

Knowledge Attitude and Practice towards Hygiene in
Schools at Village Ali Sojal, Azad Jammu Kashmir



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PIDE2016FMPHILDS40

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**A Dissertation Submitted to the Department of Development Studies, Pakistan
Institute of Development Economics, Islamabad, in partial fulfillment of the
requirements of the Degree of Master of Philosophy in Development Studies**

Department of Development Studies
Pakistan Institute of Development Economics, PIDE
Pakistan
2018

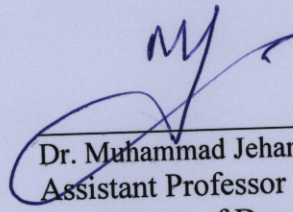


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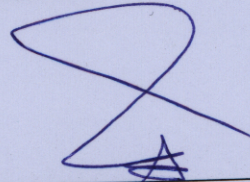
CERTIFICATE

This is to certify that this thesis entitled: "*Knowledge Attitude and Practice towards Hygiene in Schools at Village Ali Sojal, AJK*" submitted by Jawaria Younis is accepted in its present form by the Department of Development Studies, Pakistan Institute of Development Economics (PIDE), Islamabad as satisfying the requirements for partial fulfillment of the degree in Master of Philosophy in Development Studies.

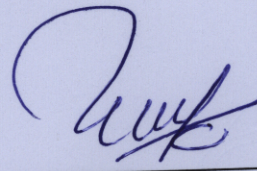
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DEDICATION

To the uplifted hands of beloved Father
and
Loving Mother.

ACKNOWLEDGEMENTS

First of all the highest words of gratitude to the Allah Almighty who is the only source of strength. I am highly thankful to my supervisor, the honorable Dr. Muhammad Jehangir Khan for his dynamic support during research. I am also thankful to all the teaching staff of development studies for their guidance and support. I am also grateful to my family members who supported me in every step of life.

Jawaria Younis

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ACRONYMS

KAP	Knowledge attitude and practice
NGO	Non-governmental organization
UNICEF	United nation international children's emergency fund
OXFAM	Oxford committee for famine relief
PHSRP	Punjab Health Sector Reforms Program
AJK	Azad Jammu and Kashmir
WES	Water environment and sanitation
SSD	Society for Sustainable Development

ABSTRACT

Health is the bounty of nature. The school have great importance to make healthy community and society through education. Hygiene is defined as science which is concerned about the investigations of environmental features that affect human health like sanitation and cleanliness and it studies the ways of body response to them. The purpose of the study was to assess the KAP (knowledge attitude and practice) among school children and to assess the current status of sanitation and hand washing facilities at the selected primary sections of high schools. The population of the study was 400 and 151 students were taken as sample size. Data is conducted by the students through questionnaires. In studies mix method was used so four in depth interviews were taken from the teachers. Stratified random sampling and sample random sampling was used in the research. In the studies Chi square and percentile analysis was used for the analysis of variables. The studies found that the students have the knowledge about personal hygiene but they don't practice it in schools timings. It is concluded that the students showed their positive attitude to increase their knowledge about personal hygiene. Generally the environment of private schools was unsatisfactory as there was less numbers of washrooms according to their population.as well as the conditions of the washrooms was unsatisfactory. More ever the ratio of knowledge and positive attitude is high than government sector.

Key words: Knowledge, Attitude, practices, hygiene, students, schools,

CHAPTER 1

INTRODUCTION

Health is considered as a blessing and now generally known as very important entity of the human body health can determine the well-being of individuals. Poor knowledge about health can be the result negatively as well as it can influence to serious basic systemic illnesses (Kabir, 2013).

“Hygeia” is the basic term of Greek which means “Goddess of Health” the word hygiene has been derived from Hygeia. According to Keshav (2008) the hygiene is. “The science and art which is associated with the preservation and promotion of health”, Good personal hygiene can be helpful to prevent infectious disease among primary school children. Cleanliness in individuals and communities can decrease the threats particularly the communicable diseases, (Lal, 2016).

Most commonly, personal hygiene contains the aspect of hand hygiene, personal health, clean attire, and personal habit of an individual or behavior. Unhygienic Food handlers with poor personal hygiene can cause to spread the food-borne diseases directly, or due to contamination many diseases can develop. These are the basic factors which influenced largely on the knowledge and practices of the food handlers (Mead *et al.*, 1999).

Globally the importance of health is taken seriously. As schools are considered as communal instructions which are the main source of change within the society. “Global school health initiative” was lunched by WHO in 1995. The program have the vision to create health promoting schools. Schools have great importance in the health of a community and society. Different practices are being taught to keep the children neat and clean so that they can lead healthy life. Most often Children are targeted for activities related to hygiene as it is considered that habits developed in early age of the child would continue into their adulthood (Takalkar *et.al*, 2013).

Hygiene is defined as science concerned about the investigations of environmental features that affect human health like sanitation and cleanliness and it studies the ways of body response to them (Koivusilta *et. al*, 2003). The studies showed that Students perceived that the healthy teeth’s have an impact on healthy life and its effects on human body directly. People visit dentist due to pain. Only in condition of pain students

visit the dentist it may be due the lack of knowledge and awareness about the health, student's visits to the doctors are conditional with pain, low visits are due to the low knowledge about health (Gopikrishna et. al, 2016).

Personal factors are involved in personal hygiene, which effects the health of the students and also effects the wellbeing of an individual. It contains many things like washing hands, clothing, care and cleanness of nails, cleanness of feet and teeth, appearance of a person and clean habits are also part of it (kumar et.al, 2015).

1.1 The History and Development of Hygiene

The concept of hygiene is ancient. It started from the time when the man moved towards caves to protect himself from harsh weather conditions for his survival. The well-known religious Prophets Moses and Prophet Mohamed had stated to their preaching with the cleanliness of their body before the religious practices (Gurudath, 2012). In the old civilizations of Egyptian and Babylonians people knew the importance of tooth brushing they were the first who introduced the tools of tooth brushing almost 3500 years ago. Chewing sticks were introduced and developed in China around 1600 BC (Fischman, 1997) In Islamic and Arabic culture the importance of cleanliness has a significant value in the religion. The use of Miswaq (twig of tree to clean teeth) helps to maintain hygiene and freshness of mouth and this is also the part of the Sunnah. The Holy prophet Muhammad PBUH said “Were it not that I might over-burden the Believers I would have ordered them to use Miswaq at the time of every Prayer.”

The children have to stay at home they learn the basics about hygiene from home too. The children learn basic habits of hand wash and they learn how to use washroom properly. The habits become behavior and attitude. The parents know the importance of knowledge about hygiene and they know that children should be guided by their parents to practice the positive habits related to health and specifically about dental knowledge (Khanal, 2015)

Communicable or Infectious diseases, such as issues related to hygiene, sanitation system and pure drinking water, these are inter linked. Inadequate sanitary conditions and poor knowledge and Hygiene practices play main roles in enlarging the burden of infectious disease within the developing Countries. Personal hygiene contain a wide range of variable which can measure the health of an individual like cleanness of nails and whole body and cleanness of those utensils which are used for this purpose like

soap, water. Inadequate facilities of the clean water ,soap and lack of sanitation facilities are the major reason to fell prey of disease of the school going children so that's why children fail to maintain proper hygiene, the practice of the students are based on children's knowledge about hygiene (Hegde et. al, 2016).

