Assessment Of Personal Hygiene Practice Among Preparatory School Students In Jimma Town, South West Ethiopia.

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JIMMA UNIVERSITY COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES, DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE ANDTECHNOLOGY

RESEARCH PAPER

ON

PERSONAL HYGIENE PRACTICE AMONG PREPARATORY SCHOOL STUDENTS IN JIMMA TOWN, SOUTH WEST ETHIOPIA.

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MAY, 2014

JIMMA, ETHIOPIA

FINAL THESIS APPROVAL

I. Advisor

Student _____ has completed his/her work per the advice, comments and recommendation given by the respective advisor.

As I am his/her advisor, I confirm the finalization of his thesis work by my signature.

Advisor:

Name	Signature
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II. Department Head

Department of Environmental Health Sciences and Technology appreciates and approves the successful completion of his/her thesis.

Name: _____ Signature & Seal: _____

Date:_____

N.B It should be noted that the thesis is to be considered as finalized after the approval of all advisors.

APPROVAL

This is to certify that the research evaluation committee of _____conducted a meeting on the _____ date of_____ 2014.

The committee read and examined his/her thesis, supervised his/her defense of it in oral examination and decided to recommend that his/her study be submitted to the dean of College of Public Health and Medical Sciences and through him to the president of the University in partial fulfillment for the degree of Bachelor of Science in Environmental health.

_____

Chairman, the research committee

Members

_____

_____

Dean, College of Public Health and Medical Science

ABSTRACT

***Background**: - Personal hygiene is especially important to reduce and prevent diarrhea, skin and eye infection. Personal hygiene includes health practices such as bathing, washing hair, brushing teeth. Cleaning clothes.*

***Objective**: - The main objective of study is to assess the personal hygiene practice of preparatory school students in Jimma town.*

***Methods: -** A cross sectional study was conducted in governmental preparatory school from March 15-17, 2014. From the total preparatory students, 275 were selected by using systematic random sampling technique. The raw data was collected using structured questionnaires' and observational check list.*

Result : - Among result 56% washed 2 or 3 times per week,28% washed weekly, 7.3% washed daily 12.7% washed in every 2 weeks and also from the total students 90.7% practiced washing hands after visiting latrine. Similarly 51.3% students washed their hands before and after eating and all of them trimmed their finger nails and toe nails.*There is significant association between students personal hygiene practice with their sex, and grade level but no significant association with their age.*

***Conclusion and recommendation**: - there is no lavatory,and proper solid waste disposal system. There is no adequate water supply, and dirty and odoured latrines. Most of students (72.7%) had good personal hygiene practice. Below half students conduct fair and poor personal hygiene practice. No provision of health education to the students and did not conduct personal hygiene checkup .the school should be facilitate school utilities such as hand washing basin or lavatory , onsite storage of refuses and proper solid waste disposal system.*

Operational definitions of terms

Personal hygiene: is the cleanliness of an individual with head hair, noise, mouth and teeth, body (bath), cloth finger and toes nails.

Good personal hygiene: is a quality of a given body structure measured number dirty particles, the source of with many be from in or outside the body with a change and effects on the body neatness.

Fair personal hygiene: if and only if clothes, nails, hair, and general appearance of the student are kept clean to some extent.

Bad personal hygiene: is a quality of a given body structure measured by presence of dirty particles (be it living or nonliving) the source of which may be from in or outside the body with a change and an effect on the body neatness.

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ACRONYMS

FDRE: - Federal Democratic Republic of Ethiopia.

JU:-Jimma University

KAP:-Knowledge, Attitude and Practice

VIPL:-Ventilated Improved Pit Latrine

WHO:-World Health Organization.

