

WOLKITE UNIVERSITY
COLLEGE OF MEDICINE AND HEALTH SCIENCES,
DEPARTMENT OF PUBLIC HEALTH



**KNOWLEDGE ATTITUDE AND PRACTICE ON HAND WASHING AFTER TOILET
UTILIZATION IN WOLKITE TOWN, GURAGE ZONE, SOUTH WEST ETHIOPIA**

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ABSTRACT (SUMMARY)

BACKGROUND: The use of contaminated hands for cooking and eating makes possible the transmission of the contaminants (germs) into the body through food. In Ethiopia more than 250,000 under five children die every year from sanitation and hygiene related diseases. Some 60 percent of the disease burden is related to poor sanitation and hygiene. Even though the above problems are visible, proper hand washing is not as widespread as desired worldwide.

OBJECTIVES: To assess knowledge, attitude and practice towards hand washing after toilet utilization in households at Wolkite town, Gurage Zone, SNNPR, Ethiopia, 2021 GC.

METHODS: Community based descriptive cross-sectional study was conducted to assess knowledge, attitude and practice on hand washing after toilet utilization among households in wolkite town. The sample sizes was 360HH; Systematic random sampling technique was applied to select individual respondents. Quantitative way of analysis was Applied for the data which are collected from households through structured questionnaire. After administering the questionnaire, each supervisor completes coding, categorizing and checking the questionnaire for accuracy and completeness. Data was entered and analyzing by the computer using (IBM SPSS software version 2020).

RESULT: The study shows among 324 the total respondents, of this 76.1% had good knowledge and 23.9% had poor knowledge, with regard to attitude 56.1% had positive attitude and 43.9% had negative attitude; related with the practice of hand washing after toilet utilization 61.72% had good practice and the rest 38.28% had poor practice.

CONCLUSION: We can conclude that the study showed that among the total respondent it was found that good knowledge on hand washing after toilet utilization was 76.1% around 23.9% had poor knowledge, with regard to attitude 56.1% had positive attitude and around 43.9% had negative attitude; related with the practice of hand washing after toilet utilization 61.72% had good practice and the rest 38.28% had poor practice.

RECOMMENDATION: We recommend depending on our result behavioral change through health education on household levels regarding communicable diseases in relation with poor

practice of hand washing after toilet utilization and this should be done more of by health extension workers and the sub city health unit health committee.

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Acronyms and Abbreviation

AOR =Area of residence

CDC = Center of diseases control

HW = Hand Washing

SNNPR = South Nations Nationalities and Peoples

SPSS= Statistical Package for Social Science

UNICEF = United Nations child fund

WASH = Water Sanitation and Hygiene

WHO = World health organization

CHAPTER ONE: Introduction

1.1. Background

Hygiene is the practice of keeping oneself, one's living and working environment clean in order to prevent illness and disease [1]. Hand washing is the act of cleansing the hands with water or/and another liquid with or without soap or other detergents for sanitary purpose of removing soil and/or micro-organisms [2].

The practice of hand washing is about as old as man. It was an important practice held by the Jews who ensured that hand washing preceded eating. Good hand washing involves the vigorous, brief rubbing together of all surfaces of lathered hands, followed by rinsing under a stream of water. Hand washing suspends microorganisms and mechanically removes them by rinsing with water. Therefore, the fundamental principle of hand washing is removal, not killing [3].

The hands are central to many of our daily activities like handling objects, farming, poultry keeping, cleaning etc, all of which make the hands to be constantly contaminated.

The use of contaminated hands for cooking and eating makes possible the transmission of the contaminants (germs) into the body through food, thereby causing ill health [4].

Some critical times at which hand-washing must be employed include, after using the toilet, changing diapers, attending to a sick person, handling raw meat, fish or poultry, after handling garbage, treating a wound or cut, contact with domestic animals, before food preparation and before eating[1,3]. A great number of diseases can be transmitted from lack of or ineffective hand washing, particularly feco-orally transmitted diseases, ranging from self-limiting infections like diarrhea (Rotaviruses are major causes of diarrhea diseases in human infants), to potentially life threatening diseases like poliomyelitis and hepatitis A virus infection [5]. Hygienic measures, including hand washing with soap before meals and after use of rest rooms, have been found to prevent hepatitis A virus infection [6].

Hand washing, if regularly and properly practiced by mothers of children of under 5 years old will go a long way in reducing the prevalence of infectious diseases, hospital admissions due to these diseases and also mortality among the under 5 years old children, thereby making them grow well and healthy [7]. Programs for the reduction of morbidity and mortality must include hand washing to prevent contamination of food.

1.2. Statement of Problem

Proper hand washing is one of the simplest, most affordable and effective means of stopping the spread of infection via feces, body fluids, and inanimate objects [8]. Hand washing is especially important for children and adolescents, as these age groups are the most susceptible to infections gained from unwashed hands. [9] The two biggest killers of children in the developing world today are diarrheal disease and respiratory tract infections [10]. The simple act of washing hands with soap can cut diarrhea risk by almost half, and respiratory tract infection by a third [10]. There is improvement on morbidity and mortality rates but still diarrheal diseases are responsible for 21% of all deaths and 2.5 million deaths per year which has either direct or indirect relation with poor hand washing. In developing countries, there were 3.2 episodes of diarrhea per child per year in under five children with mortality rate of 4.9 children per 1000 per year [11]. Lack of knowledge on hand washing has association with prevalence of diarrhea [12]. Worldwide every minute 20 children under 5 years of age die, leading to more than 10.6 million deaths each year. The majority of these deaths are caused by conditions that are either preventable or treatable [13]. In developing countries, 80% of the diseases are associated with poor domestic and personal hygiene and about 2.2 million people die; mostly children die annually due to diarrhea; the same number again die from acute respiratory infections [14]. In Ethiopia up to 60% of the current diseases burden is attributable to poor sanitation [15]. ,

