

Original Research Article

A study to assess the knowledge, practice, and personal hygiene among respondents regarding childhood diarrhoea in a selected area of South Delhi, India: a cross-sectional study

M. Azam^{1*}, Amir¹, M. Akram²

¹National Research Institute of Unani Medicine for Skin Disorders, Hyderabad, Telangana, India

²School of Unani Medical Education and Research, Jamia Hamdard, New Delhi, India

Received: 03 June 2025

Revised: 11 September 2025

Accepted: 16 September 2025

*Correspondence:

Dr. M. Azam,

E-mail: md.azam.azmi@gmail.com

Copyright: © the author(s), publisher and licensee Medip Academy. This is an open-access article distributed under the terms of the Creative Commons Attribution Non-Commercial License, which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

ABSTRACT

Background: Diarrhoeal disease is a leading cause of morbidity and mortality among children under five, particularly in developing countries. Awareness of spreading, preventive measures, and healthy practices such as breastfeeding, immunization, and proper sanitation are essential to reduce this burden. This study aimed to assess knowledge, practices, and personal hygiene regarding diarrhoeal disease among caregivers of under-five children in South Delhi.

Methods: A community-based cross-sectional study was conducted from October 2019 to September 2020 among 493 randomly selected households with at least one child under five. A total of 460 respondents who met the inclusion criteria were enrolled. Data were collected using a structured questionnaire on socio-demographics, knowledge, practices, and hygiene. Analysis was done using SPSS version 23 with chi-square tests; $p < 0.05$ was considered statistically significant.

Results: Among respondents, 46.3% were aware that tooth eruption is a cause of diarrhoea, while 72.8% and 79.3% attributed unsafe water and food exposed to flies as causes, respectively. Poor knowledge of vaccination was reported by 29.3%. During diarrhoeal episodes, 74.8% of respondents reported using the same or more water, whereas 25% reduced intake. Regarding hygiene, 84.1% practiced hand washing with soap after child's faeces disposal, 90.7% after defecation, and 44.6% before cooking.

Conclusions: The practices of respondents were not proper in spite of their knowledge regarding diarrhoeal disease where whereas personal hygiene was performed better than practices. Therefore, health education should be utilized as a tool to promote knowledge, good practices, and personal hygiene, ultimately reducing morbidity and mortality.

Keywords: Knowledge, Practice, Under-five children, Diarrhoea

INTRODUCTION

Diarrhoea is the fourth most common cause of death in children under the age of five. Between 2008 and 2015, its burden decreased from 11% to 9% of all childhood deaths.^{1,2} Globally, diarrhoea caused 5,25,977 deaths in children under five years of age in 2015. Furthermore, in 2015, India accounted for 22.29% of the total deaths in children under five years of age.^{3,4}

According to an estimate, there were 7,60,000 deaths worldwide, and 2,12,000 deaths in India due to diarrhoea.^{5,6} Primary preventative strategies, such as using clean water, hand washing, proper cooking practices, breastfeeding, immunization, and good sanitary and hygienic practices, can prevent the majority of diarrhoea-related deaths and morbidities.^{7,8}

Diarrhoea is caused by a variety of organisms, including bacteria, viruses, and protozoans, such as the rotavirus

and *Escherichia coli*. Unsafe water supplies, as well as lack of sanitation and hygiene, have been attributed to 58% of diarrhoea-related deaths.⁹

By 2000 the Indian government planned to decrease infant mortality from 95 to 50 per 1000 and preschool mortality from 41.2 to 10 per 1000 through its national CDD program (Diarrheal diseases control program). In India, the national CDD began in 1980 as part of the sixth five-year plan (1980-85), with the primary goal of enhancing caretakers' and health care providers' knowledge and practices on appropriate case management, and the secondary goal of preventing deaths due to dehydration. The CDD program was integrated within the child survival and safe motherhood (CSSM) program for the betterment of the community.⁷ Diarrhoea has become one of the most serious public health issues in India. According to a 2006 world health organization (WHO) report, 18% of children under the age of five in the India die from diarrhoeal diseases. Diarrhoea is predicted to cause 1.5 billion episodes and 1.5-2.5 million fatalities in children under the age of five annually. Diarrhoea-related mortality in children under the age of five has decreased over the last two decades. This reduction can be attributed to the proper case management, as recommended by the WHO, including the use of oral rehydration therapy as a keystone in the management.¹⁰

