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Assessment of Knowledge, Attitude and Practice on Louse Infestation and Associated Factors, among Prisoners of Jimma Town Prison South Western Ethiopia

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Abstract

Background: Louse infestation is the poor personal hygiene and a blood feeding ectoparasitic insect of order ptrithirapetera. Inadequate access of water supply leads people to acquire communicable disease such as typhus and relapsing fever. Head lice cause much distress and worry in families with school-aged children. There are many available treatment options. Many of these options are costly and may not be effective.

Objective: To assess the knowledge, attitude and practice of louse infestation versus disease transmission among prisoners of Jimma town prison at Jimma town from Jan, 2021 GC.

Methodology: Cross-sectional study was conducted in Jimma prison at Jimma town from Jan, 2021 GC. The data was collected using pretested questionnaires interview with translating the questionnaires to local language and observation. Three hundred twenty eight prisoners were enrolled through simple random sampling techniques.

Results: All prepared questions were asked to measure the knowledge, attitude and practice of respondents about louse infestation and related disease. Accordingly; 243 (74.1%) were found to have good knowledge and 15(4.6%) had poor knowledge. By attitude, it was found that, 223(68%) had positive attitude while 105(32%) had negative attitude from those who are asked to response. On the other hand, 236(72%) of respondents were have good practices and 92(28%) were had poor practices.

Conclusion: The level of louse infection prevention practice in our study area was low. Therefore, responsible stakeholders including Zonal health departments, Woreda health offices and extension workers should work on enabling factors specially focusing on prison hygiene and related factors.

Introduction

Pediculosis is an infestation of lice. Louse is blood feeding ectoparasitic insect of order ptrithirapetera. The condition can occur in almost any species of warm blood animal that means mammals and birds including human. Although Pediculosis in human may properly refer to lice infestation any parts of body the term is sometimes use loosely to refer Pediculosis capitis, the infestation of human head, with the specific head louse. Pediculosis may be divided into the following types. Head louse (Pediculosis human capitis), the body louse (Pediculosishumanuscorporis) and the pubic louse or crab (phthirus pubis). Head louse infestation is most frequent a children aged 3-10 and their families [1]. Head lice, unlike body lice, do not transmit any disease agent. Itching can develop in a sensitized individual. Rarely, scratching may cause impetigo or other skin infection, which can lead to local adenopathy. Head lice infestation is associated with limited morbidity but causes a high level of anxiety among parents of school-aged children. Head lice (Pediculosis capitis) have been companions of the human species since antiquity.

Louse can cause of some severe illness such as recurring fever, like relapsing fever, which is acquired by crushing an infective louse. Louse infestation related illness also depleted national economy when people miss work time, schools, when tourisms are affected and when infectious disease such as relapsing fever outbreak is reported. According to Oromia region prison there is two relapse per year. Ethiopia has different regions, out of these; Oromia region takes the smallest area with some woredas and towns. From these towns Jimma towns is one of the smallest cities found in oromia region. Jimma town has only one prison which found in Jimma towns and contains 1,305 prisoners. From these prisoners, 1160 males, 136 females and 9 areunder five age children. This prison has two health workers from these, one sanitarians, onepsychiatrist in this prison health education forwarding for prisoners by min media and face to face education through these health workers [2].

Pediculosis or louse infestation remains worldwide problem. The body lice remain major vector for diseases such as typhus, trench fever and relapsing fever [2]. Epidemic typhus is normally associated with wars and others over crowded unsanitary condition such as those observed during human catastrophes when normal hygiene is distributed. Outbreaks of trench fever have been reported among homeless people and typhus disease has mainly been reported following military conflict [1-5]. The most important outbreak of this disease since world war second occurred in 1997 in Burundi and involved more than 40000 individuals [6].

During the eight years of the Iraq- Iran conflict (1980-1988) more than 42,000 Iranian soldiers were captured (prisoners of war) and kept in Iraq prisoners for many years after the end of war. Pediculosis is one the health problems of the prisoners in the camps, especially in

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unsanitary overcrowded condition.