Around one third of the world population (32%) did not have access to improved sanitation facilities in 2015, including 946 million people who practiced open defecation [16]. Six percent (6%) of households in Ethiopia use an improved and not shared toilet or latrine facility. Another 9 percent of households (35 percent in urban areas and 2 percent in rural areas) use facilities that would be considered improved if they were not shared by two or more households [16]. Half of households in urban areas (50 percent) use an unimproved toilet facility, compared with more than 9 in 10 (94 percent) of households in rural areas. The most common type of toilet facility in both

urban and rural households is a pit latrine without a slab or open pit (41 percent in urban areas and 55 percent in rural areas). Overall, 32percent of households have no toilet facility at all; they are almost exclusively rural, accounting for 39percent of rural households. There has been an improvement since the 2011 EDHS, when 45 percent of all households in rural areas did not have a toilet facility [17].

In Ethiopia more than 250,000 children die every year from sanitation and hygiene related diseases. Some 60 percent of the disease burden is related to poor sanitation and hygiene [18]. Even though the above problems are visible, proper hand washing is not as widespread as desired worldwide. It has been reported that the frequency of hand washing with soap before handling food or after using a toilet was observed in only between 0% and 34.0% cases [19].

Center for Disease Control and Association for Professionals in Infection Control and Epidemiology have created guidelines for hand washing [20]. In order to emphasize the importance of hand washing, October 15 has been declared as the Global Hand Washing Day by UNICEF since 2008[20].

In addition to this due to the close proximity of children in schools and child care settings, there is a high risk for the spread of infectious disease. Half of hospital visit and 12% of all admission among children aged from 0 to 14 years are due to infections [21]. Among these, respiratory infections and infectious intestinal disease are responsible for 48% and 29% of children visit to health facility respectively [22]. The diseases burden associated with poor water, sanitation and hygiene is estimated to account for 4.0% of all deaths and 5.7% of the total diseases burden in disability-adjusted life years, Globally about 1.8 million people die every year due to diarrheal diseases, and children under the age of 5 years account for 90% diarrheal deaths .

CHAPTER TWO

2. LITERATURE REVIEW

Study in the shewa east Kersa district in households with latrine the habit of hand washing after defecation was reported to be only about 5.1%.only 8.3% had hand washing facility near the latrine. The habit of hand washing after defecation allied with the educational status of the respondents [23].

Descriptive cross-sectional study done on Assessment of Hand Washing Practice and its Associated Factors among First Cycle Primary School Children in Arba Minch Town Hand washing practice From all children, 278 (79.4%), and 277 (79.1%) of them washed their hands with soap after visiting toilet and before meal respectively. According to the measurements criteria for knowledge of hand washing practice, 254 (72.57%) were found to have sufficient knowledge; while rest had insufficient knowledge. Similarly, 254 (78.28%) children had positive attitude towards hand washing practice whereas 96 (21.72%) had negative attitude. [24]

Institution based cross sectional study was conducted with sample size of 246 students in primary school in Hosanna town from April 30/2016. From students participated in this study over all 167 (69.9%) students have good and 72 (30.1%) have poor knowledge. Regarding the attitude of students 142(59.4%) and 97 (40.6%) have good and poor attitude respectively. Overall 172(71.97%) of students have good practice and 67 (28.03%) have poor practice toward hand washing. Majority of the study subjects has adequate knowledge and about more than half of them have positive attitude. Overall practice of HW is good but utilization of soap and HW after toilet visit is low [25].

A study in Korea directly observed hand washing practices and found that only 63.4% of observed subjects truly washed their hands after using the toilet, despite the fact that 94% of subjects claimed to mostly or always wash hands after using public rest rooms [26]. This shows that there is a difference between saying “yes” to hand washing and its actual practice. According to previous studies, hand washing is crucial to diarrhea prevention [27]. In Ethiopia a study conducted by UNICEF and Ministry of health found that study participants had poor status regarding knowledge, attitudes, and practices of hygiene [28]. Communicable diseases are the

main causes of health problems in Ethiopia. Many studies and reports indicate that communicable disease account for more than 85% of the disease seen in the health institutions[28]. According to the Ethiopian federal ministry of health communicable disease accounted for most of the top ten causes of illness and death in 2008/09. Most causes of outpatient visits are due to communicable disease. Top ten leading causes of outpatient visits in most regions of Ethiopia, September 2008-august 2009 dysentery (diarrhea with blood), pneumonia and other or unspecified infectious and parasitic disease are among top ten outpatient visits. This are mainly related with poor hand hygiene [29].

But still there are no enough evidences for hand washing practice, and its contributing factors in Ethiopia in general in wolkite town in particular so this study aimed to fill this gap. There is paucity of available literature regarding parental knowledge, attitude and practice regarding hand hygiene. Most studies targeted children and health professionals and aimed at school based interventions. Hence, this present study is to evaluate knowledge, attitude and practice on personal hygiene and hand hygiene specifically after toilet utilization. The study findings were help to improve the delivery of hand hygiene education to the community, which consequently results in improved society perception and behavior on hand hygiene.

