

International Journal of Arts, Humanities and Social Studies



ISSN Print: 2664-8652
ISSN Online: 2664-8660
Impact Factor: RJIF 8.31
IJAHS 2025; 7(2): 172-180
www.socialstudiesjournal.com
Received: 04-07-2025
Accepted: 07-08-2025

Bhoomi Mishra
Research Scholar,
Department of Sociology,
University of Allahabad,
Prayagraj, Uttar Pradesh,
India

A study on personal sanitation and health in village of Prayagraj

Bhoomi Mishra

DOI: <https://www.doi.org/10.33545/26648652.2025.v7.i2c.297>

Abstract

This study critically examines the interconnections between personal sanitation practices and health outcomes within the socio-cultural and structural contexts of rural villages in Prayagraj, Uttar Pradesh. Anchored in a sociological framework, the research interrogates how caste, class, gender, and access to state welfare mechanisms shape the everyday experiences of hygiene and health among rural households. Drawing on empirical data collected through household surveys, participant observation, and in-depth interviews across five villages, the study reveals that sanitation is not merely a technical or behavioural issue but is deeply embedded in the material conditions, cultural norms, and power relations that characterize rural life. Despite policy interventions such as the Swachh Bharat Abhiyan, the persistence of open defecation, lack of safe water access, and inadequate health infrastructure reflects the limitations of top-down, technocratic models of development. The findings point toward the need for a more integrated and community-sensitive approach that addresses both infrastructural deficits and the socio-relational dimensions of sanitation and health. The study contributes to rural sociology by foregrounding the lived realities of hygiene practices and health vulnerabilities, offering a nuanced understanding of how public health is socially produced and unequally distributed in rural India.

Keywords: Rural sanitation, personal hygiene, Swachh Bharat Abhiyan, rural development, disease prevention, health education

Introduction

Sanitation means people's health and dignity. Inadequate sanitation has direct effect on health of individual, family, communities and nation as a whole. Simply, having sanitation facilities increases health well-being and economic productivity. A huge amount of economic loss due to diseases burden and unproductive human energy is one of the factors of poverty in developing countries. This loss can be prevented through improved water supply and sanitation. Improved sanitation only can reduce diarrhoea morbidity by 32%. Hygienic behaviour and sanitation are linked to our day-to-day life. Sanitation is not merely a physical and environmental issue but social as well. It is not only individuals concerned but mass at large. Sanitation includes use of latrine, personal hygiene, clean surrounding, proper disposal of solid and liquid wastages and hygienic behaviour. Toilet is taken as an essential and basic indicator of health and sanitation worldwide. The World Health Organization (1946) defines environmental sanitation as "the control of all those factors in man's physical environment, which exercise or may exercise a deleterious effect on his physical development, health and survival." In general, sanitation covers arrangements for drainage of rain water and effluents, collection and disposal of garbage, and removal of human excreta. Proper sanitation is a necessary prerequisite for improvement in general health standards, productivity of labour force and good quality of life. The practices with regard to body cleanliness vary according to seasons.

Review of Literature

Public Health and the Poverty of Reforms: The South Asian Predicament" by Imrana Qadeer (2013) Public Health and the Poverty of Reforms by Imrana Qadeer (2013) offers a sharp critique of neoliberal health reforms in South Asia, especially India, arguing that market-driven approaches have deepened social inequalities instead of improving public health. Rooted in a sociological framework, the book highlights how caste, class, gender, and rural-

Corresponding Author:
Bhoomi Mishra
Research Scholar,
Department of Sociology,
University of Allahabad,
Prayagraj, Uttar Pradesh,
India

urban divides are neglected in policy, resulting in inequitable access and poor outcomes. Qadeer calls for a rights-based, equity-focused model of healthcare that prioritizes marginalized populations and addresses the social determinants of health.

Pathak B 2015 ^[23], "Sociology of Sanitation" In this book writer talk about Sociology of Sanitation is not only to provide sanitation, but also to abolish social injustice and discrimination. According to Dr. Bindeswar Pathak "It is a scientific study to solve the problems of society in relation to sanitation, social deprivation, water, public health, hygiene, ecology, environment, poverty, gender equality, welfare of children and empowering people for sustainable development and attainment of philosophical and spiritual knowledge to lead a happy life and to make a difference in the lives of others". The Sociology of Sanitation, which ensures social equity and dignity to every underprivileged and discriminated human being. Sociology of Sanitation is the branch of action sociology.

