| International Journal of Emerging Trends in Education | Oct-Dec 2023, Vol. 1, No. 3 |
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| DOI: https://doi.org/10.5281/zenodo.10444061 | [30-41] |

International Journal of Emerging Trends in Education
www.ijete.org.pk

*Research Article*

# Causes of Unhygienic Conditions of Primary Schools in District Kotli AJ&K

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**Article Info.**

Received: 05-Nov-23
Revised: 07-Dec-23
Accepted: 19-Dec-23
Published: 31-Dec-23

**Abstract**

The purpose of the investigation was to confirm the Causes of unhygienic conditions of primary school in District Kotli AJ&K. The study was descriptive in nature and survey method was used to collect the data. The total population consisted of 312 primary school teachers of tehsil Kotli and Kohiratta. Simple random sampling technique was used to draw the sample from the population. The researcher selected (175) teachers as a sample from whole population. A self-developed questionnaire based on Five Point Likert Scale was used for the collection of data. The researcher personally collected the data after evaluating its validity and reliability. Statistical Package for Social Sciences (SPSS) was used to analyze the data by using frequency and percentage. It is concluded that primary schools' classroom is cleaned on a daily basis and students are aware of the importance of cleanliness. Classroom teacher may actively address hygiene condition. Moreover, proper sanitation is available in the classroom and classrooms are organized sufficiently for all students.

**Keywords:** Unhygienic conditions, Dirty Restrooms, Poor Waste Management, Poor Food Handling, Primary Schools

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**How to Cite:** Saeed, N. & Hashmi, Z. Z. (2023). Causes of Unhygienic Conditions of Primary Schools in District Kotli AJ&K. *International Journal of Emerging Trends in Education*, *1*(3), 30-41.

## Introduction

Children attending primary schools in low- and middle-income nations frequently lack access to clean, microbiologically safe water and sanitation, which frequently lead to a high rate of gastrointestinal disorders and poor academic performance. According to UN estimates, approximately 884 million people in low- and middle-income countries do not have access to better drinking clean water, and at least 2.5 billion people do not have access to improved sanitation (Geneva & Switzerland, 2018). A major consequence of diarrheal morbidity in kids is missing school because of illness. According to one study, ailments associated to water cause 670,000 Pakistani children to skip school every day on average (Yasmin, & Garn, 2020).

Methodological problems make assessing the impact of WASH interventions difficult. For instance, it is impossible to conduct a blinded sanitation trial since people cannot be forced to use a toilet against their will. Blinding result assessors or data analysts is not utilized sufficiently, and options like blinding individuals to the choice of outcome have only been utilized seldom (Fewtrell & Kaufmann, 2017).

An additional obstacle pertains to epidemiological concerns, whereby enhancements in the quantity of water accessible are probable to affect both the quality of water and household hygiene. Every type of intervention had a comparable level of impact, according to a systematic review and meta-analysis assessing the impact of WASH interventions on diarrheal illness, and water quality interventions proved to be more successful than previously thought (Proctor et. al., 2022).

School children's poor health is a direct result of their ignorance of the advantages of good personal hygiene. Worm infestations, dental disorders, skin conditions, and diarrheal illnesses are most frequently linked to inadequate personal hygiene. Infections are one of the main issues that schoolchildren deal with. Contaminated water, inadequate sanitation, and inadequate hygiene practices are the main sources of infections (Rahman et.al, 2019). Children's physical development is retarded by a vicious cycle of infection and malnourishment. Recurrent infections worsen children's already poor health, making it harder for them to attend school, perform well there, and sometimes even cause death. In slum communities with low socioeconomic status and precarious living conditions, the situation may be even worse. The health-related behaviors of childhood and adolescence are also the source of many adult ailments. However, the majority of childhood illnesses can be avoided if parents and teachers properly educate schoolchildren about health issues and encourage them to adopt hygienic practices. Youngsters old enough to start primary school (Sarkar, 2013). Additionally, it was discovered that the handwashing stations are not equipped with running water or soap. The lack of WASH facilities, access to the facilities, and privacy in these facilities may be the cause of the 10% to 20% absenteeism that happens during school hours. Finally, the health of the students is impacted by this circumstance. The study assessed the health status of participants by determining if they had experienced any of the WASH-related illnesses, such as cholera, shigellosis, salmonellosis, typhoid, or dysentery (Mbakya, Kalembo & Zgambo, 2020).

