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Knowledge, Practice and its associated Factors towards Rabies Prevention among Residences in Ebinat, South Gondar zone, Amhara regional state, Ethiopia

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Abstract: Cross-sectional study design and multistage random sampling procedures were employed to select households for this study. Socio-demographic, knowledge and practice related variables were collected from 785 households using interviewer administered structured and pretested questionnaires. The main aim of study was to assess knowledge and practice towards Rabies and its associated factors among the resident of people at particular selected area. A total of 785 respondents were participated with response rate of 97.4%. Good knowledge and good practice towards rabies prevention were 94.9% and 56.1% respectively. Respondents who had post exposure prophylaxis experience were 4.45 times more likely to have good knowledge than those who hadn`t (AOR=4.45, 95%CI: 1.068-18.580). Respondents with age between18-35 years were 1.77 times more likely to had good practice of rabies prevention than those aged greater than 50 years (AOR=1.778; 95%CI: 1.102-2.868). Rabies is acute fatal encephalitis that affects all mammals and it is a worldwide zoonotic disease caused by Rabies virus. It is almost 100 % fatal once the clinical signs develop. It constitutes a serious public and animal health problem in Africa including Ethiopia. Rabies is a well-known disease in the study area but the practice towards rabies prevention findings was low. Having experience of post exposure prophylaxis and previous history of dog attack were the determinant factors for knowledge about rabies prevention, while Age and knowledge were factors affecting the practice towards rabies prevention.

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Key words: - Knowledge; practice; rabies; south Gondar zone

1. Introduction

Rabies is a fatal animal disease of significant public health importance globally; it is responsible for tens of thousands of deaths annually, mostly in Asia and Africa [1]. Domestic and wild animals are reservoirs for rabies [2]. Among those Rabies is acute fatal encephalitis that affects all mammals and is a worldwide zoonotic disease caused by Rabies virus; also the disease is one of the longest known infectious diseases in human history [3, 4]. This virus is a highly neurotropic pathogen that typically leads to mortality of infected animals and humans. It is almost 100 % fatal once the clinical signs develop [5]. It is estimated that over 10 million people are exposed to rabies annually [6], globally; at least 55,000 people die of Rabies each year [7]. The burden of Rabies falls mostly on poor rural communities and children in particular [8]. Rabies is one of the most serious infectious diseases affecting mainly the low and middle income countries [9]. It constitutes a serious public and animal health problem in Africa including Ethiopia. Essential components of Rabies prevention and control include community awareness, responsible pet ownership, routine veterinary care and vaccination, and professional continuing education [10].

According to the World Health Organization (WHO), the community knowledge and practices are important for prevention of deaths in humans due to Rabies and for control of the disease in animals. The World Health Organization considers Rabies to be a serious disease and declare it to be primarily a

problem in areas troubled with poverty and with a lack of economic resources [11].

One health prioritizes Rabies as the first prioritizing disease of humans followed by Anthrax and Brucellosis. According to the WHO; this disease potentially threatens over three billion people in Africa and Asia. Most People are at risk especially who live in rural areas, where vaccines and immunoglobulin are not readily available [12]. Globally, human mortality from endemic canine Rabies was estimated to be 55,000 deaths per year and 56% of the estimated deaths occur in Asia and 44% in Africa. About 98% of the human rabies cases occur in developing countries that possess large number of dogs, many of which are stray dogs [13].

In Ethiopia the annual death due to Rabies was estimated to be 10,000, which makes it to be one of the worst affected countries [6]. The virus is present in the saliva of affected animals, and the most frequent method of transmission to humans is by bites, scratches or licks from infected animals in open wounds or on mucosal membranes [13, 14].