"Sanitation in India: Progress, Challenges and Prospects" Edited by Pay Drechsel *et al.* (2015) ^[40] Sanitation in India: Progress, Opportunities and Challenges by Pay Drechsel *et al.* (2015) ^[40] provides a multidisciplinary, policy-oriented analysis of India's sanitation efforts, highlighting both achievements and persistent gaps. It critiques the overemphasis on toilet construction over usage and sustainability, and emphasizes the need for inclusive, environmentally sound, and culturally accepted solutions. The report bridges technical, public health, and sociological concerns, offering practical insights for policy and development planning

"Clean India: Swachh Bharat Revolution" Edited by Parameswaran Iyer (2019) ^[41] Clean India: Swachh Bharat Revolution, edited by Parameswaran Iyer (2019) ^[41], offers an insider's perspective on the Swachh Bharat Mission, documenting its goals, strategies, successes, and ongoing challenges. Featuring contributions from policymakers and field practitioners, the book highlights SBM's achievements in reducing open defecation and improving hygiene through infrastructure, behavioural change, and community engagement. While it praises the campaign's transformative impact, it also acknowledges persistent issues like sustainability, water access, and social inequality, making it a key resource for understanding the broader implications of India's sanitation drive

Sanitation, Caste, and the State: The Failure of Swachh Bharat Mission" by Rahul Ranjan (2020), Economic and Political Weekly, Rahul Ranjan's article "Sanitation, Caste, and the State" (2020) critically examines the Swachh Bharat Mission, arguing that it overlooks caste-based labour and the exploitation of Dalit communities. The article exposes how the campaign's technocratic focus and performative gestures ignore structural caste inequalities and manual scavenging, undermining genuine sanitation reform

The Sanitation Triangle Socio-Culture, Health and Material by Taro Yamauchi Seiji Nakao Hidenori Harada This book described our challenge of the co-creation, which was conducted through expanding the material flow approach to social relationship networks and developing effective solutions. Through our 15-year process, we found that material flow and social relationships affinities strongly each other. Through the first phase, we could understand the overall problem of sanitation in the research field by applying material flow analysis; the strength was the ability

to catch all the related processes based on a logical mass balance point of view. However, its weakness was too strict rule and it was difficult to describe each player's motivation; in other words, "driving force" of the system. Based on that picture, we had started co-creation approach in order to realize the concept of the new sanitation system with local players, and it is still ongoing. We found that the combination of material flow and social relationship provides a reasonable and effective picture of wholistic sanitation system, and also that it is important to validate and update the picture through co-creation process among a team consisting of not only various researchers but also local players. Although we have not yet sufficiently performed co-creation of sanitation systems, we found one promising approach.

Nagla B.K. (2015) ^[21], "Sociology of Sanitation" The book chapter third 'Sanitation, health and Society' writer has talked about 'Sociology of cleanliness' is the social study of the interrelationships of cleanliness. 'Sociology of cleanliness' is the science that studies the internal relations between cleanliness and society, in which the mutual influence of man and society is studied. In the chapter third, writer has also talked about scavenging in a very limited way and the history of India is a witness that movement related to cleanliness was done by our social reformer during freedom struggle (M.K. Gandhi, B.R. Ambedkar, Suryakant Parekh). Author also has given causes for persistence of scavenging the major issue because it does not require any skill to perform sanitation work.

Research Objective

- To assess the personal hygiene, health and environmental condition of the Kotwa village.
- To find out the socioeconomic condition of the people of the Kotwa village.
- To find out the personal hygiene of the community people.
- To find out the magnitude of diarrhea and pneumonia disease in < 5-year children.

Research methodology

Mixed method research design has been used in this study incorporating both quantitative and qualitative approaches. Prayagraj District is targeted population. Houses were selected randomly of kotwa Prayagraj. The data was collected from head member of the houses in village. The first house was selected randomly. Semi structured questionnaire and observation check list were used. Interview was taken from the head of the household using a semi structured questionnaire. Observation was done using an observational checklist to assess the sanitary condition of latrines.

Study Area

Kotwa village in Prayagraj district, Uttar Pradesh.

Sampling Method

Random sampling technique was used to select 80 households from village, ensuring representation across caste, gender, and income categories.

Data Collection Tools: Structured questionnaires for household-level data on sanitation facilities, health status,

and hygiene practices, Focus group discussions (FGDs) with women, youth etc.

Variables Studied

Access to toilets, handwashing facilities, clean drinking water, personal cleanliness habits, menstrual hygiene, incidence of water-borne and skin diseases.

