study was to analyze the type of hygiene practices adopted by the children of rural areas of Jaipur (Rajasthan, India) and how frequently their practices are followed.

There were 20 items indicating the various types of hygiene practices. All the questions were answered by the children through selecting the appropriate options given under the questions. Content analysis of each item was done and tables were formulated per questions of the questionnaire. The tables formulated per item of the questionnaire depicting the percentage of responses obtained per question are given as follows:

Table I & Figure I: When do you clean your teeth?

S.No.	Options	Percentage of
		Responses
1.	Everyday	85%
2.	Everyday at night	70%
3.	Everyday before eating	25%
4.	Everyday after eating	70%
5.	Everyday anytime	90%
6.	Sometimes	5%
7.	Never	0%

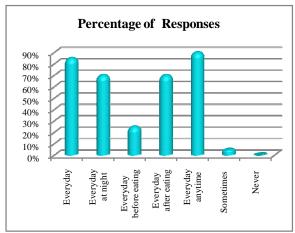
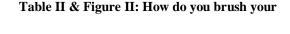
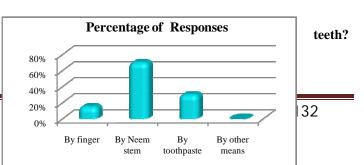


Table I and Figure I highlight the percentage of children who clean their teeth at regular intervals. In this table 85% of the children said that they clean their teeth regularly every day and 70% of them every night. 25% of them cleaned their teeth before eating and 70% after eating. 90% of the children responded that they clean their teeth anytime during the day but every day.



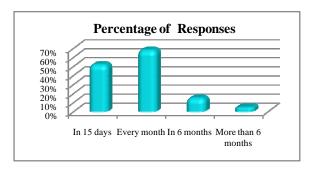


S.No.	Options	Percentage of
		Responses
1.	By finger	15%
2.	By Neem stem	70%
3.	By toothpaste	30%
4.	By other means	0%

When the children of rural area were asked the medium they use for brushing their teeth in Table II and FigureII, 15% of them were found to brush by finger, 30% of them used toothpaste and 70% of them used neem stem.

Table III& Figure III: When do you change your brush?

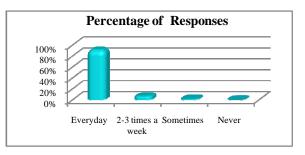
S.No.	Options	Percentage of
		Responses
1.	In 15 days	52%
2.	Every month	68%
3.	In 6 months	15%
4.	More than 6 months	5%



The children were also asked about how frequently they changed their brush in Table III and Figure III. 52 % of the children changed their brush within 15 days. 68% of them were found to change it every month. 15 % of the children changed their brush in 6 months and 5% of them changed it after more than 6 months of the time period.

Table IV& Figure IV: When do you take bath?

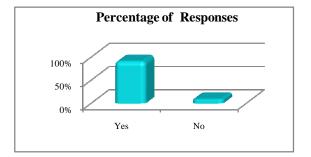
S.No.	Options	Percentage of
		Responses
1.	Everyday	91%
2.	2-3 times a week	7%
3.	Sometimes	2%
4.	Never	0%



In Table IVand Figure IVthe bathing schedule of the children was analyzed, where it was found that 91% of the children of rural area bath everyday, 7% of them bathe 2-3 times a week and 2% of them bathed sometimes in a month.

Table V & Figure V: Is the towel that you use after bathing, personal?

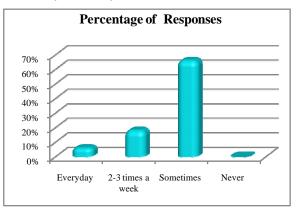
Options	Percentage of
	Responses
Yes	91%
N	00/
No	9%



It was asked whether the towel used by the children was personal or not in Table Vand Figure Vwhere it was observed that 91% of the children had their personal towels and 9% of them didn't.

Table VI & Figure VI: When do you wash your towel?