2.1. Significance of Study

Communicable diseases are worldwide health problem especially developing countries like Ethiopia. Most of these diseases are preventable through effective personal hygiene mainly proper hand washing and environmental sanitation. This study provides a rigorous analysis of knowledge, attitude and practice pertinent to hand washing after toilet utilization. As a result the findings will inform evidence based policy and practice recommendations to plan and implement hand hygiene programs. The finding of the study will give baseline information for promotion of hand washing and it will also help for planning and intervention of community health activities. The recommendations from this survey will also be utilized or helpful for local health planners, health administrators and those organization working on prevention of communicable disease especially on community health to consider during their planning and implementation. Findings from this study will help health planners and community as whole through providing basic information

on knowledge attitude and practice of community on proper hand washing. It will also provide baseline information and directions for further research activities in the area.

CHAPTER THREE: OBJECTIVES

3.1. General objective

To assess knowledge, attitude and practice towards hand washing after toilet utilization in Wolkite town, Gurage Zone, SNNPR, Ethiopia, in 2021;

3.2. Specific objectives

To assess knowledge of hand washing after toilet utilization among households, Wolkite town, Gurage Zone, SNNPR, Ethiopia, in 2021;

To assess the attitude towards hand washing after toilet utilization among households in, Worksite town, Gurage Zone, SNNPR, Ethiopia, 2021;

To assess the practice of hand washing after toilet utilization among households, Wolkite town, Gurage Zone, SNNPR, Ethiopia in 2021;

CHAPTER FOUR: METHODS AND MATERIALS

4.1. Study Area

Our study was conducted in Wolkite town which is the seat of Gurage zone, found in SNNPR and 158KM far from AA, in southern direction. It's located at latitude of 8° 17'N 37 47'E and longitude of 8.283 N 37.783 E with an elevation of 1910 and 1935 meters sea level .The structural plane of wolkite town is set up from 6 kebele and 3 sub-city's. The 3 sub-city are bekur, A/kifle ketema and gubre plus the corresponding 6 kebeles are selamber, Ediget chora, E/ber, gubrehe and A/hiwot. Wolkite town a total population of 92517, peoples of these 53% are males 47% are females. (Wolkite town statistical bureau)

4.2. Study Design and Period

Community based descriptive cross sectional study was conducted to assess knowledge, attitude and practice on hand washing after toilet utilization on july10- December 2021.

4.3. Source population

All households found in bekur sub city wolkite town

4.4. Study population

All Selected households in bekur sub city Wolkite town

4.5. Sampling frame

The list of households in Bekur sub city Wolkite town.

4.6. Study unit

The study units were adults in the selected households in Bekur sub city Wolkite town.

4.7. Inclusion criteria and exclusion criteria

4.7.1 Inclusion criteria

The households that will be including are those who had lived at least for the last 6 months and above in Wolkite town.

4.7.2 Exclusion Criteria

Adults which are an oriented person.

All rental households in which occupants are lived for, <6 month.

4.8. Sample size calculation

Sample size determination was undertaken through statistical technique. According to the formula the sample size was determined with some degree of precision for general population was used. p-value we used study done in hosanna in 2013e.c

$$n = Z^2 p (1-p) / w^2;$$

Where,

n= the required minimum sample size

Z= z-score value corresponding to a given level of confidence its value that corresponds to 95 % confidence interval equals 1.96

p= value (0.5)

w= allowable margins of error (0.05)

$$n = (1.96)^2 0.5(1-0.5) / 0.05^2 = 384$$

Since the total households are less than 10,000, which is 3079, sample size was adjusted by

Using correction formula

$$n = n_0 / (1 + n_0 / N)$$

Where n_0 = calculated sample

N=the total house holdsSoln – $n=343$

By adding 5% for non-respondent = $343+17=360$ HH was selected for the interview.

4.9. Sampling procedures

The sample were taken from Bekur sub city as it was selected by lottery method from three sub cities of wolkite town and then sample size was allocated proportionally for two kebele (Addis hiwot kebele, Ediget ber). The appropriate participants were selected every Kth house hold after labeling the household in each kebele.

The K^{th} value is calculated by dividing the households by the desired minimum sample size assuming that there is at least 1 HH in the selected house.

$$\text{Edigetberkebele} = 1554 * 360 / 3079 = 181.6 \sim 182 \text{HH}$$

$$K = 1554 / 360 = 4.31 \sim 4^{th}$$

$$\text{Addis hiwotkebele} = 1525 * 360 / 3079 = 178.3 \sim 178 \text{HH}$$

$$K=1525/360=4.23\sim 4^{\text{th}}$$

Hence during time of sampling we had taken the sample at every 4th until desired sample size is attained.

4.10. Data collection procedures and instrument

Structured questionnaire's comprised of questions on respondent's socio-demographic characteristics, knowledge, attitude and practice of hand washing after toilet utilization will be used for data collection.

4.11 Operational definitions

Hand washing at critical time: - it includes washing hand before preparing food, before eating food, after eating, after cleaning baby and after visiting toilet.

House hold: a single person live alone or a group voluntarily living together having common house keeping a management for supplying basic live need, such as principal meals.

Good Knowledge: - those households who scoring at least 6(60%) and above in positive knowledge questions.

Poor knowledge: those households who fail to answer 6(60%) of the positive knowledge questions.

Positive attitude:- those households who could score at least 6(60%) and above from the questions that measure attitude.

Negative attitude: - those households who couldn't score at least 6(60%) from the questions that measure attitude.

