

Perceptions And Beliefs On Wash Practices Among Communities In Peri-Urban And Rural Areas

Gayatri Batra, Aparajeeta Vaibhav

Undergraduate Program, Flame University, India
Aparajeeta Vaibhav, Program Leader, Sehgal Foundation

Abstract:

Background: Safe water, sanitation and hygiene (WASH) practices are essential to secure a better quality of life. The use of latrines, maintaining good hygiene practices, and safe disposal of faeces and solid-liquid waste are crucial to prevent the spread of infectious diseases, and reduce incidence of malnutrition. In India, the lack of access to basic sanitation facilities and safe, clean drinking water accounts for nine out of ten diarrhea-related deaths, most of which occur in children. Likewise, access to menstrual hygiene and awareness is another difficult development issue. As sanitation behaviours and practices are closely linked to perception, this comparative study analyses the difference in sanitation perceptions, practices and behaviours between peri-urban and rural residents in the Gurugram district.

Methods: Data from 37 respondents comprising 14 females and 23 males were collected using surveys and focus group discussions (FGDs). Respondents included residents from five villages and towns in Gurugram District, Haryana – 22 respondents from the peri-urban villages of Sadhrana, Raisina and Hariahera, and 15 respondents from Khohar and Harchandpur villages.

Conclusion:

The study found that WASH perceptions, practices and behaviours differ significantly among peri-urban and rural respondents. Access to facilities and resources by itself is insufficient to alter behaviors that have become ingrained in customs, habits, conventions and perceptions, and that efforts are required to improve sanitation perceptions and practices through behavior change communication (BCC).

Keywords: Safe WASH, safe drinking water, toilet access and usage, handwashing, gendered sanitation roles, menstrual hygiene, behavioural change communication (BCC)

Date of Submission: 21-07-2024

Date of Acceptance: 31-07-2024

I. Introduction

Safe WASH (Water, Sanitation and Hygiene) practices are key to having a better quality of life and health improvement for children, adults and the elderly. Access to safe drinking water, **proper disposal of solid-liquid waste and fecal matter**, and **practicing hygiene** are important in preventing the transmission of diseases. Non-usage of latrines is associated with malnutrition and pathogenic diseases. Poor sanitation conditions can affect an individual's wellbeing and safety (Spears, 2013). Women in particular are at a higher risk of facing harassment and violence when they defecate in the open. Improved WASH in particular provides a protective barrier from diseases such as diarrhoea, intestinal protozoa infections and soil-transmitted helminthic infections. Despite the benefits of safe sanitation practices, its sustained usage still remains an issue, particularly in India.

In India, 21.3% of rural households do not have access to a latrine. Overall, 15% do not use latrines. About 18% of households in India do not use soap/detergent for washing hands. The proportion of non-users of soap is higher in rural areas where 77.4% use soap as compared to 92.7% in urban areas (NSSO, 2020-21).

WASH behaviors are guided by knowledge, perceptions and beliefs of safe sanitation practices. Increasing latrine coverage does not guarantee the usage of latrines. It is crucial to understand the embedded socio-cultural context and conditioning that influences behaviours. Against this backdrop, this study attempts to understand the perceptions and beliefs on WASH practices among communities in urban, peri-urban and rural areas. Based on the results of this study, many interventions including behavior, communication and change (BCC) can be designed along with the development of awareness campaigns to ensure sustained uptake of safe wash practices.

II. Literature Review

According to UNICEF, growing up in a clean and safe environment is every child's right. Children not only thrive when they have access to clean water, basic toilets, and excellent hygiene habits, but they also have a

healthier start in life (UNICEF). Numerous Neglected Tropical Diseases (NTDs), including trachoma, helminths that are spread through the soil, and schistosomiasis, can be prevented with safe and adequate WASH. According to WHO, between 1990 and 2015--the Millennium Development Goal (MDG) period-- diarrhoeal deaths due to insufficient WASH were cut in half due to significant advancements in water and sanitation services (WHO, 2020).

Sanitation, cleanliness and hygiene are crucial for human health and welfare. Worldwide, 2.2 billion people to this day still lack access to safe drinking water. More than half of the world's population lacks access to clean water and sanitation. There are three billion individuals who lack access to soap-and-water hand-washing stations (UNICEF).