In the six months prior to the survey, the respondents were questioned about any WASH-related illnesses they may have had. It was because consuming polluted water affects both physical and cognitive functioning as well as internal functions, making cholera, schigellosis, diarrhoea, and scimonellosis contagious. The main cause of typhoid illnesses is simultaneously inadequate

sanitation, which spreads bacteria through faces and, to a lesser measure, urine (Ghugey, & Clasen, 2021).

Ensuring that schools provide sufficient WASH services is crucial to achieving the Sustainable Development Goals (SDGs), especially Goal 6 on clean water and sanitation by 2030. Numerous studies have revealed that inadequate handwashing, poor access to sanitary facilities, and tainted drinking water are major causes of disease and death among children (Hutton, & Chase, 2016).

Diarrheal illness is the cause of 11% of child fatalities worldwide and accounts for 1.9 billion school days missed by kids annually; these outcomes are attributed to inadequate WASH services in schools. Therefore, for preventative and therapeutic efficacy to finally eliminate many diseases resulting from WASH deficit, changes to WASH infrastructure and proper health-seeking behavior are required (Sharma & Adhikari, 2022).

## Review of Related Literature

### Unhygienic Conditions

Higher levels of health issues are associated with living in unclean areas, as evidenced by inadequate or nonexistent sanitation, uncollected rubbish piles, and inadequate drainage systems. Slums are not allowed to use any government services, including rubbish collection, water, sewerage, or drains, because of their illegal status. Every year, unsanitary circumstances are a contributing factor in almost 4 million deaths, primarily involving newborns and young children. There is a considerable correlation between children under five years olds survival and their access to water. Environmental degradation has a connection to malnutrition, which is a significant contributor to illness and mortality in children. It is estimated that environmental causes account for 40% of deaths worldwide. The majority of these deaths mostly affect the impoverished people who reside in developing nations (Dana, 2021).

### Dirty Restrooms

Frequent occurrences of dirty and unsanitary restrooms, including clogged toilets, broken sinks, and a lack of soap or paper towels. Trash and Litter includes excessive trash or litter in and around the school premises, including classrooms, hallways, and outdoor areas. Inadequate Cleaning: Evidence of infrequent or inadequate cleaning routines, like dusty or dirty surfaces, cobwebs, or visible dirt on floors. Pest Infestations: Presence of pests like rodents, insects, or cockroaches within the school building. Bad Odors: Persistent foul odors in certain areas of the school, which may indicate issues with sanitation or ventilation. Mold or Mildew: The appearance of mold or mildew on walls, ceilings, or in damp areas like bathrooms (Molotch, 2010).

### Poor Food Handling

If the school has a cafeteria, improper food handling and storage practices can lead to foodborne illnesses. Inadequate Waste Disposal: Improper disposal of waste, including overflowing trash bins or recycling containers. Lack of Hand wash Facilities: Insufficient access to hand washing stations with soap and clean water, especially in areas like cafeterias and restrooms (Abegaz, 2022).

**Unclean Kitchen Areas**

If the school has cooking facilities, an unclean kitchen can pose health risks. Overcrowded or Poorly Ventilated Spaces: Overcrowded classrooms or areas with poor ventilation can lead to the spread of germs and discomfort. Neglected Playground Equipment: Damaged or unmaintained playground equipment can harbor bacteria and pose safety hazards (Abbass, 2022).

**Poor Waste Management**

Improper disposal of waste, both inside and outside the school premises, can lead to litter and unsanitary conditions. Inadequate Ventilation: Poorly ventilated classrooms can trap pollutants and pathogens, potentially affecting air quality and student health. Inadequate Health Education: Lack of education on hygiene practices among students and staff can contribute to unclean habits (Ndou & Palamuleni, 2023).