Good practice: -those households who scored 4(60%) and above in practice questions.

Poor practice: -those households who fail to score 4(60%) of the practice questions.

4.12. Data collection procedure:

Firstly, was taken information about the number of population and household's from sub city municipality office, and then we will be code all households in sub-city. Then the data was collected by using, face to face interview through structured questionnaires, at households. In households where there are married couples, the husband or the wife (preferably the wife if both

are available at the time) will be considering as respondent to the questionnaire. In other circumstances (when there were no married couples), the head of the households will be considering as to respond to the questionnaire. In condition where the appropriate respondents were not be available in the house during initial visit, one more revisit was considered to contact the appropriate person .The data was collected by the group members.

4.13 Data quality control

Training was given for data collectors by advisors on how to interview and collect data from households. The data was checked by advisors for completeness, consistence and to identify extreme values.

4.13. Data processing, Analysis and presentation

4.13.1. Data processing

Quantitative way of analysis was applied for the data which are collected from households through structured questionnaire. After administered the questionnaire, each supervisor, mostly in the same day, completes coding, categorizing and checking the questionnaire for accuracy and completeness. Data entry followed immediately by computer software or Statistical package for social science (SPSS).

4.13.2. Data Analysis

Data was analyzed by the computer using SPSS software version 20. The finding of this study was presented in proportion, frequencies and percentage in tables for categorical variables. Charts like pie chart, bar chart was used to summarize categorical variables and histogram was used for continuous covariates. Data summarization was also be made by using measures of central tendencies: mean along with standard deviation for normally distributed continuous variables, median and Interquartile range were used to present results of skewed continuous variables.

4.14. Ethical consideration

Permission paper was obtained from Wolkite University, Collage of medicine and health science. The objective of the study was explained to the municipality of the Wolkite town and permission was obtained from it. After telling them the importance of the study verbal Consent of subjects was asked before data collection and subjects was assured about the confidentiality of the information they gave, and also the right of respondents who refuse was respected.

4.15. Dissemination plan:

The findings of this study was submitted and presented to Wolkite University College of medicine and health science, department of public health. The copy of the results will be disseminated to the Gurage zone health office, Wolkite town administrative body and other concerned bodies.

CHAPTER FIVE: RESULTS

5.1. Socio-demographic characteristics

A total of three hundred sixty individuals, were interviewed giving a response rate of 90%. From the total individuals participated (324) in this study 100(30.69%) are males and 224(69.31%) are females with mean age of 35 years. Majority of the house holds 48.1 % were Muslim religion followers whereas 38.4%, 8.3, 2.6, 0.7 are Orthodox, Protestant, catholic and others religion followers respectively. Most of the respondents 100(15.35%) have completed secondary, 50(15.35) diploma, 90(27.7%) Degree and above, 33(10%) Can't read and write and 1(0.3%) other. The majority of respondents were merchants 136 (42.0), house wife 97(30), government workers 39(15.5%), students 20(6.3%), daily labor 28(9.7%). The mean income of the households was 6000 birr and mean age of the respondents was 35 years.

Respondent characteristics	Category	Frequency	Percentage
Respondents Educational status	Illiterate	33	10
	Primary	100	30.69
	Secondary	50	15.35
	Diploma	50	15.35
	Degree and above	91	27.7
Respondent occupational status	Merchant	136	42
	government employee	39	12
	daily labor	32	9.7
	house wife	97	30
	student	20	6.3

Respondents ethnicity	Gurage	194	60
	Amhara	49	15
	Kembata	16	4.8
	Kebena	32	10.2
	Oromo	17	5.2
	Others	16	4.8
Respondents religion	Muslim	158	48.8
	Orthodox	124	38.4
Respondent religion	Protestant	27	8.3
	Catholic	8	2.6
	Others	7	1.9
Respondents marital status	single	52	16
	married	252	77.8
	divorced	12	3.8
	widower	8	2.5

Table 1. Socio-demographic characteristics of the respondents Wolkite town, guraghe zone, SNNPR, Ethiopia, 2021.

The mean age of the respondents are 35 years and minimum age is 18 and maximum 70 years. Mean monthly income is 6000 and minimum income is 1500 and maximum 20000 birr.

Table 2. Age and monthly income of the respondent's wolkite town, Ethiopia, 2021.

	age of the respondent	monthly income of the respondent
Mean	35	10000

Minimum	18	1500.00
Maximum	70	20000.00

5.2. Knowledge about hand washing

With regard to knowledge about hand washing, most of the respondents 93.2% believed that hand washing prevents diseases and 77.1% diarrheal diseases can be contracted by not washing hands; from 14 questions asked around 76.1 % have good knowledge and 23.9% have poor knowledge.

Table 3:- knowledge of respondents on Hand washing after toilet utilization in wolkite town, Gurage zone, 2021

No	Characteristics	Category	Frequency	
			No	%
1	Have you ever heard about hand washing?	Yes	275	85
		No	49	15
2	Helps prevent diseases	Yes	302	93.2
		No	22	6.8
3	Helps protect your children from infections	Yes	152	46.7
		No	172	56.3
4	Helps limits spread of infections in the community	Yes	200	61.72
		No	124	38.28
5	Diarrheal diseases can be contracted by not washing hands?	Yes	250	77.1
		No	74	22.9
6	Using soap and water are mandatory for effective hand washing?	Yes	300	92.6
		No	24	7.4

7	Did you have any health education on hand washing in the last one year?	Yes	240	74.07
		No	84	25.93
8	Human faces contain disease causing microorganisms?	Yes	297	91.6
		No	17	8.4
9	Watches, bracelets, and rinds should be removed during hand washing?	Yes	200	61.72
		No	124	38.28
10	Medium hot water should be used for hand washing?	Yes	250	77.1
		No	74	22.9

Table 4 .Categorized knowledge of households, Wolkite town, Ethiopia, 2021.