The government of India launched the Swachh Bharat Mission (SBM) on October 2, 2014. Under the mission, all villages, Gram Panchayats (GPs), Districts, States and Union Territories in India declared themselves "open-defecation free" (ODF) by October 2, 2019 (SBMG, 2022). However, the numbers speak otherwise. A joint monitoring programme (JMP) on WASH released in July 1, 2021, stated that at least 15% of the total population in India still defecates in the open. In India, one percent of the urban population and 22% of the rural population practices open defecation (Aggarwal, 2021).

Poor sanitation can have an impact on one's mental health and personal safety, particularly for women and children who risk physical exposure, harassment, and assault when defecating in the open (Jadhav, 2016). Nine out of ten diarrhea deaths, mainly in children, are caused due to lack of access to safe, clean drinking water and basic sanitation facilities in India (GaonConnection, 2021). Furthermore, improved sanitation provides a protective barrier from diseases such as diarrhoea, intestinal protozoa infections and soil-transmitted helminth infections (WHO).

Access and awareness regarding menstrual hygiene is yet another challenging development issue. Close to 500 million women on a global scale lack access to adequate facilities for menstrual hygiene. Many women and girls from less economically stable families even drop out of school when they begin menstruating. More than 77% of menstruating women and girls use a piece of cloth and is reused multiple times. They also use ashes, newspapers, dried leaves and husk sand during periods (Gera, 2019). Poor menstrual hygiene can lead to infections in the urinary tract or reproductive areas (WHO, 2022). 'Period poverty' causes young girls to skip school because of insufficient menstrual hygiene facilities available in their premises (UNWOMEN, 2024). Looking at these figures, it is therefore quite necessary to have adequate menstrual hygiene facilities for women and young girls in India.

The Jal Jeevan Mission (JJM) was re-organized by the Indian government in 2019 and absorbed the National Rural Drinking Water Programme (NRDWP). By 2024, the strategy hopes to provide functional household tap connections (FHTC) to every rural household, ensuring that each household has access to inexpensive and sufficient drinking water (JJM, 2024).

According to the JJM guidelines published in 2019, giving households access to tap water will spare women and girls the struggle of having to walk long distances to gather water, hence reducing "time poverty" (JJM, 2019). Improved WASH strategies and policies need a change in knowledge, attitude, practices and behavior (KAPB). It is important to first understand the mechanisms for changing KAPB in the relevant populations. The theory of planned behaviour (TPB), proposed by Ajzen recommends that the best predictor of behaviour is the intention to perform said behaviour (behavioural intent) (Springer, 1985). Behavioral intent summarizes the individual's motivation to act in a particular manner (e.g., adherence to WASH policies) and indicates how much they are willing to try and how much time and effort they are willing to spend to perform said behavior (Ajzen, 1991).

Such theories can serve as a useful tool in formulating policies of change and informing WASH community education programmes. TPB proposes that intention can be predicted by the constructs of attitude, subjective norms and perceived behavioral control in other words perceptions on WASH. Perceived behavioral control accounts for behaviors that require resources and opportunity and is thought to influence intention and to the extent that perceptions of control accurately reflect the person's actual control over behavior (Ajzen, 2002)

Goals and Objectives

It is important to get a better understanding of some of the most pressing issues rural and peri- urban communities face when it comes to the correct, consistent and continuous practice of safe WASH behaviours. To understand these challenges, it is crucial to know the enablers and barriers for practicing safe sanitation behaviours. This research was guided by some important questions:

- What are individual perceptions about WASH?
- What are community level WASH priorities?
- What are the enablers and barriers for safe WASH practices?
- How does public health, hygiene, gender and social deprivation drive WASH?

III. Methodology

The methodology consisted of conducting a literature review, site selection and the collection of primary data using various survey tools. This research was conducted from May 4 to July 14, 2023. The research process included narrowing down the specific research question, conducting the literature survey, designing the household survey, selecting the research site (see table 1), and conducting the actual fieldwork. A total of 37 households were surveyed across three peri-urban areas and two rural villages in Haryana. The three peri-urban areas surveyed include Sadhrana, Raisina and Hariahera in district Gurugram, Haryana. The rural areas surveyed were Khohar and Harchandpur villages in Sohna tehsil, Gurugram district. A survey questionnaire was developed to cover crucial aspects of WASH such as access to safe drinking water, usage of toilets, hand- washing with soap and hygienic menstrual practices. In addition to household surveys, FGDs were also conducted with men and women in rural and peri-urban areas.