Students got infectious because they have no awareness about the benefits of health and personal hygiene they don't give importance to the practices related to health. (Sarkar, 2013)The previous studies showed that attitude and habits can be influenced by knowledge and positive and good attitude may result in the form of good practices related to hygiene (Mohamed et. al, 2016).

Schools have not enough washrooms to fulfill the necessity of increasing demand. The number of washroom are very low and their condition to use is unsatisfactory and lack of sanitary situations and all these situations are favorable to increase the communicable disease. (Elsabagh et. al, 2014).Contaminate water can cause diarrheal infection which can be reduced 6-20 percent with the improved quality of water. Water is used from springs or natural water is used without any purifying process which is caused health diseases. (Sah et. al, 2014).

In most of the cases the students know the importance of personal hygiene like they know the importance of hand washing before and after taking meal or before and after the use of washrooms but they don't practice that knowledge in their daily routine. There is a wide gap between knowledge of the students and their hand washing practices (Takalkar et. al 2013)

The studies showed that knowledge attitude and practices of personal hygiene have significant association with health so different hypothesis will be generated in the research later.

1.2 Control Measures to Prevent the Transmission of Diseases from Hands

Washing hands is most important to prevent transmissions of disease. Some important measures should be taken to decrease the risk of the diseases that are always keep the nails neat and clean, keep the finger nails always short, use soap before and after eating something, use soap after using washroom(WHO, 2004).

1.3 Statement of Problem

To assess the awareness about KAP (knowledge, attitude, and practice) about hygiene among the school children. And To assess the current status of sanitation and hand washing facilities at the selected schools. The purpose of the study is to find out the level of knowledge about hygiene and its implementations. Study will be explanatory research.

1.4 Significance of the Study

Here is a need to assess the personal hygiene, knowledge, attitude and practices of the school children because they are more engaged in practices that may be unfavorable for their health than elders and it makes them vulnerable for their hygiene deficiency and illnesses. Moreover, assessing their basic knowledge is vital for the developing and an effective personal hygiene education programs in the institutions. In addition, the findings of the study will be helpful for policy making and strategic interventions by government on personal hygiene among school students. It will guide for further study also.

1.5 Objective of the Study

To assess the KAP (knowledge attitude and practice) towards hygiene among primary sections of the public and private schools children.

1. To assess and compare the current status of sanitation and hand washing facilities of public and private schools.

1.6 Research Questions

Do you know diseases can spread from one person to another?

- Should we avoid sneeze and cough near others?
- How much the students know about personal hygiene?
- What are the hand washing habits of primary school students?
- What are the teeth brushing habits of primary school students?

CHAPTER 2

REVIEW OF LITERATURE

Hand is important, hands are used for many purposes, the nose protect against the entrance of harmful substance into lungs so the nostrils should be kept clean. The dirt in eye can eventually lead towards the blindness so the regular washing of the eye make it clean. Dirty clothes can cause different disease. The bacteria can easily breed on the sweating and oily skin. (Legesse at. al, 2004).

It is not that personal hygiene an isolated behavior; it is vast enough that it varies from individual to individual according to different factors. The literature showed that that school children who have better knowledge, behavior and practices of personal hygiene have low risk to get infections and absenteeism in school and they achieve higher grades. The literature depict that observations indicate that knowledge and practices of personal hygiene was well correlated with students physical appearance like wearing clean cloths and presentable appearance.(Ghanim, 2016).

2.1 Severity of Poor Hygiene

Mouth is the mirror of the body. Dental problems are very common throughout the schools. Students cannot go regularly to their schools with the dental problem the literature showed that more than 50 million hours per year from the school are lost due to dental problems which affect the performance and health of the student. Dental health and awareness about their hygiene is appreciable but the methods for the care are poor. Along with this lack of checkups and harmful eating habits can pose a risk for dental hygiene (Razvil & Bashir,2016).

Umwangange, (2016) concluded that the WTO said in a report that the infections and diseases can be prevented by cleanliness of hands. In most of the time people know about the importance of hand washing but they forget to wash according to requirements. Proper and effective hand washing prevent people from diarrhea. Children who have enough facilities of water, sanitation and proper conditions of hygiene those students have more capacity to learn about hygiene knowledge and practices and they could be effective messenger of change for their families (Adams et. al, 2009).

Curtis et. al, (2009) said that communicable diseases are the main cause of deaths the results of the previous showed that 62% and 31% of all deaths are caused by communicable diseases in Africa and Southeast Asia respectively. (Mohamed et. al, 2016) Said that diseases via skin can be controlled by good sanitation and proper hand hygiene. Support of parents can play essential role to develop child hygiene for the well-being of child. It is important to educate the children about basic knowledge of infectious disease and about hand hygiene to minimize the risk of transmission of the disease.

The literature showed that In Malaysia, the incidences of food poisoning and illness related to unhygienic food are still increasing in schools. As food is being prepared by food handlers in school's canteen, it is essential that the handlers should practice good personal hygiene. (Tan, 2013)

Due to poor sanitation and hygiene 5-15 years old children catch infections at very high level. Abdominal pain, anemia, diarrhea, intestinal obstruction, ulcers and other health problems can be controlled by improving sanitation and personal hygiene. UNICEF has introduced and supported many programs like Environment and Sanitation (WES) program in east Aisa region to different governments in different regions like the provision of pure water supply and sanitary facilities and well concentrated hygiene education in many schools. (TV LUONG (2003).

2.2 Interventions to Promote Hygiene

After the earthquake of 2005, several national and international organizations introduced behavioral change interventions. These interventions targeted primarily communal institutions such as schools and Basic Health Units (BHUs) Different NGOs like Oxfam and UNICEF worked for it and put their effort. UNICEF was leading the school sanitation programs at different districts in collaboration with Society for Sustainable Development (SSD) In Azad kashmir The LGRDD Directorate has a duty to manage the system of Water Supply and Sanitation project is implemented with the collaboration of World Bank/IDA and UNICEF with financial assistance through seven district officers. In AJK there is low level of understanding between the relationship of poor sanitation and water borne diseases like diarrhea, Hepatitis, and Stomach diseases (UNICEF, 2013)

School health program is important for the better quality of education. The teachers need to educate and warn their students about many health risks and issue, and should guide them how to protect themselves and others as well others against diseases and other forms of health risks and hygiene promoting habits, attitude and practices. School health program were introduced in Pakistan in 1980. Different medical doctors were appointed for this purpose this intervention did not succeeded because the doctors were not ready to go to rural areas. The studies of the past showed that students suggested that through targeting schools for health interventions could give out the positive results in large scale in health and education benefits. It gives out significant impact to improve the health of the students. These interventions could be an entry point to improve the overall health of the society (Shan et al, 2000).