Data Analysis

Descriptive statistics were used to analyze quantitative data (percentages, mean, cross-tabulations). Thematic analysis was applied to qualitative responses from FGDs and interviews.

Ethical Consideration

Verbal and written consent was obtained from all participants. Data was collected confidentially, and respondents were assured of their anonymity.

Results

The study is done in kotwa village in Prayagraj district. The total population of the village is 9100 and 1426 houses are there in which 80 households were selected (male 30, female 50). The respondents were household head either male or female. The purpose of the study was mentioned to the respondents. Most 82.5% were Hindu and 17.5% were of Muslim community (Table-1)

Table 1: Religion of the respondents

Religion	Frequency	Percent
Hindu	66	82.5
Muslim	14	17.5
Total	80	100

Table-2 shows that most of the respondents (61%) were unable to read and write and 21% were up to 10 class, and very few (5%) above 12 class.

Table 2: Literacy of the respondents

literacy	Frequency	Percent
male	58	73
female	22	27
Total	80	100

Table-3 shows that most (33%) of residents were doing private job, 22% business, 18% labour and 14% agriculture and 14% government job respectively.

Table 3: Occupation of the respondents

Occupation	frequency	Percent
Agriculture	25	31
Business	20	25
Government job	15	19
Private job	20	25
total	80	100

In the table-4 shows that most (60%) have nuclear type of family and 40% had joint type of family.

Table 4: Type of family

Types of family	Frequency	Percent
Nuclear	32	40
Joint	48	60
Total	80	100

Table-5 shows that forty percent of the respondent's house didn't have school going girl, among school going 80% were going to government school and 20% were going to private school.

Table 5: Daughter Education

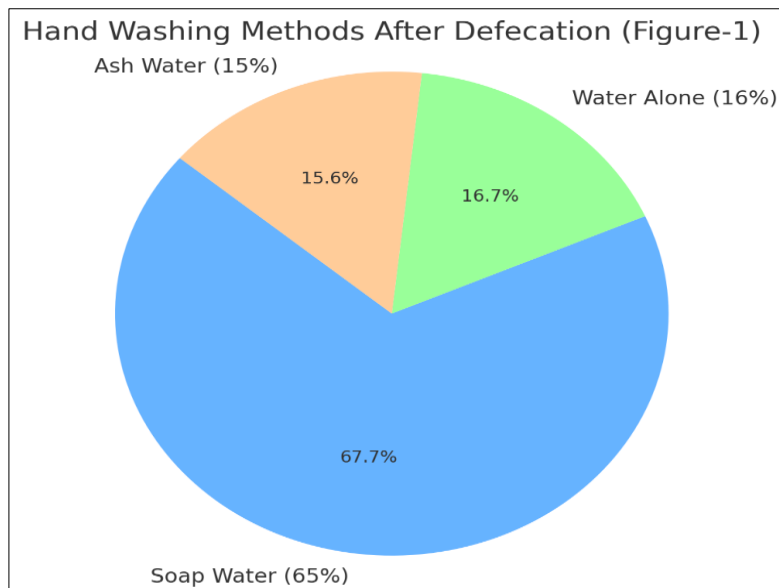
Daughter Education	Frequency	Percent
No daughter	08	10
Govt school	18	23
Private school	54	67
total	80	100

Table-6 showed that eighty percent of the school going child were going to government school and 20% were only going to private school.

Table 6: Son Education

Son Education	Frequency	Percent
No son	28	35
Govt school	41	51
Private school	11	14
total	80	100

