Evaluation of primary school teachers' knowledge regarding infection prevention in shendi town

Shireen Ebedelfatah Mohammed Aloob[1*], Faiza Ahmed Saeed Mousa[2*], Fatima Osman Ali[3*], Murtada Mustafa Tia [4*] Eman Omer Albasha Jad alkareem [5*], Eilaf Badway Adam Edrees [6*], Rofida Hassan Awadalkarim Emam[7*], Rayyan Mohammed Nouraldeen Edrees [8*], Naeema Awadalla Abdalla Alhassan [9*]

[1*]Assistant professor of Pediatrics Nursing, Shendi University, Sudan.
[2*]Assistant professor of Medical Surgical Nursing, Shendi University, Sudan.
[3*]Assistant professor of Pediatrics Nursing, Shendi University, Sudan.
[4*]Assistant Professor of Pediatrics Nursing, College of Applied Medical Sciences, University of Bisha, Bisha, Kingdom of Saudi Arabia
[5, 6,7,8,9] Faculty student of nursing sciences, Shendi University, Sudan.
Corresponding author Shireen Ebedelfatah Mohammed Aloob
Assistant professor Pediatric Nursing

DOI: https://doi.org/10.56293/IJASR.2025.6415

IJASR 2025
VOLUME 8
ISSUE 2 MARCH - APRIL **ISSN: 2581-7876**

Abstract: Background: Teachers as supervisors play a vital role in managing childhood infection at schools. They are the primary people who can inform the children about infection prevention. Objective: To Evaluate primary school teachers' knowledge regarding infection prevention in shendi town schools.
Method: Descriptive cross-sectional community-based study. This study took place between December 2024 and February 2025 at five government primary schools in Shendi town. A total of fifty teachers selected for enrollment using a multi-stage stratified random sampling method. Researchers collected data using structured questionnaires and analyzed it with SPSS version 22.
Results: The study revealed that most of study group had good knowledge regarding benefits of infection prevention, component of Infection prevention, correct method of hand washing, role of teachers in promoting personal hygiene among students and positive attitude regarding encouragement of students to wash their hands regularly (40%,) (48%) (66%) (74%) (88%) respectively.
Conclusion: The study concluded that study group had good knowledge about: Important and correct method of hand washing, important of vaccination, and component of infection prevention
Recommendation: The study suggests that the Ministry of Health and the Ministry of Education should collaborate to organize health awareness campaigns for teachers and conduct workshops on infection prevention.

Keywords: Infection, Knowledge, Prevention, Primary school teachers.

Introduction

A major public health problem is the prevention of infections in school-age children. Schools offer secure, nurturing spaces that promote the health and wellbeing of their students (1). However, because of frequent student interaction, shared items, and inadequate cleaning practices, they can also be environments where illnesses spread quickly (2). To protect students, employees, and the community at large, it is crucial to stop the spread of illnesses in schools (3). The Centers for Disease Control and Prevention (CDC) states that common diseases can be considerably decreased in school environments by taking simple steps like hand washing, disinfecting and cleaning surfaces, enhancing airflow, and promoting vaccines. By putting these measures into practice, absence from illness is reduced and school attendance is maintained (4). Children in primary school are a priority group when it comes to infectious illness prevention in schools (5) Since school instructors are crucial in keeping all students healthy while they are in class, it is critical that they understand how to prevent infectious diseases in the classroom (6).

Preventing infections in school-age children is a major public health challenge. Schools provide safe and nurturing environments that promote the health and well-being of students (1). However, they can also be places where

illnesses spread quickly due to frequent student interaction, shared items, and inadequate cleaning practices [2]. To protect students, staff, and the wider community, it is crucial to prevent the spread of infections in schools [3]. According to the Centers for Disease Control and Prevention (CDC), common diseases can be significantly reduced in school settings by implementing simple measures like hand washing, disinfecting surfaces, improving airflow, and promoting vaccinations [4]. These actions help reduce illness-related absenteeism and ensure students stay in school [4]). Primary school children are a key group for infection prevention efforts [5]. School teachers play a vital role in supporting the health of all students in the classroom, making it essential for them to understand infection control practices [6].

