A study on existing hygiene practicesof rural women of Assam, India

Abstract

Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases. It can be defined as the practice of certain habits to maintain a good health both at the personal level (personal hygiene – cleanliness, physical exercise, proper rest, sleep, bathing, avoiding smoking, drinking alcohols, drugs etc.) and at the community level (social hygiene – proper disposal of waste) *(WHO, Jan, 2016*). About 75% of health facilities are concentrated in urban areas where only 27% of the total population lives. Contagious, infectious and waterborne diseases such as diarrhea, amoebiasis, typhoid, infectious hepatitis, worm infestations, measles, malaria, tuberculosis, whooping cough, respiratory infections, pneumonia, reproductive tract infections etc. dominate the morbidity pattern, especially in rural areas (*Borgohain, 2017*).The study was carried outin the state of Assam (India) with 270 randomly selected rural women of 3 districts, viz., Tinsukia, Nagaon and Barpeta districts to find the existing practice of respondents on hygiene. More than half of the respondents (57.04 %) belonged to 'moderate category' of practice level on hygiene. Majority of the respondents belonged to 'moderate category' of practice level on hygiene, namely Barpeta (56.67%), Nagaon (53.33%) and Tinsukia (61.11%). It is also observed that the Nagaon district had highest percentage (24.44%) of respondents that belonged to 'poor category' of practice level on hygiene as compared to the other two districts.

Key word: Existing practice, Rural women, Children, Family, Hygiene, Barpeta, Tinsukia, Nagaon and Assam

Introduction

"Hygiene refers to conditions and practices that help to maintain health and prevent the spread of diseases. It can be defined as the practice of certain habits to maintain a good health both at the personal level (personal hygiene – cleanliness, physical exercise, proper rest, sleep, bathing, avoiding smoking, drinking alcohols, drugs etc.) and at the community level (social hygiene – proper disposal of waste)"*(WHO, Jan, 2016*). "India, though after independence, has progressed a lot, yet, spread of diseases, suffering from deficiency diseases, growth of harmful organisms due to improper disposal of sewage and refuse, lack of drainage system, habit of open-defecation by the people, lack of safe water, lack of healthy nutritional practices etc. are some of the common problems

prevailing in the society of the vulnerable areas like villages, slum areas etc. About 75 per cent of health facilities are concentrated in urban areas where only 27 per cent of the total population lives. Contagious, infectious and waterborne diseases such as diarrhea, amoebiasis, typhoid, infectious hepatitis, worm infestations, measles, malaria, tuberculosis, whooping cough, respiratory infections, pneumonia, reproductive tract infections etc. dominate the morbidity pattern, especially in rural areas" (*Ansari et. al., 2015).*"Hygienic practices play a vital role in the health status of human society. Health status of an individual reflects the quality of life. Access to improved water and sanitation facilities does not, on its own, necessarily lead to improved health. Evidences have shown that good hygiene practices are very important in the health status of people" [9-11]. "Lack of proper hygiene has been the major cause of many killer diseases in most countries of the world, including India. India has the highest number of under-weight children under five in the world and 70 percent of children are anaemic. Worldwide, 40 percent of the population does not have ready access to clean, safe drinking water, and approximately 60 percent does not have satisfactory facilities for the safe disposal of human waste. Infectious agents in drinking water and food cause diarrheal deaths of several million children annually" *(Health in India, Nov, 2016).*

The proportion of undernourished people in the overall population has fallen from 21.5 percent in 2004-06 to 17 percent in 2011-13 according to International Food Policy Research Institute (IFPRI) estimates (*Suchitra &Ravikumr, 2018*). "Healthy lifestyle and high intake of nutritious food can provide good health throughout life to the humans. The poor nutrition and unawareness of health facilities during the childhood and reproductive age are the major factors responsible for the poor health status. Though government of India has been taking several efforts to improve the health status of the women, poverty, gender discrimination and low education in the population are the major problems associated with the implementation of appropriate interventions"*(Raju Kowsalya, Shanmugam Manoharan, 2017).*

"Many studies have shown that India is far away in the aspect of hygienic practices. To raise the health status of rural women, adequate nutrition and proper hygiene has to be incorporated into practice in their daily living. Rural women must be educated in choosing proper foods (low cost) through nutrition education programme to improve the health and nutritional status of women. The situation calls for nutritional intervention and educational programme immediately to educate rural young women" (*Nagamani, 2014*)."Worldwide, 40

percent of the population does not have ready access to clean, safe drinking water, and approximately 60 percent does not have satisfactory facilities for the safe disposal of human waste. Infectious agents in drinking water and food cause diarrheal deaths of several million children annually" *(Health in India, Nov, 2016).*Everybody knows that women are the backbone of a society. The success of any programme depends on the cooperation of the women. As Nehru said, "to awaken the people, it is the woman who must be awakened and once she is on move, then the family moves, the village moves and the nation moves"*(Bharali and Sharma, 2004).* Thus, if the knowledge level of rural women on nutrition and hygiene is assessed, then varieties of educational programme can be undertaken for the rural women based on their knowledge level, which in turn will help them to improve their health status in general.