Knowledge	Frequency	percent
Good knowledge	247	76.1
Poor knowledge	77	23.9
Total	324	100

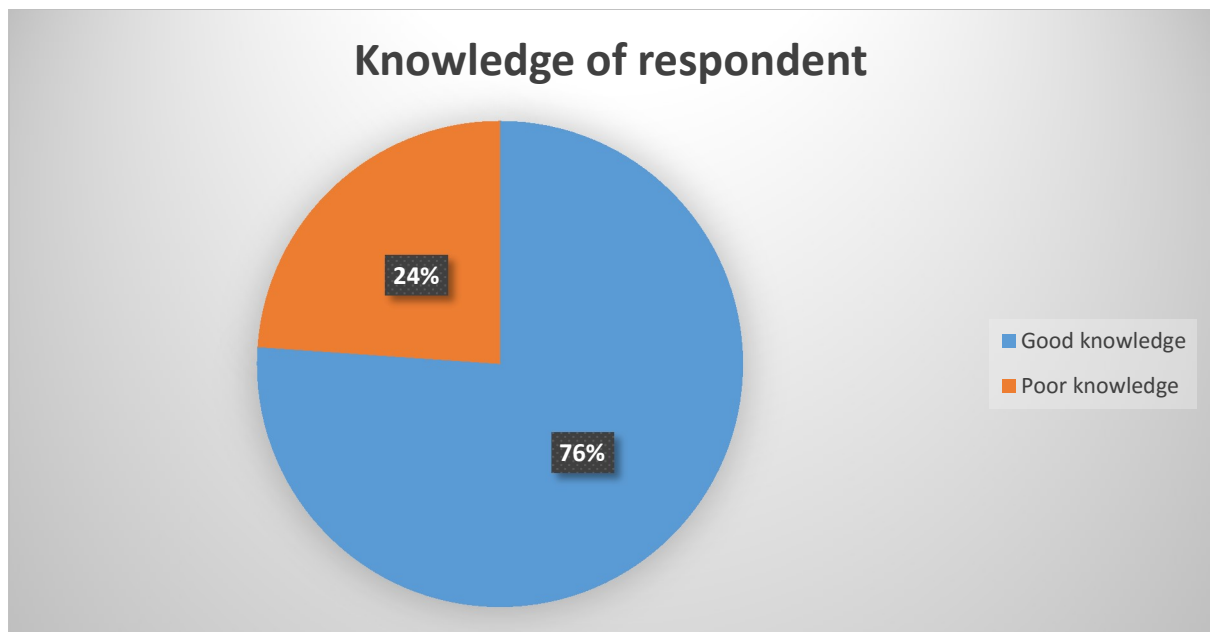


Figure 1:- knowledge of the respondents on hand washing after toilet utilization of respondents in wolkite town guraghe zone, SNNPR Ethiopia, 2021.

5.3 Attitude towards hand washing

Among the participant 100(30.86%) strongly agree, 120(37.1%) agree and 25(7.71%) that hand washing with soap is the single most effective and inexpensive way to prevent diarrhea. Based on ten questions/scale to measure the attitude towards hand washing after toilet utilization was 182(56.1%) and 142(43.9%) positive and Negative attitude respectively.

Table 5:- Attitude of respondents on Hand washing after toilet utilization in wolkite town, Gurage zone, 2021

no	Characteristics	category	Frequency	
			No	%
1	If you fail to wash your hands you will be exposed to disease?	Strongly agree	124	38.3
		Agree	88	27.2
		neutral	19	6
		Disagree	17	5.1

		Strongly not agree	76	23.45
2	If you don't wash your hands with soap and water after toilet utilization you will be exposed to disease?	Strongly agree	140	43.2
		Agree	132	40.7
		neutral	40	12.35
		Disagree	10	3.08
		Strongly not agree	2	0.6
3	Do you feel hand washing is time wasting?	Strongly agree	35	10.8
		Agree	50	15.4
		neutral	20	6.2
		Disagree	123	38
		Strongly not agree	96	29.6
4	washing one hand is enough	Strongly agree	70	21.6
		Agree	60	18.5
		neutral	40	12.34
		Disagree	100	30.86
		Strongly not agree	124	38.27
5	Excessive hand washing commonly seen as a symptom of mental disorder?	Strongly agree	50	15.4
		Agree	215	66.35
		neutral	15	4.6
		Disagree	34	10.5
		Strongly not agree	20	6.2
6	The bacteria can spread easily if you keep nail long?	Strongly agree	134	41.35
		Agree	53	16.35
		neutral	20	6.2
		Disagree	77	23.8

		Strongly not agree	40	12.4
7	Hand washing with soap is the single most effective and inexpensive way to prevent diarrhea	Strongly agree	100	30.86
		Agree	120	37.04
		neutral	15	4.62
		Disagree	25	7.71
		Strongly not agree	64	19.75
8	Can ash substitute soap	Strongly agree	60	18.5
		Agree	24	7.4
		neutral	8	2.5
		Disagree	134	41.35
		Strongly not agree	98	30.25
9	Frequent hand washing can lead to skin damage	Strongly agree	102	31.48
		Agree	88	27.16
		neutral	32	9.88
		Disagree	45	13.89
		Strongly not agree	57	17.6
10	Is it the only responsibility of health professionals to promote and advocate hand washing?	Strongly agree	117	36.11
		Agree	101	31.17
		neutral	7	2.16
		Disagree	28	8.64
		Strongly not agree	71	21.39