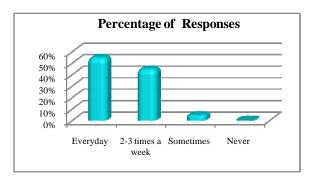
S.No.	Options	Percentage of
		Responses
1.	Everyday	6%
2.	2-3 times a week	18%
3.	Sometimes	66%
4.	Never	0%



According to the next table i.e. Table VI and Figure VI, 6% of the children washed their towel every day. 18% of the children washed it 2-3 times a week. 66% of them washed their towels sometimes in a week.

Table VII & Figure VII: When do you wash your hair?

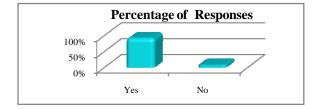
S.No.	Options	Percentage of
		Responses
1.	Everyday	55%
2.	2-3 times a week	45%
3.	Sometimes	5%
4.	Never	0%



The intervals by which the children washed their hair was calculated in Table VII and Figure VII. 55% of the children washed their hair every day, 45% of them washed the hair 2-3 times a week and 5% of the children washed it sometimes in a week.

Table VIII & Figure VIII: Do you wear washed clothes daily?

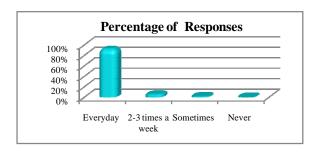
S.No.	Options	Percentage of
		Responses
1.	Yes	92%
2.	No	8%



In Table VIII and Figure VIII, 92% of the children said that they wear washed clothes daily and 8% of them denied.

Table IX & Figure IX: When do you wash your undergarments?

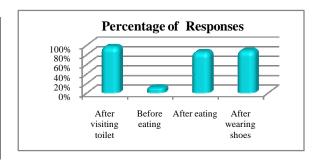
S.No.	Options	Percentage of
		Responses
1.	Everyday	92%
2.	2-3 times a week	6%
3.	Sometimes	2%
4.	Never	0%



When the question about regularity of the undergarments was asked in Table IX and Figure IX it was found that 92% of the children of rural area wash their undergarments daily, 6% of them wash it 2-3 times a week and only 2% of them washed their undergarments sometimes in a week.

Table X & Figure X: When do you wash your hands in a day?

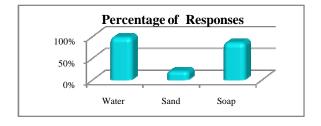
S.No.	Options	Percentage of
		Responses
1.	After visiting toilet	96%
2.	Before eating	11%
3.	After eating	85%
4.	After wearing shoes	88%



With the help of Table X and Figure X it was revealed that 96% of the children of rural area washed their hands after visiting toilet, 11% washed their hands before eating and 5 % after eating. 88% of the children washed their hands after wearing shoes.

Table XI & Figure XI: What do you use to wash hands?

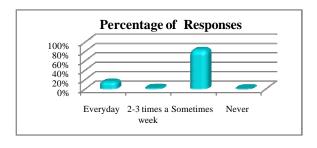
S.No.	Options	Percentage of
		Responses
1.	Water	98%
2.	Sand	20%
3.	Soap	86%



It was highlighted from Table XIand Figure XIthat 98% of the children of rural area used only water to wash their hands, 20% of them used sand and 86% of them used soap for hand washing.

Table XII & Figure XII: When do you clean your nails?

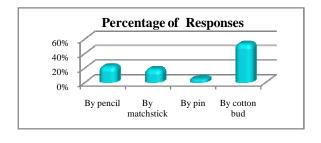
S.No.	Options	Percentage of
		Responses
1.	Everyday	15%
2.	2-3 times a week	2%
3.	Sometimes	83%
4.	Never	0%



In Table XII and Figure XII, 15% of the children were found to clear their nails every day, 2% of them cleaned 2-3 times a week and 83% of them cleaned their nails sometimes.

Table XIII & Figure XIII: How do you clean your ears?