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CHAPTER ONE

1. INTRODUCTION

1.1 BACKGROUND INFORMATION

Jimma town is located 325km from Addis Ababa .its astronomical location is 7c^{o} 4' North latitude and 36c^{o} 5, East longitude. There are 23 elementary school, 5 secondary and 1 governmental preparatory school, 3 technical and vocational school, 10 college and university which is intended in governmental according to 2009 the sample survey report of Jimma town health bureau. Jimma town was founded in 1837. Jimma is one of the reform towns in the region and has city administration, municipality and 13 kebeles. It explores social, economic and administrative themes, but also attempts to show the interrelationship between these themes. Socially, the town of Jimma evolved during this period from a home town of a relatively homogenous society and culture to a place of residence for a diverse and increasingly cosmopolitan population. It is a story of continuity because Jimma, which had from the very beginning been a center of trade, continued to be so during this period also. There was significant change, however, because unlike the previous decades in which Jimma served as a point of exchange or transit for elite goods that mostly originated beyond the borders of the Oromo kingdom, Jimma during this period developed into the chief center for the collection, organization and export of a cash crop (coffee) that grew in the country side all around it. The background for this was set by the ending of the autonomous political economy of the Ethiopian state on the eve of the Italian occupation of 1936. But the decision by the Italians to make Jimma the chief center of their activities in the whole of southwestern Ethiopia was of even greater significan.

1.2. Statement of the problem

Personal hygiene is one of the basic tools in combating the transmission of the different disease including skin gastroenteritis and intestinal parasites. Intestinal parasitic inflectional are rampant in the poorest developing countries of the world often emanating from contamination of the environment by human excreta. In any other developing countries, intestinal parasitic infections are widely spread due to poverty poor sanitation and ignorance of health promotion practices. (Ahmed &Kloosstelmut, 1988).

At the world summit on sustainable development at Johannesburg in itself to have by 2015 the proportion of people without access to safe sanitation. Since 1990 an estimated 747 million people have gained access to sanitation facilities (equivalent to205, 000 people every day). Despite this huge achievement, a further 1,089 million rural and 1,085 million urban dwellers will need to gain access in the coming 15 years, if the 2015 target is to be realized. Today, sixty percent of people living in developing countries amounting to some 2.4 billion people have no access to hygienic means of personal sanitation (UNICEF, 2000).

In Africa and developing countries in south East Asia 4-8% 0f all disease burden is attributable to poor personal hygiene practice or lack access to safe sanitation. Over 99.8% of the death attributable to these factors occurs in developing countries and 90% are deaths of students (Environmental health project, 2003).

Minister of health estimates that 60 to 80 percent of communicable diseases were due to the lack of basic sanitation services. Personal hygiene has been critical factor in most rural areas and small towns due to lack of soap and shortage in quantity and quality of water (AFDE, 2007).

In Ethiopia, especially in the rural area, scabies, typhoid, fungus, skin infections, ulcer, trachoma, relapsing fever, intestinal parasites, diarrhea and other communicable diseases are predominantly seen due to poor personal hygiene.

The reasons for poor personal hygiene are lack of knowledge on the part of communities. Poor access to clean and adequate water supply, weak economic capacity of communities, back ward life style and culture and working behavior also contribute a lot to this (FDRE,2004).

It is widely recognized that schools can play an important role in prevention, controlling and promoting society health.Poorly can be a source of disease and ill-health (Winbladu&Duavy, 2004).

Several studies were conducted on personal hygiene practice at several secondary and elementary schools. However, there are no comprehensive studies conducted on preparatory school students that investigate their practice on personal hygiene. .

1.3. SIGNIFICANCE OF THE STUDY

The human body can provide places for disease causing germs and parasites to grow and multiply. These places include the skin and in and around the openings to the body. It is less likely that germs and parasites will get inside the body if people have good personal hygiene habits.

Every student comes from individual family environment to condensed school compound, which could be problems of communicable disease and at the same time every students comes with different personal hygiene behavior. This cumulative effect of personal hygiene behavior was significant if it organized and practiced in preparatory school. However, there is no study that has been conducted in Jimma preparatory school that shows the extent of the problem. Therefore this study is important to fill the gaps by assessing factors and point out the problems.

The result of study will be used:-

-To plan hygiene education in the school

-As a source of information for health workers and other Concerned bodies

-As base line data for further studies

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CHAPTER TWO

2. LITERATURE REVIEW

School hygiene education can contribute greatly to improving water supply and sanitation related behavior. By establishing basic hygiene practices, school programmed can help to modify or reinforce attitudes and habits developed at home. New facilities, such as learn how to use and maintain sanitary latrines, water supplies and why hand washing is essential after latrine use. The organizational structure for community environmental improvements is necessary to introduce changes in school. From school health programmed the most important and most practicable part is hygiene education and checkup practice (Anderson, 1976).