2.3 Assessment of Hygiene Knowledge, Attitude, and Practice among Students

Students have the knowledge about hygiene but they don't practice it according to their knowledge there exist wide gap between knowledge and practices. Hygiene includes cleaning and grooming, it is considered as the basic and the initial step towards good and strong health. It is most important part of our everyday life whether it is the workplace or home. The concept of hygiene help us to protect our health and make ourselves healthy (Takalkar et.al, 2013). Hygiene include different habits and patterns like the habit of hand washing, to brush the teeth, it helps us to protect our self from bacteria and viruses. In the field of medical this term is used to get personal attention to prevent the body from the germs and diseases and this can be take place within the area by using different equipment's like boots gloves etc. (Hassan, 2012).

The health of the child is considered as holistic and positive in the perspective of development. Good health is considered as good quality of life for children in the school as they are considered the source of change and natural agent to change. Children are the important figure of total population as they are 25 % of total population so it can contribute to the overall health status. In India schools students are facing dental problems due to in appropriate care and inadequate knowledge (Kaur, 2013).

Gumb et. al, (2003) said that researches done related to hygiene indicate that the respondents have poor knowledge about water related diseases and about their prevention. The results showed that there was neither soap our other washing material

nor learners were encouraged to bring their own washing material. (Postma et. al, 2004) said that washing of the body is the part of personal hygiene (bathing) hand washing, washing someone's cloth, washing someone's hair, to brush the teeth, cutting of nails, and to take care for the gums. The children were very vulnerable to maintain necessary personal hygiene.

Vivasa et. al, (2010) said that due to Deficiency of resources cleanness like soap and water, and poor sanitation facilities are the main reasons why children don't wash their hands and why they cannot maintain their cleanness. All the practices are influenced by students' attitude and knowledge towards hygiene. The knowledge about hygiene is an important factor to maintain proper hygiene environment. Quintero et. al, (2009) Said that Attitude is considered as an indicator of performance how the individual perform the acts relevant to his or her health it reflects the degree of positivity or negativity valued by an individual for prediction of hand washing.

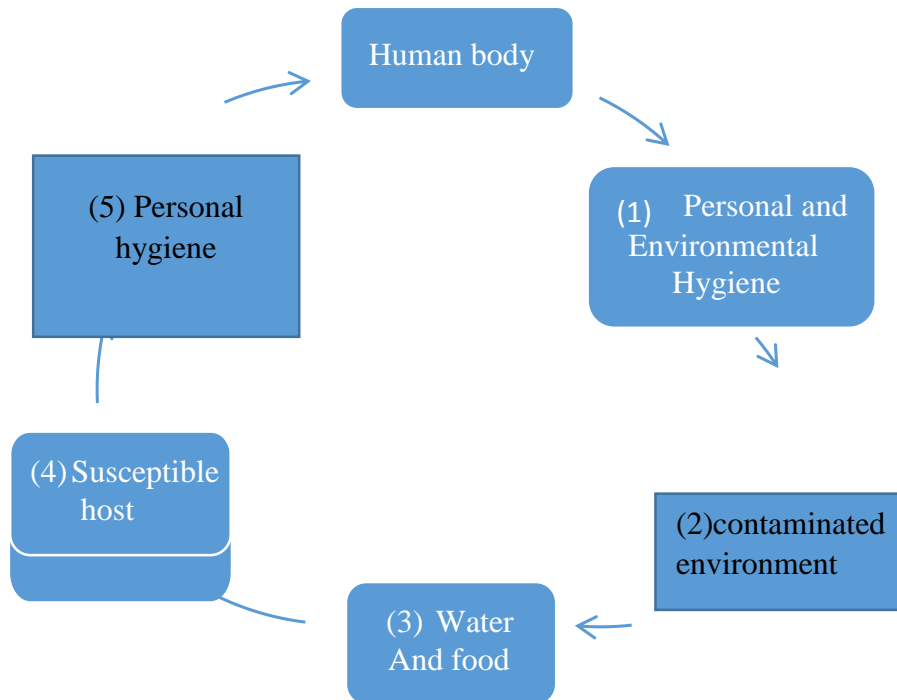
School teachers play important role to promote positive attitude and practices of hygiene. The previous studies indicates that the primary schools teachers have enough knowledge about hygiene throughout worldwide. In Tanzania, school curriculum includes different health promotion activities. And teachers from many other different countries like Poland, China,

Romania, and Thailand they all were in the favor children's oral health education and them happy for being a part of such education system (Sajjad, 2016).

A study conducted by the Global Public-Private Partnership for Hand Washing (PPPHW) which included several sub-Saharan African countries (i.e. Kenya, Senegal, Tanzania, and Uganda) reported that 17% of the respondents washed their hands with soap after using the toilet, while the others 45% used only water WHO (2009).

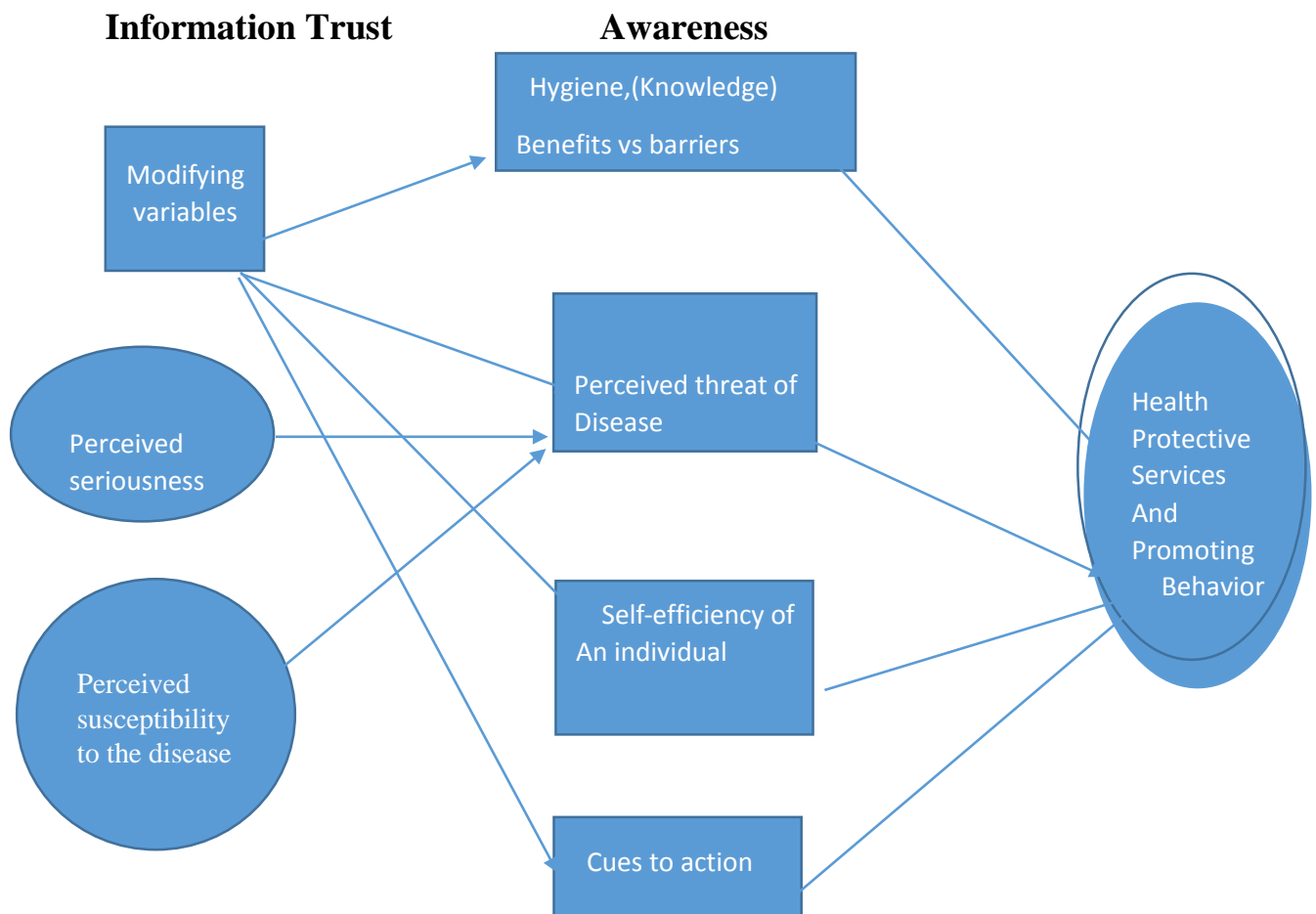
The study Conducted in Senegal, depicts that the reasons given for not washing hands included stubbornness (not wanting to follow what adults say), laziness of an individual, the rush to go to play in breaks, to save time for playing, and due to the dirt and smell of the toilets in schools (VIVAS, at, al 2010).