Improving access to safe drinking water, adequate sanitation, and promoting good hygiene practices are key components in preventing childhood diarrhoea.¹² An action plan has been prepared by the WHO to end preventable child deaths from pneumonia and diarrhoea by the year 2025. In India, the prevention and treatment of childhood diarrhoea come under the integrated management of neonatal and childhood illness (IMNCI) and the national health mission (NHM). In 2014, the Government of India launched the integrated action plan for prevention and control of pneumonia and diarrhoea (IAPPD) under the NHM.

In India, nearly 88% of childhood diarrhoea cases occur due to the lack of access to clean water, inadequate personal hygiene, and poor sanitation.¹² A study revealed that hand washing with soap decreases the incidence of diarrhoea in children under five by 42-47%.¹³

The knowledge of respondents, especially mothers, regarding health, disease, and its prevention serves as a valuable indicator to measure the progress of the families, the communities, and the country. Lack of awareness can lead to an unhealthy family and community. Healthy practices adopted by respondents can contribute to a healthier life and help to prevent morbidity and mortality in children under five years.

The objective of the study was to assess the knowledge, practices, and personal hygiene regarding childhood diarrhoea among mothers and respondents.

METHODS

Study design

This was a community-based cross-sectional study conducted from October 2019 to September 2020 in Sangam Vihar, New Delhi, India. The study sample comprised of respondents belonging to different religions, age groups above 18 years, and having at least one child under 5 years of age.

Data collection

A semi-structured objective questionnaire was used for collecting the data. Both English and Hindi versions of the questionnaire were available for the respondents to overcome literacy and language barriers. It consisted of four different sections, including the demographic profile, knowledge section, practice section, and personal hygiene section.

Sample size

Based on the prevalence of diarrhoea among children under five years of age, a sample size of 460 was calculated for the primary objective of research, which was the assessment of the magnitude of prevalence of diarrhoea under five children in selected area of South Delhi. We interviewed the same 460 respondents in this secondary objective.

Inclusion criteria

All respondents with children under five years old in the selected households were included in the study. Respondents who were willing to participate in the study were included after obtaining their consent.

Exclusion criteria

Respondents of children who were not willing to participate in the study and respondents who had been living in study area for less than 6 months were excluded.

Statistical analysis

Statistical testing was conducted using the statistical package for the social sciences system (SPSS) version 23.0 (MAC). P value less than 0.05 was considered indicative of a significant difference for all statistical tests. Frequency and percentages were also calculated by SPSS.

RESULTS

In our study, 24% of respondents (111) were male and 76% (349) were female. The majority of respondents were female because of earning purposes; the majority of males were not present at home, while most of the females were housewives. Additionally, the majority of

respondents were mothers, 68% with the frequency of 314, and 90% of respondents (416) were married, and 1% were unmarried (5). Furthermore, most of the respondents were Hindu (291), with the percentage of 63%. As per socioeconomic status, most of the respondents were from upper lower (IV), with the percentage of 51.73%.

The 24% of respondents (111) were male and 76% (349) were female. The majority of respondents were female (Figure 1).