Pediculosis humanuscapities has widespread distribution that transcends (behind) socio economic, religious and racial groups. Researchers have that Pediculosis species are the transmitters of causative agents of typhus and relapsing fever. The physical irritation caused by their bites can interfere with the ability of youngsters to learn and perform psychomotor activity [7-8].

Although Pediculosis in humanus may properly refer to lice infestation of any part of body, the term is sometimes used to loosely to refer Pediculosis capitis, the infestation of human head with the specific head louse. Pediculosisdivided into head louse, body louse and pubis louse or crab. Louse infestation is most frequent on children and their family, prisoners living with overcrowded camp, especially prisons of developing country like Ethiopia. Head to head contact with infected persons is one way of transmission. Lice feed by piercing the skin. Lice infestation is frighteningly common worldwide and millions of adults and children deal with lice infestation like Pediculosis [6].

Having a form of lice infestation is not only embarrassing and difficult to deal with, but in some case can even cause some severe illness such as reoccurring fever, like relapsing fever, which is acquired by crushing an infected louse pediculushumanus over the bite wound or an abrasion on skin. Louse born epidemic typhus is transmitted by ReckettisiaProwazeki to human beings generally. When louse feaces are rubbed into the broken skin scratching the louse bite facilitates this process. Pediculus human corporis, which is particularly adapted to humans, is the only important vector of epidemic typhus.

Therefore necessary to prevent and control relapsing fever and epidemic typhus through health education for prisoners and overcrowding population group. Inspection and delousing method for risky areas is important. According to Oromia region prison health office report there is at least two outbreaks occurred annually. To control Pediculosis, the prisoners washed their cloths at any time that was possible and they exposed their belongings cloths and blankets to the sun one day a week. To prevent becoming hosts for lice and to stop lice from laying their eggs in the seams of clothes, the prisoners wear their clothes inside (especially underwear), thus seams of the clothes is not in contact with their bodies. Oral therapy might have been a suitable alternative for treatment in the prisoners of camp. Such therapy is easier to administer and potentially safer than topical drugs [4]. In addition, the prisoners become accustomed to prisoners and its condition. Appropriate case management by using this and other will encourage louse infestation and disease transmission. Therefore, this study aimed at exploring the knowledge, attitude, and practice on louse infestation versus disease transmission among prisoners of Jimma town prison. And the result obtained will be used for further study in similar issue and in planning, implementing, evaluation of prisoners KAP towards louse infestation and disease transmission as primary strategy to control louse infestation related disease among prisoners.

Methodology

Study area and population

This study was conducted in Jimma prisons at Jimma town is one of the popular historical beautiful town, which is located 356km south west of Addis Ababa, Ethiopia. It has an average altitude of 1760m above sea range from1200-2000mm and the climatic conditions are woinadega (Jimma Zone cultural & sport bureau report, 1997 EC) [9-10]. In Jimma Town the mean annual temperature varies from 10oc in highlands and 26oc in lowlands. However generally the temperature of the Town is little varying among the season.

According to CSA (2007) population census report, Jimma Town has 120,960 residents. Among this 60824 were male and the rest 60136 were female. However specifically the study was conducted on Jimma town prison which is one of the Jimma town prisons found in Jimma town.

The prisons have 1305 prisoners. Each class (dormitory) of prisons contains 50-150 prisoners averagely. From these prisoners nine are children's aged under five years and 136 is female, the rest 1160 are male (Jimma prison commission office, 2021 GC). The data was collected from Jan, 2021 GC.

In this town there are one prison commission namely Jimma town prison commission. These prison commissions are found in Jimma town [11-15].

Study design and period

A cross sectional study design was employed for this study.

Source population

All prisoners of Jimma town prison in Jan, 2021 GC.

Study population

The study population was all three hundred twenty eight selected prisoners jailed in Jimma town prison by sample size determination technique. While sampled individual prisoners of Jimma town prison were study unit.

