

Awareness and practices regarding Environmental Sanitation and Hygiene among women residing in selected rural areas: A cross sectional study.

¹ Simarjeet Kaur, ² Deepshikha Basnet, ³ Diksha, ⁴ Harpreet Kaur, ⁵ Kalpana

¹ Nursing Tutor (PhD Scholar, MSc Nursing), ^{2,3,4,5} Graduate Students
Akai College of Nursing,
Eternal University, Baru Sahib, District Sirmour (Himachal Pradesh), India
Email: simarjeet3011@gmail.com

Abstract: *Environmental Hygiene is a practical control measure use to improve the basic environmental condition affecting the human health. This study was conducted to assess the awareness and practices regarding Environmental Sanitation and Hygiene among women residing in selected rural areas of district Sirmour, H.P.*

Material and Methods: Quantitative research approach and cross sectional research design was used to assess the knowledge and practices regarding environmental sanitation and hygiene among 100 women selected through purposes sampling technique residing in selected rural areas of district Sirmour, Himachal Pradesh. Structured interview schedule was used to collect the data. Descriptive statistical analysis (Frequency & Percentage) was performed.

Findings: The results of study revealed that 77% of women stated that a purpose of hygiene maintenance is to prevent from diseases. Mostly (77%) of them stated that the waste found in the local environment is garbage. 73% of women stated that all members are responsible for cleanliness of village. 56% of them stated that the purpose of constructing toilet is for facility. 48% of them said that usage of unhygienic toilet leads to UTI.

Findings of study related to practices regarding environmental sanitation and hygiene revealed that 78% of women using burning as method of waste disposal and only 1(1%) women disposing waste in dustbin respectively. Most of the women (79%) having household toilet facility. Majority women (71%) use close drainage system. 84% of them clean toilet every day. Majority of women 97(97%) stated that they use water with soap for hand washing. This study conclusion emphasis on need to create awareness through educational interventions regarding sanitation and hygiene practices.

1. INTRODUCTION:

Environment is everything that is around us, it encompasses all living or non-living things occurring naturally.¹ Environmental sanitation means the art and science of an applying sanitary, biological and physical science knowledge and principles to improve and control the environment for the protection of the health and welfare of the community.² Lack of sanitary facilities leading to fouling of the ground and accumulation of garbage causes pollution of the soil and spread infestations. Poor sanitation has massive effect on the right to health with an estimated 5,000 children dying from diarrhoea every day.¹ In rural areas, by the large, people have not accepted latrines with any enthusiasm. Due to improper sanitation it directly cause the infectious diseases specially diarrhoea, typhoid, jaundice, secondary malnutrition etc.³

Govt of India has taken various initiatives such as Swachh Bharat Abhiyan launched by Prime Minister Shri Narendra Modi becomes country biggest cleanliness drive on 2 October 2014 aimed to accomplish a vision of clean India by 2nd October 2019.⁴ UNICEF's overall objective in the water and sanitation sector is to promote the survival, protection and development of children, and to promote behavioural changes essential to realizing the full benefits of water and sanitation services. These objectives cannot be met without the full participation of women.⁵

In most of areas of World, women and girls are traditionally responsible for domestic sanitation and maintaining a hygienic home environment as managers at the household level, they have a higher truss in the improvement sanitation services. WHO/UNICEF joint monitoring program for water supply and sanitation released on 2013, estimated that 36% of the world's population people lack improved sanitation facilities. Survey by water sanitation and hygiene (WASH) in India (2008) estimated that with regards to sanitation the most of the India's population (69%) do not use improved sanitation. In rural parts of India, 79% of the population used unimproved sanitation facility. Over 50% of the India's population defecates in open field.⁶

Investigator observed majority of population facing health problems such as GI tract infections, Fever related to inadequate environmental hygiene. Married women were unaware of inadequate environmental hygiene.

2. METHODOLOGY:

Quantitative research approach and cross sectional research design was used to assess the knowledge and practices regarding Environmental Sanitation and hygiene among 100 women selected through purposes sampling technique residing in selected rural areas(Kheri, Bagroti, Lana bhalta, Maccher) of district Sirmour, Himachal Pradesh. Sample size calculation was done through formula $4pq/d^2$ where p=80% and d=.08 and we got sample size of 100 women. Structured interview schedule was used to collect the data. Validation of tool was done through various experts’ opinion and reliability of tool was .78 checked with Cronbach Alpha. It was consisted of two parts:

Part –A –Demographic variables

Part–B- Assessment of the awareness and practices regarding environmental sanitation and hygiene.

Descriptive statistical analysis (Frequency & Percentage) was performed.

Ethical Considerations

1. Administrative permission and ethical clearance was obtained from research and ethical committee of Akal College of Nursing, Baru Sahib. Permission was taken from village Pradhan.