In 1996 world health manager emphasized that, the school is an extra ordinary effective setting in which to improve the health of pupils, staff, families and members of the community. It is the means of supporting the basic human rights both education and health (Ahmed&Kloosstelmut, 1988).

Intestinal parasitism is distributed throughout the world. As-cariasis, amoebiasis trichuiriasis and hookworm infections are among the most common parasites. Most of these infections are widely spread in the topics, where most of the developing countries are located (Record1 of 1 Medicine, 1995).

Personal hygiene, especially hand washing, is frequently mentioned as important aspects of diarrhea diseases prevention in water and sanitation programmed. Hand washing practice is difficult to assess but the micro-biology analyses of hands shows promise as an indicator of behavior have and how living condition affect behavior and the role of hands in diarrhea diseases transmission. It was recommended isolating faucal indicator bacteria from hands and fecal streptococci as an indicator of fecal contaminator. Hence personal hygiene practice is especially important to reduce and prevent diarrheas, intestinal parasitism, skin and eye infection and lice born infection (Hubley, 1993).

A study of the impact of health imparted to school student on their knowledge, attitude and practice in regard to personal hygiene, were done in India on 324 rural school students. It was assessed to measure the relative levels and the impact of health education. The six months course was conducted. Evaluations were made before course introduction, twice three months apart during the course and three months after completion of the course. The results indicated that health knowledge, attitude toward personal hygiene, and practice of personal hygiene improved significantly after the course. The main score at the predation assessment was 10.1 and gradually increased to a level of 14.1 at nine months. The mean score on attitude was 24.4 precaution, in the assessment of practice, the mean of score precaution was 19.5 which had statistically significant increase in the follow up period, but sustaining effect of the education programmed is necessary(WHF,1991).

Another study in conducted in India ‘’school students and conveyors of health information for family member’’ make know that they have investigated the extent to which health information is passed by school student to adult member of their families. That is students of sixth to tenth standard, age 11-15 years were thought hygiene, sanitation and immunization by attained health educator. They were encouraged to discuss the topics with their families at home they found a statistically significant increase in knowledge about health among both students and their families after their teaching sessions. Moreover, 23% of family members who were questioned at this stage mentioned that their children where a source of health information. So school students in the long run, in India could play a significant role in imparting health information to adults. In fact the above truth can work in our country, if practiced widely in secondary school (Gesseie, 2003).

In Kenya, the likelihood of fecal contamination of the school environment is high because many schools including the ones described in this evaluation have few latrines, inadequate water supplies, poor quality of available water sources, water storage in containers the permit hands to touch and contaminate stored water and a lack of hand wash facilities besides impacting school attendance.

The resulting burden of diarrheal disease and parasitic infestations has a negative impact on students' growth, nutritional status, physical activities, cognition concentration and school performance (WHO, 2007).

Bility., etal indicated that the provision of appropriate water, sanitation and hygiene education, especially in school, is very weak in some areas of South Africa. Inadequate education is one of biggest obstacles to provide sufficient water in the country. The South Africa hygiene education project was implemented during 1996-98 with the goal of education curriculum in formed by the perceptions of student and adolescents in preparatory schools (Bility, etal., 1997).

A country wide survey of giardiasis, using formal either concentration method, among school students and residents showed overall prevent rate of 8.9% and 3.1%respectively. However, giardiasis was 4.4% showing that school students are more significantly infected than their non-school counter parts. A study conducted on prevalence of trachoma in junior and elementary school students in Asendabo town south western Ethiopia. Risk factors as age, sex, frequency of face washing and various aspects of water as factors of personal hygiene showed that total province of trachoma of 181, 34.2% of cases with no significant correlation to the risk showed marked significance of the prevalence of trachoma (Belaine, 2000).

Another study conducted in Agaro showed that the majority of the students 190 (96.9%) tale bath, 98.4% bath every week where as the remaining 1.05% and 0.05% bath every day and monthly respectively. Among the students under study 122(62.2%) practice washing hand after defecation similarly, 98(50%) of the students claimed to use finger in cleaning nose mucus and also use rough paper (20.4%) cloth (18.9%) and leaves(4.1%) in descending order. Only 6.7% use proper methods of cleaning nose mucus (Nigussie, 1996).

CHAPTER THREE

3. OBJECTIVES

3.1. General objective

- To assess the state of personal hygiene practice among preparatory school students in Jimma town.