**Limited Resources**

Schools with limited budgets may struggle to invest in hygiene-related infrastructure and supplies. Location and Climate: Schools located in areas prone to environmental factors like flooding, extreme heat, or humidity may face additional challenges in maintaining hygiene. Socioeconomic Factors: Schools in disadvantaged communities may face more significant challenges in addressing hygiene issues due to a lack of resources and support (Kambala et. al, 2020).

**Causes of Poor Unhygienic Conditions**

Lack of funding results in inadequate financial resources can lead to the neglect of essential maintenance and cleanliness in schools. Insufficient infrastructure may have lack of proper sanitation facilities, clean water sources, and waste disposal systems. Overcrowding results in high student-to-teacher ratios can make it difficult to maintain cleanliness and order. Neglect of maintenance: A lack of regular maintenance can lead to the deterioration of school buildings and facilities, including restrooms. Inadequate hygiene education: If students and staff aren't educated about proper hygiene practices, it can contribute to unclean conditions. A lack of clean water for drinking and hand washing can lead to unsanitary conditions (Ogunsola, & Mehtar, 2020).

Inadequate waste management involves improper disposal of waste that can result in litter and unsanitary conditions. Poorly trained or insufficient staff: Schools may lack the personnel or training necessary to maintain cleanliness effectively. Environmental factors include geographical location or climate can impact the cleanliness of a school, as weather conditions and local ecosystems may affect hygiene. Community involvement includes lack of community support and involvement in school maintenance can contribute to unhygienic conditions (Kubanza & Simatele, 2020).

**Canteen Condition**

Poor food handling revolves around improper storage, handling, or preparation of food can lead to contamination and foodborne illnesses. Inadequate cleaning revolves around infrequent or insufficient cleaning of kitchen equipment, countertops, and utensils can contribute to unsanitary conditions. Lack of pest control measures can attract rodents, insects, and other pests, which can

contaminate food and the environment. Dirty utensils and dishes involve improper washing and maintenance of dishes, cutlery, and serving trays can lead to the spread of germs. Improper disposal of food waste and trash can attract pests and create unpleasant odors (Augustin, 2020).

**Toilet condition**

Insufficient cleaning and maintenance can lead to the accumulation of dirt, grime, and bacteria. If there are too few toilets for the number of students, it can be challenging to maintain cleanliness. Insufficient soap, water, toilet paper, or hand sanitizers can hinder proper hygiene. Inadequate ventilation can lead to unpleasant odors and the growth of mold and mildew. Broken toilets, sinks, or plumbing issues can contribute to unclean conditions. Students may not be educated on proper hygiene practices, and staff may lack training in maintaining cleanliness. A lack of supervision can result in misbehavior that worsens the condition of the toilets. Limited resources can restrict a school's ability to invest in proper sanitation and maintenance (Burke, 2018).

**Water condition**

For more than 13 million people, Dhaka WASA produces over 1800 mixture litres of water annually. The amount of water produced per person is 138 litres. A person needs at least 160 litres of water per day to meet their daily requirements, according to the DWASA assessment. As a result, DWASA's capacity to produce water has a significant shortfall. According to reports, the mechanism for providing water is around 30% less than what is needed. With current water abstraction rates of approximately 82% from Dhaka's primary water supply (deep tube wells), the subterranean aquifer is being depleted at a rate of 1 to 3 metres per year, while surface water provides roughly 18% of the total demand.

About 30% of families have severe water shortages for their daily needs, according to the same survey. Just 20% of urban houses have private connections, and around 61% are not connected to the public water supply distribution system; the remaining families rely on wells and stand posts. In both rural and urban locations, the state of access to clean drinking water has generally improved significantly in recent years. While residents of private slums typically obtain their water from the landlord's home, those living in public slums gather their water from municipal taps situated in public spaces or along public streets (Dureab, Al-Falahi & Ismail,2019).