Sample size

This study was conducted in Jimma town prison. It has total prisoners of 1305; out of these 9 of them are children under five years.

Sampling techniques

Three hundred twenty eight study subjects from prison were selected by stratified random sampling techniques in proportion by assuming the sex as strata. Finally, in each sex, the first prisoners were selected randomly and selecting others by adding the Kth values using list of prisoners as sampling frame.Kth value of sex was calculated by dividing total number of each sex by number of samples needed.

Sample size determination

The study was conducted on selected 328 prisoners out of the total 1305 prisoners.

$$\mathbf{n=}\ \frac{(Z\alpha/2)^2 p(1-p)}{d^2}$$

$$\mathbf{n=}\ \frac{(1.96)^2 0.5(1-0.5)}{(0.05)^2}\mathbf{=384}$$

Where,

n=the required sample size

Zα/2=standard normal distribution at 95% confidence interval (1.96)

P=population prevalence/proportion (p=0.5 the baseline to use 0.5 is there is no published research conducted in similar manner.)

d=desired precision/marginal error=0.05. However, the number of the source population is less than 10,000(n/N≥0.05). Therefore, Correction formula was used. Adjust the sample size, then the final sample size will determine by using a finite population correction formula.

So, $\mathbf{n} = \frac{n}{1+n/N}$

Where,

n=sample size that get from above formula

N=total prisoners of study area

$$n = \frac{384}{1 + 384/1305} = 298$$

10% non-response rate =298x$\frac{10}{100}$+298=328. Therefore, sample size was 328.

The proportionate sample size for each of both sex based on their number of prisoners in each sex are calculated as follow.

n=n1/N1*nf

Where, **n1** is total number of prisoners in each sex group of prison

nf is total sample size for the study

N1 is total number of prisoner in prison.

Female, total number=136 n=n1/N1*nf=136/1305*328=**35**

Male, total number=1160 n=1160/1305*328=**292**

Exclusion criteria

Prisoners with any disability, illness that result in improper response or inability to respond.

Methods of data collection and quality control

To keep the quality of data, the following activities was performed, pretesting of questionnaire, providing orientation for data collector and supervision of data collection, checking the completeness of questionnaire.Pre tested interview (5% of the sample population) was conduct at Jimma town prison for test with questionnaires that consist of different types of questions related to the topic of the research and relevant variables was used for collecting essential quantitative data [16]. The protest was conduct from Dec, 2020 GC. The questionnaires was prepared by English language and translated to local language such as Amharic, and Afan Oromo during interview by data collector and back to English to ensure consistency.

Study Variable

Dependent variables

- Louse infestation
- Knowledge, attitude and practice.

Independent variable

Sex, Educational status, Age, Income, Personal hygiene of prisoners, Crowding, Room size, Availability of cleaning facilities.

Data analysis

All the data collected was edited and checked for completeness for analysis and the type will rated for all subject based on characteristics of questionnaires applied [17-19]. The collected data was analyzed using SPSS. All percentage, frequencies and other calculations was done and the result was presented in the form of table, chart, graph and sentence.

Ethical Consideration

Permission to conduct the study was obtain from Jimma University, from Department of Environmental Health science and technology Verbal consent was held with the person in charge of the study, the important of their participation on this study was briefly and the interview was conducted securing confidentiality After the consent from administration, prisoners were informed about objective of the study and were asked for faithful response. Confidentiality was kept in all condition [20-22].

Operational Definition

Knowledge –having some sort ort of information or idea about louse information and its impact on health.

Good knowledge- if the respondents have answers half or more of the knowledge assessment questions.

Poor knowledge- if the respondents have answer below the mean or half of questions related with knowledge assessment.

Louse infestation- physical irritation caused by the bite of louse and multiplication of louse over other organism including human being.

Louse- blood feed ecto parasitic insect of order ptrithirapetera.