3.2. specific objectives

- To assess school utilities and services
- To identify self- reported personal hygiene practices of students.
- To observe the actual personal hygiene practice of students.
- To determine the relationships of students personal hygiene practice with their sex, age and grade level.

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CHAPTER FOUR

4. METHOD AND MATERIALS

4.1. Study Area and period

The study was conducted in Jimma governmental preparatory school from March 15 -17, 2014.

4.2. study design

A cross sectional study was conducted on 275 students.

4.3. populations

4.3.1. Source population

All students who have been currently following their education in preparatory School(governmental) found in Jimma town.

4.3.2. Study population

All students who have been currently following their education in governmental preparatory school found in Jimma town and students who had a chance selection among the source population using systematic sampling technique.

4.4. Sample size determination and sampling technique

4.4.1. Sample size determination

The whole population was not studied because of limited time and resource. Therefore, the representative sample size was fixed by using the formula for the sample size determination for a finite population (Daniel, 2005).

$$N = \frac{NZ^2pq}{D^2(N-1)+Z^2pq}$$

Where Z=the desired confidence level 95%

P= prevalence of personal hygiene coverage 50 % = 0.5

q=1-p =1-0.5 =0.5

N=Degree of population (preparatory school) from Jimma town 1920.

D =Degree of accuracy desired (5%) =0.05

$$N=\frac{NZ^2pq}{D^2(N-1)+Z^2pq}=\frac{1843.968}{4.7975+0.9604}$$

$$\frac{1920(1.96)2(0.5)(0.5)}{(0.05)^2(1920-1)+(1.96)^2(0.5)(0.5)}$$

$$n_i = 320$$

$$n_f=\frac{ni}{1+\frac{ni}{N}}=\frac{320}{1+\frac{320}{1920}}=\frac{320}{1+0.16}=\frac{320}{1.16}$$

$$n_f = 275$$

Number of female students = 275(916)/1920=131

Number of male students= 275(1004)/1920=144

4.4.2. Sampling technique

Systematical random sampling with proportional allocation with respect to the numbers of students in each grade was used.

The Kth student was selected by the following formula

Kth = N/n where, N=total population

n=sample size

=1920/275

=6.9=7th

So, every 7 student was selected. The first student was selected by lottery method.

Proportional allocation of sample size from each grade was obtained by the formula

ni= Ni*n/N where , ni=sample size of students in Grade 11th or 12th

Ni=Total number of governmental(preparatory school students) enrolled in 2006 E.C =1920 Grade 11th or 12th

n= total sample size of students

N=total number of students

For grade 11th =876*275/1920=125

Female=406*125/876=58, male=470*125/876=67

For grade 12^{th} =1044*275/1920=150,

Female=510*150/1044=73, male=534*150/1044=77

4.5. Variable of the study

4.5.1. Independent variable

-Age

-Sex

-Grade level

4.5.2. Dependent variable

-Personal hygiene practice.

4.6 . Data collection

Data was gathered from students by using pre-structured questionnaires and observational checklist through face-to-face interview. It was collected by 4^{th} year undergraduate environmental students.

4.7. Data processing, analysis and presentation

The collected data was checked at the end of each data collection day for their completeness and consistency. The raw data was processed manually by using pocket scientific calculator. These data were also compiled, organized and presented in tables. The data was analyzed using statistical tools (chi-square).Finally the result was compared and discussed based on different principles, standard and with others similar findings.

4.8. Pre-test

In order to determine the validity and reliability of data collecting instrument small scale study was conducted on 14(around 5% of total sample size of students) randomly selected which was not included in this study.

4.9 . Ethical consideration

A formal letter was obtained from Jimma University to precede the study. The objective of the study was explained to the director of Jimma governmental preparatory school.

4.10. Dissemination of the result

The result of the study will be disseminated to Jimma university students' research program, environmental health department, supervisor and may be used as a base line data for those who want to do their research in this area.

4.11 . Limitations

The study with large sample size gives more accurate and visible results than smaller sample size studies. Unfortunately in this study it was not possible to take large sample size because of financial and time constraint.

CHAPTER FIVE

5. RESULT

5.1. Sociogemographic characteristics of students

A total 275 students were involved for study, from this 144 (52.4%) were males and131 (47.6%) were females. The age of respondents 235(86.7%) were between 15 to 20 years, 40(21.8%) 0f students were great than 20years. 125(45.5%) of students were from grade 11^{th} and the rest 150(54.5%) were from grade 12^{th}.