Reducing the spread of disease in schools requires the implementation of prevention measures, such as immunization campaigns and good hygiene [7]. As influential members of the school community, teachers play a critical role in putting these preventative tactics into practice and spreading awareness of them. By lowering absenteeism and improving general school health, their knowledge and comprehension of infection control procedures can contribute to the creation of a safer learning environment [4]. As a result, determining knowledge gaps and creating focused interventions to enhance infection control procedures in schools depend on evaluating teachers' awareness [6].

Reducing the spread of diseases in schools involves implementing preventive measures, such as immunization campaigns and promoting good hygiene [7]. Teachers play a vital role in executing these preventive strategies and raising awareness within the school community. Their understanding and application of infection control practices can help create a safer learning environment by reducing absenteeism and improving overall school health [4]. Therefore, assessing teachers' awareness is essential in identifying knowledge gaps and developing targeted interventions to enhance infection control practices in schools [6].

Since school health has a direct impact on children's development and well-being, it is an essential part of public health. Schools provide a setting where kids can learn lifelong health habits in addition to academic courses. Maintaining a healthy student body, making sure kids stay in school, and lessening the strain on healthcare systems all depend on stopping the spread of infectious diseases in schools [8]. Limiting the spread of illnesses among children requires the implementation of efficient infection prevention measures in schools, such as frequent hand washing, immunization, and adequate sanitation. These tactics protect instructors, staff, and the community at large in addition to pupils. Strong health initiatives and infection prevention strategies have been linked to reduced absenteeism and enhanced academic achievement in schools, according to research [8]. Health education plays a critical part in creating an atmosphere where cleanliness and illness prevention are valued, for both employees and students. Increased compliance and a healthier school climate result from instructors and students understanding the significance of these controls. [9]. For this reason, funding school health initiatives and preventative measures is crucial to children' overall growth and achievement. Globally, infectious illness prevention has been difficult in developing nations, particularly in educational institutions. An illness caused by a specific infectious agent or its toxic byproducts is called a communicable disease. Infectious infections can have a serious influence on children's health and can negatively affect schooling by raising absenteeism. [10] The establishment of school health programs could not be completed without the cooperation and participation of parents and staff. Teachers, parents, and other community leaders are frequently viewed as role models by students. Students serve as a link between the home and the school, and parents can and should collaborate with teachers to provide the greatest education possible for their children.[11] Downloadable materials and guidance on germ protection in schools must be compiled because infectious diseases spread quickly among students in the classroom.[12] School administrators must find a way to protect the rest of the student population from potentially dangerous infectious diseases while also protecting the sick kid's right to privacy and public education. Every year, an estimated two million people have the illness, which results in 5000–10,000 deaths globally [.13]

Preventing the spread of infectious diseases in schools is crucial for children's health and overall development. Schools are not only places for academic learning but also environments where children can learn essential health habits. Effective infection prevention measures, such as regular hand washing, vaccinations, and proper sanitation, are essential to keep a healthy student body, reduce absenteeism, and lessen the burden on healthcare systems (8). Research shows that strong health initiatives and infection prevention strategies in schools lead to reduced absenteeism and improved academic performance (8). Health education plays a vital role in fostering an

environment that prioritizes cleanliness and disease prevention, helping both staff and students. When teachers and students understand the importance of these practices, compliance increases, creating a healthier school climate (9). Investing in school health initiatives and preventive measures is crucial for the overall growth and success of children. Preventing infectious diseases in educational institutions is particularly challenging in developing countries. An infectious disease results from a specific pathogen or its toxic products, and these diseases can severely impact children's health and education by increasing absenteeism (10).

The cooperation and participation of parents and staff are essential for successfully implementing school health programs. Teachers, parents, and community leaders often serve as role models for students. By working together, they can ensure the best possible education and health outcomes for children (11).