Attitude-are evaluating feeling and they are learned predisposition to behavior.

Poor attitude-if respondent answer less than 50% question related to attitude.

Good attitude-if respondent answer greater than 75% question related to attitude.

Hygiene-the operation and maintenance of sanitation and healthful condition.

Pediculosis- Pediculosis is an infestation of lice

Prisoner- a person incarcerated in a prison, while on trial or serving a sentence.

Prison- a place of long term confinement for those convicted of serious crimes or otherwise considered undesired by government.

Practice- having frequent habit of using the available chemicals and washing their clothes with available detergent against louse infestation.

Good practice- if respondent answer greater than 75% question related with practice.

Poor practice-if respondent answer less than 50% question related with practice.

Results

Sociodemographic data

Among total of 328 included in this study, 292 (89%) respondents were males and36 (11%) were females. Regarding the age of respondent 68 (20.7%) were between 18-24years, 106 (32.3%) were between 25-34years, 140 (42.7%) were between 35-54 years and 14 (4.3%) were above 55 years. Concerning their religion the majority of respondents were Muslim that means 222 (67.7%), orthodox 60 (18.3%), protestants were 28(8.5%) and others were 18(5.5%) [23]. regarding the educational status of respondents 64(19.5%) were illiterate, 7(2.1%) were can read and write, 117(35.7%) were elementary school, 97(29.6%) were high school and 43(13.1%) were finished grade 11 and above (Table 1) (Chart 1).

Knowledge regarding to louse infestation and related disease

The result of the study show that 243(74.1%) of the respondents

Table 1: Sociodemographic data of study subject, of the population/ prisoners Jimma town.

S. No.	Variable		Frequency	
			No.	%
1	Sex of respondent	Female	36	11
		Male	292	89
		Total	328	100
2	Age	18-24	68	20.7
		25-34	106	32.3
		35-54	140	42.7
		>55	14	4.3
		Total	328	100
3	Educational status	Illitrate	64	19.5
		Read and write	7	2.1
		Elementary school	117	35.7
		High school	97	29.6
		Grade 11 & above	43	13.1
		Total	328	100
4	Income	< 100	22	6.7
		101-500	89	27.1
		>500	217	66.2
		Total	328	100
5	Marital status	Single	45	13.7
		Married	255	77.7
		Widowed	20	6.1
		Divorced	8	2.4
		Total	328	100
6	Occupation	Government	11	3.4
		House wife	15	4.6
		Husband	28	8.5
		Merchant	96	29.3
		Daily labor	66	20.1
		Farmer	104	31.7
		Students	8	2.4
		Total	328	100
7	Religion	Muslim	222	67.7
		Orthodox	60	18.3
		Protestant	28	8.5
		Others	18	5.5
		Total	328	100
8	Ethnicity	Oromo	174	53
		Amhara	39	11.9
		Tigre	3	0.9
		Gurage	14	4.3
		Others	98	29.9
		Total	328	100

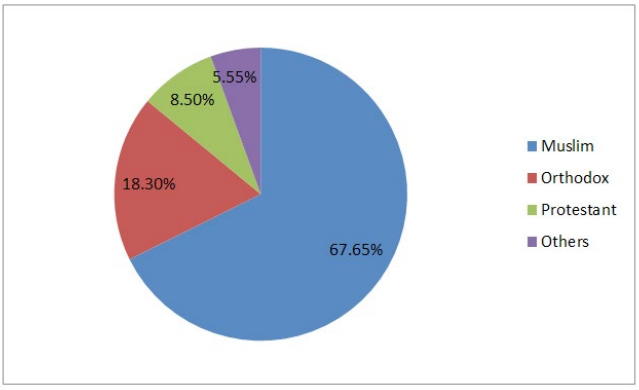

Chart 1: religion distribution of prisoner's.