Hand washing practice

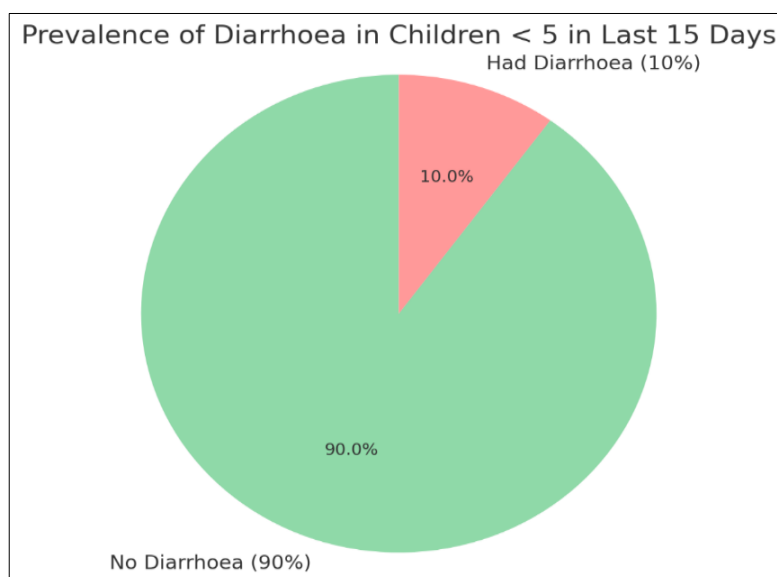
**Fig 1:** Hand washing practice

The table-7 shows that most of the respondents 90% mentioned that due to lack of sanitation there is Diarrhoeal disease and 10% don't have sanitation knowledge.

Table 7: Knowledge of sanitation

Knowledge due to lack of education	Frequency	Percent
No knowledge	08	10
diarrhoea	72	90
total	80	100

Figure-2 showed that ninety percent of the children < 5 have no diarrhoea in last 15 days.

**Fig 2:** Diarrhoeal disease in < five children

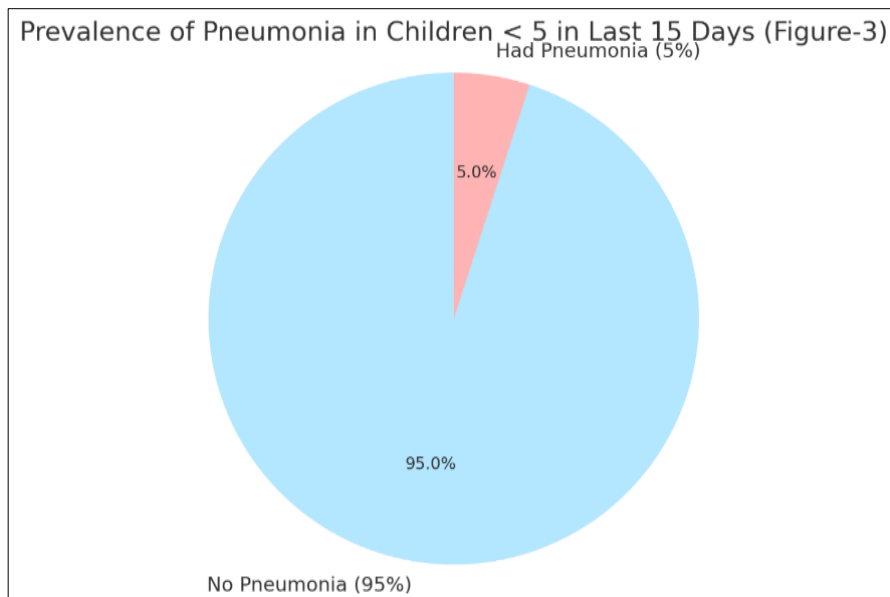


Fig 3: Figure 3 shows that ninety five percent of the children less than 5 year have no pneumonia in last 15 days.

Figure-4 Most 69% of the family members went to hospital for health seeking, 18% went to private clinics, very few 3% go to health institution, and 6% went to traditional healer to get health services (Figure-4).

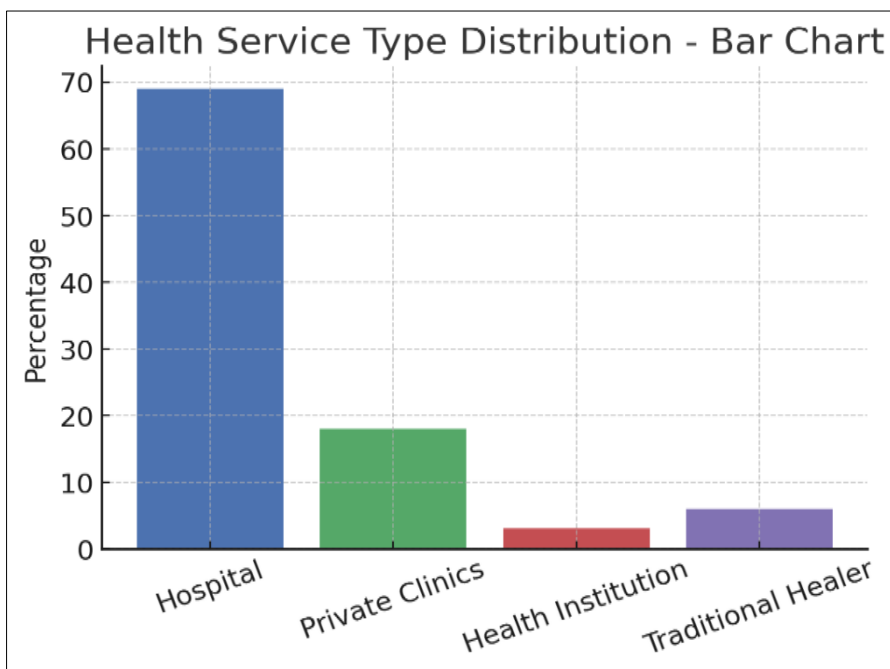


Fig 4: Health seeking behaviour

The table-8 shows that only 52% of the respondents were known about the delivery service provided by the government.