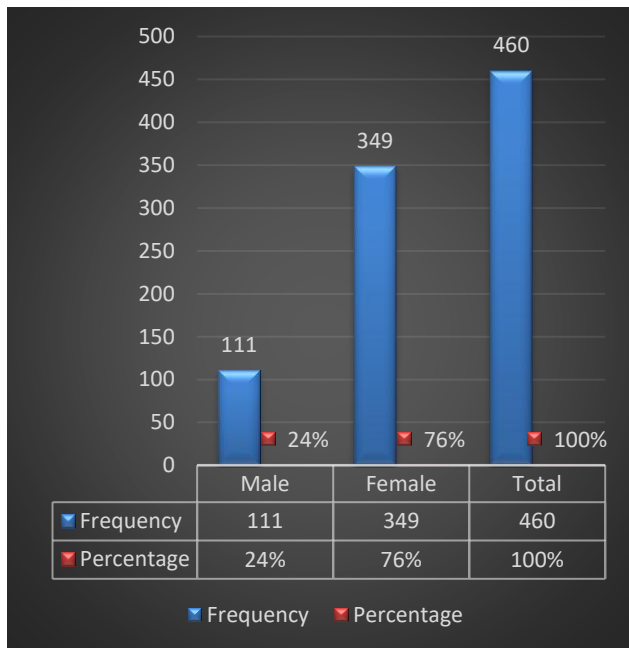


Figure 1: Gender of respondents, (n=460).

Table 1: Respondents' relation with child, (n=460).

Relations	N	Percentage (%)
Mother	314	68
Father	81	18
Grand mother	22	5
Grand father	25	6
Others	18	4
Total	460	100

The majority of respondents were mothers, 68%, with a frequency of 314 (Table 1).

Table 2: Marital status of respondents, (n=460).

Marital status	N	Percentage (%)
Married	416	90
Unmarried	5	1
Divorced	12	3
Widowed	27	6
Total	460	100

The 90% of respondents (416) were married, and 1% were unmarried (5) (Table 2).

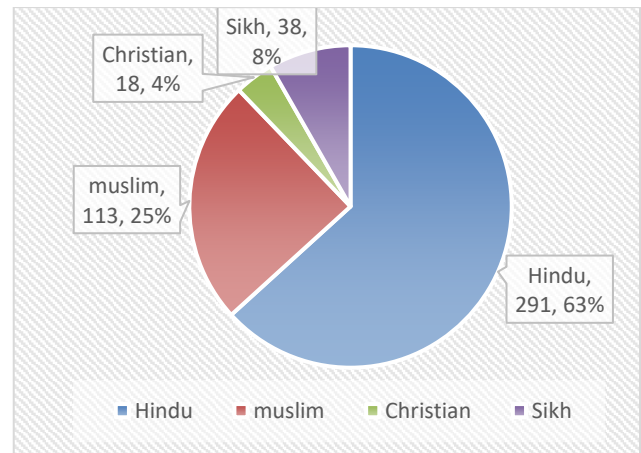


Figure 2: Religion of respondents, (n=460).

Most of the respondents were Hindu (291), with a percentage of 63% (Figure 2).

Table 3: Socio-economic status of respondents, (n=460).

Socio-economic status	N	Percentage (%)
Upper (I)	4	0.87
Upper middle (II)	70	15.22
Lower middle (III)	143	31.09
Upper lower (IV)	238	51.74
Lower (V)	5	1.08
Total	460	100

Most of the respondents belonged to upper lower (IV) with the percentage of 51.73% (Table 3).

Table 4: Respondents' knowledge about diarrhoea among children under five, (n=460).

Variables	Yes, N (%)	No, N (%)
Do you know tooth eruption can cause diarrhoea?	213 (46.30)	247 (53.69)
Do you know exposure of food to flies can cause diarrhoea?	365 (79.34)	95 (20.65)
Do you know unsafe drinking water can cause diarrhoea?	335 (72.82)	125 (27.17)
Do you know diarrhoea may cause death in children?	330 (71.73)	130 (28.26)
Do you know breast-feeding should be continued in diarrhoeal episode?	254 (55.21)	206 (44.78)
Do you know vaccination may prevent diarrhoea in children	135 (29.34)	325 (70.65)

Among the respondents 46.30% attributed that tooth eruption is a cause of diarrhoea while 72.82% and 79.34% of respondents were aware that unsafe drinking water and exposure of food to flies can cause diarrhoea. The 29.34% of respondents had poor knowledge about vaccination (Table 4).