Figure 2.1 Transmission of Disease from Unhygienic Person and Environment to Healthy individual and Vice Versa.



In the diagram human body indicate that how personal hygiene can help to protect the human body. Personal hygiene can help the human body in the contaminated environment. The relationship ship between contamination and transformation of disease from environment and unhygienic person to the healthy person is vice versa. Number 3 and 4 indicates that environmental hygiene keep the human body healthy. Number 5 tells that it will help to protect the water from being contaminated (Ambelu, et, al 2004)

Figure 2.2 Conceptual framework Interactions among social information trust about disease, situational awareness and health protective behaviors and individual perception about hygiene.



(Jones et al., 2015).

The study addresses two main questions regarding knowledge attitude and practice about hygiene of school children. The concepts of the model borrowed from literature to be used as analytical tools. As far as the significance of hygiene and its impacts on life of students is concerned I borrowed the HBM (health belief model) from the literature.

Basic concepts or perceptions construct the health belief model that are perceived seriousness, susceptibility, benefits, barriers, and self-efficiency. Perceived seriousness is based on individual knowledge. It is powerful and positive perception of an individual to adopt healthier behavior. When an individual believe by the adoption of new behavior the risk of the developing disease will decrease. The model indicates The

Influence and impact of perception and Social-Cognitive Factors on Personal Hygiene Practices. The individual gain the knowledge from others by social interaction through different mediums like personal interactions, experiences, and through media influences. The model indicates the links between trusts in information about diseases, and the perception about hygiene effectiveness, knowledge about the causes of diseases, perceived vulnerability and fears of diseases, and personal hygiene practices. Health belief model is used to determine the individual's perceptions about health. Health development model is used to construct this model (Jones at. Al, 2015).

The model helps to predict and explain health behaviors of individuals thus the beliefs, attitudes and behavior of the individuals are focused. Hygiene is the set of practice or Conditions to maintain good health special through cleanliness. It will be discussed how to Predict health-related attitude and behaviors, particularly to the upgrade of health services it will help to perceive benefits and risks of taking actions about hygiene. The health belief model predicts that individuals who perceive that they are susceptible to a particular health problem will engage in behaviors to reduce their risk of developing the health problem. Assessment of the severity of a health problem and its potential consequences. It tells about the differences of individual attitude towards their hygiene. Different modifying variables can change the individual's attitude and practice towards hygiene.

CHAPTER 3

METHODS AND METHODOLOGY

3.1 Introduction

The purpose of the study is to achieve the objective of the study. The study is explanatory. It is explaining the concerning aspects in a detail manner it will help to understand the problem more efficiently. Mix method is used for the analyses of the data. The methods are the tools, which I used in research which are interviews, participant observation, and questionnaires. Methodology contain research approach and it contains general research strategy.

3.2 Interview Guide

The mix research (qualitative and quantitative) is conducted by in depth interviews and through questionnaire from the respondents after the selection of representative sample. An interview guide was prepared according to the objectives of the study. All the concerning issues related to the research were included in the interview guide. In interview guide researcher have done probing according to the situation. In the questionnaire all the relevant questions were included. The detail information have been conducted through questionnaires and interviews. Interview guide provide helped the researcher that what he/she has to discuss further in the research (U.S. OPMTRB, 2008). In all the interviews the real names of interviewee will not be used in the dissertation. Sodo names are used in interviews.

3.3 Participant Observation

It focuses on human interaction and meaning viewed from the insider's viewpoint in everyday life situations and settings. The methodology of participant observation involves a flexible, open-ended, opportunistic process and logic of inquiry through which what is studied constantly is subject to redefinition based on field experience and observation (Kawulich, 2005). It connected the researcher to the experience, and it helps the researcher to observe the things in particular context. In this research the practice of hygiene is observed through participant observation.

3.4 Questionnaires

Questionnaire were designed to collect the data. Open ended and close ended questions were included during research.

3.5 Sampling Techniques

Probability sampling and nonprobability sampling has been used as a sampling technique. Convenient and Stratified sampling is used for the data collection. Schools were stratified into private and public sectors and sub groups were generated according to the classes of the students. For the stratified random sampling, the targeted population is divided into strata or groups. A random sample is selected from each group on the base of percentage that each strata represents in the population. Afterwards Sample random sampling will be used for the selection of the UDCs during the research. Convenient sampling is used for conducting interviews. Mix method is used to collect and analyze the data.

3.6 Study Locale

Study is conducted at union council Ali Sojal district Pooch Rawalakot Azad Kashmir. Rawalakot is located at Latitude 33°51'32.18"N, Longitude 73° 45'34.93"E and an Elevation of 5374 feet. Rawalakot is approximately 76 kilometers (47 mi) from Kahuta and about 120 km (75 mi) from the city of Rawalpindi, Pakistan.

3.7 Units of Data Collection

The present quantitative and qualitative research has been designed to explain and access the knowledge attitude and practice towards hygiene of the primary school children. The study was conducted at Village Ali sojal AJK. The respondents were the students of class three, four, and fifth and their teachers. Four schools were selected from which two were public and two were private schools. Stratified sampling was used while conducting the data. At first level the schools were divided into two strata's then three strata's were created according to the class level. Afterwards students were selected randomly.

CHAPTER 4

RESULTS AND DISCUSSION

4.1 Introduction

The relevant data was collected. SPSS was used to find out the chi square and percentile analysis. The chapter comprises interpretations of student's responses, teachers in depth interviews and participant observation. The results of the study and different interviews are discussed and presented in this chapter.