Table 1: Sites selected and sample size

Sl. No.	SITE NAME	RURAL/PERI-URBAN	DISTRICT	RESPONDENTS		SURVEY/FGD
				Male	Female	
1	Sadhrana	Peri-urban	Gurugram	6	9	Survey + FGD
2	Raisina	Peri-urban	Gurugram	0	5	Survey + FGD
3	Hariahera	Peri-urban	Gurugram	1	1	Survey
4	Khojar	Rural	Gurugram	3	8	Survey + FGD
5	Harchandpur	Rural	Gurugram	4	0	Survey
Total				14	23	
				37		

Research tools

The specific research tools included a household survey questionnaire, followed by focus group discussions (FGDs) with separate groups of women and men in order to triangulate the survey findings. The survey questionnaire was translated into Hindi to survey the respondents; Google Forms was used to collect responses. For the household survey, questionnaires were administered to any household member who was 18 years or above of age.

The questionnaire included both open and closed-ended specific questions for each segment under WASH. The FGDs with groups of women in rural areas covered their perceptions and stereotypes on menstruation and menstrual hygiene. Some questions were adapted from the survey in order to get an overall perspective of opinions.

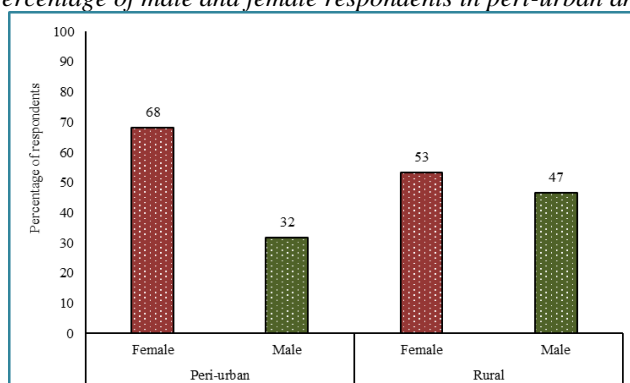
The study aims and procedures were fully explained in Hindi to all participants prior to them giving informed consent to participate in the study. Participation in the survey and FGDs was voluntary and participants were free to withdraw at any stage.

FGDs with groups of men were conducted to better understand the situation of water supply and water quality in their area. For women, the discussions covered their perception on menstruation and menstrual hygiene. The responses were recorded with videos and voice recordings.

Background characteristics of respondents

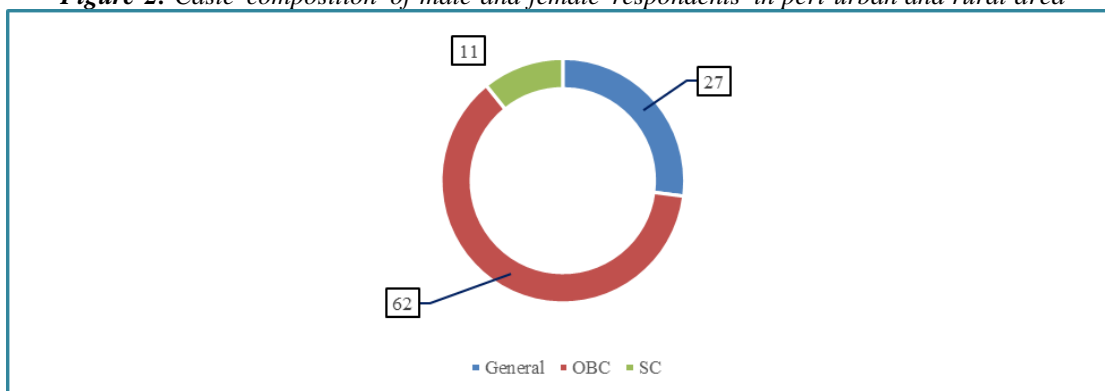
In this study, in peri-urban areas, 68% of the respondents surveyed were women and 32% of respondents were men. In rural areas 53% of the respondents surveyed were women and 47% were men (figure 1).