Methodology

The study was carried in the state of Assam. A stratified random sampling technique is followed. Three parts of Assam had been included, namely Upper Assam, Middle Assam and Lower Assam for the study. Three districts viz., Tinsukia, Nagaon and Barpeta were selected randomly from the three parts of Assam.From the three districts, three subdivisions namely: Tinsukia subdivision from Tinsukia district, Nagaon subdivision fromNagaon district and Sorbhog subdivision from Barpeta district were selected randomly. One development block from each selected subdivision, onegaon panchayat from each selected block and threevillages from each selected gaon panchayat were selected randomly. Finally, nine villages were considered for carrying out the study. Selection of respondents was done by equal distribution method. Thirty respondents in the reproductive age group (15 yrs – 49 yrs) (according to WHO, reproductive age group is usually defined as 15-49 years or 12-49 years) were selected randomly from each village. Thus, there were two hundred seventy (270) numbers of respondents for assessing the existing knowledge of the respondents on nutrition. The data were collected personally by the investigator through personal interview method with the help of the prepared interview schedule.

According to the Oxford English Dictionary, practice is the actual application or use of an idea, belief or method as opposed to theories relating to it.In the present study, it is operationally defined as the habits which were performed by the rural women repeatedly or regularly in order to maintain their proficiency in the activities of hygiene. The existing practice on hygiene was with a structure schedule consisting of 30 statements related to hygiene prepared

in consultation with experts and review of literature. The responses of the respondents were recorded in yes or no category and score assigned is "1" and "0" accordingly. Based on the scores obtained by the respondents, they were categorized into three categories: viz., Low (< mean - SD), Medium (between mean ± SD) and High (> mean + SD).

The existing practice on hygiene was studied in terms of General Hygiene &Food Hygiene, Personal &Menstruation Hygiene and Environment Hygiene.

Result and Discussion

The existing practice on hygiene is studied in terms of overall existing practice and district wise existing practice.

Existing level of practice on hygiene (overall):

The distribution of respondents according to their overall existing level of practice on hygiene is presented in Table 1. It indicates that more than half of the respondents (57.04 %) belonged to 'moderate category' of practice level on hygiene. It might be due to the fact that the respondents' existing level of knowledge on hygiene was medium; therefore the existing level of practice on hygiene was also moderate. Table also indicates that only 22.22 percentage of respondents belonged to 'good category' of practice level on hygiene. It might be due to the fact that as very low percentage of respondent belonged to high category of knowledge level on hygiene, therefore lower percentage of respondents belonged to good category on hygiene. The respondents might have knowledge on hygiene but they did not put into practice as they were not aware about the importance of being hygienic.

Table1: Distribution of respondents based on overall existing level of practice on hygiene **N=270**

Category	Score Range	Frequency	Percentage (%)	Mean	SD
Poor	<5.26	56	20.74	8.05	2.79
Moderate	5.26 – 10.84	**154**	**57.04**		
Good	>10.84	60	22.22		