Table .4.1 Results cross –tab. Chi square

Questions		Association	Association
Does boiling water kills germs?	Do you know that diseases can spread from one person to another person?	.859	S.A
Human face have germs, and should be flushed?		.183	S.A
Do you drink boiled water?		.067	S.A
Do you wash hands before meal?		.859	S.A
Do you wash hands after meal?		.186	S.A

P value =0.05, significant >0.05 and non-significant <0.05

Ho=There is no strong association between students “knowledge” and their practices towards hygiene

When the respondents were asked that do they know that diseases can spread from one person to another person? 100 % of them said that the disease can spread from one person to another person. The null hypothesis Ho is that there is significant strong association between do the students know that diseases can spread from one person to another and the knowledge about that does boiling water kills germs has strong association. The table shows that the strong association exist that is .85 which is greater than 0.05 so we accept our null hypothesis. While asking the question do they know that human faces contains germs and should be washed the Ho is that there is strong significant association between the knowledge of students about the spread of diseases and do they drink boiled water to avoid them. Here the value of chi square is greater than 0.05 that is .18 so we accept Ho. When the question was asked that do they wash their hands before meal the null hypothesis is generated that there is significant association between students' knowledge about spread of diseases and their practice of hand washing before meal. Here the value of Chi square is .85 so Ho is accepted. While

asking the question that do they wash their hand after taking the meal. Here the Ho is that there is strong association between students' knowledge about spread of diseases and their practice of hand wash after taking meal. The value of association is .18 which is greater than 0.05 so the Ho is accepted.

Table 4.2 Results cross –tab. Chi square

Questions	Attitude of children towards hygiene measures and can control of communicable	Association	Association
Do you use toothbrush and paste while brushing?		.028	N.S
Do you flush after using the toilet?		.101	S.A
Personal hygiene and clean surroundings are important for healthy living?		.643	S.A
Through washing the hands we can prevent many infectious diseases?	.076	S.A	

P value =0.05, significant >0.05 and non-significant <0.05

Ho=There is no strong association between the “attitude” of the students and their practices towards hygiene.

When the question was asked that do the respondent think that attitude of children towards hygiene measures and can control of communicable disease. 41% said yes while 59% of the respondent said no the attitude of the students towards hygiene measure and can control of communicable disease. Here the Ho is that there is strong significant association between the questions children attitude can control the communicable disease and their practice of tooth brushing with tooth paste. The value of Chi square is .02 which is less than 0.05 so we reject null hypothesis. When the question was asked that do they flush out water after using the toilet the Ho is there is strong and significant association between children attitude can control the communicable disease and their practice of flushing out water after using the toilet. The value of Chi square is .10 which is greater than 0.05 so we accept Ho that there exist association between them. When the question was asked that personal hygiene and clean surroundings are important for healthy living. The results showed that 96% of the respondents said yes while 4% said clean surrounding have no effect on clean surrounding. Ho is that there is strong association between the questions being asked that are children attitude can control the communicable disease and their perception that do they think that personal hygiene and clean surrounding are important for healthy

living. The value of ChiSquare is .64 which means that there is significant association exist so we accept our null hypothesis. On questioning that through washing the hands we can prevent many infectious diseases? Ho is the strong association exist between the questions that are Attitude of children towards hygiene and their practice and hand wash can prevent them from many diseases. The value of Chi square .07 which is greater than 0.05 so we accept our null hypothesis. Overall we accept our Ho and reject H1 that is there is no association exist.

4.2 Knowledge Assessment

The questions were asked to exploring and to assess whether the participants are aware of hand hygiene practice and its importance.

Table 4.3 Percentile Analysis of Government Schools to Check their Knowledge and Awareness

Questions	frequency	Percentage		
		Class	Class	Class
Do you think that Water and food need covering?	Yes	75	83	79
	No	25	17	21
Do you think waste items should not be thrown around the house or in open area?	Yes	83	67	67
	No	17	33	33
What do you think that stagnant water and dumping areas are home for mosquitos?	Yes	80	50	54
	No	20	50	46
What do you think that spraying pesticides will help control the spread of diseases?	Yes	83.	71	87
	No	17	29	13
Do you cut your nails regularly?	Yes	75	75	79
	No	25	25	21

More than 75% of each class were agree on that eatable things should be covered properly to avoid the contamination. When the question was asked that do they think waste items should not be thrown around the house or in open area? The results illustrates that 83% of three, 67% of class forth, and 67% of class 5th were agree that the waste items should not be thrown in open areas. When the question was asked that what do they think that stagnant water and dumping areas are home for mosquitos? The results showed that 80% of class 3rd, 50% of class 4th and 54th of class 5th were sure about it that stagnant water and dumping areas are home for mosquitoes. When the question was asked that what do you think that spraying pesticides will help control the spread of diseases? The research showed that 83% of class 3rd, 71% of class 4th, and 87%

of class 5th were agree about that the pesticides will help to control the spread of diseases. While asking the question that do they cut their nails regularly 57% from 3rd class, 75% from 4th class and 79% from 5th said that thy cut their nails regularly.

Table 4.4 To Assess the Knowledge of Government Schools Students

Questions	Frequency	Percentages		
		Class	Class	Class
Through washing the hands we can prevent many infectious diseases?	Yes	91	71	75
	No	7	29	25
Do you use mosquito nets, coils at home?	Yes	10	25	30
	No	90	75	70
We should avoid sneeze and cough near others?	Yes	99	91	95
	No	01	9	5
When you eat something your nails must be cut?	Yes	100	96	79
	No	01	4	21
I am interested in increasing my knowledge about hygiene measures.	Yes	50	92	96
	No	50	8	4

Table showed different percentages of different groups of students. To access the knowledge was asked that through washing the hands we can prevent many infectious diseases? 91%, from class 3rd, 71% from class 4th, and 75% from class 5th were agree on that. When the question was asked that do they use mosquito nets, coils at home? Most of the respondents said no the figures are 90% from class 3rd, 75% from class 4th, and 70% from class 5th were disagree with the question being asked. While asking the question that do they think we should avoid sneeze and cough near others? 99% of class 3rd, 91 from class 4th, and 95% from class 5th were agree on this that we should avoid sneezing and cough near other. When the question was asked that when you eat something your nails must be cut? 100% from class three, 96% from class four while 79% from class five were agreed that nails must be cut before eating something. The table indicated that 50% from class 3rd, 92% from class 4th, and 96% from 5th were interested to get more knowledge about personal hygiene.

Table 4.5 Percentile Analysis to Access the Knowledge of Private Schools

Questions	Frequency	Percent		
		Class 3 th	Class 4 th	Class 5 th
Do you think that Water and food need covering?	Yes	97	97	96
	No	3	3	4
Do you think waste items should not be thrown around the house or in open area?	Yes	70	81	85
	No	30	19	15
What do you think that stagnant water and dumping areas are home for mosquitos?	Yes	99	97	96
	No	1	3	4
What do you think that spraying pesticides will help control the spread of diseases?	Yes	98	97	93
	No	2	3	7

Table showed the results of private schools. When the question was asked that do they think that Water and food need covering? 97% from class 3rd, 97% from class 4th, 96% from class 5th were agree on that all eatable things should be covered. When the question was asked that do they think waste items should not be thrown around the house or in open area? 70%, 81% and 85% respondents respectively. The results shows that while asking the question that what do you think that spraying pesticides will help control the spread of diseases. The responses were in favor of spraying were 98%, 97%, 93% respectively.