Available evidences suggest that domestic dogs are the main reservoir and responsible species for human cases in the country [15], and it is an endemic disease with a high incidence rate. It has been diagnosed from various species of domestic and wild animals. [16]. Nationwide data on Rabies are not available to reveal the actual magnitude of the problem. However, the distribution of vaccine to the various regions and the fragmented reports on human and animal Rabies cases are strong indicators of the wide spread nature of the disease in the country. In the study area there are a large number of stray dogs are inhabited and the resident are in contact with them, so this will be used to assess the resident knowledge and practice towards Rabies prevention [18].

Rabies is one of the first prioritizing diseases in human as one health, and 55,000 deaths per year and 56% of the estimated deaths occur in Asia and 44% in Africa. About 98% of the human rabies cases occur in developing countries. In Ethiopia the annual death due to rabies was estimated to be 10,000, it is highly zoonotic disease worldwide [17].

2. METHODS

2.1. Study area and study period

This study was conducted in Ebinat woreda kebeles such as: worgaja, gelamtabia, akuha and ziha districts of South Gondar Zones, Amhara Regional state, Ethiopia. The study period was from January to June 2024. Ebinat is located in Northern part of the country at 11^0 30 North of the Latitude and 38^0 30 East of the Longitude. Ebinat has the total area coverage of 17, 5095 square kilo meters in which total human population of 37, 0978. The distances coverage is 150 km from Amhara Regional city Bahirdar. Ebinat is divided in to 31 kebeles. The altitude and annual rainfall of the Zone range from 1222-3219 meters above sea level and 850-1500 mm respectively [32].

2.2. Study design:

Community based cross-sectional quantitative study design was used to assess the knowledge and practices towards Rabies prevention and its associated factors among the community of Ebinat in those selected four kebeles.

2.3. Source population:

The source populations were all the residence of Ebinat lives in those 31 districts, either males or females, who were age greater than 18 years.

2.4. Study population

The study population were those household members (either males or females), who were age greater than 18 years in selected districts of worgaja, gelamtabia, akuha and ziha.

2.5. Study subject

The study subjects were those house hold members either males or females, who were age greater than 18 years in selected households and selected kebeles of worgaja, gelamtabia, akuha and ziha.

2.6. Inclusion criteria:

Residents (family members) those ages greater than 18 in randomly selected households

2.7. Exclusion criteria:

Family members who were age greater than 18 years in randomly selected households were seriously sick or mentally ill at the time of data collection were excluded.

2.8. Sample size and sampling procedure

2.8.1. Sample size determination

Sample size was calculated using the

standard formula for estimating a single population proportion [33].

$$n = \frac{(z\,\alpha/2)^2\ P\ (1-P)}{d^2}$$

Where:

n = the sample size to be determined

d^2 = Desired absolute precision (0.05)

$z\,\alpha/2$ = the standard normal deviation at 1.96 with 95% CI

P = population proportion, that had good knowledge for prevention of rabies, in Ebinat district were 51.9% [21].

So, substitution in to the above formula, we got,

$$n = \frac{(1.96)^2 \times 0.52\ (1-0.52)}{(0.05)^2} = 384$$

As a result, 384 study population will be selected, 5 % nonresponse rate,

Total sample size was = 403 subject. With design effect of 2, thus $2 \times 403 = 806$

As showed in the below tables,

Table 1: Summary of sample size using double population formula

No	Associated factors	Assumption	Sample size calculated	Remark
1	**Education**			
	Illiterates	Good=25 poor=44		
	Elementary	Good=31 poor=14		
		With OR=2.5 p-value 0.040	$114 \times 2 = 239$	
2	**Sex**			
	Male	Good=129 poor=64		Ratio : 1-1 Design effect : 2 Non response rate : 5%
	Female	Good=44 poor=83		
		With OR=1.9 p-value 0.001	$320 \times 2 = 672$	
3	**Sex**			
	Male	Good=71 poor=95		
	Female	Good=72 poor=17		
		With OR=3.4 p-value 0.004	$255 \times 2 = 535$	

So, the sample size calculated for the single population is greater than that of the double population. Thus, 806 were being the sample size used in this study.