Figure 1: Percentage of male and female respondents in peri-urban and rural areas



In peri-urban and rural areas surveyed, in total, 62% of the respondents belonged to the Other Backward Class (OBC) category. Twenty-seven percent of the respondents belonged to the General caste category and 11% belonged to the Scheduled Caste (SC) category (figure 2)

Figure 2: Caste composition of male and female respondents in peri-urban and rural area



IV. Key Findings

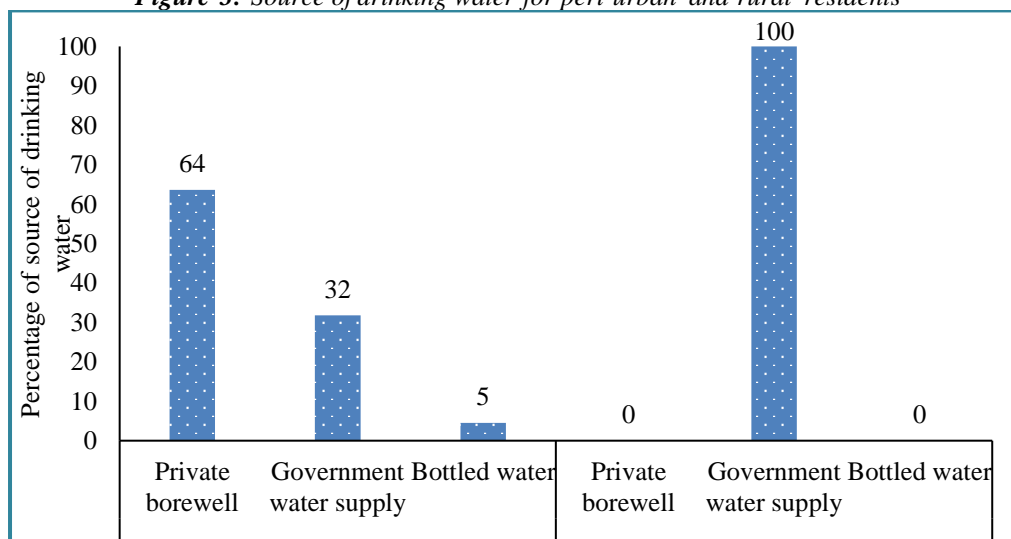
This section highlights some of the key findings highlight the respondents’ perceptions on wash practices and behaviours. The questions asked were non –leading and the responses were not prompted.

Water

Source of drinking water

In the rural areas surveyed, all respondents were dependent on government borewells for supply of water. None of the respondents in rural areas surveyed reported having a private borewell. In peri-urban areas, 64% of the respondents had a borewell within their household premises. Only one respondent mentioned that his household bought bottled water for drinking. 32% percent of the households in peri-urban areas depended on government borewell supply (figure 3).

Figure 3: Source of drinking water for peri-urban and rural residents

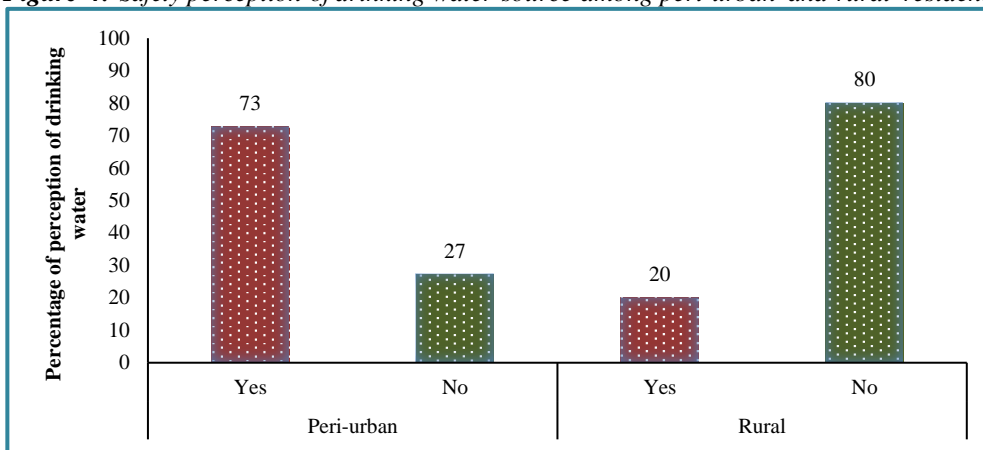


Perception on safety of drinking water

The perception of safety of drinking water in peri-urban and rural areas was based on certain indicators such as smell, taste and appearance of the drinking water. In the peri-urban areas surveyed, 73% of the respondents perceived their drinking water to be safe while 27% of the respondents felt it was unsafe. In contrast, 80% of the rural respondents felt that their drinking water was unsafe while only 20% felt it was safe.