Table 5: Respondents' knowledge about the prevention of diarrhoea, (n=460).

Variables	N	Percentage (%)
Breast-feeding	254	55.21
Eat safe food	429	93.26
Use of proper toilet	341	74.13
Immunization	128	27.82
Hand washing	354	76.95
Drink safe water	433	94.13

The highest number of respondents (433 out of 460) were aware about the importance of safe drinking water to prevent diarrhoea, whereas a very small number, 128 respondents, were aware of the importance of immunization in this regard (Table 5).

Practicing of respondents during diarrhoea, 74.78% of respondents provided the usual amount or more water during episode of diarrhoea, while 4.7% gave much less amount of water, and 20.43% provided somewhat less amount of water during diarrhoea (Table 6).

Among the respondents 84.13% respondents were performing hand washing with soap and water after child's faeces disposal, 90.65% after defecation and 44.56% before cooking (Table 7).

Table 6: Practices among respondents during diarrhoea in children, (n=460).

Variables	Yes, N (%)	No, N (%)
Do you restrict foods during the diarrhoeal episode?	220 (47.82)	240 (52.17)
Do you restrict breastfeeding during the diarrhoeal episode?	73 (15.86)	387 (84.13)
Do you restrict bottle-feeding during the diarrhoeal episode?	210 (45.65)	250 (54.34)
Do you use boiled water in the preparation of feed during diarrhoea?	204 (44.34)	256 (55.65)
What amount of liquid should be given to a child during diarrhoea?	N	Percent (%)
Much less	22	4.78
Somewhat less	94	20.43
Usual amount or more	344	74.78
Nothing to drink	0	0.00
What amount of food should be given to a child during diarrhoea?		
Much less	87	18.91
Somewhat less	120	26.08
Usual amount or more	202	43.91
Nothing to eat	51	11.08

Table 7: Personal hygiene among respondents during diarrhoea of under-five, (n=460).

Variables	N	Percentage (%)
What are your critical times of hand washing?		
After using toilet	460	100
After attending to a child that defecated	392	85.21
Before feeding a child	188	40.86
Variables	Yes, N (%)	No, N (%)
Do you wash hands with soap and water when child's faeces are disposed	387 (84.13)	73 (15.86)
Do you wash hands with soap and water after defecation?	417 (90.65)	43 (9.34)
Do you wash hands with soap before cooking?	205 (44.56)	255 (55.43)
What are your hand's hygiene materials?		
Water only	105	22.82
Water with ash	0	0.00
Water with soap	355	77.17

Table 8: Distribution of respondents according to the hand washing with soap/water after child faeces are disposed of and prevalence of diarrhoea, hand washing with soap/water after defecation among respondents and diarrhoea prevalence, hand washing with soap/water before cooking by respondents and prevalence of diarrhoea, (n=460).

Questions	Response	Diarrhoea present, N (%)	Diarrhoea absent, N (%)	Total, N (%)
Washing hands with soap/water after child's faeces are disposed of	Yes	85 (21.97)	302 (78.03)	387 (100)
	No	17 (23.28)	56 (76.72)	73 (100)
	Total	102 (22.17)	358 (77.83)	460 (100)
Washing hands with soap/water after defecation	Yes	88 (21.10)	329 (78.90)	417 (100)
	No	14 (32.56)	29 (67.44)	43 (100)
	Total	102 (22.17)	358 (77.83)	460 (100)
Washing hands with soap/water before cooking	Yes	38 (18.54)	167 (81.46)	205 (100)
	No	64 (25.09)	191 (74.91)	255 (100)
	Total	102 (22.17)	358 (77.83)	460 (100)

Hand washing with soap/water after child faeces are disposed of, and prevalence of diarrhoea-Chi square test value=0.003, $p=1.00$ (Not significant). Odds ratio=1.018 (i.e. developing diarrhoea is 1.018 times higher in those who did not perform hand washing after the child's faeces were disposed of than those who did perform hand washing).