Table 6:- categorized Attitude of respondents on Hand washing after toilet utilization in wolkite town, Gurage zone, 2021

Category	Frequency	Percent (%)
Positive attitude	182	56.1
Negative attitude	142	43.9
Total	324	100

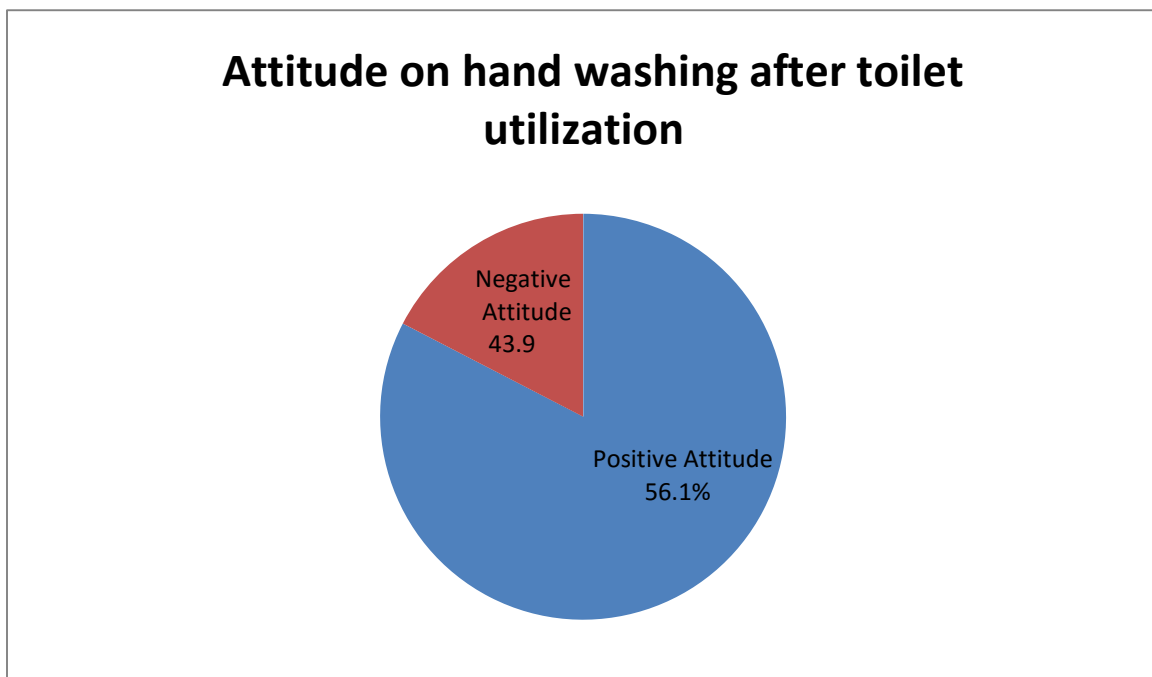


Figure 2: Attitude of respondents on hand washing after toilet utilization of respondents in wolkite town guraghe zone, SNNPR Ethiopia, 2021.

5.4 Practice on hand washing

From total respondents around 200(61.72%) have good practice toward hand washing after visiting the toilet with water and soap, and 124(38.27) have poor practice toward hand washing with soap and water after toilet utilization.

Table 7: Practice of households on Hand washing after toilet utilization in, Wolkite town ,Gurage zone, SNNPR,Ethiopia,2021

	Characteristics	Category	Frequency	
			No	%
1	do you have hand washing facility near to the latrine	Yes	168	52
		No	156	48
2	do you always wash your hands after visiting the toilet with soap and water	Yes	200	61.72
		No	124	38.27
3	what materials do you have used	Water only	80	24.69
		Water and soap	200	61.72
		Water and ash	14	4.32
		sanitizer	30	9.25
4	in average for how many times you wash your hands per day	six and above times	60	18.52
		below six times	180	55.55
		I do not know	84	25.93
5	for how long duration do you wash your hands at a time	10-15 sec	60	18.52
		15-20 sec	100	30.86
		30 sec -1 min	40	12.35
		no specific length of time	124	38.27
6		do nothing	230	70.98

	when there is no soap and water what do you do after you visit the toilet	always use hand sanitizers	30	9.26
		sometimes use hand sanitizer	64	19.75

Table 8: Categorized Practice of respondents on Hand washing after toilet utilization in, wolkite town, Gurage zone, SNNPR, Ethiopia, 2021

Category	Frequency	Percent
Good Practice	168	51.85
Poor Practice	156	48.15
Total	324	100