have correctly answered greater than or equals to 75% of the questions on knowledge. Hence they have good knowledge. Whereas 70(21.3%) of the respondents have correctly answered (50-74%) of the questions on knowledge, hence they have fair knowledge and 15(4.6%) are answered less than 50%, hence they have poor knowledge. From the total questions were asked to measure the knowledge of respondents on louse infestation and related disease, accordingly all of the respondent were have good knowledge on what louse infestation mean 328(100%), and from 328 respondents 186 (56.7%) were know the disease related with louse infestation, only 142 (43.3%) were not know disease comes due to louse infestation [24]. From these respondents 324 (98.8%) were have knowledge on the condition that favourable to louse infestation and 4(1.2%) were have no knowledge the condition that favourable for louse infestation (Table 2).

Concerning, knowledge of respondent in this study on the type of

Table 2: The background knowledge of respondents on louse infestation and related disease transmission.

Description	Frequency			Percent%		
	Yes	No	Total	Yes	No	Total
Know what louse infestation mean	328	0	328	100	0	100
Know louse infestation related disease	186	142	328	56.7	43.3	100
Knowledge on condition for louse infestation	324	4	328	98.8	1.2	100
Know louse infestation prevention method	325	3	328	99	1	100
Know on louse infestation transmitted disease	90	238	328	27.4	72.6	100

disease related to Louse infection, from total respondents of 328 they were 186(56.7%) were know the disease related to LI such as relapsing fever, epidemic typhus and trench fever. Figure below show the respondent's knowledge on LI related diseases (Figure 1).

With regard to knowledge of respondents on condition that favourable for Louse infection, From all respondents 324(98.8%) were know the condition that is comfort for louse infestation such as hair contact with infected person, poor personal hygiene and overcrowded living system. whereas the left 4(1.2%) were have no knowledge on the condition that favourable for louse infestation (Figure 2).

Regarding knowledge of respondents on louse infestation prevention method, the total 328 respondents measured with knowledge on louse prevention method 325(99%) were have knowledge on prevention method such as grooming hair and washing their cloth regularly, using creams or pediculocides and washing their clothes with hot water and the left 3(1%) respondents were have no enough knowledge on prevention method. The below figure show the type of prevention method the respondents know (Figure 3).

Regarding source of information about louse infestation and related disease transmission, almost, all of the participants were heard about louse infestation and related disease transmission [25]. Out of 328 prisoners, most of their source of information 44%was from health worker (HW), followed by 20%, 15%, 12% & 9% were TV, Radio, Friends, and others respectively.

Attitudes of respondents on louse infestation and related disease transmission

From all 328 interviewed prisoners 223(68%) were have positive attitude on louse infestation, whereas 105(32%) have negative attitude on louse infestation. From participated respondents in this study 276 (84.1%) believed that louse related diseases can be prevented and 52 (15.9%) were agreed the related diseases are uncontrollable. Also from 328 respondents 16 (4.9%) were believed the occurrence of lice on human body is shame and the left 312(95.1%) is thought as it is not shame. In generally the attitude of respondent prisoners are shows in table below (Table 3).

Concerning attitude of respondents on the type of method that can prevent the louse related diseases, from the responds 302(92.1%) were have positive attitude on the prevention of diseases related to louse by using method such as washing clothes regularly, using chemicals and keeping house condition and personal hygiene and the left 26(7.9%) respondents have negative attitude on the louse related disease transmission. The table below shows the attitude of louse related disease prevention method (Table 4).

About attitude of respondents on the cause or source of louse infestation, in this study from all interviewed respondents 312(95.1%) were believed the cause of louse infestation is poor personal hygiene, 46 (14%) thought as of louse infestation is common social life and

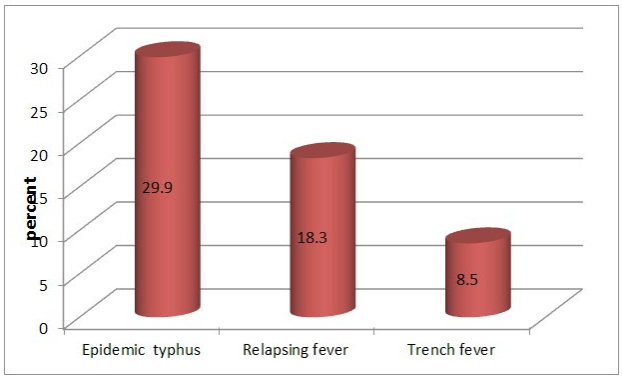

Figure 1: Knowledge on the type of disease related with louse infestation.

