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Mothers' Perspectives on Household Hygiene and Preschool Child Cleanliness in Nepal: A Phenomenological Qualitative Study

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Abstract

Mothers' perceptions on hygiene practices are essential to prevent early childhood infections and promoting healthy development, yet limited qualitative evidence exists in Nepal. Guided by the Health Belief Model and Social Ecological Model, this exploratory phenomenological study examined mothers' perspectives on food hygiene, child cleanliness, and home environmental sanitation among preschool children (36–71 months) in Rupandehi District, Nepal. Thirteen purposively selected mothers from diverse sociocultural and educational backgrounds participated in in-depth interviews conducted between April and May 2021. Data were analyzed using inductive thematic analysis. Three major themes were developed as of hygiene in food preparation and preservation; child personal hygiene routines; and maintenance of a clean and safe home environment. Mothers demonstrated strong awareness on hygiene importance, routinely handwashing practice, safe food handling techniques, bathing, nail trimming, laundering, and regular household cleaning. However, practices towards their children varied according to seasonal changes, child health status, socio-cultural norms and household resource availability. Findings highlight maternal agency in promoting child health despite structural constraints. Socio-culturally guided hygiene promotion and improved access to basic sanitation resources are essential to strengthen early childhood health outcomes in low-resource settings, Nepal.

Keywords: home sanitation, food hygiene, child cleanliness, mothers' perspectives, preschool children

Introduction

Hygiene practices, including food safety, personal cleanliness and maintaining a clean home environment are very important to health and development in early childhood. Poor hygiene leads to a high incidence of diarrhoea/malnutrition in preschool-aged children (Dhital et al., 2025). In Nepal, and other low-resource settings, the vulnerability of children to infection increases when basic food hygiene, handwashing and sanitation practices are not being adhered to - due to lack of household resources and infrastructure (Shrestha et al., 2020; Dhital et al., 2025). Conversely, in developed countries, the availability of safe drinking water, sanitation, refrigeration for food storage, and providing an organized approach to food safety reduces the possibility of hygiene-related illnesses in preschool-aged children (World Health Organization, 2023).

Regularly washed hands, foods that have been prepared safely, and cleaned homes have been linked to decreases in the number of episodes of diarrheal disease and improved nutritional status of children, and are therefore important for promoting a positive sense of well-being among children (UNICEF, 2023; World Health Organization, 2022). In Nepal, mothers often change their daily hygiene routine as the seasons change, the health of the child changes, the household workload changes, and as the available resources at the home change. This indicates that effective hygiene practices require knowledge and the ability to problem solve in real-life situations (Shrestha et al., 2020; World Bank, 2023).

According to the health belief model, a mother's perception of her or her child's risk for a disease, its severity, or their personal belief in the effectiveness of a preventive behavior will influence her practice of those behaviors (Glanz et al., 2008). In addition, the social ecological model indicates that a person's behavior is determined by their attitudes as well as by their communities, families/friends and the environment; for example, whether there are clean water and safe sanitation facilities or appliances available for them to use in their homes (Bronfenbrenner, 1979; McLeroy et al., 1988). Together, these models can be used to understand how maternal perceptions, beliefs, and environmental limitations work together to influence hygiene activities performed on a daily basis by mothers and ultimately how this affects the health of preschool children.

Despite growing evidence linking maternal hygiene practices with child health outcomes, limited qualitative research and systematic reviews have explored how mothers in Nepal perceive, interpret, and practices hygiene within their everyday household environments to promote the health of their preschool children (Braun et al., 2026). Most of the current studies in Nepal primarily concentrate on quantitative WASH indicators, fixing on access to water, sanitation facilities, or prevalence of hygiene-related illnesses, while providing limited insight into the lived experiences, beliefs, and decision-making processes of mothers responsible for daily childcare and food preparation (Shrestha et al., 2020; Dhital et al., 2025). As a result, there remains a gap in understanding how sociocultural norms, household resources, and maternal perceptions interact to shape hygiene practices in real-life contexts. While existing studies quantify hygiene access and disease prevalence, they provide limited understanding of how mothers interpret, negotiate, and adapt hygiene behaviors within sociocultural and resource-constrained contexts. Addressing this gap is important for designing culturally appropriate and context-sensitive interventions that support effective hygiene behaviors and improve early childhood health outcomes.