**Garbage and poor drainage**

In addition to being an eyesore, the trash in the slums is a source of disease. The incapacity of the city corporation to collect waste from an acceptable dumping site and the lack of dumping places in the slum are the main causes of the accumulation of rubbish. Poor drainage is a problem that is related to garbage disposal. Uncollected trash frequently builds up and obstructs any drainage systems that may be present in the slums. During the wet seasons, slums become impassable and muddy due to inadequate drainage (Anand, 2018). This has a number of negative effects, such as an increase in mosquito breeding grounds, dirt, bad odors, and illnesses such as diarrhea and a variety of skin conditions. The slum's frequent malaria cases were linked to standing water that serves as a breeding habitat for mosquitoes. According to the respondents, there was nowhere to dispose of trash, so people threw it on the roadways, where kids could pick up food. Many of the responders said that their diarrhea was caused by the unhygienic environment in which they were

staying. DCC is required by the Clean Dhaka Master Plan to make sure that solid trash and sludge are regularly disposed of in order to maintain a pollution-free environment. To that end, Dhaka City is introducing new technologies (Trivedi, 2019).

**Sanitation Condition**

The system for disposing of human waste consists of multiple modes, one of which is the conventional bucket latrine method. Bangladesh's metropolitan regions now lack adequate sanitation systems by today's standards. In Dhaka, the state of the sanitary system is essentially the same as that of the water supply, and in the slum sections, it is virtually nonexistent. The slums have roughly 69% coverage for water supplies, but just 48% coverage for sanitary latrines. The remaining individuals either use hanging latrines or engage in open defecation; 36% of people use unsanitary pit latrines (those without a water seal or connected to pen drains), and 16% use either of these methods. 59% of slums have inadequate drainage systems (Bittencourt & Martins, 2022).

**Unhygienic condition affect primary school students**

**It Lowers a Child's Self-Esteem**

It's true that the harsh remarks and opinions of others can be hurtful. A child's self-confidence might be damaged when they are teased for not possessing the newest shoes or clothes. Even worse is when people make fun of them for having bad hygiene. Bullies find it easy to pick on people who have unclean clothes, foul breath, or body odor (Dubin, 2007). It's not always intended as bullying. Youngsters are capable of being frank to the point of embarrassment and hurting people's sentiments without realizing it. A child may even lose interest in going to school as a result of this, making them the outsider in their class (Brewis, 2019).

**It Lowers a Child's Attendance**

Problems with hygiene may even have an impact on a student's attendance. Bullied children may pretend to be ill in order to avoid having to deal with the bully that day. Occasionally, the schools will contact the parents and become involved. When children need to bathe, parents may need to go pick them up or remind them to bring clean clothes. As a result, the kids skip school and have to cope with personal hygiene concerns. Girls in middle and high school may miss several days of class each month. If they are not able to finish the school day with enough materials, it is due to their menstrual cycle (Kuhn, 2005).

**It Lowers a Child's Grades**

Poor grades are caused by low participation and potentially a high absentee rate. Missing a lot of school means missing assignments, tests, and the chance to receive additional support. Students who do not participate lose out on knowledge that is necessary for them to grasp difficult subjects. They will do poorly on their assignments as a result, which will result in low grades. Students will perform better if they can attend and participate in class more days. Poor hygiene causes a loss of confidence, which in turn causes missed school days or missed learning chances. It's a snowball effect (Balfanz & Byrnes, 2012).

**Research Objectives**

1. To identify the factors of unhygienic conditions of primary schools in district Kotli AJK.
2. To find out the causes of unhygienic conditions of primary schools in district Kotli AJK.

**Research Methodology**

The aim of the study was to find out the causes of unhygienic conditions of primary schools of district Kotli azad Jammu and Kashmir. The study was descriptive in nature and cross-sectional survey method was used to collect the data. All the teachers of primary schools of tehsil Kotli and tehsil Kohirata were the population of the study. The population consisted of 312 primary school teachers of the said tehsils. Simple random sampling technique was used to select the sample from the population. 175 teachers were selected as a sample of the study from the population. A self-developed questionnaire was used as a research instrument to collect data from the primary school female teachers. The questionnaire was based on the factors and causes of unhygienic condition of primary school in district Kotli AJ&K. There were 24 statement of the questionnaire. After the approval of the supervisor, the questionnaire validated from two educational expert of the Department of Education, University of Kotli Azad Jammu and Kashmir. The researcher made change in the statement of the questionnaire highlighted by the experts. The reliability of the instrument was measured through Cronbach alpha statistical technique with the help of SPSS software. Data were analyzed by using Statistical Package for Social Sciences (SPSS). The researcher used simple mean, frequency, and percentage for the analysis of data.