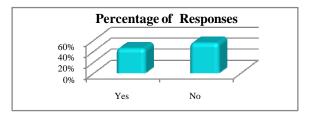
S.No.	Options	Percentage of
		Responses
1.	By pencil	22%
2.	By matchstick	18%
3.	By pin	5%
4.	By cotton bud	53%



The medium by which the children of rural area clean their ears was asked in Table XIII and Figure XIII where it was observed that 22% of the children used pencil to clean their ears, 18% used matchsticks, 5% used pin to clean their ears and 53% of them used cotton bud to clean their ear.

Table XIV & Figure XIV: Do you keep hanky on your mouth when you cough?

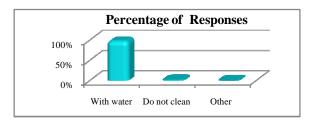
S.No.	Options	Percentage of
		Responses
1.	Yes	45%
2.	No	55%



It was asked whether the children kept hanky on their mouth when they coughed in Table XIV and Figure XIV. It was seen that 45% of the children kept hanky on their mouth and 55% of them didn't when they coughed.

Table XV & Figure XV: How do you clean your eyes?

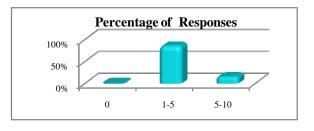
S.No.	Options	Percentage of
		Responses
1.	With water	98%
2.	Do not clean	2%
3.	Other	0%



In Table XV and Figure XV, it was found that 98% of the children of rural areas cleaned their eyes with water and 2% of them didn't.

Table XVI & Figure XVI: How many friends do you have?

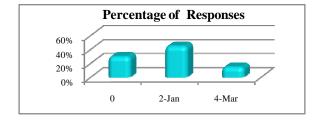
S.No.	Options	Percentage of Responses
1.	0	0%
2.	1-5	85%
3.	5-10	15%



It was also observed from the survey (Table XVI and Figure XVI) that 85% of the children had a fried circle comprising of 1-5 number of children and 15% of them had large number of friends ranging from 5-10.

Table XVII & Figure XVII: How many of your friends spit anywhere in the surroundings?

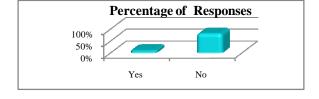
S.No.	Options	Percentage of
		Responses
1.	0	30%
2.	1-2	45%
3.	3-4	15%



It was also asked to them that whether any of their friends had a habit of sitting in the surroundings in Table 17 and Figure 17 to which 30% of the children replied that none of their friends had that habit. 45% of them said that 1 or 2 of their friends have the habit of spitting and 15% of them responded that 3-4 of their friends usually spit anywhere in the surroundings.

Table XVIII & Figure XVIII: Do you take tobacco?

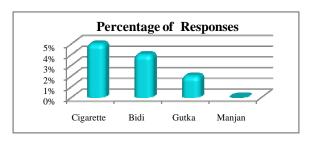
S.No.	Options	Percentage of
		Responses
1.	Yes	11%
2.	No	81%



In Table XVIII and Figure XVIII, the children were asked about tobacco intake where 81% of the children denied that they don't take any form of tobacco and 11% of them agreed that they take tobacco.

Table XIX & Figure XIX: If yes than how?

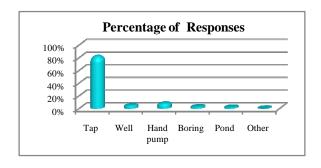
S.No.	Options	Percentage of
		Responses
1.	Cigarette	5%
2.	Bidi	4%
3.	Gutka	2%
4.	Manjan	0%



It was also revealed from Table XIX and Figure XIX that out of the children who were involved in tobacco intake, 5% of them used cigarettes 4% used bidis and 2% of them used gutka.

Table XX & Figure XX: What is the source of water in your area?