School administrators must compile downloadable materials and guidance on germ protection in schools, as infectious diseases spread rapidly among students (12). They must find ways to protect the remaining student population from potentially dangerous diseases while respecting the privacy and educational rights of the sick child. Annually, it is estimated that around two million people contract infectious diseases, resulting in 5,000 to 10,000 deaths globally (13).

2-1-1 Infection prevention strategies in schools

School infection prevention techniques are a collection of actions intended to keep instructors and children safe and healthy while preventing the spread of infectious diseases. In order to prevent the spread of germs among students, these tactics emphasize the need of personal cleanliness, particularly frequent hand washing with soap and water or alcohol-based sanitizer. [14]. In order to lower the likelihood of outbreaks in crowded places like schools, they also involve giving necessary immunizations to prevent illnesses like meningitis and measles [15]. Furthermore, it is advised to wear masks and other personal protective equipment (PPE) when needed, particularly during epidemics of respiratory diseases [16]. Maintaining a pathogen-free school environment requires routinely cleaning and sanitizing communal surfaces like desks and door handles. [17]. Furthermore, health education is essential in helping parents and kids understand the value of preventative care and personal hygiene. Another way to stop the spread of infections in schools is to identify and report illnesses as soon as possible [18]. These tactics, when properly applied, guarantee a secure learning environment that supports students' health and improves their educational experience [19].

Infection prevention techniques in schools consist of various measures designed to keep both teachers and students safe and healthy. These strategies prioritize personal hygiene, such as frequent hand washing with soap and water or using alcohol-based sanitizers to prevent germ transmission among students (14). Additionally, ensuring students receive necessary vaccinations for diseases like measles and meningitis helps minimize outbreak risks in crowded school environments (15). During respiratory disease epidemics, wearing masks and other personal protective equipment (PPE) is highly recommended (16). Regular cleaning and disinfection of common surfaces, like desks and door handles, are crucial to keeping a pathogen-free school setting (17). Health education plays a vital role in teaching students and parents about the importance of preventive measures and personal hygiene. Prompt identification and reporting of illnesses further aid in curbing the spread of infections in schools (18). When these techniques are effectively implemented, they ensure a safe learning environment that supports students' health and enhances their educational experience (19).

Benefits of Infection Prevention Strategies in Schools:

lowering absenteeism [20], raising awareness and health literacy [23], improving academic achievement [21] and preventing illness outbreaks [24], as well as saving families and school expenses [25]. Common forms of infections in schools include common viral diseases [29], parasitic diseases [30], food-and waterborne diseases [28], respiratory diseases [26], and skin infections [27].

Factors Contributing to the Spread of Infections in Schools:

High Human Density [31], Poor Personal Hygiene [32], Poor Ventilation in School Buildings [33], Sharing Personal Items [34], Lack of Health Awareness [35].

Components of infection prevention strategies:

The effects of hand cleanliness on education and health [36], Obtaining and Preserving Sufficient Indoor Air Quality, Cleaning and Disinfecting the Environment, Suggestions for testing, masking, cohosting, vaccination, active screening, environmental cleansing, and physical separation [37].

Methodology:

Study Design: This descriptive cross-sectional community-based study done to evaluate the knowledge of primary school teachers regarding infection prevention in Shendi Town. The study took place between December 2024 and February 2025. **Study Area:** Shendi Town, located about 172 kilometers north of Khartoum. Shendi Town encompasses a diverse range of communities and educational institutions. Situated on the Nile River, Shendi plays a vital role in the region's commerce and agriculture. The town has multiple health centers and educational institutions, including primary and secondary schools, making it an ideal location for this study. Educational institutions in Shendi play a significant role in promoting education and health awareness. **Setting:** Shahid Kamal El-Din School for Girls is located in Shendi, Square 7 East. The school consists of 6 classrooms and 3 offices, with 15 teachers and about 700 students. There are 10 bathrooms, and the water sources include pipes, water jugs, and coolers. Al-Zahraa School for Girls is located in Shendi, Square 16. The school consists of 9 classrooms and 3 offices, with 11 teachers and about 1000 students. There are 10-bathroom s, and the water sources include pipes, water jugs, and thermal coolers. Al-Sharqiyah School for Boys is located in Shendi, Square 14. The school consists of 10 classrooms and 4 offices, with 45 teachers and about 1000 students. There are 6 bathrooms, and the water sources include water jugs and coolers. The school has one mosque. As-Salam wall Wahda School for Girls is located in Shendi, Square 37, near the As-Safiyyah Mosque, east of the oil pipeline. The school consists of 7 classrooms and 3 offices, with 9 teachers and about 475 students. There are 10 bathrooms, and the water sources include water jugs and coolers. Ahmad Malah School for Boys is located in Shendi, Central Quraysh, west of the Grand Mosque. The school consists of 9 classrooms and 3 offices, with 10 teachers and about 520 students. There are 8 bathrooms, and the water sources include pipes. **Study Population: All** teachers working in 5 primary schools in Shendi Town. Inclusion Criteria: All teachers working in 5 primary schools in Shendi Town during the study period. Exclusion Criteria: Teachers on holidays. Teachers who refuse to participate. **Sample Size and Sampling Selection:** Multi-stage stratified simple random sampling representing different residential areas. Stage 1: Selection of 5 primary schools from the available schools in Shendi Town by lottery. The total number of teachers: (50) Stage 2: Selection of teachers from the schools by total coverage sampling.

Data Collection Tools: Data will be collected using a closed-ended questionnaire designed by the researcher based on a review of the literature. The questionnaire consists of three sections: Section 1: Contains demographic information including age, gender, number of years of teaching experience, and highest level of education. Section 2: Contains questions about teachers' knowledge regarding infection prevention. Section 3: Contains questions about teachers' attitudes towards infection prevention. Scoring **System: To** evaluate the knowledge of teachers, the following scoring system will be used: A score of three to four points (75-100%) is rated as good. A score of two points (50%) indicates fair knowledge. A score of one point or zero (0-25%) indicates poor knowledge. **Data Collection Technique:** data collected over one week. The questionnaire was distributed to the study group after explaining the items, and the researcher allowed them to choose the items according to their knowledge. **Data Analysis Technique: After** data collection, it was coded and transferred into specially designed forms to be suitable for computer processing using the Statistical Package for Social Sciences (SPSS version 22). **Ethical Considerations:** The ethical committee of research in the Faculty of Nursing Science approved the study. Approval was obtained from the school principal. The study's purpose was explained to teachers in Arabic. Names and addresses of participants were not documented. Data collection commenced following the procurement of verbal consent from participants, who were duly informed of their right to withdraw at any point.

Result

Table No (1): Study group distribution by definition, common type, and infection spread factors in schools

Item	*Frequency*	*Percentage*
Definition of infection		

Good knowledge	25	50%
Fair knowledge	18	36%
Poor knowledge	7	14%
Total	50	100%
Common type of infection		
Good knowledge	15	30%
Fair knowledge	20	40%
Poor knowledge	15	30%
Total	50	100%
Factor contributing to the spread of infection		
Good knowledge	23	46%
Fair knowledge	18	36%
Poor knowledge	9	18%
Total	50	100%

The table above shows that 14% of the study group had poor knowledge about the definition of infection, 30% had good knowledge about common types of infection in schools, and 36% had fair knowledge about factors contributing to the spread of infection in schools.

Table No (2): Distribution of the study group knowledge according to the definition and components of infection prevention

Item	*Frequency*	*Percentage*
Definition of infection prevention		
Good knowledge	14	28%
Fair knowledge	15	30%
Poor knowledge	21	42%
Total	50	100%
Component of infection prevention strategies		
Good knowledge	24	48%
Fair knowledge	12	24%
Poor knowledge	14	28%
Total	50	100%

The table above shows that 42% of the study group had poor knowledge about infection prevention, while 48% had good knowledge about components of infection prevention strategies.