Therefore, theoretical base of the Health Belief Model and Social Ecological Model, this study aims to explore mothers' perspectives and everyday practices regarding food hygiene and child cleanliness among preschool children (36–71 months) from diverse sociocultural backgrounds in Rupandehi District, Nepal.

Methodology

This exploratory qualitative study was conducted in Rupandehi District of Nepal, a region characterized by diverse cultural, ethnic, and socioeconomic backgrounds aiming variations in living conditions, household resources, and cultural norms. Further, respondents were selected purposively from urban, semi-urban and rural areas to capture a broad range of maternal experiences. A phenomenological approach was adopted to explore mothers lived experiences and understand the meanings they assign to hygiene practices related to food preparation and preserving, child cleanliness, and maintaining a safe home environment (Creswell & Poth, 2018; Patton, 2015).

Thirteen mothers of preschool children aged 36–71 months were recruited from community-managed Early Childhood Development (ECD) centers. The inclusion criteria decided based on the mothers of preschool children enrolled in ECD centers and willing to share their experiences related to household hygiene and child cleanliness practices. Mothers who were unable to provide informed responses because of their unwillingness and any kind of mental disorder were excluded from the study. The sample included mothers from Tarai Dalit, Dalit, advantaged caste, Janajati, and advantaged Janajati groups, with educational attainment ranging from illiterate to secondary school level. Three mothers were illiterate (Mother 4: Tarai caste; Mother 9: Tarai Dalit; Mother 11: Janajati), six had basic education (Mother 1: Tarai Dalit; Mother 5 and Mother 10: Dalit; Mother 6: Tarai caste; Mother 12: Advantaged Janajati; Mother 13: Janajati), and four had completed secondary education (Mother 2, Mother 3, and Mother 8: Advantaged caste; Mother 7: Advantaged Janajati).

Data collection continued until saturation, which was determined through ongoing analysis during the data collection process, where repeated responses and recurring patterns indicated that sufficient depth and coverage of participants' experiences had been achieved (Guest, Bunce, & Johnson, 2006). If the participants could not give the needed information because of a disorder, a close family member was selected.

Data were gathered from 20 April to 2 May 2021 via in-depth interviews. The purpose of these interviews was to explore three primary areas: parental and food hygiene practices; routines for the cleanliness of children; and how to maintain a clean and safe home environment. The location of each of the interviews with the mothers was based upon what the mothers preferred as their home or the Early Childhood Development Centre so as to provide them a comfortable, safe and familiar environment in which to discuss openly and without apprehension or hesitation. Each interview with the participant was recorded (with participant consent) and each transcription was done exactly as was spoken by the participant. The transcripts were reviewed multiple times to ensure there was no discrepancy and that the participants' original perspective was retained (Braun & Clarke, 2013).

This study used guidelines developed by Lincoln and Guba (1985) to demonstrate methodological rigor. Credibility was established by repeatedly checking the transcripts and verifying interpretations through member checks. In order to improve transferability, detailed descriptions of the research context and participant

characteristics were provided, which allowed the reader to determine whether the findings can be applied to other similar contexts (Lincoln & Guba, 1985; Shenton, 2004). Similarly, to support dependability, systematic documentation of research decisions was maintained via audit trails and systematic coding procedures. Likewise, confirmability was improved through reflexive practices that recognized the vulnerabilities of researchers' positionality and potential biases, and use of direct quotes from participants' transcripts maintained the findings in mothers' voices.

Inductive thematic analysis (Braun & Clarke, 2006) was done for data analysis which is commenced with multiple readings of the transcripts to attain familiarity, succeeded by preliminary coding to discern significant units and nascent concepts. After that, the codes were put into bigger thematic groups in a systematic way. Using direct quotes kept the richness and truthfulness of the participants' stories and let their voices guide how the findings were understood. It also showed how hygiene practices differ between cultures and individuals (Braun & Clarke, 2013).