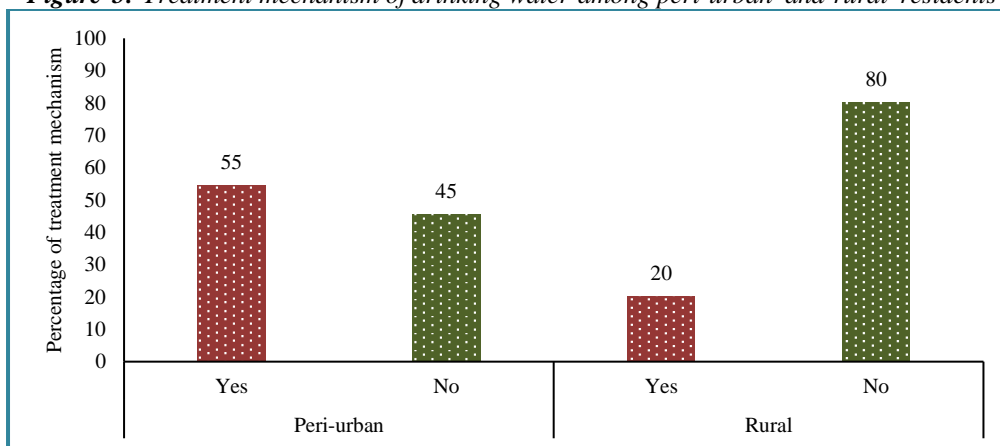
The respondents surveyed in the rural areas did not trust their government bore water supply as compared to peri-urban respondents who depended on their private borewells. Respondents in both peri-urban and rural areas felt that their water was unsafe as there was ‘dirt’ visible in their water or the water tasted salty (‘khaara’) (see figure 4).

Figure 4: Safety perception of drinking water source among peri-urban and rural residents



Treatment of drinking water: 80% percent of the respondents in rural areas reported to not treat their drinking water despite feeling it is unsafe for consumption. 20% percent of the rural respondents treated their drinking water. 55% percent of the peri-urban respondents treated their drinking water despite feeling it is safe for consumption while 45% did not treat their water (see figure 5).

Figure 5: Treatment mechanism of drinking water among peri-urban and rural residents

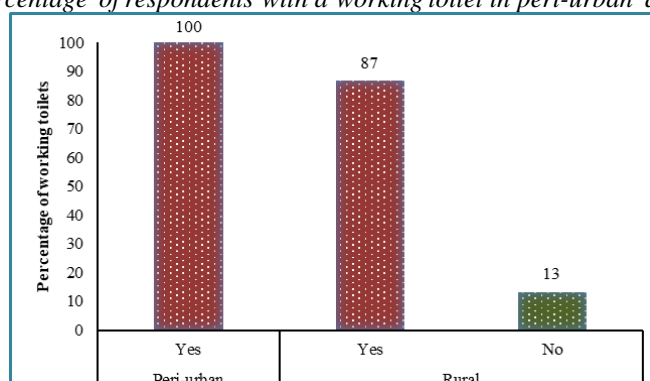


Sanitation

Percentage of respondents with a working toilet

All peri-urban respondents reported to have a working toilet within their household premises. In the rural areas surveyed, 87% of the respondents reported to have a working toilet in their household and 13% of the respondents did not have a working toilet and defecated in the open. Despite owning a working toilet, a few respondents defecated in the open as some rural respondents (especially the elderly) were more comfortable defecating in the open (see figure 6).

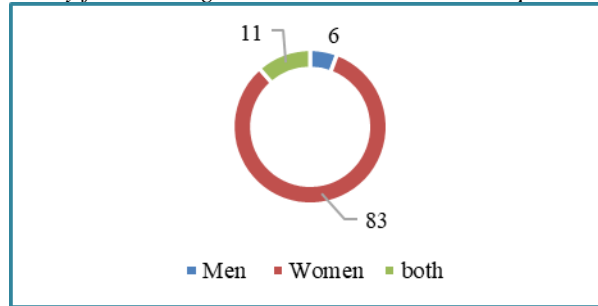
Figure 6: Percentage of respondents with a working toilet in peri-urban and rural areas