Table 1: socio-demographic characterstics in Jimma preparatory school, Jimma town,2014

Identification		Number	Percentage
Sex	Male	144	52.4
	Female	131	47.6
	Total	275	100
Age	15-20	235	78.2
	20>	40	21.8
	Total	275	100
Grade level	11^{h}	125	45.5
	12^{th}	150	54.5
	Total	275	100

5.2. School utilities

As indicated below in table 2 the school utilities and services, there was 3 tap water for all the school, 3 pit latrines, which have 24 holes and separated for teachers and students as well as for males and females, and they used pit and open dump for solid waste disposal in school compounds.

Table 2:school utilities and service in Jimma preparatory school Jimma town, 2014

Utilities		Yes	No
Water supply in school	Tap	✓	0
	Current status functional	✓	0
Latrine in the school	Pit	✓	0
	Current status -Functional -Non functional	✓ ✓	0 0
	Separated latrine for teachers and students	✓	0
Means of solid waste disposal	-Pit -Open dump	✓ ✓	0 0

5.3. Self-report personal hygiene practices

Concerning basic personal hygiene practice all the students washed their body. Among them 154(56%) washed 2 or 3 times per week, 77(28%) washed weekly, 20(7.3%) washed daily and 35(12.7%) washed in every 2 weeks. From the total students 147(90.7%) practiced washing hands after visiting latrine. Similarly 141(51.3%) students washed their hands before and after eating and all of them trimmed their finger nails and toe nails.

Table 3; result of self reported personal hygiene practices of students in Jimma preparatory school, jimma town, 2014.

No	Parameter		yes		No		If yes, how often?											
							Daily		2 or 3 times in a weekly		Weekly		Every 2 weeks		Monthly		2 times a month	
			No	%	NO	%	NO	%	NO	%	NO	%	No	%	No	%	N0	%
1	Washing body		275	100	0	0	20	7.3	143	56.6	77	28	35	12.7	0	0	0	0
2	washing clothes		275	100	0	0	0	0	59	21.4	174	63.2	43	15.6	0	0	0	0
3	Washing head hair		275	100	0	0	58	21	106	38.5	73	26.5	28	10.1	10	3.6	0	0
4	Cutting head hair		143	95.9	0	0	0	0	0	0	0	0	0	0	74	51.7	40	27.9
5	Washing face		275	100	0	0	275	100	0	0	0	0	0	0	0	0	0	0
6	Washing feet		275	100	0	0	275	100	0	0	0	0	0	0	0	0	0	0
7	Trimming finger and toe nails		275	100	0	0	0	0	0	0	113	41	94	34.1	68	24.7	0	0
8	Washing socks and shoes		111	40.3	1	0.5	97	35.2	47	17	7	4.2	12	4.3	0	0	0	0
9	wear shoes	regularly	162	74.3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
		Irregular	56	25.6	0	0	0	0	0	0	0	0	0	0	0	0	0	0

5.4 observational results of personal hygiene

Regarding to personal hygiene practice status of students in actual observation 8(2.7%) had skin disease, 234(85.6%) wear washed clothes, 238(87.8%) cleaned their teeth, 143(95.9%) shorten his hair and were washed their head hair, 200(72.7%) the general personal hygiene of the students.

Table 4:- Observational results on personal hygiene practices of student in preparatory school, Jimma town, 2014.

No	Parameter	Personal cleaning				Total
		Yes	%	No	%	100
1	Skin disease	8	2.7	267	97.3	100
2	Wear washed clothes	234	85.6	41	14.4	100
3	Cleaned teeth	238	87.8	37	12.2	100
4	trimmed their finger and toe	255	92.7	20	7.3	100
5	Washed body	200	72.72	75	27.28	100
6	Trimmed hair	143	95.9	6	4.1	149
7	Washing hair	241	87.6	34	12.4	100

There is statistical significant association between students personal hygiene practices with students sex, and educational level ($p<0.05$). Female students practice personal hygiene than male students . But there is no significant association between age of students and personal hygiene practices ($p>0.05$).