Table 8: Knowledge about delivery facility by Government

Knowledge about delivery facility	Frequency	Percent
Don't know	42	52
Correct knowledge	38	48
total	80	100

Figure-5 shows that sixty four percent had good personal hygiene practice and 36% did not have good personal hygiene.

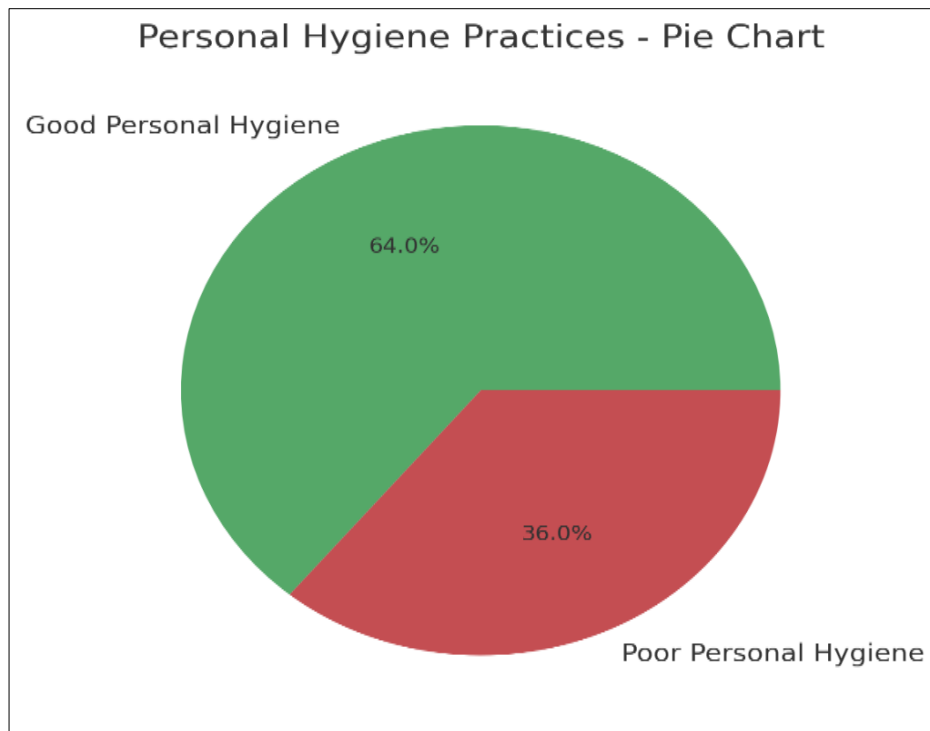


Fig 5: Personal Hygiene

Figure-6 showed that fifty eight percent of the houses had good sanitary condition.