Responsibility for cleaning toilets

In both peri-urban and rural areas surveyed, it was reported that most domestic chores such as cooking, taking care of infants and cleaning toilets was done by women. When it came to cleaning toilets, 83% of women reported to be responsible for cleaning toilets within the household premises. Only six percent of men reported to take responsibility to clean toilets. Eleven percent of households had both men and women sharing responsibility for cleaning the toilets in the household premises (see figure 7)

Figure 7: Responsibility for cleaning toilets within households in peri-urban & rural areas

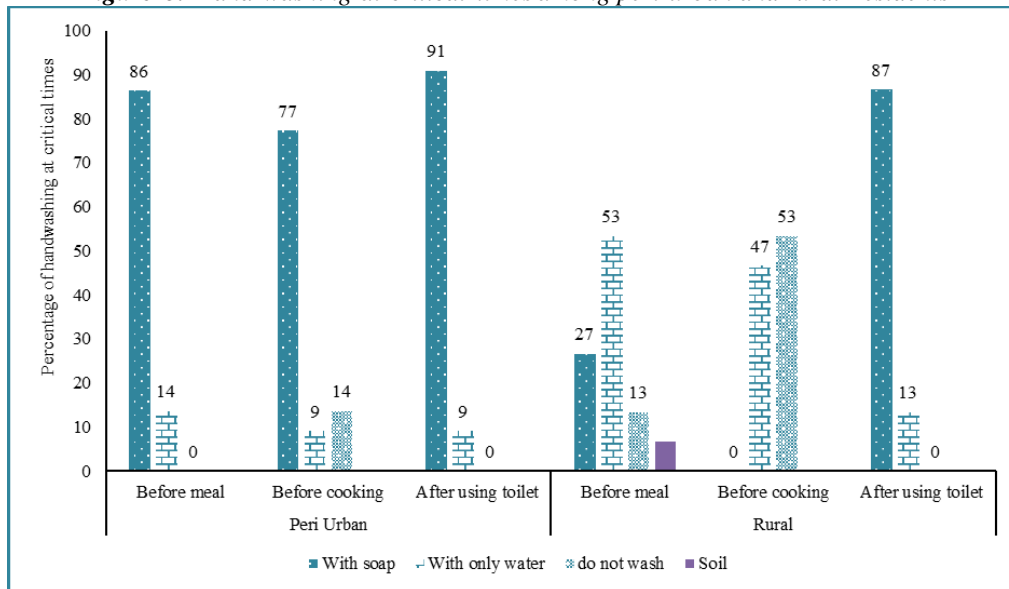


Hygiene

Hand-washing at critical times

Among peri-urban residents, the use of soap for hand-washing at critical times was high. It was reported that 91% of the respondents washed their hands with soap after using a toilet (91%) and the remaining 9% used only water. Before a meal 86% of the respondents used soap and 14% used only water for hand-washing (see figure 8)

Figure 8: Hand-washing at critical times among peri-urban and rural residents



Compared to peri-urban residents, the usage of soap was less for hand-washing among rural respondents. Before a meal, 53% of the respondents used only water for hand-washing and 27% used soap. The remaining 13% did not wash their hands before a meal. After using a toilet, 87% of the rural respondents used soap for hand washing and the remaining 13% used only water (see figure 8).