Table 3: Study group distribution knowledge on hand washing importance and correct methods

Item	*Frequency*	*Percentage*
Importance of hand washing		
Good knowledge	25	50%
Fair knowledge	17	34%
Poor knowledge	8	16%
Total	50	100%
The correct method of hand washing		
Good knowledge	33	66%
Fair knowledge	7	14%
Poor knowledge	10	20%
Total	5 0	100%

The table above shows that 50% of the study group possessed good knowledge about the importance of hand washing, while 20% had limited knowledge regarding the correct method of hand washing.

The table No (4): Distribution of the study group knowledge according to the Role of teachers in promoting personal hygiene among students

Item	*Frequency*	*Percentage*
Good knowledge	37	74%
Fair knowledge	6	12%
Poor knowledge	7	14%
Total	50	100%

The table shows that 74% of the study group have good knowledge about teachers' roles in promoting personal hygiene among students.

The table No (5): Distribution of the study group according to the importance of vaccinations in disease prevention

Item	*Frequency*	*Percentage*
Good knowledge	21	42%
Fair knowledge	14	28%
Poor knowledge	15	30%
Total	50	100%

The table above shows that 42% of the study group possessed good knowledge about the importance of vaccinations in disease prevention.

The table No (6): Distribution of the study group according to the Benefits of infection prevention strategies in school

Item	*Frequency*	*Percentage*
Good knowledge	20	40%
Fair knowledge	10	20%
Poor knowledge	20	40%
Total	50	100%

The table above shows that 40% of the study group had poor knowledge about the benefits of infection prevention strategies in school.

The table No (7): Distribution of the study group according to the Attention to infection prevention in the school

Item	*Frequency*	*percentage*
I ensure that infection prevention is always a priority and regularly monitor its implementation in the school	24	48%
I consistently monitor and ensure the correct implementation of infection prevention measures in the school	6	12%
I make regular plans to strengthen infection prevention and involve my colleagues in their implementation	9	18%
I maintain a safe school environment by continuously following all infection prevention measures	11	22%
Total	50	100%

The table above showed that 22% of the study group demonstrated a positive attitude towards infection prevention in the school.

The table No (8): Distribution of the study group according to the Satisfaction with the resources available at school for infection prevention

Item	*Frequency*	*percentage*
The resources available are sufficient and used effectively	15	30%
The resources available need some improvement	21	42%
The resources available are insufficient and need additional support	13	26%
There are no available resources to support infection prevention efforts	1	2%
Total	50	100%

The table above shows that 42% of the study group had a positive attitude about the resources available at school for infection prevention.

The table No (9): Distribution of the study group according to the Response if a student shows symptoms of an infectious disease

Item	*Frequency*	*percentage*
I follow the school's health protocols, ensuring the student is isolated and	22	44%
I inform the administration and closely monitor the student's condition	18	36%
I do not take any specific action if a student shows symptoms of an infectious disease	7	14%
Referral of the student to a hospital/medical clinic."	3	6%
Total	50	100%

The table above shows that (44%) of the study group had a positive to the Response if a student shows symptoms of an infectious disease

The table No (10): Distribution of the study group according to the Practice of sanitizing your hands during the school day

Item	*Frequency*	*percentage*
I make sure to sanitize my hands frequently throughout the school day	25	50%
I sanitize my hands several times during the school day	11	22%
I rarely sanitize my hands during the school day	4	8%
l ensures to sanitize my hands regularly, especially after interacting with students or handling shared materials	10	20%
Total	50	100%

The table above shows that (20%) of the study group had a positive attitude about the Practice of sanitizing your hands during the school day

The table No (11): Distribution of the study group according to the Encouragement of students to wash their hands regularly.

Item	*Frequency*	*Percentage*
Always	44	88%
Sometime	5	10%
Never	1	2%
Total	50	100%

The table above shows that (88%) of the study group had a positive attitude about the Encouragement of students to wash their hands regularly.