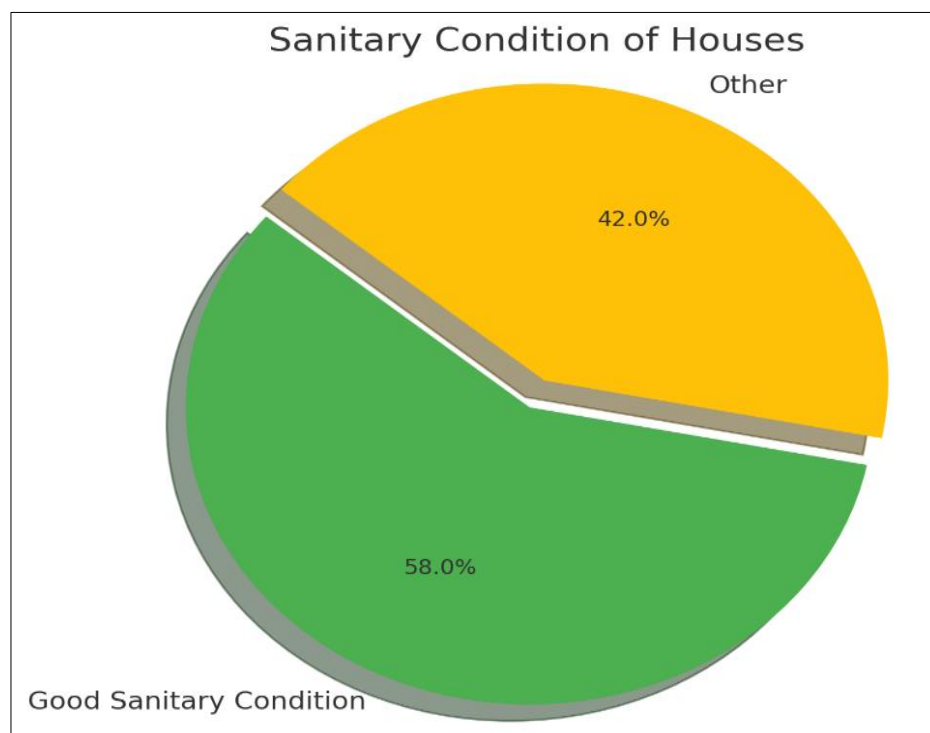


Fig 6: Sanitation in houses

Figure 7 shows that sixty four percent of the houses don't have toilet facilities.

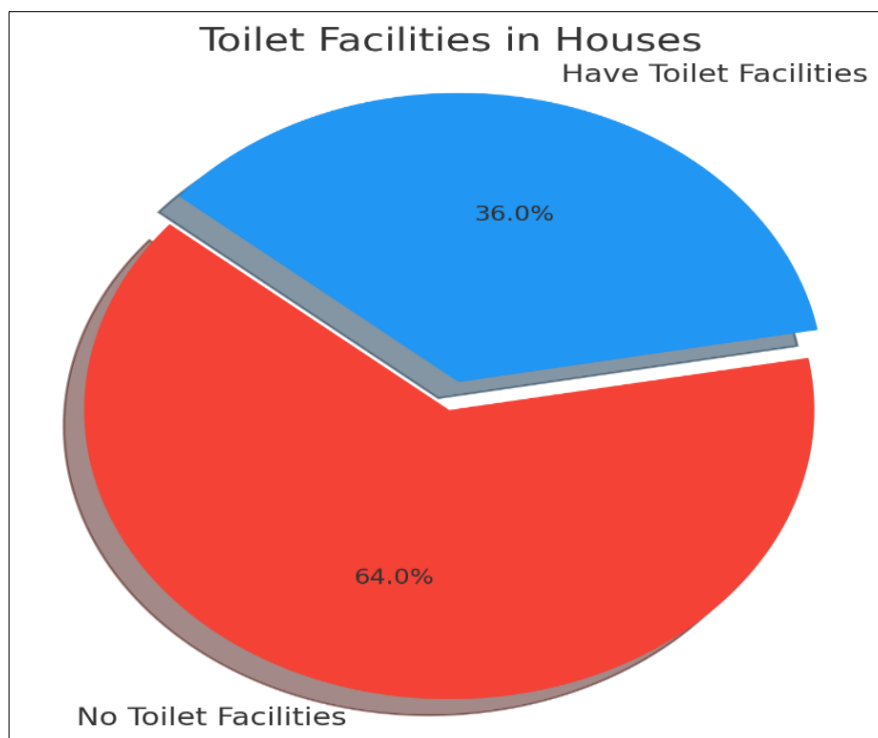


Fig 7: Toilet facilities

Discussion

In this study sixty four percent have good personal hygiene practice and 36% did not have good personal hygiene and fifty eight percent of the houses have good sanitary condition similarly the study done in Karchhana showed that sanitation practices were of an average degree, but not very much satisfactory from the hygiene point of view. Similarly, the studies done showed that only 15 percentages of respondents were aware of hygiene. Most of the respondents known about family planning and immunization but there was minimal use of family planning tools and immunization (8%). Health and sanitation in this village is found to be not very good when compared to other communities of Nepal¹³. In this study sixty four percent of the houses didn't have toilet facilities and they use open defecation similarly the study done by Kravid DZ showed that only 5% of villagers used latrines and 18% of under-5-year-olds had suffered a recent diarrhoeal illness but in this study ten percent of the children under 5 have diarrhoea in last 15 days. In the study Thapa M, showed that in most of the rural village, latrines are non-existent; the people use to discharge excreta near water sources, making water contaminated. Village people are unaware about the quality of water, and are consuming it and regularly facing the problems created by water borne infections¹⁵. Latrine coverage was 15% nationally; 12% rural and 63% urban.²⁴ Every day, 16 million Nepalis (around 57% of the population) practice open defecation because they have no toilets¹². In this study most (65%) of the respondents were using soap water after defecation, and 16% were using water alone and 15% were using ash water for 34 hand washing. It is good practice that they were using soap water after defecation. For health seeking practice most 69% of the family member goes to hospital for health seeking, 18% go to private clinics, very few 3% go to health institution, and 6% goes to traditional healer to get health services. In the study done by Subba N in Katakari and Baijnathpur showed that 72.0% patients used private clinics whereas only 15.4% patients had used