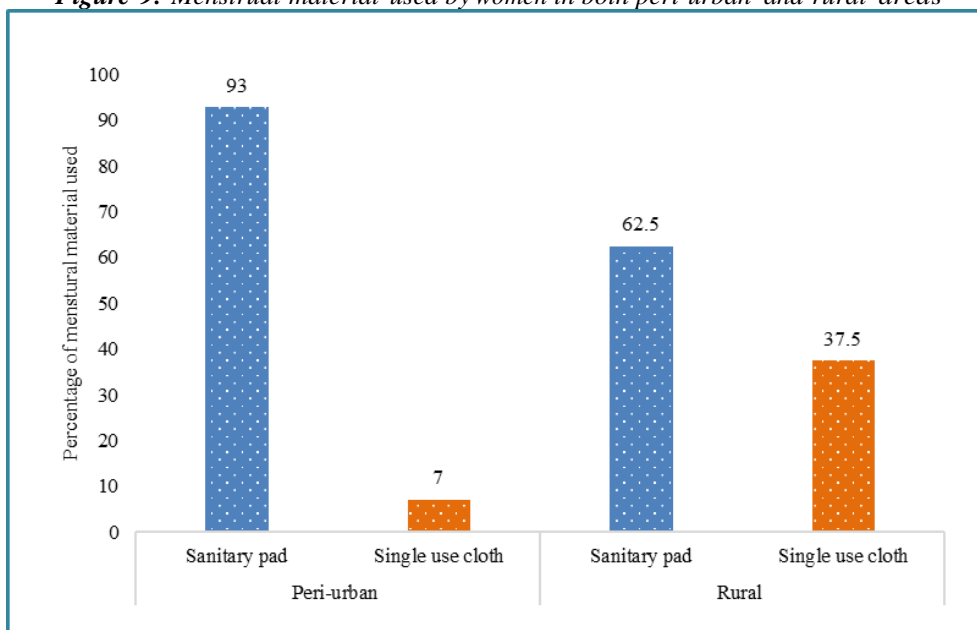
Hand-washing before cooking

The responsibility of cooking in the household lies solely with women in both peri-urban and rural areas. In peri-urban areas, 77% of women used soap for hand-washing before cooking a meal and 9% used only water and remaining 14% did not wash their hands. None of the women respondents in rural areas reported to using soap for washing hands. 47% percent of the respondents used only water and the remaining 53% did not wash their hands before cooking a meal. (see figure 8).

Menstrual material used by women

The use of sanitary pads among women in peri-urban areas was higher as compared to rural areas. In peri-urban areas, 87% of the women used sanitary pads as their menstrual material and 13% used a single use cloth. In rural areas 63% of the women used sanitary pads and 37% used single use cloth during menstruation. In total, 78% of the women respondents used sanitary pads and 22% used single-use cloth during menstruation (see figure 9).

Figure 9: Menstrual material used by women in both peri-urban and rural areas



V. Results From Focus Group Discussions (Fgds)

A total of three Focus Group Discussions (FGDs) with groups of men and women were conducted in the peri-urban area of Sadhrana and rural area of khohar, district Gurgaon, to gauge community perceptions on WASH behaviours. Two focus group discussions with men and women each were held in the rural area of Khohar, while one focus group discussion with men was held in the peri-urban area of Sadhrana. The questions asked covered each segment of WASH. Men and women were asked questions regarding their perceptions on the safety of drinking water, sufficiency of water, source of water, treatment of drinking water, disease occurrence in the past six months, roles and responsibilities of cleaning toilets within the household and the usage of toilets. Women additionally were exclusively asked their perceptions and stereotypes on menstruation and menstrual hygiene. The questions asked here were non-leading. It was ensured that informed consent was obtained from each respondent before the survey was administered, before taking pictures and recording videos.

Most men and women particularly in rural areas felt that their drinking water was unsafe for consumption and even emphasized on its strange taste and appearance. Sometimes the water even appeared red in colour, they noted. In terms of sufficiency of water, all men and women in rural areas felt that the government bore supply was not sufficient to fulfil their daily needs and felt a constant water shortage in the area. In case of water shortage, women were expected to procure water from a privately owned bore-well. On an average, it took about an hour and a half to procure water. The treatment of water before drinking was more prevalent in peri-urban areas as compared to rural areas. Findings from the FGD in Khohar revealed that most men and women did not treat their water before drinking as there was a “shortage of time”. Men in rural areas reported that there was a high disease occurrence within their household such as typhoid and diarrhoea in the past 6 months. When it came to roles and responsibilities regarding WASH related domestic chores, men in rural areas reported that it was the women’s duty to clean toilets. In terms of the usage of toilets, the FGD in Sadhrana (peri-urban area) revealed that everyone used a toilet to relieve themselves. In contrast, the FGD with men and women in Khohar revealed that defecating in open was still prevalent, particularly among the elderly out of habit and comfort.

Almost all women across peri-urban and rural areas felt that their period blood was impure. Moreover, all of them abstained from going to places of worship. One woman respondent from Khohar (rural area) even reported that during her menstrual cycle, she wasn’t allowed to go out and have fun (“mauj-mastinahi kar sakte”). Most women in peri-urban areas used sanitary pads as compared to rural women who mostly used single-use cloth. Women in rural areas reported using single-use cloth more because sanitary pads were not affordable (“in advertisements they use pads, but we can only afford cloth”).