The table (12): Relation between definition of Infection and Educational level

Educational level		Definition of Infection			Total	p.value
		Good Knowledge	Fair Knowledge	Poor Knowledge		
Diploma	N	1	2	4	7	.002
	%	2.0%	4.0%	8.0%	14.0%	
Bachelor's degree	N	23	12	2	37	
	%	46.0%	24.0%	4.0%	74.0%	
Post graduate	N	1	4	1	6	
	%	2.0%	8.0%	2.0%	12.0%	
Total	N	25	18	7	50	
	%	50.0%	36.0%	14.0%	100.0%	

The table above showed that there was statistically significant relation between educational level of teachers and definition of infections (p-value .002)

The table (13): Relation between Educational level and Common types of infection in schools

Educational level		Common types of infection in schools			Total	Pp.
		Good Knowledge	Fair Knowledge	Poor Knowledge		
Diploma	N	0	3	4	7	.123
	%	0.0%	6.0%	8.0%	14.0%	
Bachelor's degree	N	13	15	9	37	
	%	26.0%	30.0%	18.0%	74.0%	
Postgraduate	N	2	2	2	6	
	%	4.0%	4.0%	4.0%	12.0%	
Total	N	15	20	15	50	
	%	30.0%	40.0%	30.0%	100.0%	

Table above showed that there was No statistically significant relation between educational level of teachers and common type of infections (p-value .123)

Table (14): Relation between Years of experience and definition of Infection

Years of experience		Infection is			Total	Pp.
		Good Knowledge	Fair Knowledge	Poor Knowledge		
Less than 5 years	N	3	0	0	3	.071
	%	6.0%	0.0%	0.0%	6.0%	
5 - 10 years	N	2	7	3	12	
	%	4.0%	14.0%	6.0%	24.0%	
11 - 20 years	N	9	5	0	14	
	%	18.0%	10.0%	0.0%	28.0%	
Above 20 years	N	11	6	4	21	
	%	22.0%	12.0%	8.0%	42.0%	
Total	N	25	18	7	50	

	%	50.0%	36.0%	14.0%	100.0%	

The table above showed that there was no statistically significant relation between years of experience and definition of infection (p-value .071)

Table (15): Relation between Years of experience and Infection prevention is

Years of experience		**Definition of Infection prevention**			Total	**P. v**
		Good Knowledge	Fair Knowledge	Poor Knowledge		
Less than 5 years	N	2	1	0	3	.021
	%	4.0%	2.0%	0.0%	6.0%	
5 - 10 years	N	3	5	4	12	
	%	6.0%	10.0%	8.0%	24.0%	
11 - 20 years	N	5	1	8	14	
	%	10.0%	2.0%	16.0%	28.0%	
Above 20 years	N	4	8	9	21	
	%	8.0%	16.0%	18.0%	42.0%	
Total	N	14	15	21	50	
	%	28.0%	30.0%	42.0%	100.0%	

The table above showed that there was statistically significant relation between years of experience and definition of infection prevention (p-value .021)

Discussion

Infection prevention in primary schools plays a crucial role in promoting the health and well-being of students. Since children spend a significant amount of time at school interacting closely with their peers. Teachers, as primary caregivers in the school setting, play a vital role in overseeing students' health, educating them on proper hygiene practices, and identifying any signs of illness at an early stage.

Regarding socio demographic data the study revealed that more than one third (34%) of study group their age group between (40-49) years old, while most (74%) of study group their educational level was bachelor degree also (42%) had experience more than20years and more than two Third (76%) We're female.

Regarding knowledge The study group the study explained that about half (50%)of the study group had good knowledge about definition infections this agree with previous study done in Mosul City, Iraq by Alaa ,Nasier , Mahmood 2024 which states that (near to half(47.7%) teacher understanding of communicable disease prevention and control [38] and there was statistical significant relation between educational level of the teachers and definition of infections (p .v= -.002)

The study showed that about more than third (30%) of the study group had good knowledge about common types of infections our study found better result than other study done in Saudi Arabia by Sulami 2025 wich state that (25%) of teacher had good knowledge about common type of infection in schools ([39] there was no statistical relation between educational level of teachers and common type of infections (p.v=.123).