2.8.2. Sampling procedure

There were 31 kebeles in Ebinat woreda, 4 kebeles were selected from Ebinat woreda these kebeles were selected randomly. Worgaja, gelamtabia, akuha and ziha kebeles have population number of 21400, 17,700; 15,200 and 12,213 respectively. So since in variation number of those districts we use proportional allocation formula. From those randomly selected kebeles the number of household member in each kebele were identified using a sample frame available in each Ebinat agricultural office. Then equal sample size was distributed to the number of household members in each kebele. The numbers of household members were selected in each kebele using a random sampling method.

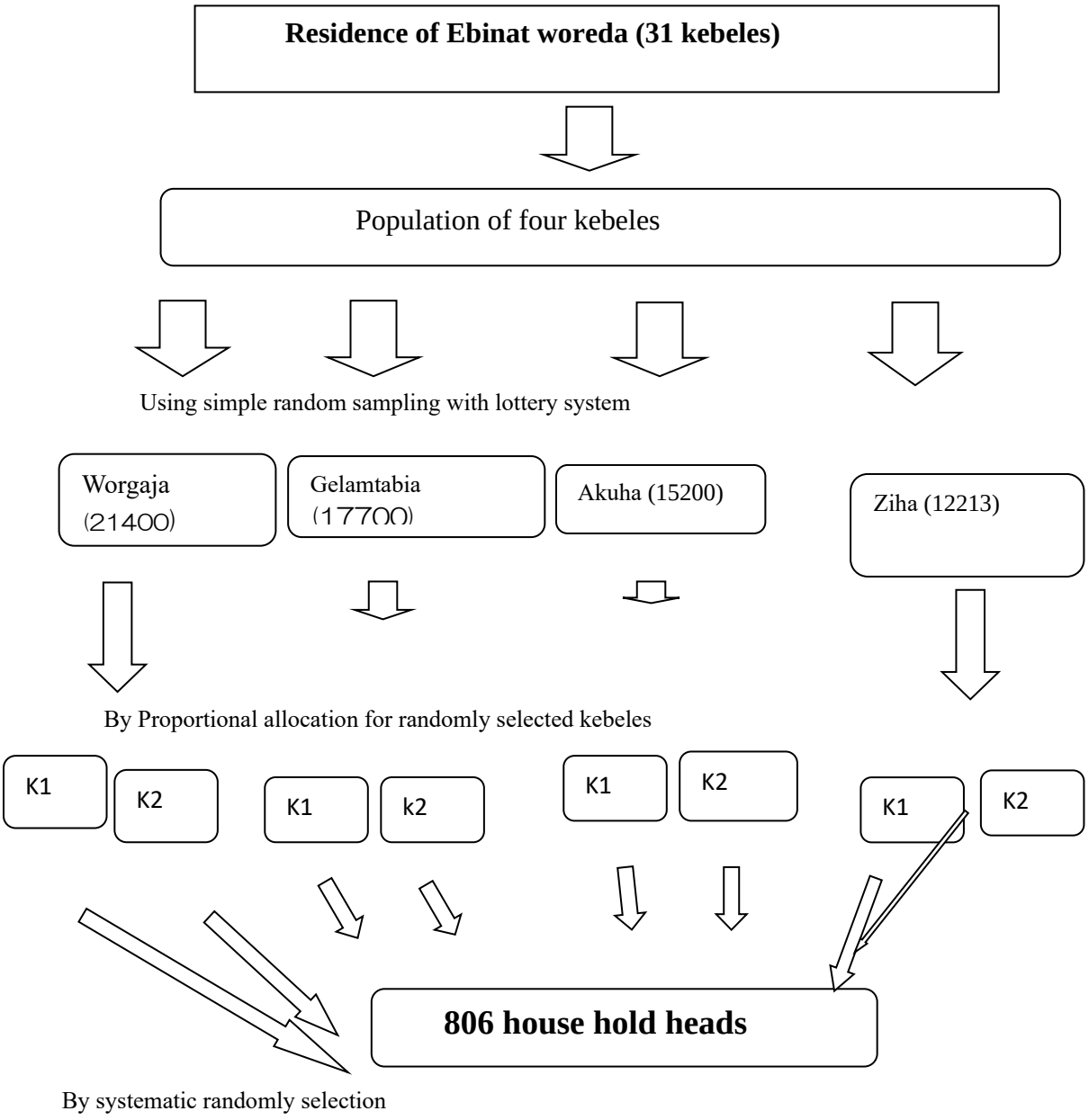

Figure 1: Population determination for those four kebeles.

2.9. Study variables

Dependent variable: For this study, the dependent variables are Knowledge **and** Practice and also **Independent variables:** Socio demographic characteristics are: Age, Sex, Education and Occupation. Source of information can be Mass media and Community education. Dog owner ship factor is training and geographical factor is distance from health facilities.

2.10. Operational definition:

Knowledge: Rabies prevention is a familiarity, awareness or understanding of someone or something; such as facts, information, description or skills which is acquired through experience or

education by perceiving, discovering or learning. Practice: Rabies prevention is the actual application or use of an idea, belief or method as opposed to theories, relating to it, the customs, habitual or etc.

Good knowledge towards Rabies: the participant was good knowledge if he or she can answer greater than or equal to 50% of knowledge measuring questions. Poor knowledge towards Rabies: the participants were poor knowledge if he or she can answer less than 50% of knowledge measuring questions [34]. Good practice towards Rabies prevention: the participant was having good practice if he or she can answer greater than or equal to 50%. Poor practice towards Rabies prevention: the participants were poor knowledge if he or she can answer less than 50% of practice measuring questions. [34]. Community education: means creation of awareness regarding knowledge and practice of rabies prevention.

2.11. Data collection tool and procedure:

Data were collected using pre-tested interviewer administered structured questionnaire. The questionnaire was developed based on the information gather from different literatures. The questionnaire was first prepared in English and later translated to Amharic (National working language). The data was collected using Yes or No questions supported with interview. The questionnaire was mainly compromise: Socio demographic variables, Knowledge and practice of Rabies prevention question. Eleven Diploma holder data collectors and seven supervisors were recruited and training was given to both data collectors and supervisors for two days. Two data collectors and one supervisor were assigned to each kebele by the principal investigator. Prior to data collection pre testing was conducted in 25 households that have similar characteristics to the study area. The investigator and supervisor were carried out regular supervision and reviewing the questionnaire to maintain data quality. The overall activity was coordinated by principal investigator [21].

2.12. Data management and analysis

Data entry, cleaning, was made using Epi info version 7statistical software. Descriptive statistics such as frequency distribution, percentage, P-values less than 0.05 and odds ratio (OR) for statistical significance test were employed with SPSS version 20 software. Logistic regression analysis also using SPSS, were used to see the influence of the different factors on the level of knowledge and practice of rabies prevention. The knowledge and practice on prevention of rabies were presented in the form of binary variable (Yes =1 and No= 0) and taken as the dependent variable while socio demographic data used as a source of information and other independent variables are use. If P-value is < 0.05 it had been considered to represent a significance difference [19].

2.13. Ethical Consideration

The Ethical approval and clearance was obtained from University of Gondar, Institute of Public Health, and Institutional Review Board (IRB) prior to data collection. The objective of the study was discussed with the concerned officials of the districts and written consent was obtained. Informed consent was obtained from each study participant after the purpose and significance of the study is explained to him/her by data collectors [20].

Great emphasis was given for the confidentiality and privacy of respondents throughout the study period. The participants would also be informed that the information obtained from them had not disclosed to the third person. Their participation was voluntary and they were informed that they can withdraw from participation at any time they would. Data were collected after obtaining informed verbal consent from each study participant [22].