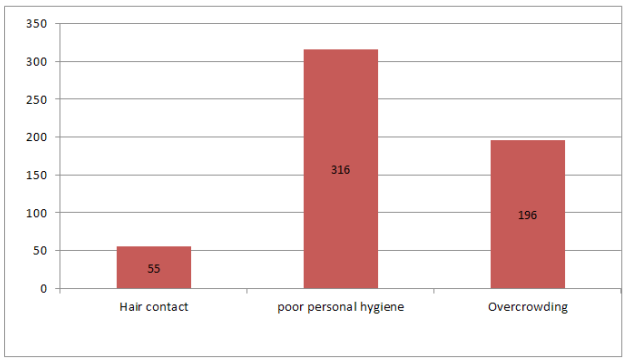

Figure 2: Knowledge of respondents on condition that favourable for louse infestation.

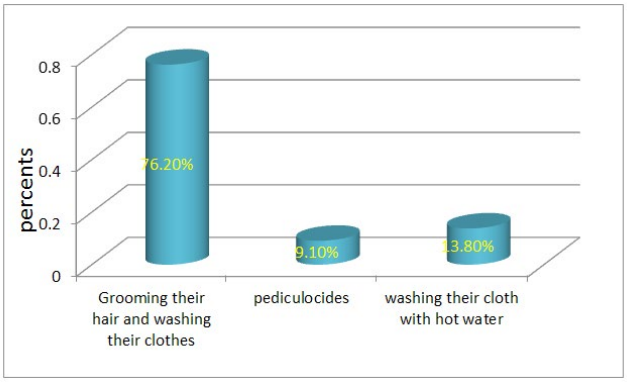

Figure 3: Knowledge of louse infestation prevention method the respondent used to prevent

145(44.2%) were believed that poverty can cause for louse infestation. The below figure show the attitude of respondents on the cause of louse infestation (Figure 4).

Table 3: The attitude of respondent prisoners on LI and related diseases.

Descriptions	Frequencies			Percent		
	Yes	No	Total	Yes	No	Total
Louse infestation can prevented	311	17	328	94.8	5.2	100
Louse related disease can prevented	276	52	328	84.1	15.9	100
Personal hygiene and house condition can prevent louse infection	324	4	328	98.8	1.2	100
Can identify any sign of louse related disease	108	220	328	32.9	67.1	100
The appearance of lice on body is shame	16	312	328	4.9	95.1	100
Crushing lice with nails can transmit diseases	8	320	328	2.4	97.6	100
Feel ashamed to ask for help	4	324	328	1.2	98.8	100

Table 4: Attitude of respondents on the type of method they can use to control louse infestation related disease.

Descriptions	Frequencies	Percent's
Washing clothes regularly	300	91.5
Using chemicals	198	60.4
Keeping house conditions and personal hygiene	296	90.3

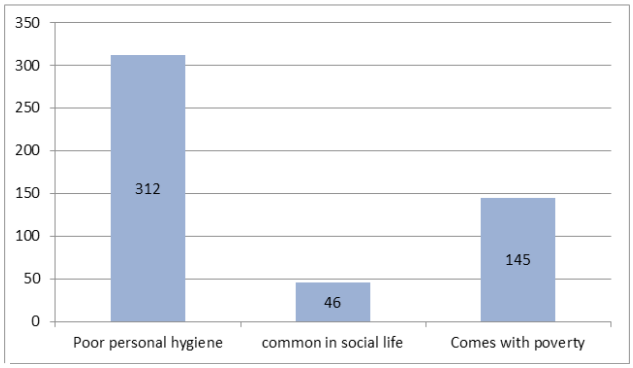

Figure 4: Attitude of respondents on cause of louse infestation.