The study clarified that about less than half of study group (42%) had poor knowledge about infection prevention . This result agrees with a previous study done in Egypt by Hassan et al. in 2020, which states (teachers had insufficient knowledge about infection prevention). [40] and there was statistically significant relation between years of experience and definition of infection prevention (p. 0.21)

The study explained that about near to half (46%) of the study group had good knowledge about factors contributing to the spear of infection prevention Alla yousif ' nasir muwafaq' mahmoud Mohammed ahmed in mosual 'iraq 2024 in primary schools found better result than our study which state that near to half of teachers have acceptable knowledge (47.7%) [38]

The study clarified that about less than half (42%) of the study group had good knowledge about importance of vaccinations in disease prevention this agree with previous study done in Baghdad City Primary Schools by Raad K. Faraj, Mohammed F.Khalifa,in Baghdad City 2024 Which explained that about less than half (42%) of the study group had good knowledge about importance of vaccinations in disease prevention [41]

The study showed that (74%) of the study group had good knowledge about the Role of teachers in promoting personal hygiene among students this agree with study done by Kefderergi found that 71.7% of teachers have a good understanding of their role in promoting personal hygiene among students. [42]
The study showed that about near to one third (28%) of the study group had poor knowledge about Component of infection prevention this agree with previous study done in primary schools in mosual city by alla yousif 'nasir muwafaq' mahmoud Mohammed ahmed 2024 which stated that the teacher's knowledge of disease prevention methods was poor (49%) [38]

The study clarified that about less than half (40%) of the study group had poor knowledge about Benefits of infection prevention strategies in school this agree with previous study done in India by Sudha Rani found which state that 42% of teachers had poor knowledge about the benefits of infection prevention in schools. [43]

The study explained that (50%'66%) of the study group had good knowledge about importance and correct method of hand washing respectively Samson Gbolu, Emmanuel Appiah-Brempong, Paul Okyere,et found better result than our study done in Ghana Witch state 'The majority of respondents (94.8%,95.8) strongly agreed that hand washing is important, hands must be wet before soap application and should be extended to the upper wrist region, respectively. Washing hands in between the fingers was also acknowledged as important by 205) [44]
The study clarified that about near to half (44%) of the study group had positive attitude about Response if a student shows symptoms of an infectious disease Better than result of other study, that it was found 38% of teachers have a positive attitude towards following school health protocols. [42]

Our study found better result which explained that about majority (88%) of the study group had positive attitude about Encouragement of students to wash their hands regularly.than other result of study done in Nigeria Raji, et al.2023 witch states (54.75%), attested to hand washing not being a school practice [45]

The study clarified that about half (50%) of the study group had positive attitude about Practice of sanitizing your hands during the school day that agree with previous study done in primary school teachers in a district of Ghana by Samson Gbolu, Emmanuel Appiah-Brempong, Paul Okyere,et al that more than half of them did that between 2–3 times in a day (55.5%).[44]

The study showed That near to third (22%) of the study group had a positive attitude about maintaining a safe school environment by continuously following all infection prevention measures about the Attention to infection prevention in the school, Kefderergi had better result than our study done in Ethiopia found that 35% of teachers have a positive attitude towards infection prevention in schools. [41]

The study explained that near to third (26%) of the study group had a positive attitude about the Satisfaction with the resources available at school for infection prevention, sudha Rani. 2021 found better result than our study done in India wich state that - The study found that 42% of teachers had positive attitude about the benefits of infection prevention in schools. [43]

Recommendation:

The study recommended that:

To ministry of health to:

- Organize health awareness campaigns
- provide medical support within schools.
- coordinate with the Ministry of Education to implement effective health policies
- offer vaccinations

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To ministry of education to:

- Provide necessary preventive tools (sanitizers, soap, cleaning supplies) in all schools
- organize health prevention workshops for teachers.

Encourage the school managers and teachers to:

- Monitor students' health and immediately report any symptoms to the relevant authorities.
- Maintain classroom cleanliness and promote preventive measures like proper ventilation and avoiding unnecessary gatherings.

Engage the local community in supporting school health activities by providing resources and awareness programs.

Acknowledgement:

The authors wish to deeply thank all teachers staff in schools for his support this work.

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