health post service²³. Only 52% of the respondents were known about the delivery service provided by the government. The reason of pollution was deforestation 36%, industrialization 20% and others 35% and 9% don't know the reason of pollution. Forty nine percent of tube well site was clean. Fifty nine percent of the houses have tree plantation. Seventy four percent of the respondents were known about the benefit of tree plantation.

Summary and Conclusion

The descriptive study was done in Prayagraj district. The targeted population of the study is 80 household and total household were, descriptive analysis was done by using SPSS. The respondents were household head either male or female. Most 50% of the respondents were female, 83% were of Hindu religion, 61% were unable to read and write. Most of the respondents 33% involve in private job in factory. Sixty percent have nuclear type of family. Sixty five percent have no land. Daughter and son equally studied in government and private school 50%. Most 65% use soap water for hand washing and knowledge of sanitation was high 90%. Regarding the tobacco practice 52% were using tobacco and among them 56% use all type of tobacco product. Twenty nine percent used alcohol and 67% of the respondents want to relief from tobacco. Ten percent of the < 5 children have diarrhoea and 5% have pneumonia in last 15 days. Sixty nine percent were going to hospital for health seeking and very few 3% were going to SHP. Fifty two percent were aware about the government free delivery service for pregnant women and transportation charge is given to client. Regarding the reason of pollution most of the respondents mentioned that deforestation 36%, industrialization 20% respectively. Seventy four percent of the respondents had knowledge of benefit of tree plantation, 64% have good personal hygiene, 58% houses were clean and good sanitary condition. Sixty four percent have no toilet facilities. Tree plantation around houses was seen in 59% of respondents.

Suggestion and Recommendation

There is need to construct toilet as the 64% houses didn't have toilet facilities. There is need to conduct hand washing program in Muslim and other disadvantage communities as most of the communities didn't know the correct method of hand washing. There is need of awareness program about the health institution as people were going to private clinics for health seeking. There is need to aware about the government scheme for institution delivery and about transportation 500 given by the government. There is need to start tree plantation program in Kotwa. There is need to do analytical study to see the relationship of hand washing practice and diarrhoeal disease. 37