3. Written Informed consent was taken from women.

4. The purpose for carrying out research study was explained to the women and assurance for confidentiality was given.

3. RESULTS:

Table 1 revealed that 36% of women belong to 42-53 years of age group. 97% of women were Hindu. 90% of them were married. 37% of women have middle class education and 72% of them were living in nuclear families.89% of them living in pucca house. 58% of women have family income less than 5000. Majority of them (86 %), received information through mass media.

Objective:1-To assess the awareness regarding environmental Sanitation and hygiene among women in selected rural areas.

Table 2 shown that Majority of women (77%) stated that a purpose of hygiene maintenance is to prevent from diseases.

Table 1: Frequency and Percentage Distribution of women in rural areas according to demographic variables N=100

S. NO	DEMOGRAPHIC VARIABLES	(n)	(%)
1.	Age (in yrs)		
	a. 18 – 29	35	35%
	b. 30 – 41	24	24%
	c. 42 – 53	36	36%
2.	Religion		
	a. Sikh	2	2%
	b. Hindu	97	97%
	c. Christian	0	0%
3.	Marital status :		
	a. Married	90	90%
	b. Unmarried	5	5%
	c. Widow	4	4%
4.	Level of Education		
	a. Illiterate	10	10%
	b. Primary	21	21%
	c. Middle	37	37%
5.	Type of Family		
	a. Nuclear	72	72%
	b. Joint	28	28%
	6.	Type of House :	
a. Kucha		11	11%
	b. Pucca	89	89%

7.	Family Monthly Income		
	a. < 5000		
	b. 5001-10000	58	58%
	c. 10000-15000	38	38%
	d. >15000	4	4%
		1	1%
8.	Source of Information		
	a. Mass media		
	b. Health worker	86	86%
	c. others	9	9%
		5	5%

Mostly (77%) of them stated that the waste found in the local environment is garbage. 73% of women stated that all members are responsible for cleanliness of village. 56% of them stated that the purpose of constructing toilet is for facility. 48% of them stated that usage of unhygienic toilet leads to UTI followed by skin infections 25(25%), 18(18%) stated for other respectively. 36% of women stated that distance from the toilet to water resource should be 6m.

Objective: 2 To identify the practices regarding environmental sanitation and hygiene among women in selected rural areas

Table 2: Frequency and Percentage Distribution of women in rural areas in terms of awareness regarding Environmental Sanitation & Hygiene N=100

S.No	Knowledge regarding Sanitation & Hygiene	(%)
1.	What is the purpose of following hygiene practices?	
	a) Promotion of health	17%
	b) Prevention from diseases	77%
	c) Don't know	6%
2.	What kind of waste do you find in your local environment?	
	a) Garbage	77%
	b) Human and Animal excreta	7%
	c) Street wastes	14%
	d) Others	2%
3.	Who is responsible for cleanliness of village?	
	a) Village people	18%
	b) Gram Panchayat	8%
	c) Health workers	1%
	d) All members	73%
4.	What is the main purpose of constructing the toilet?	
	a). For facility	56%
	b). For good status	14%
	c). To prevent human contact with human excreta	30%
5.	What kind of disease can occur by usage of unhygienic toilets?	
	a) Urinary Tract Infection	48%
	b) Skin infection	25%
	c) Don't know	9%
	d) Others	18%
6.	How much distance toilet should be far away from water resource?	
	a) 3m	24%
	b) 6m	36%
	c) Up to 15m	34%
	d) No matter	6%

Table 3 depicts that 78% of women using burning as method of waste disposal and only 1(1%) women disposing waste in dustbin respectively.

Most of the women (79%) having household toilet facility and only 3% women have open field defecation respectively. Majority women (71%) use close drainage and 4% of them stated drainage to the road respectively.

84% of them clean toilet every day. Mostly women (76%) stated adequate timing for hand washing is all situation (before and after food, after defecation and after weaning the child/changing the baby) and no one considered it mandatory during weaning the child/changing the baby respectively.

Majority of women 97(97%) stated that they use water with soap for hand washing and only 3(3%) women using water with ash for hand washing respectively.(Fig 1)

Table 3: Frequency and Percentage Distribution of women related to practices regarding Environmental Sanitation & Hygiene practices N=100

S.No	Environmental Sanitation & Hygiene Practices	(%)
1.	Which Method is used for solid waste disposal? a) Burning b) Compositing c) Open land d) Dustbin	78% 18% 3% 1%
2.	What Kind of toilet facility do you have? a) Household b) Open field defecation c) Community d) Shared	79% 3% 8% 10%
3.	Which method is used for discharging waste water? a) Open drainage b) Close drainage c) To field d) On the roads	17% 71% 8% 4%
4.	How many times do you clean your toilet? a) Every day b) Twice a day c) Weekly d) Monthly	84% 9% 5% 2%
5.	What in your opinion are the critical times for hand washing? a) before & After food b) After defecation c) After weaning child/changing the baby d) all of the above	16% 8% 0% 76%
6.	Which material is used for hand washing? a) Water & soap b) Water & ash c) Only water	97% 3% 0%