Hand washing with soap/water after defecation among respondents and diarrhoea prevalence-Chi square test value=2.96, $p=0.12$ (Not significant), odds ratio=0.554 (i.e., developing diarrhea is 0.554 times higher in those who did not perform hand washing after defecation than in those who performed hand washing after defecation).

Hand washing with soap/water before cooking by respondents and prevalence of diarrhoea-Chi square test value=2.84, $p=0.11$ (not significant), odds ratio=0.679 (i.e., developing diarrhea is 0.679 times greater in those who did not perform the hand washing before cooking than in those who performed the hand washing before cooking).

DISCUSSION

Socio-demographic and economic factors

In our study, 24% of respondents (111) were male while 76% (349) were female. The majority of respondents were female because of earning purposes; the majority of males were not present at home, while most of the females were housewives, so they stayed at home. The majority of respondents were mothers, 68% with a frequency of 314, and 90% of respondents (416) were married, and 1% were unmarried (5) and most of the respondents were from the Hindu religion, making up 63% of the total. As per socioeconomic status, most of the respondents belonged to the upper lower (IV) category, accounting for 51.73% of the respondents.

Knowledge, practices, and personal hygiene

Knowledge

This study revealed that 46.30% ($n=213$) of respondents attributed teeth eruption as a cause of diarrhoea. A study conducted by Kaur et al also reported that 14.5% of mothers believed that tooth eruption could be a cause of diarrhoea.¹⁴ Similarly, studies conducted in Karachi and Haryana found that about 10% and 33% of mothers, respectively, believed that tooth eruption was also a cause of diarrhoea.^{15,16} The interpretation of teeth eruption as a cause of diarrhoea may be because, at the time of teeth eruption, children may attempt to chew on something they can grasp, which increases the risk of diarrhoea in children due to the pathogens present on the surface. In the opinion of Ibn-Sina, during the teeth eruption phase in children, homeostasis is involved in maintaining a new organ and deviates from the process of digestion. This is why diarrhoea occurs in this phase.¹⁷

Nearly one third of our study respondents, i.e., 29.34% ($n=135$), agreed that vaccination is important and should be given to prevent diarrhoea. A study conducted in Iran showed that around 80% of mothers considered vaccination to be important.¹⁸ The reason for this could be that the rest of the study respondents might not be fully aware of the complete vaccination according to the national immunization program of India.

More than two-thirds of our study respondents, i.e., 72.82% ($n=335$), agreed that unsafe drinking water can cause diarrhoea. Similarly, a study revealed that (85.5%) respondents believed that diarrhoea is caused by drinking contaminated water, which is significantly higher than findings of studies conducted in Pakistan, India, Mali, and Western Ethiopia.^{15,19,20}

From our study, it is clear that 55.21% ($n=254$) of respondents had knowledge about breastfeeding during diarrhoea, while 71.73% ($n=330$) were aware that diarrhoea is a fatal disease, and our study also revealed that the knowledge regarding food to flies can cause diarrhoea was 79.34% ($n=365$). In a similar study done in Sudan, nearly 70% of literate mothers continued breastfeeding during diarrhoea.²¹ Another study done in Rewa showed that nearly 88% of mothers continued breastfeeding during diarrhoea.²²

In the current study, we found that about 65.47% of respondents scored well on knowledge-related questions, which indicates good knowledge regarding diarrhoea prevention. This is slightly lower than a study conducted in Indonesia, where 68.3% of caregivers had good knowledge of preventing diarrhoea. The difference might be due to the level of awareness, educational status, socio-demographic factors, and others. This result is higher than that of studies conducted in the district of Fagita Lekoma (37.6%), South Sudan (42.2%), and Finote Selam town (45.9%).²³⁻²⁵

Practices

47.82% ($n=220$) of respondents reported restricting food intake during diarrhoea. Another research conducted by Kaur et al reported that 98.1% of mothers claimed that food should be limited during diarrhoea episodes.¹⁵ Similarly, a study in Haryana stated that 83.33% of mothers restricted their children's food intake during a diarrhoea episode.¹⁷ Another study carried out in Assam stated that 37.9% of mothers decreased feeding during episodes of diarrhoea.²⁶