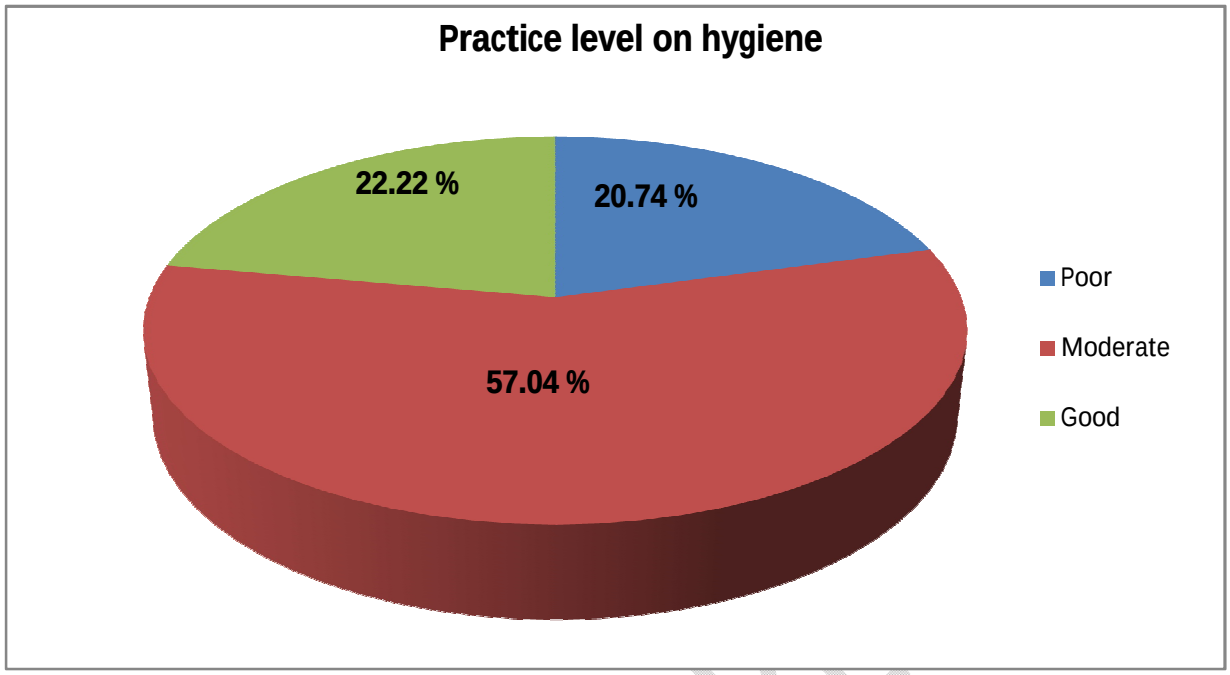

Fig 1. Distribution of respondents based on overall existing level of practice on hygiene

Existing level of practice on hygiene (districtwise):

The distribution of respondents based on existing level of practice on hygiene (district wise) is presented in the Table 2. The data presented in the Table shows that in the three assessed districts, majority of the respondents belonged to 'moderate category' of practice level on hygiene, namely Barpeta (56.67%), Nagaon (53.33%) and Tinsukia (61.11%). From the Table 2, it is also observed that the Nagaon district had highest percentage (24.44%) of respondents that belonged to 'poor category' of practice level on hygiene as compared to the other two districts. The Table 2 also shows that the three assessed districts had equal percentage of respondents (22.22%) that belonged to 'good category' of practice level on hygiene.

Table 2: Distribution of respondents based on Existing level of Practice on Hygiene(district wise)

Name of district	Category	Score Range	Frequency	Percentage (%)	Mean	SD
Barpeta (N=90)	Poor	<5.18	19	21.11	8.01	2.83
	Moderate	5.18 – 10.84	**51**	**56.67**		
	Good	>10.84	20	22.22		

Nagaon (N=90)	Poor	<5.12	22	24.44	7.97	2.84
	Moderate	5.12 – 10.08	**48**	**53.33**		
	Good	> 10.08	20	22.22		
Tinsukia (N=90)	Poor	< 5.45	15	16.67	8.17	2.72
	Moderate	5.45 – 10.89	**55**	**61.11**		
	Good	> 10.89	20	22.22		

The existing practices of respondents regarding Hygiene are presented in Table 3.

Table 3:Percentage distribution of respondents' existing practices on Hygiene (statement wise) **N = 270**

Sl. No.	Statements	Percentage	
		Practiced	**Unpracticed**
GENERAL HYGIENE AND FOOD HYGIENE			
1.	Washing of hands properly with soap after changing a baby's diaper.	32.59	67.41
2.	Mopping of house by using water with disinfectant.	27.78	72.22
3.	Keeping of cooked and uncooked foods separately in a refrigerator.	24.44	75.56
4.	Boiling of baby's feeding bottles and bottle nipples properly before using.	22.22	77.78
5.	Washing of hands properly with soap after scrubbing soiled/ filthy utensils.	21.11	78.81
6.	Prolonged boiling of milk before serving.	21.11	78.89
7.	No consumption of foods handled by a person suffering from infectious disease.	20.00	80.00
8.	Rinsing of utensils with hot water before using.	04.44	95.56
9.	Not using of disposable plates, glasses and containers.	0	100.00
PERSONAL HYGIENE AND MENSTRUATION HYGIENE			
10.	Washing of hands properly with soap after defecation.	54.81	45.19
11.	Giving bath to a child every day.	51.85	48.15
12.	Using of chappals/slippers while going for defecation.	42.22	57.78
13.	Flushing of toilet properly after using it.	42.22	57.78
14.	Not using of same ladle for serving food which was used for stirring meat/fish without cleaning/ washing.	38.52	61.48
15.	Washing of hands properly with soap before preparing, handling and eating foods.	22.22	77.78