Table 4.6 To Access the Knowledge of the Students from Private Sector Schools

Dependent	Frequency	Percent		
		Class	Class	Class
Through washing the hands we can prevent many infectious diseases?	Yes	99	97	96
	No	1	3	4
We should avoid sneeze and cough near others?	Yes	67	47	44
	No	33	53	56
When you eat something your nails must be cut?	Yes	55	62	59
	No	45	38	41
I am interested in increasing my knowledge about hygiene measures.	Yes	97	91	67
	No	3	9	33

To access the knowledge of the students when the question was asked from the respondents do they think that through washing the hands we can prevent many infectious diseases more than 90% of the respondents said that through washing the hands we can prevent many infectious diseases. When the question was asked that do they think that we should avoid sneeze and cough near others? 67%, 47%, and 44% of the respondents were agree respectively. When the question was asked that when you eat something your nails must be cut? 55%, 62%, and 59% of the respondents were agree on cutting the nails before to eat something. The question was being asked that are they more interested to increase their knowledge about hygiene 97% of the respondents from class 3rd, 91% from class 4th, and 67% from class 5th were interested to increase their knowledge.

Table 4.7: Assessing Attitude of Government Schools

Questions	Parentages		
	Class 3 rd	Class 4 th	Class 5 th
We should wash our hands before and after having meal?	95	96	98
Attitude of children towards hygiene measures and control of communicable diseases.	59	60	55
Sharing knowledge about healthy practices will lead to a disease free society?	81	70	85

4.3: Assessing Attitude

The first question was the indicator to access the attitude of the students Over 90% of all the participant responded said yes we should wash our hands before and after having meal. The second questions was that do they think that Attitude of children towards hygiene measures and control of communicable diseases 60% of the respondents from each group were agree. To assess the attitude the question was asked that what their opinion that do is they think Sharing knowledge about healthy practices will lead to a disease free society? More than 70% Of the respondents said yes.

Table 4.8: Assessing Attitude of Private Schools

Attitude is about perception how the students perceive the importance of hygiene. The results of government's sector schools are discussed.

Questions	Parentages		
	Class 3 rd	Class 4 th	Class 5 th
We should wash our hands before and after having meal?	96	98	99
Attitude of children towards hygiene measures and control of communicable diseases.	70	80	85
Sharing knowledge about healthy practices will lead to a disease free society?	85	75	86

The results showed that same questions were asked by the students of public and private schools the percentages were slightly higher than the public schools. The attitude of private schools students were more positive than government sector.

Table 4.9: Practices of the Government School Students Responses

Practice is the performance of the students

Questions	Frequency	Percentages		
		Class 3 rd	Class 4 th	Class 5 th
Do you cut your nails regularly?	Yes	88	69	63
	No	12	31	37
Do you use mosquito nets, coils at home?	Yes	42	19	23
	No	58	81	77
Do you brush your teeth daily?	Yes	90	92	91
	No	10	8	9
Do you take bath daily?	Yes	30	35	36
	No	70	65	64
Do you wash your hands before eating something?	Yes	91	93	90
	No	9	7	10

The table showed that when the question was asked that do you cut your nails regularly? 88%, 69%, 63, from three classes said yes respectively. The results of the table shows that 99%, 97%, 96% of the respondents from class 3rd, 4th, and 5th were agree that

through washing the hands we can prevent many infectious diseases. When the question was asked that do you use mosquito nets, coils at home? Most of the respondents were disagree 58% from class 3rd, 81% from class 4th and 77% from class 5th were not using the nets. When the question was asked that do they brush their teeth's daily 90% respondents from each class were brushing their teeth's daily. While the small numbers of the respondents said they don't brush they use miswaq (teeth cleaning twig) to clean their teeth. When the question was asked do they take bath daily? More than 60% of the respondents said that due to cold climate they take bath after two or three days. While asking the question that do they wash their hands before eating something more than 90% of the respondents practicing hand wash before eating something.

Table 4.10: Practices of the Private School Students Responses

Questions	Frequency	Percentages		
		Class	Class	Class
Do you cut your nails regularly?	Yes	90	71	65
	No	10	29	35
Do you use mosquito nets, coils at home?	Yes	40	15	24
	No	60	85	76
Do you brush your teeth daily?	Yes	91	95	93
	No	9	5	7
Do you take bath daily?	Yes	35	40	35
	No	65	60	65
Do you wash your hands before eating something?	Yes	92	94	93
	No	8	6	7

Different questions were asked to assess the practices of the students of private sector schools students the results showed that the percentages were higher than the government school students.

4.4 Interviews

4.4.1 Interview 1

Mis Zee is been teaching for last five years in a private sector school. According to her Personal hygiene contains the cleanness of hand, feet, eye, nose, mouth and skin.

Communicable or Infectious diseases, such as issues related to hygiene, sanitation system and pure drinking water, these are inter linked. She said that Personal hygiene contain a wide range of variable which can measure the health of an individual like cleanness of nails and whole body and cleanness. To maintain the personal hygiene of the students, the staff of the school checked the nails, uniform and teeth's of their students in the assembly on daily basics. To maintain the cleanliness the students have to pay fine if they can't maintain the clean physical appearance. In the morning the students make clean their classrooms by themselves. Mis Sadia knows very well about personal hygiene she knows about the communicable disease. She has the knowledge about the disease which are caused by contaminated water. She said that in most of the cases the students know the importance of personal hygiene like they know the importance of hand washing before and after taking meal or before and after the use of washrooms but they don't practice that knowledge in their daily routine. There is a wide gap between knowledge of the students and their hand washing practices. According to her the school is facing the deficiencies of facilities in the provision of clean and fresh water. The students are using water of pipeline. The school have no canteen although the school is located near the bazar. In the break they go to the bazar and get their desirable things to eat which are not pure and clean. The school admin cannot make control on this. In the break before taking the lunch the students can't wash their hands due to different reasons they don't took seriously personal hygiene or they could be in a rush to play. The school have only one washroom which is used by the teachers and the students also. According students can also use the toilets of Jamya masjid. There is no sewerage system in the school. The students bring the water in buckets and put them in washroom. There is no sanitizer available in school washroom. The school have dusty play ground in the rain it becomes muddy and in the sunny day it becomes dusty. The students who came neat and clean in the morning they go back to their homes muddy or dusty. According to her in her time only one NGO name CHITKA came once and organize the training for personal hygiene. According to her there is need to organize more educational programs and activities to make awareness on personal hygiene in the students and to their parents as well. She said that to reduce the risk of the diseases some important measures should be taken that are clean nails, keep them short use soap before and after having meal and to wash the hand after using washroom.

4.4.2 Interview 2

Mam Xee is teaching for last five years. She is the head of school. According to her hygiene is the first step and gateway to maintain the health of an individual. Hygiene is generally considered as cleanliness. According to her hygiene keeps us away from disease. Moreover it is the sunnah of our holy prophet. According to her dirty fingers nails causes stomach and abdominal diseases because dirt produce germs and germs are the main cause of diseases. And it is important to wash hand before and after the having the meal. She said that there are many diseases that which are infectious. Contaminated water can cause lot of diseases like intestinal diseases, diarrhea etc., diarrhea is caused by dirty drinking water because germs are present in contaminated water and these germs are the main reason to spread the disease.