In our study, 84.13% ($n=387$) of mothers continued breastfeeding and 54.34% continued bottle-feeding during diarrhoea. Another study done in Rewa showed that nearly 88% of mothers continued breastfeeding during diarrhoea.²² These results are consistent with the findings of similar studies conducted elsewhere. Almost 70% of literate mothers continued breastfeeding during diarrhoea found in a similar study conducted in Sudan.²¹

In this study, less than half of the respondents, 44.34% (n=204), routinely used boiled water during diarrhoea. On the other hand, 74.78% and 43.91% of the respondents offered fluid and feeding usual amount or more to their children during the diarrhoeal episodes, respectively. Similarly, in Kenya, more than 70% of mothers and 19.6% of mothers in India minimised fluid intake and feeding during diarrheal episodes.^{20,27} Other studies in Bangladesh and Pakistan, on the contrary, found that more than 50% and 71% of mothers preferred providing food and fluids during the child's diarrhoeal illness.^{15,28} The other possible reason for the decrement of fluid intake and feeding during diarrhoeal illness by the mothers might be due to the fear that more vomiting or watery stool might worsen.

Personal hygiene

In our study, respondents were asked about critical times for hand washing, hundred percent of the respondents were practicing hand washing after using toilet, while after defecation hand washing with soap was reported 90.65%, the association of diarrhoea was not statistically significant with (Odds ratio=0.554), 85.21% after attending a child who defecated while hand washing with soap by 84.13%, the association of diarrhoea was not statistically significant with (Odds ratio=1.018). Less than half of the respondents, 40.86%, were practicing hand washing with soap and water before feeding a child, and before cooking was also lower to be 44.56%; the association of diarrhoea was not statistically significant (Odds ratio=0.679). A study conducted in South India showed that 83.4% of mothers understood the importance of hand washing.²⁹ The findings of this study on hand-washing are almost comparable to the other studies conducted in the rest of India. Generally, the majority of mothers (67.8% and 100%) wash their hands before cooking food and after defecation. However, in Assosa, Ethiopia, only 11.7% and 16% of mothers washed their hands before cooking food and after defecation, respectively.¹⁹ In contrast, 60.0% and 3.1% in Bangladesh do not wash their hands before food preparation and after defecation, respectively.²⁸ This variance may be attributed to cultural, socio-demographic, and knowledge access variations.

In this study, 22.82% of respondents washed their hands using only water, which may not be effective in removing disease-causing bacteria, and the posture of hands during wash could be the source of contamination and another risk for diarrhoea transmission. In the other case, hand washing with soap was higher (77.17%) in comparison to plain water. This discrepancy might be due to the affordability of purchasing soap or less knowledge of handwashing practices. A finding was reported by a study carried out in India that demonstrated 41% of respondents washed their hands with water only.³⁰ This finding is lower than a study conducted in Farta, Ethiopia, where 56.3% of the respondents used only water to wash their hands.²⁵ The disparity is likely due to differences in

socio-demographic and economic factors. Similar observations were made in another study done in Yavatmal by Khadse et al which stated that hand washing with soap and water after defecation and before feeding had a protective value against diarrhoea.³¹

Limitations

Cross-sectional design

Because the study was cross-sectional, it can assess associations but not establish causal relationships between knowledge, practices, and diarrhoeal outcomes.

Self-reported data

Responses on knowledge, hygiene, and practices were self-reported, which may be subject to recall bias and social desirability bias, potentially overestimating good practices.

Limited generalizability

The study was conducted only in selected areas of South Delhi, so findings may not be generalizable to other regions with different socio-cultural or environmental conditions.

Exclusion of qualitative insights

The structured questionnaire provided quantitative data but lacked qualitative exploration, which might have offered a deeper understanding of attitudes or barriers influencing practices.

Possible non-response bias

Although 460 respondents participated, some eligible households may have declined, potentially affecting representativeness.