Sl. No.	Statements	Percentage	
		Practiced	Unpracticed
16.	Not sharing of same soap and towel.	21.85	78.15
17.	Changing of clothes after each bath.	19.63	80.37
18.	Washing of hands with soap after handling a used sanitary pad.	18.89	81.11
19.	Washing of hands with soap after giving care to a sick person.	16.67	83.33
20.	Washing of hands properly after urination.	5.56	94.44
21.	Washing and disposing off used sanitary pad.	0.37	99.63
22.	Not using of same sanitary pad for more than 6 hours.	0	100.00
ENVIRONMENT HYGIENE			
23.	Children going for defecation in a sanitary toilet.	27.41	22.61
24.	Disposing of kitchen wastes in a pit.	47.78	52.22
25.	Keeping of pet animals away /aside for maintaining hygiene at home.	35.53	64.07
26.	Cleaning of surrounding of the source of drinking water regularly.	34.44	65.56
27.	Dumping of household waste inside the house for longer period.	28.52	71.48
28.	Draining out stagnated water near the house.	26.67	73.33
29.	Location of drinking water source away from the toilet.	22.97	77.04
30.	Construction of hen's and bird's coop away from the main house.	22.59	77.41

The data from Table 3 under the aspect 'General Hygiene and Food Hygiene' shows that all respondents (100%) under study practiced the use of disposable plates, glasses and containers. It might be due to the fact that as all the respondents did not know that harmful chemicals like styrene, bisphenol A (BPA) and formaldehydes are present in the disposable plates, glasses and containers which are responsible for many types of cancer, hormonal disruption in the body, therefore they have practiced using it. The Table 3 also revealed that 95.56 percent of respondents have not practiced rinsing of utensils with hot water before using. This might be due to their lack of knowledge that rinsing utensils with hot water helps to kill germs that are present on the utensils even after cleaning it with plain water. It was also found that 80.00 percent of respondents did not have the practice of not consuming foods handled by a person suffering from infectious disease. This might be due to the fact that the respondents were

not aware about some infectious viruses (Hepatitis A), which may spread by consuming food or drink that has been handled by an infected person.

It is interesting to reveal from the Table 3 under the aspect 'Personal Hygiene and menstruation Hygiene' that 100 percent of respondents continued the same sanitary napkins/ pads for more than 6 hrs. It might be due to their lack of awareness that not changing of sanitary pad for long is unhygienic and can lead to diseases like skin rashes, urinary tract infection and vaginal infection.It is alarming to observe from the Table 3 that 94.44 percent of respondents did not practice washing of hands properly after urination. This might be due to that, they are unaware of the fact that fecal material and fecal bacteria get into our hands while urination. So it is always necessary to wash hands with soap and water even after urination. Therefore, to make the respondents aware in these aspects, training programme and interventions are necessary to be organized in rural areas involving these rural women.

From the Table 3, under the aspect 'Environment Hygiene', majority (77.41%) of the respondents did not have the practice of constructing hen's and bird's coop away from the main house. This might be due to the fact that, the respondents did not know about dirty litter on the floor and spilled foods may have an odour and also attract flies which carry bacteria or other organisms from the feces into nearby houses, potentially causing diseases to the respondents. Again, it is found that 77.04 percent of respondents did not practice of having the drinking water source away from the toilet. This might be due to the fact that the respondents did not know that the source of drinking water has to be located at least 8-10 mtrs. away from the toilet. Another reason might be that the respondents did not know about the microorganisms contained in human faces which enter the body through contaminated food, water and contaminated utensils. Seventy three percent of respondents did not have the practice of draining out stagnated water near the house. It might be due to the fact that the respondents were not aware that stagnant water acts as a breeding ground for mosquitoes which transmit malaria and dengue - dangerous diseases that kill people.To increase knowledge on these aspects, rural women have to be made aware by organizing awareness programme regarding hygiene.

Conclusion

Women plays dual role in every family. The health condition of a family depends on the activities of a woman. She has to maintain hygiene while cooking food, cleaning surrounding

and taking care of the members etc. The rural women should be made aware regarding different aspects of hygiene and its importance in their day to day life activities so as to maintain a hygienic atmosphere at the household level as well as at the community level. The government can play an important role in educating and creating increased awareness on nutrition and its needs among the rural women. Thus, if the knowledge level of rural women on hygiene is assessed, then varieties of educational programme can be undertaken for the rural women based on their knowledge level, which in turn will help them to improve their health status in general.

In spite of so much effort being taken by the government and other organizations for improving the health status of rural women by introducing information on,there is still a gap to reach the rural people.The awareness on proper nutrition and hygiene among rural women was possible only when they understand the importance of basics of nutrition, conservation of nutrients in food, nutrition for mothers and children and also programme on hygiene such as provision of safe drinking water, proper defecation of human excreta, and proper maintenance of surroundings for rural areas, that play a vital role in prevention of both deficiency diseases and communicable diseases and to improve the quality of life in the community. To bring changes among the rural women of Assam, knowledge in the form of education had to be imparted to them. To improve the prevailing situation of poor nutrition and hygiene, dissemination of knowledge was to be addressed both at macro (national and state) and micro (district and villages) levels(*Current Health Scenario of Rural India, 2015).*

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