According to her she is the only employ to run the school as is facing different problems. According to her the school have low standard building there is unpaved playground which become dusty in sunny weather and become muddy in monsoons. According to her the students are using spring water for the drinking purpose and in washrooms they are using pipeline water. They know very well about the personal hygiene and the importance of hand washing. So they put the soap in the washroom for hand washing after using toilets. According to her they need paved building and open playground. She said the school have no canteen. They only give a little break to their students to take lunch. She said the staff of the school daily check the physical appearance, their nails, and teeth. In her time period of teaching they are only focusing on the studies of the students the administration don't take notice on the infrastructure of the school building. The classrooms have no roof ceiling there is electricity connection in the school. There is neither filtration plant near the school nor the students are using boiled water for drinking purpose. As the contaminated water is the main and basic reason to breed the infections of different diseases. According to her some important measures should be taken to improve personal hygiene of the students. The government and NGOs should start awareness program on personal hygiene.

4.4.3 Interview 3

Mis lee is teaching in a government school for the last ten years. Personal hygiene is very important to maintain good health. Generally cleanness is considered as an indicator of personal hygiene. According to her they take it very seriously to keep the

personal hygiene. As they have the facilities as compared to private schools. They have neat and clean building. The school have 6 washrooms. Two are specific for teachers and the others are for students. The pipe line water is being used there. For drinking purpose they use spring water. According to her the students cannot maintain the cleanness of washrooms the students of basic elementary classes cannot flush out the water after using the toilet. The school have two canteens the students go there frequently. According to her the school administration cannot make control over them. Hygiene committee does not exist there. According to her in assembly time the staff checked the student's cleanness on daily basics. They checked their teeth, nails, uniform and their physical appearance. According to her as the peons cannot maintain the cleanness of the school as the school area is vast enough. The school students clean their classrooms before assembly. The duties of cleanness are assigned to the student according to their roll numbers. The student make their classroom clean on their turn. According to her they have two play grounds and clean environment. After earthquake many NGOs visited the school like UNICEF and others but they give little focus on personal hygiene.as well as there they visited very rarely. There is a need to organize more awareness programs on personal hygiene and about infectious diseases.

4.4.4 Interview 4

Mis Anaa is government teacher she is teaching for last 30 years. She is posted in this school for last two years. She thinks that cleanness is mostly considered as personal hygiene. According to her personal hygiene includes hand wash, mouth wash, cleanness of hairs, feet, and clean attire of an individual. According to her in schools they mostly focused on cleanness of nails, and uniform which is being checked by the staff during assembly. According to her schools should arrange some awareness sessions or seminar on personal hygiene. According to her the school have proper building with enough amount of washroom according to the strength of the school. The school have neither canteen nor it is near the bazaar. The students bring their lunch from their homes. According to her contaminated water can cause many belly diseases. And personal hygiene can control many infectious diseases. According to her the students use pipeline water for drinking purpose. In her duration of stay in this school she did not notice any workshop or seminar on personal hygiene which can spread the awareness among students. According to her some interventions should be taken seriously on personal hygiene through NGOs and government workshops.

4.5 Personal Observations / Participant Observation

The researcher visited four schools two were private and two were public. According to the observations the private schools have more strength than public schools. The observation of Tameer e Nau public Ali Sojal schools are: The school have low standard building of two floors. There is no basic facilities like electricity, ceiling of roofs, etc. The school have open play ground which is unpaved and dusty. The students play there and they become dusty in the break while playing. The school is near the bazar so school don't have any canteen the students get the things from the bazar. Near the school there is water filtration plant which is out of order. Near the school there is spring the students get the water from there in no separate pipeline for the school. The school have only two washrooms one of them was out of order. The only one washroom was the in the use. The students filled the buckets and put them into the washrooms. There is no proper sanitation system in the school no soap was found there for hand washing purpose before and after using the toilets. The student have the knowledge about personal hygiene and the importance of hand washing but in the break while having their lunch they did not wash their hands. They took their lunch without hand wash. No committee was found there keep an eye on personal hygiene and clean environment of the school. Kashmir Tameer e Nou public school Ali Sojal. The school have low standard building. The building have no basic facilities like electricity, water sanitation system, the roofs of the schools were without ceiling. The school have only two washrooms there was no drainage system in the washrooms. Two buckets were full with water. Soap was there in the wash room to wash the hands before and after using the toilet. The teachers and the students knows very well about the personal hygiene. They have the little knowledge about the diseases and their severity. In assembly time the staff checked the student's nails, teeth, and their uniform. The students use spring water for drinking purpose. The school have no canteen. The students only get the break of 15 minutes to take their lunch. According to observations the students did not wash their hand before taking their lunch. There is only one person the students clean their classrooms before assembly on their turn. The school have covered pit latrine. Government girls middle school Ali Sojal the school have fully furnished building with proper facilities. There is no filtration plant in the school. The pipeline water is available for use of washrooms. For drinking purpose spring water is being used. The school have 6 washrooms. Three washrooms are in the use of staff

members while the students are using three washrooms. In the staff washrooms I found soap and towel. While the soap was not available in the student's washrooms. The school have open area. The students know about cleanness. They know about the importance of hand washing. But during the break the students did not wash out their hands before taking the lunch. The gap exist between knowledge attitude and practices about hygiene. Government primary school Toppa Ali Sojal have the building which is fully furnished. The school have three washrooms while the school have low strength. There the buckets were full with water the pipeline water was out order. Although the washrooms were neat and clean. There was no soap or any other hand sanitizer. The school have no canteen. The physical appearance were clean. The students have the knowledge about cleanness and hygiene but they don't know about the infectious disease and their severity. Most of them were saying that they use towel to clean their hands after having meal.

CHAPTER 5

INTRODUCTION

This chapter includes discussion and analysis of the research work the following pages define briefly the results of different public and private schools.

5.1 Discussion

School functions as an ideal setting to interact and to learn positive knowledge about hygiene. In the premises of schools the teachers and students play important role to adopt positive attitude about hygiene.

Data is conducted by teachers and students. The questionnaire and interviews were used for this purpose. In private schools the population were large so the sample size were taken one third of the population. While from the government sector the population have small size so the whole population was taken as sample. Teacher's interview were conducted according to non-probability sampling.

Availability of water supply, existence of garbage around the school surrounding, conditions in toilets and soap availability were different in four schools. These conditions were below average poor in the private schools, while the both government schools were well sanitized. Water supply was inadequate in private schools and tap water was unavailable they used buckets to store water. While during participation the researcher observed that in private schools some students don't use washrooms of the school due to its cleanness they waited long till end of school session. The toilets of schools were in poor conditions and there were no available soaps in three school while one private school has the soap availability in its washroom. During the participation observation it is observed that some of the schoolchildren wait till the final bell of school to go to their homes because the cleanness is not maintained in the washrooms of schools, the children could not clean their hands according to the requirements due to lack of water in the schools and they cannot develop hygienic attitudes. No purification method is used to make water clean and pure. Lack of water treatment is less related to financial issues and more related to awareness about water based diseases.

According to the results 100% of populations of both public and private schools were using water without any purification process like filtered water or boiled water. Most of them were using spring water for drinking purpose which is used without any purification process.