Temporal factors

Data were collected between October 2019 and September 2020; seasonal or pandemic-related factors during this period may have influenced hygiene and health behaviours.

CONCLUSION

Respondents demonstrated a lack of knowledge regarding the causes of diarrhoea, its spread, and preventive measures. Furthermore, their dietary practices during diarrhoea episodes were also found to be inadequate.

Effective health education can only be provided if the community's prevailing knowledge, practices, and personal hygiene are accurately understood. The level of knowledge among respondents, particularly mothers,

regarding health, disease, and preventative services is a barometer by which we may assess the families, communities, and the country's progress. Due to the lack of information, people may not fully utilize the health services accessible to them. Healthy practices adopted by mothers and respondents can improve a child's health and reduce morbidity and mortality in children under the age of five because mothers, and even respondents, are the primary health-care providers; their knowledge of disease etiology, prevention, and control is crucial in reducing diarrhoea morbidity and mortality.

ACKNOWLEDGMENTS

Authors would like to thank to vice chancellor and dean of SUMER, Jamia Hamdard.

Funding: No funding sources

Conflict of interest: None declared

Ethical approval: The study was approved by the Institutional Ethics Committee Jamia Hamdard, New Delhi, India, on 11/10/2019.

REFERENCES

1. WHO Global Health Observatory. Available at: http://www.who.int/gho/child_health/en/index.html. Accessed on 20 May 2025.
2. WHO-MCEE methods and data sources for child causes of death 2000-2015. Global Health Estimates Technical Paper WHO/HIS/IER/GHE/2016.1.
3. GHO. By category. WORLD- Diarrhoeal diseases. WHO. Available at: <http://apps.who.int/gho/data/view.main.CM1002015WORLD-CH3?lang=en>. Accessed on 29 May 2025.
4. GHO. By category, By country- India. WHO. Available at: <http://apps.who.int/gho/data/view.main.ghe1002015-IND?lang=en>. Accessed on 29 May 2025.
5. WHO. Media Centre. Diarrhoeal disease. Fact sheet N° 330. 2013. Available at: <http://www.who.int/mediacentre/factsheets/fs330/en/>. Accessed 25 May 2025.
6. Liu L, Johnson HL, Cousens S, Perin J, Scott S, Lawn JE. Global, regional, and national causes of child mortality: an updated systematic analysis for 2010 with time trends since 2000. *Lancet*. 2012;379(9832):2151-61.
7. Shah D, Choudhury P, Gupta P, Mathew JL, Gera T, Gogia S. Promoting Appropriate Management of Diarrhoea: A Systematic Review of Literature for Advocacy and Action: UNICEF-PHFI Series on Newborn and Child Health, India. *Indian Pediatr*. 2012;49(8):627-49.
8. Munos MK, Walker CL, Black RE. The effect of oral rehydration solution and recommended home fluids on diarrhoea mortality. *Int J Epidemiol*. 2010;39(1):i75-87.
9. Preventing diarrhoea through better water, sanitation and hygiene: Exposures and impacts in low- and middle income countries. Geneva: World Health Organization; 2014. Available at: http://apps.who.int/iris/bitstream/10665/150112/1/9789241564823_eng.pdf. Accessed on 29 May 2025.
10. Rehan HS, Gautam K, Gurung K. Mothers needs to know more regarding management of childhood acute diarrhea. *Indian J Preventive Social Med*. 2003;34(1):1-2.
11. WHO. Diarrhoea: why children are still dying and what can be done. WHO. Available at: http://apps.who.int/iris/bitstream/10665/44174/1/9789241598415_eng.pdf. Accessed on 29 May 2025.
12. The situation of children in India-a profile. Available at: <http://www.unicef.org/india/health.html>. Accessed on 7 May 2025.
13. Curtis V, Cairncross S. Effect of washing hands with soap on diarrhoea risk in the community: a systematic review. *Lancet Infect Dis*. 2003;3(5):275-81.
14. Kaur A, Chowdhury S, Kumar R. Mother's beliefs and practices regarding prevention and management of diarrhoeal diseases. *Indian Pediatr*. 1994;31(1):55-7.
15. Mumtaz Y, Zafar M, Mumtaz Z. Knowledge attitude and practices of mothers about diarrhoea in children under 5 years. *J Dow Uni Health Sci*. 2014;8(1):3-6.
16. Sood AK, Kapil U. Knowledge and practices among rural mothers in Haryana about childhood diarrhoea. *Indian J Pediatr*. 1990;57(4):563-6.
17. Baghdadi IH. *Kitab-al-mukhtaraat fi-al-tibb* (Urdu translation). New Delhi:CCRM. 2005;1:185-6.
18. Khalili M, Mirshahi M, Zarghami A. Maternal knowledge and practice regarding childhood diarrhoea and diet in Zahedan, Iran. *Health Scope*. 2013;2(1):19-24.
19. Merga N, Alemayehu T. Knowledge, perception, and management skills of mothers with under-five children about diarrhoeal disease in indigenous and resettlement communities in Assosa District, Western Ethiopia. *J Health Popul Nutr*. 2015;33(1):20-30.
20. Saurabh S, Shidam UG, Subair M. Knowledge and practice regarding oral rehydration therapy for acute diarrhoea among mothers of under-five children in an urban area of Puducherry India. *Natl J Community Med*. 2014;5(1):100-4.
21. Ahmad IS, Eltom AR, Karrar ZA, Gibril AR. Knowledge, attitudes and Practices of mothers regarding diarrhoea among children in a Sudanese rural community. *East Afr Med J*. 1994;71(11):716-9.
22. Kapoor P, Rajput VJ. Maternal knowledge, attitudes and practice in diarrhoea. *Indian Pediatr*. 1993;30(1):85-8.
23. Rumbo H, Sanguanprasit B, Wichaikul S. Factors influencing preventive behaviors of mothers for diarrhoea in children aged 1-5 years in Buol district, Indonesia. *Sociol Study*. 2016;6(12):745-53.
24. Godana W, Mengiste B. Environmental factors associated with acute diarrhoea among children