Practice of respondent on louse infestation and related diseases

The result of the study show that 236 (72%) of the respondents have correctly answered greater than or equals to 75% of the questions on practice. Hence they have good practice. Whereas 92 (28%) of the respondents have correctly answered less than (50%) of the questions on practice, hence they have poor knowledge. From total of 328 prisoners interviewed, 325(99.1%) keep their housing condition and sanitation while, the left 3(0.9%) were complicated on their housing condition sanitation. Also only 168 (51.2%) from 328 used sun light to kill lice and its nits, the other 160 (48.8%) were not used sun light for delousing. From interviewed respondents 278 (84.8%) were separate their clean clothes from dirty, whereas the left 50 (15.2%) were putted their clothes collectively whether it is clean or not. In same thing 309 (94.2%) respondents were separates' their clothes from other prisoners clothes and the remaining 19(5.8%) were keep their cloths without separate from other prisoners clothes, putted at the same place.

Concerning practice respondents on sanitation of their body, from all 328 respondents interviewed all of them keep their body hygiene (shower) at different frequents. From these respondents 220(67.1%) wash their body once a week, 84(25.6%) were took shower once per two days and the remaining 24(7.3%) were wash their body at irregular times. The following table shows the time frequents of respondents used to take shower (Table 5).

The respondents were used water and soap and only water to clean their body. Regarding these detergents they used to clean their body

Table 5: The time frequents of respondents used to take shower (wash their body).

Time of body wash	Frequencies	Percent
Weekly	220	67.1
Two days gap	84	25.6
Irregular times	24	7.3

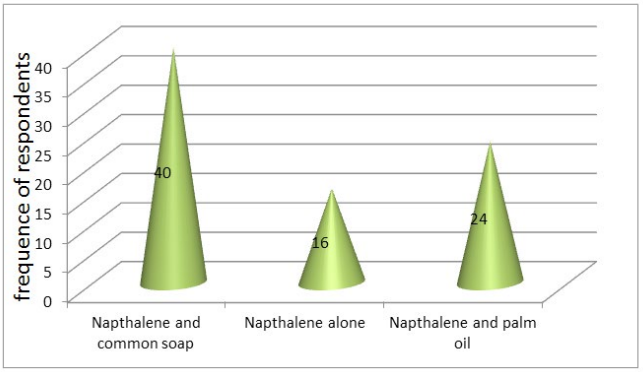

Figure 5: The type of chemicals used by respondents (prisoners) of Jimma town prison.

using water and soap were 322(98.2%) and the remaining 6 (1.8%) used to clean their body only water without detergents.

Regarding the chemical using of respondents only 80 (24.4%) of them used chemicals and the remaining majority of them that means 248 (75.6%) were not practiced of using chemicals. In general the following figure shows the type of chemicals they used (Figure 5).

Concerning problem of sanitation practice of respondents of prisoners' of Jimma town prison, there are some factors that affect practice of respondent's sanitation in prison. From interviewed prisoners 140(42.7%) , lack of adequate water , 21(6.4%) lack of awareness and the others 167(50.9%) are exposed to these; lack of detergent, lack of place used for shower and washing the clothes respectively and their sanitation may poor because of these problems.

Practice of head louse infestation treatment of respondents of prisoners of Jimma town prison, from 328 prisoners interviewed during data collection, 130(39.6%) of respondents used for treatment of louse infestation by picking nits from the head, 287 (87.5%) combing their hair and 270 (82.3%) treated head lice by crushing lice with their nails. And also from interviewed respondents 250(76.2%) were reported to health office of Jimma town prisoners if they infected by diseases cause from louse infestation and 78 (23.8%) of them were took as the diseases related louse infestation as common social problems.