2.14. Dissemination and utilization of the result

The Result of this study were presented to Ebinat woreda livestock resource development promotion office and it also shared to Agricultural and animal health office of Amhara region, worgaja, gelamtabia, akuha and ziha kebeles of the study area and stallholders' were also shares the result of the study for further information and awareness [23].

3. RESULT

In this study, 785 were participated with a response rate of 97.4%.

3.1. Socio-Demographic characteristics

Among respondents 671(85.5%) of them were males. Majority of 627(79.9%) of the respondent's found in the age group of 18-49. Regarding to their educational status 345(44.1%) can

read and write, while about two third respondents were farmers. Majority of the respondents were orthodox 761(96.9%). Regarding to their residence 535(68.2%) were from rural (This is stated in Table 2).

Table 2 : Socio-demographic characteristics of the residence in Ebinat woreda.

Sn	Variables	Frequency(n)	Percentage(%)
1	**Age**		
	18-49	627	79.9
	50-64	136	17.3
	>65	22	2.8
2	**Sex**		
	Male	671	85.5
	Female	114	14.5
3	**Educational status**		
	Unable to read and write	154	19.6
	Can read and write	345	44.1
	Primary education	164	20.9
	Secondary education and above	121	15.4
4	**Occupation**		
	Farmers	517	65.9
	Civil servants	65	8.3
	Merchants	97	12.4
	Students	106	13.5
5	**Religion**		
	Orthodox	761	96.9
	Muslim	24	3.1
6	**Resident**		
	Urban	250	31.8
	Rural	535	68.2
7	**Training about rabies**		
	Yes	50	6.4
	No	735	93.6
8	**Previous history of dog attack**		
	Yes	742	94.5
	No	43	5.5
9	**Post exposure prophylaxis**		
	Yes	457	58.2
	No	328	41.8
10	**source of information about rabies**		
	Neighbors	568	72
	Media and veterinary	217	28

3.2. Knowledge about rabies prevention

In this study the overall knowledge about rabies prevention were 94.9% (95%CI: 93.4%-96.3%).

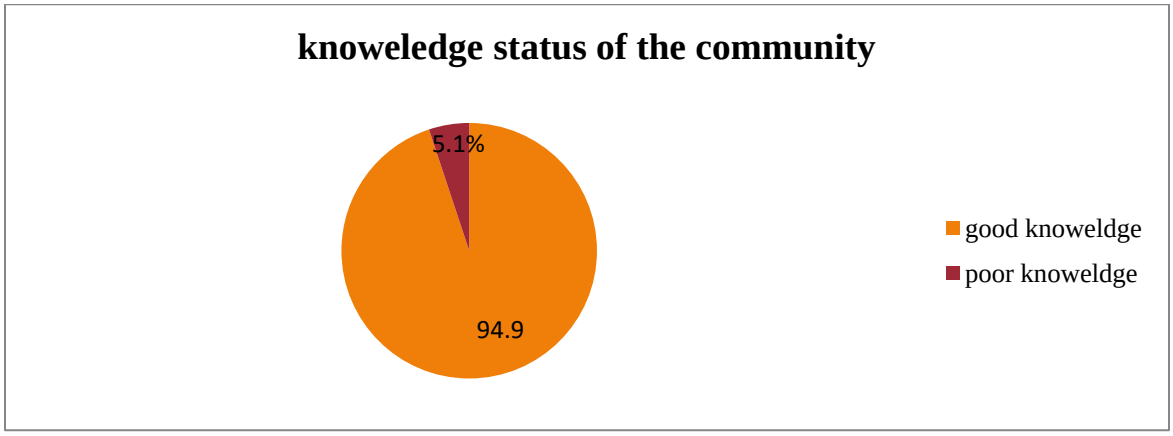

Figure 2: knowledge of the respondent in Ebinat woreda, Ethiopia, 2024.