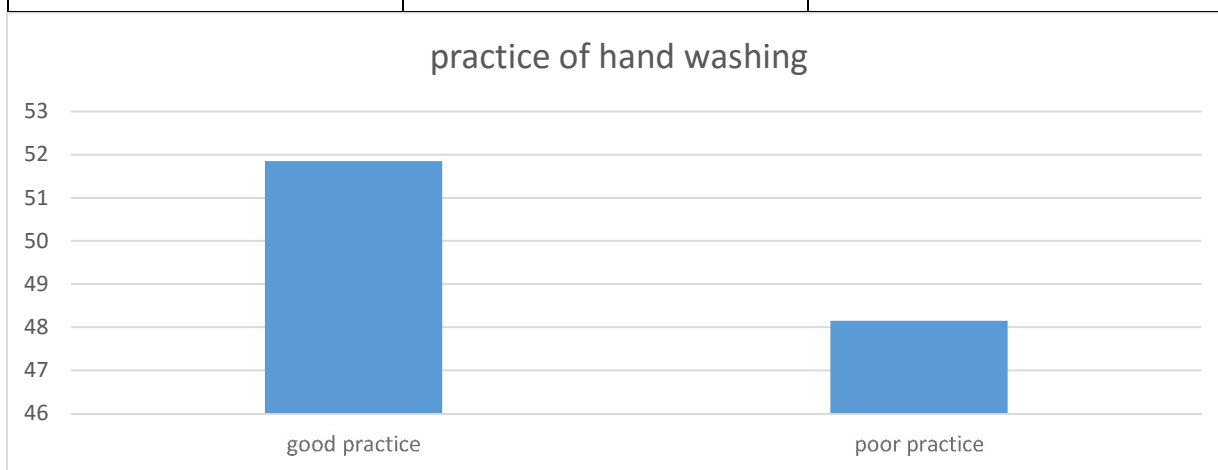


Figure 3: Practice on hand washing after toilet utilization of respondents in wolkite town guraghe zone, SNNPR, Ethiopia, 2021

CHAPTER SIX

Discussion

Knowledge about hand washing after toilet utilization

With regard to knowledge about hand washing, most of the respondents 94.6% believed that hand washing prevents diseases better than study done in Arbaminch students of private university 83% of the students thought that washing hand was important to prevent diseases, 17% of the students did not think [30]. According to study done on mothers of under five children zeway 78.7% have told that hand washing is important in prevention of diseases and 16.7% have given the response that they do not know the importance of hand washing [31]. According to study done on mothers of under five children Hosanna area 82.35% and 89% of respondents in rural area considered that diarrhea could be prevented. according to this study around (80.4%) believed that medium hot water should be used for hand washing it is better when it is compared with the study done in private university in Hawasa 28.5% replied that medium hot water should be used; while 69% believed that cold water should be used for washing hands, this can be due to setting difference or socio-economic status difference. 80% of the respondent watch and bracelet need to be removed during washing.

From the respondent who participated in this interview (76.1%) and (23.9%) had good and poor knowledge about hand washing after toilet utilization respectively, and it is low When we compared this with knowledge of students report in University of Zeway (77%) [32]. and with study done in Bangladesh where 83% of the total respondents are aware that unhygienic practices facilitate growth and transmission of „germs But it was better with the case of Northern Shoa of Ethiopia where about 52% of the students were classified as having adequate knowledge of proper hygiene including HWWS [33].

Attitude towards hand washing after toilet utilization

From the 324 respondents in this study, (56.1%) and (43.9%) had good and poor attitude respectively. It is low comparing this with study in South Africa with good attitude ($91.40 \pm 1.16\%$) (35), the level of attitude was less in this study. This finding is almost similar with finding from Lake Mereb District of Ethiopia with positive hygiene behavior of 61.6%.

Practice of hand washing after toilet utilization

On duration of hand washing, (38.27%) do not know how long duration they wash their hands at a time and of the remaining said they used <15s were (18.52%) and 30 s-1 min to wash their hands were (12.35%) as it is lower compared with the study done in private university in Bangladesh 39.5% agreed that at list 15 seconds is required for washing hands properly and around 30% did not know the time needed for washing hands. this may promote transmission of disease-causing microbes from wet hand and increased number of residual microorganisms on hand.

The frequencies of wash per day show that the hand washing practice is mainly related with meal times. Overall, (61.72%) of respondents had good practice and (38.28%) had poor practice toward hand washing after toilet utilization in this study and it is high when compared with the study done in Shashmne in rural areas 71% always use soap and water after toilet utilization, Study done on mothers of under five in slums of Addis Ababa, Ethiopia around 17.1% wash their hands with water and soap after toilet utilization. Lower than study done on mothers of under five children in Arbaminch mothers who washed their hands with soap and water after defecation 79.3%. The practice is less than that of Ghana after toilet visit hand washing with soap (90.2%); but better in comparison with that of Northern rural Vietnam where (66%) students used soap to wash their hands [34].

Limitation of the study

Recall bias, and since the study didn't include observation under or over reporting of the frequency, duration of stay, use of soap during hand washing after toilet utilization.

Strength of the study

Since the study was community based and interview was conducted by going house to house, it can represent the community.

CHAPTER SEVEN

7. CONCLUSION AND RECOMMENDATION

7.1 CONCLUSION

We can conclude that the study showed that among the total respondent it was found that good knowledge on hand washing after toilet utilization was 76.1% around 23.9% had poor knowledge, with regard to attitude 56.1% had positive attitude and around 43.9% had negative attitude; related with the practice of hand washing after toilet utilization 61.72% had good practice and the rest 38.28% had poor practice. Furthermore, multifaceted and dedicated effort must be undertaken to rectify this attitude and practice from early on in the town.

7.2 RECOMMENDATIONS

Depending on the results found the following suggestions are recommended.