Discussion

This study was designed to assess the knowledge, attitude and practice of the respondents in Jimma town prison and provided

important information related to louse infestation. In this survey, the overall KAPs about louse infestation and related disease among prisoners of Jimma town prison showed that majority of the respondents had good levels of knowledge, positive attitude and good practices. As the study revealed, about 74.1% of the respondents answered greater than 75% of the question and they have good knowledge. This study result was lower than the study conducted in small rural community on population five hundred ninety in kwara state, central Nigeria. Of the 496 participants included, 367(74.0%) have good knowledge; the possible reason for these differences may be due to lack of education on lice infestation and related disease.

In this research (2%) studied population does not know where cause of louse infestation when compare with study conducted in central Nigeria 26.2% studied population does not know where the cause of lice infestation or condition favourable for lice infestation. This study results is more or less the same to that of in Nigeria. So there is need to improve the attitude of prisoners who not know because louse infestation in order to keep the health of the individuals.

The results of this study revealed that, among prisoners of Jimma town from 328 respondents measured with knowledge on louse prevention method 325(99%) were have knowledge on prevention method such as grooming hair and washing their cloth regularly, using creams or pediculocides and washing their clothes with hot water and the left 3(1%) respondents were have no enough knowledge on prevention method. however, According to study population related with louse infestation in kwara state, central Nigeria, in 2011, individuals who had experienced Pediculosis at least once in life time, 78.2% were have knowledge on prevention method, 17(4.6%) use creams or pediculocides, 170(46.3%) from 367 people use grooming/nit picking as treatment and 100(27.2%) prevent lice infestation through combing, whereas 80/367(21.8%) no treatment for louse infestation. As we see this two study results there is wide gap between them the result from this study is good knowledge on lice infestation prevention method than study conduct in Nigeria, these indicate that in this study area the prisoners are well aware about louse prevention method. Almost all of the prisoners understand about "louse infestation and related disease" awareness of the prisoners is changed by different means. Most of the prisoners on the study area were aware of it because awareness creation by different means such as expansion of extension programs, mass media and so on.

The results of this study revealed that, among the prisoners 236 (72%) of the respondents have correctly answered greater than or equals to 75% of the questions on practice. Hence they have good practice naphthalene and common soap (12.2%), naphthalene alone (4.9%), naphthalene and palm oil (7.35). However Study conducted in viana, Angola the research shows that out of 171 primary school students. The majority (97.56%) reported poor practice with any type of louse infestation treatment at all. The remainder mentioned using a variety of substance, including naphthalene and common soap (13.5%), naphthalene alone (2.9%), naphthalene and palm oil (1.8%), sheltox (denkavepon +tetrametrin) (1.8%), sheltox and kerosene (1.2%) and vinegar (0.6%).; this study result is more the previous study conduct in Angola so the Jimma town prisoners have more awareness on practice to prevent lice infestation.

Conclusion

It can be concluded from the present study that knowledge, attitude and practice of prisoners among the Jimma town in the study area was not more satisfactory but well. However these knowledge, attitude and practice were not very good. Hence there is need to more improve their KAP by giving health education for prisoners and create awareness. In this study, knowledge and attitude were found to be associated with practice behaviors. This indicates that knowledge and attitudes of respondents was an important factor in practice behaviors towards louse infestation and related disease. Therefore, we recommended that despite the presence of other factors that hinder the knowledge and attitudes of prisoners' in order to do practice; face to face health education should also be given as part of prevention strategy. On the basis of the findings of this study, the following recommendations are proposed: Health workers exist in prison should teach prisoners about louse infestation and related disease. Jimma town administration should develop health intervention program through health promotion and education about personal hygiene in the prison. Jimma prison administration in collaboration with health bureau, infrastructural development for proper maintenance of personal hygiene along with necessary resources and facilities and provide adequate hygiene facilities such as, available water supply and etc Health workers should undertake continuous home visit to improve the sanitation of the compound and home.

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