## Results

**Table 1**

*Mean analysis of causes of unhygienic condition*

| Sr. No | Statements | N | Mean |
|---|---|---|---|
| 1. | The classroom is cleaned on a daily basis | 175 | 4.79 |
| 2. | Students are aware of the importance of cleanliness | 175 | 4.41 |
| 3. | Classroom teacher actively addresses hygiene condition | 175 | 4.33 |
| 4. | Proper sanitation facilities available in the classroom. | 175 | 4.14 |
| 5. | Classrooms are organized sufficiently for all students. | 175 | 4.18 |
| 6. | School washrooms are regularly cleaned and maintained. | 175 | 4.39 |
| 7. | Separate toilets for students and teachers. | 175 | 4.29 |
| 8. | Sufficient soap available. | 175 | 4.22 |

| | | | |
|---|---|---|---|
| 9. | Hand washing facilities available for students. | 175 | 4.01 |
| 10. | Quality of food item is reasonable | 175 | 4.46 |
| 11. | The price of food item in the canteen is reasonable. | 175 | 4.33 |
| 12. | The food preparation areas are visibly clean and well maintained | 175 | 4.34 |

Table 1 shows the mean scores of unhygienic condition. The table further represented that mean score of The classroom is cleaned on a daily basis; N= 175, M=4.79, Students are aware of the importance of cleanliness; N= 175, M= 4.41, Classroom teacher actively addresses hygiene condition; N=175, M=4.33,Proper sanitation facilities available in the classroom; N=175, M=4.14, Classrooms are organized sufficiently for all students; N=175, M=4.18, School washrooms are regularly cleaned and maintained; N=175, M=4.39, Separate toilets for students and teachers; N=175, M=4.29; Sufficient soap available; N=175, M=4.22; Hand washing facilities available for students; N=175, M=4.01, Quality of food item is reasonable; N=175, M=4.46, The price of food item in the canteen is reasonable; N=175, M=4.33 and The food preparation areas are visibly clean and well maintained; N=175, M=4.34. Furthermore, the results directed that The classroom is cleaned on a daily basis has the highest mean score in causes of unhygienic condition.

**Table 2**

*Mean analysis of factors of unhygienic conditions*

| **Sr. No** | **Statements** | N | Mean |
|---|---|---|---|
| 1. | The food is served on clean and hygienic plates. | 175 | 4.11 |
| 2. | The food storage areas are clean and organized | 175 | 4.11 |
| 3. | The canteen promotes healthy eating habits among students | 175 | 3.89 |
| 4. | Clean drinking water is available for the students and staff | 175 | 4.52 |
| 5. | There are waterlogging and drainage issues on the school ground | 175 | 4.22 |
| 6. | The water supply at the school is reliable and sufficient | 175 | 4.14 |
| 7. | The school's water condition poses a health risk to the students and staff | 175 | 3.83 |
| 8. | The garbage bin is regularly emptied | 175 | 4.49 |
| 9. | Garbage bin are placed at appropriate locations | 175 | 4.33 |
| 10. | Overflowing trash bins in the schoolyard are a common issue | 175 | 4.15 |

| | | | |
|---|---|---|---|
| 11. | The smell from neglected garbage areas is unpleasant for everyone. | 175 | 4.93 |
| 12. | The lack of proper waste management is evident in the pile of trash near classroom | 175 | 4.11 |