Ethical considerations

Ethical approval was obtained from the Ethical Review Board of the Nepal Health Research Council (ERB approval No. 2078-56/2021). Written informed consent was obtained after participants were informed about the study objectives, voluntary participation, and confidentiality. Participants were assured that the data would be used exclusively for research purposes, that all identifiers would be removed, and that they could withdraw at any time.

Findings

The finding of this study determined three key thematic dimensions as of hygiene in food preparation and preservation, child personal hygiene routines, and maintenance of a clean and safe home environment.

Hygiene in food preparation and preservation

Food hygiene was seen by mothers as being a systematic and routine part of their everyday caregiving tasks. Their stories highlighted how aware they are of the potential risks of contamination, and how much of a responsibility they feel toward preventing illness. The majority of mothers spoke about what preventative methods of food preparation they used (i.e., washing their hands, showering, washing fresh fruits and vegetables, and covering prepared foods) prior to and during cooking; however, the level, frequency, and degree to which those methods were performed, differed because of different resource availability (e.g., refrigerators) or cultural beliefs and the different methods of storage available to mothers in their homes influenced how regularly and thoroughly mothers completed those hygiene-related methods.

For example, a mother noted:

"First of all, I clean myself then start to cook. I bathe every morning. Wash food items before cooking, and cooked food is covered properly." (Mother 1, Tarai Dalit, basic education)

Another participant explained:

"I take bath early in the morning, worship God, and cook rice in the same clothes. I wash food items 2–3 times before cooking. Most of the time we eat home-produced vegetables, which do not need to be washed many times." (Mother 3, Advantageous caste, secondary education)

Some mothers highlighted cooked food preservation strategies through refrigeration, for example:

"I keep in freeze and close the food items to make safe." (Mother 5, Dalit, basic education)

Food safety and hygiene were shaped by education, culture as well as the physical circumstances surrounding food safety and hygiene. Mothers adapted their hygiene behaviour pragmatically and in response to traditional beliefs and the resources available in individual households. The mother's hygiene practices were based on the combination of traditional culture and the limited availability of resources. For example, some mothers did not wash their home-grown vegetables, as they believed they were safer than the store-bought varieties. This belief also has an impact on the day-to-day hygiene practices. The mothers' experiences show that, rather than being technical in nature, food hygiene was also a part of everyday life and influenced by the belief system and the physical conditions of the mother's home.

Child personal hygiene routines

Mothers viewed child hygiene as an important aspect of parenting and protecting children's health. They described child hygiene activities as being structured however, flexible depending upon the season, if children attended school and their health condition. A majority of the mothers were focused primarily on ensuring that their children had regular baths, changed their clothes frequently, kept children and homes as clean as possible as they additionally performed other hygiene-related tasks for children like cutting their nails, caring for their hair, taking care of their teeth.

In this regard, a study mother described her child's daily routine as:

"I give my daughter bath almost every day in summer, change her dresses daily, comb her hair, cut her nails when they grow long, and give her a toothbrush and paste so she brushes herself after eating." (Mother 6, Tarai caste, basic education)

Another mother reflected school-related variations as:

"I send her to school neat and clean, but she comes home very dirty. I wash her dress every day. I bath her twice a week, but in summer every day. She cuts her nails herself." (Mother 10, Dalit, basic education)

A mother with a child suffering health issue noted adaptations to hygiene routines as:

"I give him a bath once a week because he has pneumonia. I apply oil to his body after bath and change clean clothes. I wash his dress and socks every day." (Mother 13, Janajati, basic education)

These mothers were flexible as they worked through their daily responsibilities of taking care of their children to negotiate different levels of hygiene which they could achieve. The mothers negotiated personal hygiene differently every day based on the environment they lived in, health issues they had to contend with in taking care of a child, and how the environment limited them from taking care of their child in the

manner that they wanted to. In this instance, the mothers were in control of balancing values as they were defined socio-culturally and their daily experiences. These findings demonstrate the way in which the norms of each interpersonal relationship impacted how mothers were able to respond to the structure in which they lived and changed their methods of providing care to their child based on the structure.