Table 5: Association of student's personal hygiene practice with their sex, age and grade level in Jimma preparatory school, Jimma town, 2014

Identification		Personal hygiene practices status						
		Good	Fair	Bad	Total	X2	p-value	Df
Sex	Male	78	28	5	275	18.8	P<0.05	2
	Female	148	15	1				
Age	15-20	210	17	1	275	0.17	p>0.05	2
	20>	2	0	0				
Grade level	11	118	34	2	275	12.9	P<0.05	2
	12	112	9	0				

CHAPTER SIX

6. DISCUSSION

As the study shows there is no hand washing basin or lavatory, on site storage system for refuses and proper solid waste disposal system in the school. in addition to that there is 3 tap water supply, which is inadequate for all school population because WHO recommended that one tap water for 50 students. Also there are 3 pit latrines which have 24 holes. This means there is inadequate latrine for the students because WHO recommended that for non water carriage system one seat of pit latrine for 60-90 boys and one seat of pit latrine for 30-45 girls for school students. But the school latrine was uncleaned and contaminated with faeces and urine. They had bad odour and fly nuisance problem. Such condition in school lead to feco-oral transmission for parasites (WHO, 2007).

Different studies have suggested that health education on personal hygiene and intervention to prevent diseases caused specifically by parasitic worms infection can have beneficial impact on the health of students (MEDLINE et al., 1990).But there is no personal hygiene check up and no enough health education was given too for the students in the school. The school was found to pit latrine, which are separated for both, sexes.but they do not have hand washing facilities and health facilities or school health program.

Personal hygiene practice of students

The personal hygiene practice of students of this study showed that all students washed their body, 147(90.7%) washed their hands after visiting latrine and all of the students trimmed their finger and toe nails. The study conducted in Uganda shows 85.1% of the high school students washed their hands after visiting latrine. Another study conducted in Agaro by Getachew showed that 96.9% were washed their body and only 62.2% were washed their hands after visiting latrine (WHO, 1993). Therefore the students in this study had better personal hygiene practices as compared to the students in Getachew study. Because the awareness of the students are different and the availability of water is also different. Also this may be due to the urbanity and rularity of the students. Regarding to personal hygiene practices status of students in actual observation, the study in Agaro showed that 52.2% were poor and only23.4% were good. Therefore the students in this study also hand better personal hygiene status. Even though the personal hygiene status of most of were good, students showed there is no significant association between students age with their personal hygiene practice.

CHAPTER SEVEN

7. Conclusion and recommendation

7.1 conclusions

- ✓ There were poor personal hygiene condition such as teeth cleanliness, skin cleanliness, finger cleanliness and hair cleanliness problems.
- ✓ There is inadequate water supply and dirty and, odoured latrines.
- ✓ Most of students (72.7%) had good personal hygiene practice. Below half of students conduct fair and poor personal hygiene practices.
- ✓ There was no provision of health education and personal hygiene check up didn't conduct.

7.2 Recommendation

- ➢ The school should be facilitating school utility such as hand washing basin or lavatory.
- ➢ The school should install additional water supply.
- ➢ School latrines should be cleaned regularly.
- ➢ Health education should be provided for the students and personal hygiene check up should conduct by their teachers.
- ➢ Further studies should be conducted for better recommendation.
- ➢ hygiene club should be established to initiate and organized different program.

ANNEXI

References

- AFDE/DECD Africa Economic outlook. 2007.
- Anderson (1976). Basic division of the school health programmed: school health practice 6th edition.
- Daniel, W. Biostatics foundation for analysis in the health science John Wandsons., USA, 2005.
- Environmental health projects (2003) the hygiene improvement frame work a comprehensive approach for preventing child hood diarrhea.
- Federal Democratic Republic of Ethiopia minister of health personal hygiene extension package February, 2004, Addis Ababa.
- Getachew Belaine, Assessment of personal hygiene practice and parasite load on students in secondary school at Agaro town and its periphery February, 2000.
- John Hubley, communication health in action guide to health education and health promotion LTD 1993.
- MEDLINE, Bility K. etal, Rethinging school sanitation and hygiene education curriculum in rural and per urban communities in South Africa, march 1997.
- MEDLINE, muthtur yc, kumar A, school health service, rationals,1990:410-8
- Prevalence of trachoma among children attending Asendabo Junior and elementary school, south western Ethiopia, Neway Gessessie.
- Record 1of 1 Medline 1995 microbiological methods for assessing hand washing practice in hygiene behavior studies.
- School health survey in menders elementary school Jimma town by Asrat Nigusse, 1996.
- UNICEF/ WHO Joint monitoring programmed (2000) Global water supply and sanitation assessment 200 Report.
- World Health forum, An International journal of health Development volume 12, 1991.
- WHO News letters on environmental health, November 20, 1993.