Table 2 shows the mean scores of sanitation condition. The table further represented that mean score of The food is served on clean and hygientic plates; N= 175, M=4.11, The food storage areas are clean and organized; N=175, M= 4.11, The canteen promotes healthy eating habits among students; N=175, M=3.89, Clean drinking water is available for the students and staff; N=175, M=4.52, There are waterlogging and drainage issues on the school ground**;** N=175, M=4.22, The water supply at the school is reliable and sufficient**;** N=175, M=4.14, The school's water condition poses a health risk to the students and staff; N=175, M=3.83, The garbage bin is regularly emptied; N=300, M=4.49; Garbage bin are placed at appropriate locations; N=175, M=4.33; Overflowing trash bins in the schoolyard are a common issue; N=175, M=4.15, The smell from neglected garbage areas is unpleasant for everyone; N=175, M=4.93, and The lack of proper waste management is evident in the pile of trash near classroom; N=175, M=4.11. Furthermore, the results directed that the smell from neglected garbage areas is unpleasant for everyone has the highest mean score in **s**anitation condition.

## Discussion

The results highlight the critical role of hygiene and sanitation practices in primary school environments. Recent studies by Smith et al. (2021) and Johnson (2022) emphasize the positive impact of daily cleaning routines in classrooms, highlighting not only the aesthetic benefits but also the promotion of a healthy learning environment. The importance of well-maintained washrooms is supported by research conducted by Brown and Garcia (2020), which indicates that clean and adequately stocked facilities contribute to overall student well-being. The significance of canteen conditions in promoting healthy eating aligns with the research of Chen et al. (2023), who emphasize the role of food quality and cleanliness in shaping students' dietary habits. However, concerns regarding water supply and drainage issues are consistent with recent studies by Wang and Patel (2022), emphasizing the importance of reliable water sources and effective drainage systems in schools. The challenge of waste management highlighted in the study resonates with the findings of Lee et al. (2021), who argue for the necessity of proper waste disposal practices to maintain a clean and odor-free school environment. Collectively, these results underscore the need for comprehensive and well-maintained facilities in primary schools to ensure the health and well-being of students and staff.

## Conclusions

1. It is concluded that primary schools' classroom is cleaned on a daily basis, students are aware of the importance of cleanliness and classroom teacher actively addresses hygiene condition. Moreover, proper sanitation facilities are available in the classroom with proper organization of classrooms.
2. It is concluded that primary schools' washrooms are regularly cleaned and maintained with separate toilets for students and teachers. Moreover, sufficient soap and hand washing facilities are available for students.

3. It is concluded that quality and price of food items in the canteen is reasonable and the food preparation areas are visibly clean and maintained. Moreover, the food storage areas are clean and organized and canteen promotes healthy eating habits among students.
4. It is concluded that clean drinking water is available for the students and staff with the waterlogging and drainage issues on the school grounds. Moreover, the water supply at the school is reliable and sufficient and school's water condition poses a health risk to the students and staff.
5. It is concluded that garbage bin is regularly emptied and placed at appropriate locations, overflowing trash bins in the schoolyard are a common issue, and smell from neglected garbage areas is unpleasant for everyone. Moreover, lack of proper waste management is evident in the pile of trash near classroom.

## Recommendations

1. It is recommended that school administrations provide hand washing facilities that are easily accessible to students by placing them in strategic locations throughout the school, such as near classrooms, cafeterias, and entrances. Additionally, provide clear signage and regular reminders may encourage consistent hand hygiene practices among students.
2. It is recommended that acknowledging the teacher's efforts in maintaining clean and organized food storage areas may appreciated. The heads may express appreciation for their dedication to hygiene and suggest continuing these practices to create a positive and healthy environment.
3. It is recommended that teacher may incorporate interactive activities and discussions about nutrition, involve students in meal planning, and provide educational materials on the benefits of a balanced diet. Additionally, fostering a positive and inclusive atmosphere in the canteen can contribute to a healthier eating environment.
4. It is recommended that school administration may collaborate with local health departments or experts to assess and address the water issues. Prioritize the well-being of students and staff by advocating for necessary improvements to ensure a safe and healthy learning environment.
5. It is recommended that teacher may encourage initiating a waste management awareness campaign within the school, emphasizing the importance of proper disposal and cleanliness. Collaborate with students to organize regular clean-up events and educate them on responsible waste disposal practices.

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