Clean and safe home environment

In a study of families who had limited space, it became apparent that keeping their home clean and organized was very important to the mothers in the study. The mothers felt the cleanliness of the environment was directly linked to how safe, comfortable, and healthy their children would be as well as their ability to develop. Because of this, many mothers provided areas for their preschool-aged children to sleep, study, and play that were clean, well lit, and organized. Even though numerous families lived in small dwellings where they all cooked, studied, and slept together in one room, the mothers involved in the study made cleaning and organizing their priority to provide a nurturing environment for their children.

For example:

"I use the same room to cook, study, and sleep as we live only in one room. You can see now it is neat and clean." (Mother 5, Dalit, basic education)

Another mother described her child's environment:

"She plays and lives in a bright room most of the time. Her father's room is a little dark, but she sleeps sometimes with me and sometimes with her father. All rooms are neat and clean. We clean rooms every day." (Mother 7, Advantageous Janajati, secondary education)

Another mother highlighted frequent cleaning routines:

"Our rooms are bright and clean. I clean the room 2–3 times per day and wash her dresses every day." (Mother 4, Tarai caste, illiterate)

Even though they faced numerous competing interests, such as less access to resources and financial limitations, mothers made efforts to keep their homes clean and organized for the benefit and well-being of their children. Mothers demonstrated their commitment to health-promoting behaviours, in part by maintaining their hygiene; they would adjust the personal care of their children (ie. food hygiene, child hygiene), as well as the cleanliness of their homes based on their ethnic and cultural practices, yet all mothers shared the same commitment to take a proactive approach to protect and promote their children's health through their daily hygiene practices.

Discussion

This exploratory qualitative study provided insight into how mothers' interpretation and implementation of hygiene practices related to food preparation, child personal hygiene, and household environmental cleanliness in the context of everyday caregiving to their preschool children which are grounded by an interplay of maternal beliefs, sociocultural prospects, and operational constraints, highlighting the complex decision-making processes in low-resource settings.

Throughout the study, mothers demonstrated proactivity in maintaining food purity by washing all produce items prior to their meal preparation, washing their hands before preparing their meals, and keeping cooked foods covered at all times. Research from around the world shows that when caregivers practice good hygiene and food handling practices, there is a reduction in microbiological contamination of foods and the risk of diarrhea among children under five years of age (Mumma et al., 2020; Shrestha et al., 2020). Additionally, based on the Health Belief Model, these actions are a reflection of caregivers' perceived susceptibility to infection as well as perceived benefits of participating in preventive hygiene (Glanz et al., 2008). Therefore, mothers' knowledge of the hygiene risks associated with poor hygiene attitudes and behaviours, as well as the benefits of adopting protective practices, reflect a well-formed understanding about the importance of these practices to maintain good health in children.

All mothers reported regular bathing, laundering of children's clothes, and general personal cleanliness routines, though frequency varied by season, school attendance, and children's health status. Such routines are supported by research indicating that caregiver hygiene behaviors, including bathing and clothing cleanliness, are associated with reduced incidence of infection and improved child health outcomes (Edward et al., 2019; Shrestha et al., 2020). The Social Ecological Model also offers a helpful way to understand these findings as it states that individual behaviors affect each other through relationships with other people such as family members and friends, by community norms like cultural beliefs about bathing and cleanliness as well as through structural conditions like access to water and soap (McLeroy et al. 1988).

Mothers in this study stated that they placed major importance on keeping their homes clean, organized, and well lit, despite having limited space as many of them had only one room in which they could cook, sleep and study, and being short on money. Similar to this finding, having a hygienic home can help to reduce a child's exposure to environmental health risks such as; infectious diseases; and poor sanitary conditions; especially in low resource situations (Humphrey, 2009; World Health Organization, 2019).

The mothers viewed the advantages of physical home environment as of sufficient light and organization, to support early childhood development. Similar study stated that child-friendly home settings provide adequate and safe environments for playing, resting and learning, contributing positively to children's cognitive, emotional and physical growth (Bradley & Corwyn, 2002; Evans, 2006). Likewise, mothers' hygiene habits are viewed in relation to their broader cultural and societal context as personal hygiene habits and household routines vary by ethnic background and economic means of families, all of the mothers expressed a profound commitment to keeping clean and protecting their children's health. Similar findings were observed in studies from other low- and middle-income countries regarding cleanliness and orderliness within homes being key behaviours of caregivers to foster child health in constrained settings (Aunger et al., 2010; Pickering et al., 2018).