- under five years of age in Derashe district, Southern Ethiopia. *Sci J Publ Health*. 2013;1(3):119-24.
25. Gedamu G. Magnitude and associated factors of diarrhoea among under five children in Ferta wereda, North West Ethiopia. *Insight Med Publishing Group*. 2017;25(4):199-207.
26. Gogoi R, Saikia P. Knowledge, attitude and practices regarding diarrhoea and its management at home among mothers of under-five children residing within a subcentre area in Dibrugarh district, Assam. *Sch J App Med Sci*. 2017;5(11C):4495-9.
27. Othero DM, Orago AS, Kaseje DO. Home management of diarrhoea among underfives in a rural community in Kenya: household perceptions and practices. *East Afr J Public Health*. 2008;5(3):142-6.
28. Rabbi SE, Dey NC. Exploring the gap between hand washing knowledge and practices in Bangladesh: a cross-sectional comparative study. *BMC Public Health*. 2013;13:89.
29. Dutta SS, Singh, Z, Boratne AV. Knowledge and practice of hand washing among mothers of under five children in rural coastal South India. *Int J Med Public Health*. 2011;1(1):33-8.
30. Paul R, Kalidas P. A study on hand washing practices among mothers of under-five children in urban slums. *J Prevent Med Holistic Health*. 2017;3(2):37-40.
31. Khadse SS, Dani VS, Kulkarni LR, Shri VN. Study of behavioural risk factors for recurrent acute diarrhoea in children (Conference), Yavatmal in Conference Proceedings of the 9th Asian conference on diarrhoeal diseases and nutrition. New Delhi. 2001.

Cite this article as: Azam M, Amir, Akram M. A study to assess the knowledge, practice, and personal hygiene among respondents regarding childhood diarrhoea in a selected area of South Delhi, India: a cross-sectional study. *Int J Community Med Public Health* 2025;12:4519-26.