VI. Conclusion

This research paper aimed to gauge behaviours and perceptions on WASH in peri-urban and rural areas in Gurgaon District, Haryana. In terms of the source of drinking water, all rural respondents relied on government bore supply as their drinking water source while most (64%) of peri-urban respondents relied on private borewells. Perceptions on safety of drinking varied between rural and peri-urban areas. Most (80%) of the rural respondents perceived their drinking water to be unsafe compared to a majority (73%) of peri-urban respondents who felt that their drinking water was safe. The peri-urban respondents trusted their source of drinking water as it is within their respective household premises.

Interestingly, 80% of rural respondents did not treat their water despite feeling it is unsafe. The decision to treat water was guided by whether the water “looked” clean. A significant portion of peri-urban respondents (55%) treated their drinking water despite feeling it safe for consumption. A possible explanation for the difference in behavior and perceptions in terms of treating water in peri-urban areas could be because of the aggressive campaigning and promotion of R.O water filters in these areas. Moreover, most peri-urban residents in the survey could afford to have RO water filters. With these findings, it is particularly important to highlight the need for implementing Sustainable Development Goal Six (SDG-6) in rural areas which ensures availability and sustainable management of water and sanitation for all (SDG-6, 2015).

In terms of the ownership of a working toilet within the household premises, all peri-urban respondents reported to have a working toilet.

Most (87%) of the rural respondents had a working toilet within their households while the remaining (13%) did not have toilets and defecated in the open. The field research and discussions with respondents especially in rural communities showed that the availability of toilets alone does not guarantee the usage of toilets. Despite having functional toilets, some respondents, in particular the elderly, still preferred to defecate in the open. This was because they are habituated to defecate in the open: “aadat hogayi hai”. Open defecation was seen as a social activity among some rural residents. Some respondents said that if their visiting guests wanted to see the surroundings, they would also accompany them in the morning with a “lota” or a water bottle.

Findings from this research also pointed to how certain roles and responsibilities were gendered. The role of cleaning toilets and cooking across peri-urban and rural areas belonged mostly to women. However, 88% of women in rural areas used only water to clean hands before cooking a meal when compared to women respondents in peri-urban areas who used soap for hand-washing.

The usage of soap for hand-washing at critical times was higher in peri-urban areas as compared to rural areas. In terms of hand-washing before a cooking meal, a significant portion (77%) of women used soap for hand-washing. In contrast, none of the women in rural areas used soap for hand-washing before cooking a meal, most (47%) used only water for hand-washing.

The use of sanitary pads among women in peri-urban areas was higher (93%) as compared to women in rural areas. A majority of women respondents across peri-urban and rural areas, and interestingly, including a teacher at an anganwadi centre, unanimously reported that they believed that menstrual blood was ‘impure’ (ashudh) blood. None of the women across peri-urban and rural areas visited a place of worship while menstruating. Younger women reported, however, that menstruating does not stop them from other social interactions and activities, including going to school. In fact, some adolescents reported that they sometimes ask their teacher at school for sanitary pads when needed. With these findings, it is clear that there is a stark contrast in terms of WASH practices among peri-urban and rural residents.

Behaviour Change Communication (BCC) efforts are much needed to improve hand washing behaviours. Perceptions and concomitant behaviours particularly those related to hand washing or water treatment were guided what the respondents “saw”. Awareness campaigns should focus on pathways to ill health from water-related diseases and how hand washing with soap is critical in preventing diseases. Future investment and improvement need focus on strengthening water supply and treatment infrastructure in rural areas so that trust in government sources of water supply is instilled. Menstrual hygiene education needs to be further strengthened both in rural and peri-urban areas to address stereotypes and taboos. It is clear that there is a stark contrast in terms of WASH practices among peri-urban and rural residents. Factors such as knowledge and awareness caused by education and exposure, affordability, and the availability of public infrastructure and services could potentially cause this distinction among residents.

Access to resources and facilities alone is not sufficient to change behaviours that are hardened by habits, norms and traditions. Behaviour change is stubborn and requires much more than wealth and access to facilities, or even scientifically proven data and knowledge. It needs exposure to ‘correct’ information, backed by specific messaging designed around specific behaviours, and a healthy dose of trust to override strongly held beliefs and habits to transition to healthy and safe WASH practices.