References

1. Azim S. In: An Analysis of Sanitation Deprivation in Karnataka. In: National Conference on Sociology of Sanitation Environmental Sanitation Public Health and Social Deprivation. New Delhi: Xtreme Office Aids Pvt Ltd; 2013. p. 26-39.
2. Akhtar [initials not provided]. Impact of Water Pollution on Health in Faisalabad City (Pakistan) 2005.
3. Ananthakrishnan [initials not provided], et al. Study on ground water quality and its suitability for drinking purpose in Alathur block, Perambalur district, Tamilnadu. Archives of Applied Science Research. 2012; 4:1332-1338.
4. Angelence JRG. Urban water potential in Madurai City. The Deccan Geographer. 2010;48(1):41-48.
5. Aurangabadkar K, et al. Impact of municipal solid waste dumpsite on groundwater quality at Chennai. Environmental Control Journal. 2001; 5:41-44.
6. Batheja K, Sinha A, Seth G. Physico-chemical characteristics of groundwater at Churu Tehsil, Rajasthan, India. Journal of Environmental Science & Engineering. 2007; 49:203-206.
7. Coffey D, Spears D. Where India Goes. Noida: Harper Collins Publishers India; 2017.
8. Chatterjee AB. Howrah: A Study in Social Geography. Calcutta: U. Chatterjee Publication; 1967.
9. Capilla A. Traditional health practices of Kumauni women community and change. Delhi: Concept Publishing Company Pvt Ltd; 2004.
10. Dreze J, Sen A. Uncertain Glory: India and its Contradictions. Princeton: Princeton University Press; 2013.
11. Dubey KK. Use and misuse of land in KAVAL towns of Uttar Pradesh. Varanasi: National Geographical Society of India; 1967.
12. Dwivedi A. Urban Sanitation and Human Health: A Case Study of Varanasi City. PhD thesis. Varanasi: Department of Geography, B.H.U.; 2009.
13. Khare RS. Ritual purity and pollution in relation to domestic sanitation. Eastern Anthropologist. 1962;15(2)
14. Dwivedi P, Sharma AN. 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. 2007;22(1):7-10.
15. Gond R. Sanitation: A Way of Life. Delhi: IN UNICEF-NE, India; 1994.
16. Huesco A, Bell B. An untold story of policy failure: The Total Sanitation Campaign in India. Water Policy. 2013;15(6):1001-1017.
17. World Health Organization. WHO fact sheet FS115. Geneva: WHO; [cited 2020 Dec 24]. Available from: URL.
18. Karn RR, Bhandari B, Jha N. A study on personal hygiene and sanitary practices in a rural village of Mornag District of Nepal. Journal of Nobel Medical College. 2012;1(2):39-44. doi:10.3126/jonmc.v1i2.7298.
19. Luthi D. Private cleanliness, public mess: Purity, pollution and space in Kottar, South India. Urban Pollution: Cultural Meanings, Social Practices. 2010; 15:57.
20. Masood H. Urban sanitation in India: Role of the state and civil society. International Journal of Arts, Humanities and Social Studies. 2022;4(1):36-42. doi:10.33545/26648652.2022.v4.i1a.64.
21. Nagla BK. Sociology of Sanitation. Delhi: Kalpaz Publications; 2015.
22. Pathak B. Sulabh Shauchalaya: A Simple Idea That Worked. Patna: Amola Press and Publications; 1981.
23. Pathak B, ed. Sociology to sanitation: Environmental sanitation, public health and social deprivation. Delhi: Kalpaz Publications; 2015. p. 1-29.
24. Spears D, Thorat A. Caste, purity and pollution and the puzzle of open defecation in India: Evidence from a novel measure in a nationally representative survey. Economic Development and Cultural Change. 2017; [volume and pages not provided].
25. Train RE. Quality Criteria for Water. London: Castle House Publications Ltd; 1979. Treatment and Disposal in Metro Cities. CPCB Series /24/1997-98; [pages not provided].
26. UNICEF. Progress on Sanitation and Drinking Water, 2023 Update. 2010.
27. UNICEF, WHO. Progress on Drinking Water Sanitation and Hygiene: 2023 Update and SDG Baseline. [Place of publication not provided]; 2023.
28. United Nations. The World's Women 2015: Trends and Statistics. New York: UN; 2015.
29. WHO, UNICEF. Progress on drinking-water and sanitation: 2012 update. Geneva: WHO; New York: UNICEF; 2012. p. 5.
30. Wyman W. Sanitation and progress. Public Health Reports (1896-1970). 1901;16(8):3-17. Sulabh International Centre and Sulabh International Social Service Organization, Sociology of Sanitation.
31. Wankhade K. Urban sanitation in India: Key shifts in the national policy frame. Environment & Urbanization. 2015;27(2):555-572.
32. WHO. Milestones in Health Promotion: Statement from Global Conference. Geneva: WHO; 2009. p. 1-5.
33. WSP. The Economic Impacts of Inadequate Sanitation in India. New Delhi; 2010.
34. WHO, UNICEF. Water, Sanitation and Hygiene in Health Care Facilities: Status in Low- and Middle-Income Countries and Way Forward. Geneva: World Health Organization; 2023.
35. World Health Organization. WHO fact sheets for schistosomiasis. Switzerland: WHO; 2017.
36. WHO. Water, sanitation and hygiene links to health: Facts and figures. 2023.
37. WHO. WHO fact sheets for trachoma. Switzerland: WHO; 2017. Available from: URL. Accessed 2020 Dec 24.

38. WHO. Proposed global targets for maternal, infant, and young child nutrition. Summary of main issues raised and WHO responses. Geneva: World Health Organization; 2012a.
39. WHO. Progress on drinking water and sanitation-2022 update. 2012b (launched 2022)
40. Drechsel P, Cofie O, van Veenhuizen R, Danso G, Gyiele L, Keraita B, *et al.* Sanitation in India: Progress, opportunities and challenges. Colombo: International Water Management Institute (IWMI); 2015.
41. Iyer P, editor. Clean India: Swachh Bharat Revolution. New Delhi: HarperCollins; 2019.