The conditions of the government schools were comparatively better they give out the better look than private schools they have open area. The numbers of washrooms were available. Tap water was also available there but the availability of soap was not found there in the students washrooms while the soap was available in the washrooms of staff.

While during the comparative analysis to assess the knowledge of the students the results of percentile analysis showed that the private schools have high percentages than government schools they were mostly 90 plus while the percentages of governments slightly low than those.

The studies in the past suggests that practice of hand washing and proper water storage interventions in schools could be an effective tool to reduce illness and infections in primary school students. Such intervention can improve the health of students, and their attendance in school. The safe water and hygiene program will reduce absentees by improving the personal hygiene of students, and to change the behaviors of them at their homes through raising knowledge and awareness (Tambekar DH, 2012).

Hand washing helps to prevent the enteric pathogens which are the main cause of diarrheal diseases. Proper hand wash can control most of the diarrheal diseases. Such as Infectious diseases which can generally spread through hand to hand contact contain common cold and several gastrointestinal sicknesses, such as diarrhea. Diarrhea is a very common and serious global health problem. The research showed that 2.2 million people in developing countries die annually due to diarrhea most of them were children due to lack of access to pure drinking water, poor sanitation and poor hygiene practices (Emma, 2013).

The results of the study showed reasonably good responses towards the knowledge and importance of hand hygiene. Though, the attitude of the respondents also reflected their knowledge but their practices towards hygiene did not reflected in their knowledge and attitude about hygiene. The results of the study showed that during assessment of knowledge, attitude & practice of students almost all participants were aware about hand hygiene, and it could be a positive signal that any future activities and trainings

would strengthen the safe practice of hand hygiene. However, at this phase of assessment, knowledge and practice are not touching 100% score for the exact response in particular for main cause of infection, and the main track of spreading the infectious diseases and time for hand hygiene.

The results showed that students of both sectors have little knowledge and awareness about the safety of the food they used. They did not notice the food they are using weather is pure and healthy, they don't even know that many times they used spoiled food which caused food poisoning cases. Sometimes they may have knowledge about the safety of food but they cannot control the situations of kitchens where the food was being prepared that can cause sickness to them. The future trainings would support safe practice of hand hygiene.

5.2 Conclusion

The results of the study depicts that, there is no existence of strong relation between knowledge and the practices of personal hygiene among students of public and private schools it is essential to take some interventions which will increase the level of awareness about the serious infectious disease it will help to promote the positive hygiene behaviors and attitude in daily life of students. The students have little knowledge about the diseases which are caused by poor hygiene practices. While in the comparison of public and private schools the results showed that the students of private sector have more knowledge and positive attitude than public sector. While the gap between knowledge, attitude and practice were present at both sectors.

5.3 Limitations

The students spend more time at their homes. In the study the parents were not included to get the data.

5.4 Recommendations

The policies or regulations related to the development of personal hygiene and health promotion needed to be established or improved. Fun based activities hygiene education is extensively acknowledged throughout the world that children learn better and understand the messages which are communicated to them through such fun based activities, programs or events like drama, puppet shows poster competitions.

In Future practical studies which contains activities are required to evaluate the actual practices of hygiene among students, as well as further evaluation of student's awareness about personal hygiene

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QUESTIONNAIRE

Knowledge attitude and practice towards hygiene in schools at village Ali Sojal ,Ajk

For students

Note: All the information will be used for research purpose at PIDE .

Name_____ Age_____

Class_____ School_____

Date_____

To assess the knowledge of students

1. Do you know that diseases can spread from one person to another?

(i) Yes (ii) No

2. Does boiling water kill germs?

(i)Yes (ii) No

3. Human faces has germs, and should be flushed.

(i)Yes (ii) No

4. Water and food needs covering.

(i)Yes (ii) No

5. Waste items should not be thrown around the house or in open areas.

(i)True (ii) False

6. Stagnant water and dumping areas are home for mosquitoes.

(i)True (ii) False

7. Spraying pesticides will help control the spread of diseases.

(i) True (ii) False

To assess the practices of personal hygiene

8. Do you drink boiled water?

(i) Yes (ii) No

9. Do you wash hands before meal?

(i) Yes (ii) No

10. Do you wash hands after every meal?

(i) Yes (ii) No

11. Do you use a toilet inside your house?

(i)Yes (ii) No

12. Do you wash hands after going to the toilet?

(i) Yes (ii) No

13. Do you cover your mouth and nose during coughing and sneezing?

(i)Yes (ii) No

14. Do you wash hands after coughing and sneezing?

(i)Yes (ii) No

15. Do you use soap for washing hands?

(i) Yes (ii) No

16. Do you share your food and drinks even if you are sick?

(i)No (ii) Yes

17. Do you wear sandals all the time?

(i)Yes (ii) No

18. Do you use soap while bathing?

(i)Yes (ii) No

19. Do you use tooth brush and paste while brushing?

(I)Yes (ii) No

20. Do you cut your nails regularly?

(i) Yes (ii) No

21. Do you flush after using the toilet?

(i) Yes (ii) No

22. Do you dispose waste to municipal waste collectors?

(i) Yes (ii) No

23. Do you use mosquito nets, coils, repellants or mosquito bats at home?

(i) Yes (ii) No

24. Attitude of children towards hygiene measures and control of communicable diseases.

(i) Yes (no)

25. Personal hygiene and clean surroundings are important for healthy living

(i) True (ii) False

27. Sharing knowledge about healthy practices will lead to a disease free society?

(i) Agree (ii) Disagree

28. I am interested in increasing my knowledge about hygiene measures.

(i) Yes (ii) No

Discussion Questions:

1. Is it necessary to practice personal hygiene every day? Why?

2. What kinds of diseases can be caused by dirty finger nails? Why?

3. What kinds of diseases can happen from not brushing your teeth? Why?

4. Which habit is better, washing hands before meals or after meals? Why?

5. What kind of diseases can be caused from not washing hands before eating? Why?

6. What diseases can you get from dirty drinking water? Why?

7. Can diarrhea be caused by dirty drinking water? Why?

Questions on Student's Attitude

Learning more about personal is important to me?

We don't need to wash our hand when there is no visible dirt?

Through washing the hands we can prevent many infectious diseases?

When you eat something your nails must be cut?

When we use washroom our hands must be washed after using the washroom?

We should avoid sneeze and cough near others?

We should brush our teeth daily in the night after taking dinner?

Figure :1 Washroom of Tmeer e Public school Ali sojal



Source :Field work

Figure 2: Washroom of Tmeer e Public school Ali sojal



Source: Field work

Figure 3: Classroom of Tmeer e Public school Ali sojal



Source :Field work

Figure 4: washroom of Tmeer e nou public school



Source: field work

Figure 5 : Kashmir tameer e nou public school Ali Sojal



Source: Field work

Figure 6: Kashmir tameer e nou public school Ali sojal



Source :field work

Figure 7: Kashmir Tameer e nou public school Ali sojal



Source :Field work

Figure 8: Government girls middle school Ali sojal



Source :Field work

Figure 9: Government primary school Toppa



Source :Field work

Figure 10 : Government primary school Toppa



Figure 11: Government Primary school Toppa



Source :Field work