- ✓ Behavioral change through health education on household levels regarding communicable diseases in relation with poor practice of hand washing after toilet utilization and this should be done more of by health extension workers and the sub city health unit health committee.
- ✓ The coordination between the stakeholders in the health sector needs to be strengthened and to increase non-governmental organizations engagement in the community projects.

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ANNEXIES (ENGLISH- VERSION)

Good Morning, My name is.....I am a student in Wolkite university college of medicine and health science as part of my academic requirement we are expected to conducted research about assessment on knowledge, attitude and practice on hand washing after toilet utilization in Wolkite town. In this study the role of your active participation is important. The interview will take only 20 minutes. Your name and identification will not be documented because the result of the study is important for the whole community, not for individual person.

Your participation in this research project is voluntary and will not have any type of payment. You have full right to refused full or partially from participating in this research and again you can choose not to respond of the questions and this will not affect you from getting any kind of health related services.

Are you willing to participate?

If the answer yes. Continue No. Stop

Thank you very much!!

General information

1. Questioner code _____
2. Household number _____
3. Kebele _____ village _____
4. Enumerator name _____ date _____

Part 1. Socio-demographic Characteristics

Sex 1.M 2.F

Age

Marital status

1. Single 2.Married 3.Divorced 4.Widower

Ethnicity

1.Gurage 2.Amhara 3.kembata4.kebena5.oromo6.Others

Religion

1. Orthodox 2.Muslim3.Protestant 4.Catholic 5.Others

Relation to the house hold

1. Father 2.Mother 3.child4.others

Occupational status

1. Merchant 2.Goverment employee3.Daily labor

4. House wife 5.student6.others

Educational status....

1. Illiterate 2.elementary (1-8) 3. Secondary (9-12)

4. Diploma 5.degree6. Others

Monthly income in birr...

A. KNOWLEDGE

1. Have you ever heard about hand washing? 1. Yes 2.No
2. Helps prevent diseases 1. Yes 2. No
3. Helps protect your children from infections 1. Yes 2. No
4. Diarrheal diseases can be contracted by not washing hands?
1. Yes 2.No
5. Using soap and water are mandatory for effective hand washing?
1. Yes 2. No
6. Did you have any health education on hand washing in the last one year?
1. Yes 2. No
- 7 .Human faces contains disease causing microorganisms? 1. Yes 2.No
8. When you get your Hands visibly dirty?
1 .Before meal 2. After meal 3. After toilet
9. Watches, bracelets, and rinds should be removed during hand washing?
1. Yes 2.No
10. Medium hot water should be used for hand washing?
1. Yes 2.No

B. ATTITUDE

1. If you fail to wash your hands you will be exposed to disease?
1. Strongly agree 2.Agree 3.neutral 4. Disagree 5Strongly not agree

2.If you don't wash your hands with soap after toilet utilization, you will be expose to disease?

1. Strongly agree 2.Agree 3.neutral 4. Disagree 5. Strongly disagree

3. Do you feel hand washing is time wasting?

1. Strongly agree 2.Agree 3.neutral 4. Strongly not agree 5. Disagree

4. Washing one hand is enough?

1. Strongly agree 2.Agree 3.neutral 4. . Disagree 5 strongly disagree

5 .Excessive hand washing commonly seen as a symptom of mental disorder?

1. Strongly agree 2.Agree 3.neutral 4. Disagree 5. Strongly dis agree

6.The bacteria can spread easily if you keep nail long?

1. Strongly agree 2.Agree 3.neutral 4. Disagree 5. Strongly disagree

7. Hand washing with soap is the single most effective and inexpensive way to prevent diarrhea?

1. Strongly agree 2.Agree 3.neutral 4.Disagree. 5. Strongly not agree

8. Can ash substitute soap?

1. Strongly agree 2.Agree 3.neutral 4. Disagree 5. Strongly disagree

9. Washing can lead to skin damage?

1. Strongly agree 2.Agree 3.neutral 4. Disagree. 5. Strongly disagree

10.It is only the responsibility of health professionals to promote and advocate hand washing?

1. Strongly agree 2.Agree 3.neutral 4. Disagree 5.Strongly disagree

C.PRACTICE

1. Do you have hand washing facility near to the latrine? 1. Yes 2. No

2. Do you always wash your hands after visiting the toilet with soap and water? 1. Yes 2. No

3. If yes for Q4, what material do you have used?

1. Water only 2. Soap and water 3. ash and water 4. Sanitizer

4. In average for how many times you wash your hands per day?

1. Six and above six times 2. Below six times 3. I don't know

5. For how long duration do you wash your hand at a time?

1. 1.5-10 sec 2. 15-20 sec 3. 30 sec-1min 4. No specific length of time

6. Where there is no soap and water what do you do after you visit the toilet?

1. do nothing 2. Always use hand sanitizer 3. Sometimes use hand sanitizer

Thank you! I have finished the interview.

If you have any question_____

ADVISOR APPROVAL SHEET

This is to certify that the project result paper entitled “ ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE ON HAND WASHING AFTER TOILET UTILIZATION IN WOLKITE TOWN, GURAGE ZONE, SNNPR, ETHIOPIA, 2021 G.C” submitted to wolkite university college of medicine and health science department of public health in partial fulfilment for the bachelor degree of public health in undergraduate programs and has been supervised by Ms.Tigist G/Mariam and Mr. Hamid Z. .The students have fulfilled the research proposal requirement and hence, here by the investigator are allowed to go ahead with the actual wok.

Ms. TIGIST G/MARIAM (MPH).....

Mr. HAMID Z. (MPH)

Advisor's NamesignatureDate.....