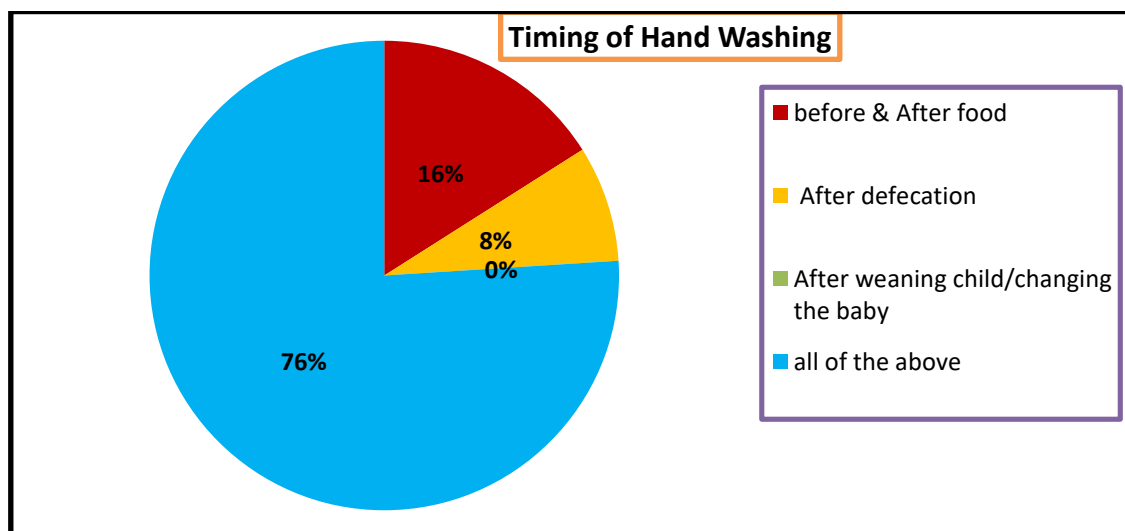


Fig 1 Pie diagram showing opinion of women regarding critical timings of hand washing

4. DISCUSSION :

Adequate Sanitation and hygiene practices are essential in order to prevent from various infectious diseases and for promotion of Health. The current study was conducted in rural setting of Himachal Pradesh (India) to understand the existing environmental sanitation and hygiene related awareness and practices. The results of study revealed that Majority of women (77%) stated that a purpose of hygiene maintenance is to prevent from diseases. Mostly (77%) of them stated that the waste found in the local environment is garbage. 73% of women stated that all members are responsible for cleanliness of village. 56% of them stated that the purpose of constructing toilet is for facility. 48% of them stated that usage of unhygienic toilet leads to UTI followed by 25 % stated skin infections, 18% stated for other respectively.

Findings of study related to practices regarding environmental sanitation and hygiene revealed that 78% of women using burning as method of waste disposal and only 1(1%) women disposing waste in dustbin respectively. Most of the women (79%) having household toilet facility and only 3% women have open field defecation respectively. Majority women (71%) use close drainage and 4% of them stated drainage to the road respectively. 84% of them clean toilet every day. Mostly women (76%) stated adequate timing for hand washing is all situations and no one considered it mandatory during weaning the child/changing the baby respectively. Majority of women 97(97%) stated that they use water with soap for hand washing. Similar findings of the study performed by Pankaj Dwivedi and AN Sharma (2017)⁷ which was a cross sectional study on environmental sanitation, sanitary habits and personal hygiene among Baigas of Samnapur block of Dindori district, Madhya Pradesh.

5. CONCLUSION:

The overall result of study revealed that only 1% of them were using dustbin for disposal of waste. None of them stated the need of hand washing during change of sanitary napkins of baby. 48% of them said use of unhygienic toilets leads to UTI. This study concluded that there is need for implementation of educational interventions regarding environmental sanitation and hygiene to promote healthy wellbeing of community.

REFERENCES:

1. K.Park. Textbook of Preventive and Social Medicine. 22nd ed. Jabalpur: Bhanot publishers; Pp-655-70
2. K.K Gulani. Community Health Nursing. 2nd ed. New Delhi: Kumar publishing house; Pp-242-50.
3. Judith Ann Allender. Community & Public health nursing. 8th ed. Philadelphia: Lippincott Williams & Wilkins; Pp-289-314.
4. http://www.pmindia.gov.in/en/major_initiatives/swachh-bharat-abhiyan/
5. https://www.unicef.org/wash/index_womenandgirls.html
6. WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene. Retrieved from http://www.unwater.org/publication_categories/whounicef-joint-monitoring-programme-for-water-supply-sanitation-hygiene-jmp/
7. Pankaj Dwivedi & A.N. Sharma.(2017), A Study on Environmental Sanitation, Sanitary Habits and Personal Hygiene among the Baigas of Samnapur Block of Dindori District, Madhya Pradesh. Journal of human Ecology.:22(1); Pp-7-10.