3.3. Knowledge status of the residence with socio demographic characteristics

Respondents age's between 36-49 years were good knowledge on rabies prevention 308(96.9%). Those respondents had good knowledge on rabies prevention were 643(95.8%) male and 102(89.5%) females and those had poor knowledge were 28(4.2%) male and 12(10.5%) were females. Respondents had good knowledge on prevention of rabies regards to their education were those above secondary education had good knowledge 115(95%) and those had poor practice were 6(5%). Regarding to occupation respondents those civil servants were good knowledge 64(98.5%).

Table 3: Knowledge on prevention of Rabies among study respondents.

Variables	Frequency /percentage	
Age	**Good knowledge**	**Poor knowledge**
18-35	285(92.2%)	24(7.8%)
36-49	308(96.9%)	10(3.1%)
>50	152(96.9%)	6(3.8%)
Sex		
Male	643(95.8%)	28(4.2%)
Female	102(89.5%)	12(10.5%)
Education		
Secondary and above	115(95%)	6(5%)
Can Read and write	331(95.7%)	15(4.3%)
Unable to read and write	299(94%)	19(6%)
Residence		
Urban	235(94%)	15(6%)
Rural	510(95.3%)	25(4.7%)
Occupation		
Civil servant	64(98.5%)	1(1.5%)
Merchant	189(93.1%)	14(6.9%)
Farmer	492(95.2%)	40(4.8%)

3.4. Knowledge related characteristic with on prevention of rabies

The majority of exposure for information were neighbor 565(72%) followed by mass media. Among the respondent 745(94.5%) were good knowledge regarding to the rabies prevention. Most of the respondent beliefs that cause of rabies were starvation and trust 299(38.1%). Regarding to disease transmission from animal to human those respondents said yes were 738(94%). Mostly affected species by rabies were dog and human 272(34.6%). Respondents appreciate post exposure prophylaxis

(PEP) were 453(58.2%).

Table 4: Knowledge of the participants on rabies prevention

Variable	Frequency (n)	Percent(%)
Cause of rabies		
With sprit	54	6.9
Virus	186	23.7
Starvation and trust	299	38.1
I dont know	246	31.3
Animal to human		
Yes	738	94
No	47	6
Species affected by rabies		
Dog	57	7.3
Dog and human	272	34.6
Human and domestic animal	19	2.4
All	437	55.7
Awearness about rabies		
Yes	763	2.8
No	22	97.2
symptom		
salivation	169	21.5
stop eating and drinking	257	32.7
all	359	45.7
Transmission of rabies		
Biting	605	77.1
Scratchs	160	20.4
Infected meat	20	2.5
Post Exposure Prophylaxis		
Yes	457	58.2
No	328	41.8