Overall, the findings support both the HBM by illustrating how mothers' perceptions of disease risk motivate hygiene practices and the SEM by showing how individual behaviors are embedded within family, community, and environmental contexts. Global empirical research further underscores the relevance of these theoretical frameworks, demonstrating that caregiver hygiene practices such as handwashing, food safety, and household cleanliness are associated with improved child health outcomes and reduced prevalence of hygiene-related illnesses across low-resource settings (Edward et al., 2019; Mumma et al., 2020; Petermann-Rocha et al., 2023; Shrestha et al., 2020). These findings emphasize the critical role of maternal agency and the need for structural support to sustain effective hygiene practices. This study contributes to the literature by demonstrating how hygiene behaviors are not merely knowledge-driven but are culturally embedded, resource-dependent, and dynamically negotiated within everyday caregiving contexts.

Strengths and Limitations

An exploratory qualitative phenomenology was conducted using a purposive diverse sample of mothers to explore the different perspectives of both food hygiene and child cleanliness from a phenomenological point of view, using multiple caste/ethnicities, different levels of education, and different rural or semi-urban communities in Rupandehi District, Nepal. Likewise, the study used in-depth interviews in a variety of familiar settings to present the actual quotations, and the use of trustworthiness measures increased the richness, authenticity, and trustworthiness of the data collected. However, possible social desirability bias and failure to include fathers and other caregivers may limit generalizability of the study. Similarly, because data were collected between April and May 2021, the findings reflect mothers' perceptions and experiences from that period, not current practices.

Implications

The findings suggest that hygiene promotion strategies should be culturally responsive and grounded in mothers' lived experiences. At the individual level, programs should reinforce mothers' perceptions of disease risk and the benefits of preventive hygiene behaviors. At the community level, ECD centers need to provide a strategic platform for integrating practical hygiene education into routine program. Similarly, at the structural level, improved access to clean water, soap, and safe food storage facilities is essential to sustain effective hygiene practices. Policymakers should prioritize resource support for low-income households to reduce environmental barriers. I included studies published after data collection to compare our findings against the current evidence base. Future qualitative research using more recent data could clarify how maternal hygiene perceptions and practices have changed over time.

Conclusion

This study demonstrates that mothers of preschool children in Rupandehi District actively integrate hygiene practices into daily caregiving despite sociocultural and resource constraints. Guided by perceived health risks and shaped by environmental

realities, mothers adapt food safety, child cleanliness, and household sanitation routines to promote child well-being. The results support both the Health Belief Model and the Ecological Model, illustrating how individual perceptions and structural conditions interact to influence maternal practices. Culturally responsive hygiene promotion strategies, improved access to sanitation resources, and integration of hygiene education within early childhood programs are essential to sustain these practices.

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References

Aunger, R., Schmidt, W. P., Ranpura, A., Coombes, Y., Maina, P. M., & Curtis, V. (2010). Three kinds of psychological determinants for hand-washing behaviour in Kenya. *Social Science & Medicine, 70*(3), 383–391. https://doi.org/10.1016/j.socscimed.2009.10.038

Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology, 53*, 371–399. https://doi.org/10.1146/annurev.psych.53.100901.135233

Braun, L., MacLeod, C., Wells, J., Chipungu, J., Amon Tanoh, M., MacDougall, A., Opondo, C., Dreibelbis, R., & Mahmud, Z. H. (2026). Effectiveness of domestic food hygiene interventions on the microbiological quality of child food and childhood diarrhoea: A systematic review and meta-analysis. *BMJ Global Health, 11*(1), e018958. https://doi.org/10.1136/bmjgh-2025-018958

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology, 3*(2), 77–101. https://doi.org/10.1191/1478088706qp063oa

Braun, V., & Clarke, V. (2013). *Successful qualitative research: A practical guide for beginners* (1st ed.). Sage.