S.No.	Options	Percentage of
		Responses
1.	Тар	82%
2.	Well	5%
3.	Hand pump	8%
4.	Boring	3%
5.	Pond	2%
6.	Other	0%



The source of water in area of residence of the children was asked in Table XX and Figure XX, where 82% of children replied that the main source of water in their area is tap. 5% of them used wells, 8% used hand pumps. 3% of them had boring and 2% of them used pond water for the fulfillment of water need in their area.

#### **DISCUSSION**

According to the tables 1 to 20 given above, it is evident that the school going children are somewhat nicely aware of their hygiene. As it may be observed that majority of school going children clean their teeth everyday, most of them brush their teeth by stem of the Neem tree, they are also aware of changing their brush every month. Most of the children take bath everyday, they use personal towel and also wash their towels sometimes to keep it clean.

Impact of school water, sanitation, and hygiene (WASH) interventions on school-going children was also examined in Kenya. The children who were given interventions regarding hygiene practices had much lesser chances of having infectious diseases in comparison to those who didn't received intervention<sup>9</sup>.

In the present study nearly all of the school-going children of the rural areas wash their hands every day; they also wear washed clothes daily and also wash their undergarments everyday.

In order to keep themselves away from germs, most of the children wash their hands after visiting toilet, after eating and after wearing shoes. They mostly use soap and water to wash their hands; they also clean their nails after a certain intervals of time.

Baker et. al also conducted a survey in Mirzapur, Bangladesh where hand washing practices among caretakers of case and control children < 5 years of age were characterized and analyzed for association with moderate-to-severe diarrhea. It was found that Soap or detergent ownership was common, yet 48% of case and 47.7% of control caretakers also kept ashes for hand washing, including 36.8% of the wealthiest households. Soap, detergent, and ash were used for multiple hygiene purposes and were kept together at hand washing areas<sup>10</sup>.

Many school going children were found to clean their ears with cotton bud. Some of the children were seen to be aware of putting hanky on their mouth when they cough, but many of them were not aware of this practice. The children were found to wash their eyes with water regularly. In order to judge about awareness of environmental hygiene among children some questions about their friends were also asked where it was observed that the children had many friends and some of them were found to spit anywhere in the surroundings. 11% of the children out of the total sample were found to be indulged in tobacco intake. Most of these children adopted the medium like to smoking cigarette (5%) and bidi (4%) and taking gutka (27%) for tobacco intake.

The source of water supply in their respective areas was mainly through taps (82%) but the other sources of water supply observed in those rural areas were well, hand pump, boring and pond.

In the case of water supply a study was conducted by Oswald et. al in which the association between improved water and sanitation access was examined and the affect of unhygienic water sources on the health of children was observed in Peru. It was seen that Hand washing increased following installation of private, piped water and sewerage connections, but its practice remained infrequent, particularly before food-related events. Infrastructural interventions should be coupled with

efforts to promote hygiene and ensure access to water and soap at multiple on-plot locations convenient to mothers<sup>11</sup>.

Thus, the tables showed that most of the school going children of rural area had developed a good sense of hygiene and the awareness towards keeping themselves clean is increasing among the children of the rural area. But along with the awareness about personal hygiene, the sense of environmental hygiene is also necessary which seemed to be still lacking among these children.

#### **CONCLUSION**

Through the present study it may be concluded that the school going children of the rural area are having a good sense of personal hygiene. They take care of their cleanliness regularly and also spread awareness regarding personal hygiene among others in their locality.

## Limitations of the study

- 1. The sample size may be large in order to generalize the results.
- 2. An intervention program or training program would be prepared in order to enhance the significance of the research.
- 3. More questions regarding other types of hygiene and general health may be added in the questionnaire to go into further details of the research.

## **Implications**

- 1. This study gives an idea of the level of improvement in the direction of personal hygiene in the rural areas of the state.
- 2. This research opens new vistas for further research.
- 3. Intervention programs or training programs may be carried out further in this direction according to this study.
- 4. Awareness programs may be formalized on the basis of the present research conducted.

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