- WHO/UNICEF meeting the millennium development goals for drinking water and sanitation target: a mid-term assessment of progress Geneva: world organization fund report 2007.
- Winbladu and Duavy, Primary school physical environmental and health WHO Global school health institute Documentary two WHO/EDSI/97-15.
- Zeid Ahmed and Kloosstelmut, the ecology of health and disease in Ethiopia, 1988.

ANNEX II

QUESTIONNAIRE

JIMMA UNIVERSITY

COLLEGE OF PUBLIC HEALTH AND MEDICAL SCIENCES DEPARTMENT OF ENVIRONMENTAL HEALTH SCIENCE AND TECHNOLOGY

1. **Identification**

1.1.Age……

1.2.Sex…….

1.3. Grade level…….

2. **School utilities and services**

2.1 Is there any water supply in the school? Yes… No…

2.1.1 If yes what is the source

-Tap

-Spring A. Protected B. Unprotected

-well A. Protected B. Unprotected

-River A. Zoned B. Unzoned

-other specify

2.1.2 Current status of water source?

A. functional B.non- functional

2.2. Which type of latrine do you used in your school?

A. pit B. VIPL C. water carriage D. other

2.2.2 Current status of the latrine

A. functional B.non functional

2.2.3. Is there a separate latrine for teachers and students?

Yes…. No…

2.2.4. Is there a lavatory facility?

Yes…. No….

2.2.5. Is there a separate latrine for males and females?

Yes… No….

2.3. Which type of onsite storage system for refuses used in your school?

A. Bucket B. Plastic C. Pit D. other (specify)

2.3.1 How do you dispose it?

A.pit B. Incinerate C. Municipality service D. open dump. Other (specify)

2.4. Is there any personal hygiene check up in the school?

Yes… No...

2.5. Is health education incorporating in the school curriculum? Yes……. No…..

If yes is it given regularly? Yes…… No…….

3. Personal hygiene practices

3.1 Do you wash your body? Yes… No…

If yes, how often

A. Every day B. Every 2 or 3 days C. Weekly D. Monthly

E. other (specify)

3.2 Do you visit the latrine of the school? Yes….. No….

If yes, do you wash your hands after visiting? Yes… No…

3.3 When do you wash your hands?

A. Before eating
B. After eating
C. both before and after eating

3.4 When do you wash your teeth?

A. Before eating B. After eating C. both before and after eating.

3.5 How often do you wash your clothes?

A. Daily B. 2 or 3 times a week C. weekly D. every 2 weeks

E. monthly F. other (specify)

3.6 How often do you wash your head hair?

A. Daily B. 2 or 3 times a week C. weekly D. every 2 weeks

E. Monthly F. other

3.7 How often do you cut your head hair?

A. 2 times a month B. Monthly C. every 2 months D. Other (specify).

3.8 How often do you wash your face?

A.5 times a day B. 3 times a day C. 2 times a day D. only 1 a day

3.9 How often do you wash your feet?

A. 5 times a day B. 3 times a day C. 2 times a day D. only 1 a day

3.10 Do you wear shoes with socks? Yes…… No ….

If yes, A. Regularly B. Irregularly

3.11 Do you brush your teeth? Yes… No…

If yes, how often?

A.DailyB. 2 0r 3 times a week C. weekly D. Every 2 weeks

E. Monthly F. Other (specify).

3.12 Do you trim your finger and toe nails? Yes…… No……

If yes, how often?

A. Daily B. 2 or 3 times a week C. weekly D. Every 2 weeks

E. Monthly F. Other (specify).

4. Observational check list

4.1 is there any skin disease visible? Yes… No….

4.2 Are the finger nails trimmed? Yes … No…

4.3 Does the teeth of a student cleaned? Yes … No…

4.4 Does the student wash his or her hair? Yes… No…

4.5 Does the student shorten his or her hair? Yes… No…

4.6 What is general personal hygiene of the pupil? Good… Fair… Bad…

THANK YOU!!!