Bronfenbrenner, U. (1979). *The ecology of human development: Experiments by nature and design*. Harvard University Press.

Creswell, J. W., & Poth, C. N. (2018). *Qualitative inquiry and research design: Choosing among five approaches* (4th ed.). Sage.

Dhital, S. R., Chojenta, C., & Loxton, D. (2025). Effects of mothers' water, sanitation and hygiene habits on diarrhoea and malnutrition among children under 5 years in Nepal. *BMJ Public Health, 3*(2), e001815. https://doi.org/10.1136/bmjpublichealth-2025-001815

Edward, A., Jung, Y., Chhorvann, C., Ghee, A. E., & Chege, J. (2019). Association of mother's handwashing practices and pediatric diarrhea: Evidence from a multi-country study. *Journal of Preventive Medicine and Hygiene, 60*(2), E93–E102. https://doi.org/10.15167/2421-4248/jpmh2019.60.2.1088

Evans, G. W. (2006). Child development and the physical environment. *Annual Review of Psychology, 57*, 423–451. https://doi.org/10.1146/annurev.psych.57.102904.190057

Glanz, K., Rimer, B. K., & Viswanath, K. (2008). *Health behavior and health education: Theory, research, and practice* (4th ed.). Jossey-Bass.

Guest, G., Bunce, A., & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and variability. *Field Methods, 18*(1), 59–82. https://doi.org/10.1177/1525822X05279903

Humphrey, J. H. (2009). Child undernutrition, tropical enteropathy, toilets, and handwashing. *The Lancet, 374*(9694), 1032–1035. https://doi.org/10.1016/S0140-6736(09)60950-8

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry.* Sage.

McLeroy, K. R., Bibeau, D., Steckler, A., & Glanz, K. (1988). An ecological perspective on health promotion programs. *Health Education Quarterly, 15*(4), 351–377. https://doi.org/10.1177/109019818801500401

Odhiambo Mumma, J. A., Cumming, O., Simiyu, S., Czerniewska, A., & Dreibelbis, R. (2020). Infant food hygiene and childcare practices in context: Findings from an urban informal settlement in Kenya. *American Journal of Tropical Medicine and Hygiene, 105*(5), 1383–1395. https://doi.org/10.4269/ajtmh.20-0574

Patton, M. Q. (2015). *Qualitative research & evaluation methods* (4th ed.). Sage.

Petermann Rocha, F., Rao, N., Bala, M., Parshad Asnani, M., Sifuna, A., Yousafzai, A., Ho, F. K., & Ip, P. (2023). Hygiene practices and early childhood development in the East Asia Pacific region. *International Journal of Environmental Research and Public Health, 20*(4), 2798. https://doi.org/10.3390/ijerph20042798

Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. Education for Information, 22(2), 63–75. https://doi.org/10.3233/EFI-2004-22201

Shrestha, A., Six, J., Dahal, D., Marks, S., & Meierhofer, R. (2020). Association of nutrition, water, sanitation and hygiene practices with children's nutritional status, intestinal parasitic infections and diarrhoea in rural Nepal: A cross-sectional study. *BMC Public Health, 20*, 1241. https://doi.org/10.1186/s12889-020-09302-3

Shrestha, A., Sharma, S., & Bhandari, P. (2020). Household sanitation and hygiene practices and their association with diarrheal disease among under-five children in Nepal. *BMC Public Health, 20*, 1234. https://doi.org/10.1186/s12889-020-09345-8

UNICEF. (2023). *Water, sanitation and hygiene (WASH) and child health report*. UNICEF.

World Health Organization. (2019). *Healthy environments for healthier populations: Why do they matter, and what can we do?* Geneva: World Health Organization. https://iris.who.int/handle/10665/325877

World Health Organization. (2023). *Water, sanitation and hygiene (WASH).* https://www.who.int/health-topics/water-sanitation-and-hygiene-wash

World Health Organization. (2022). *WHO guidelines on sanitation and health*. WHO Press.

World Bank. (2023). *Improving water supply, sanitation, and hygiene in South Asia: Policy and implementation review*. World Bank Publications.