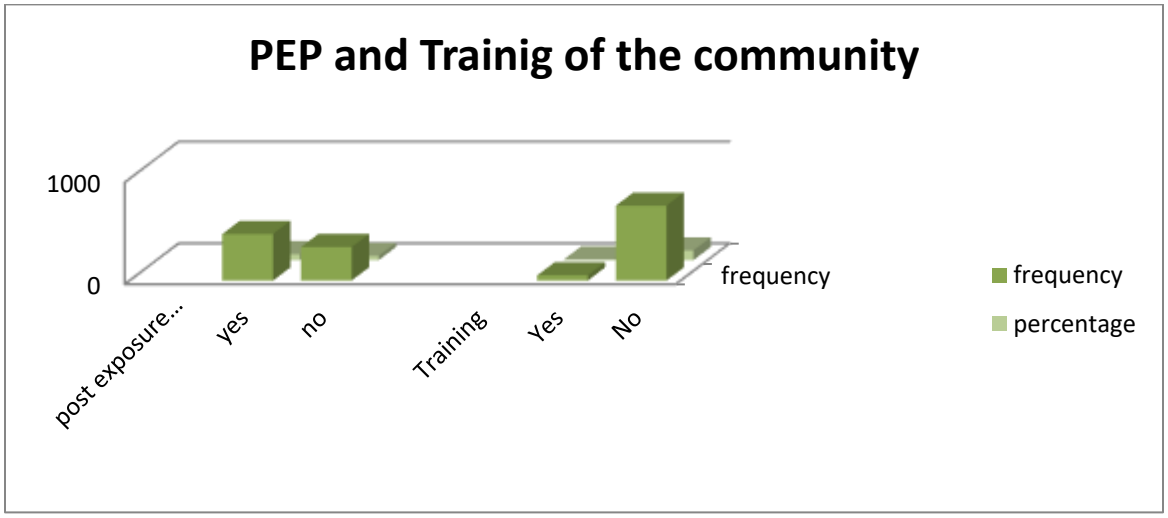

Figure 3: Post exposure prophylaxis and training status of the community

3.5. Practice about rabies prevention

In this study the overall good practice towards rabies prevention was 56.1% (95%CI: 52.2-59.5).

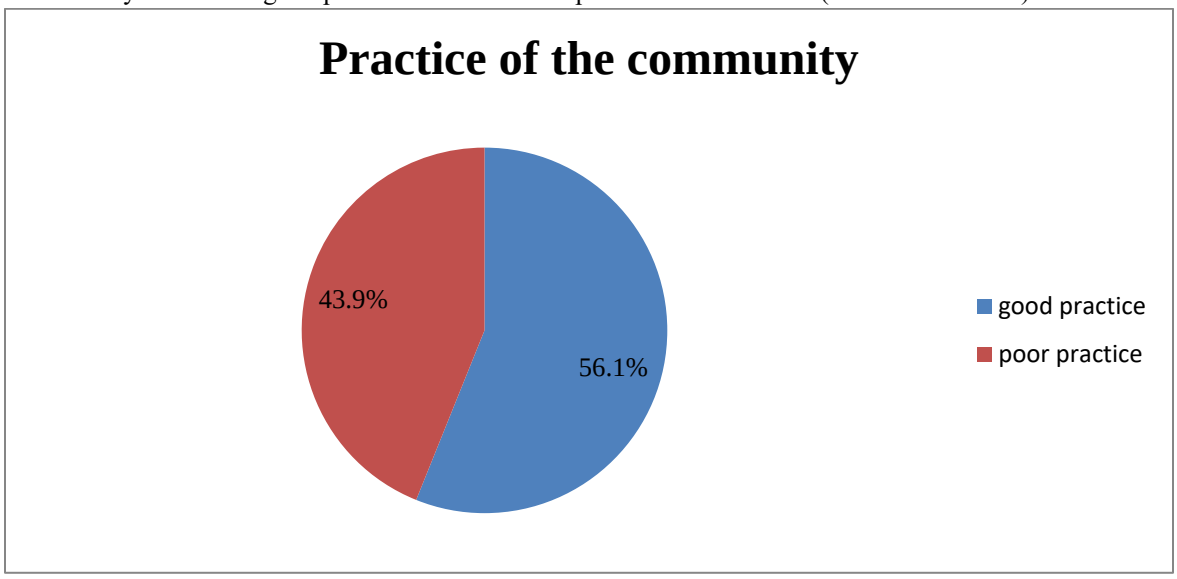

Figure 4: Practice of the community on prevention of rabies

3.6. Over all practice of the respondents on prevention of rabies

The overall good practices of the respondent were 56%, regarding to age 18-35 were 373(59.5%) and those had poor practice were 254(40.5%). Most of secondary educated and above had good practice on prevention of rabies 106(87.6%) and those had poor practice were 15(12.4%) and those civil servants had good practice were 51(78.5%) and those poorly practice were 14(21.5).

Table 5: Variables in related to practice on prevention of rabies among study respondent

Variables	Frequency /percentage	
Age		
18-35	373(59.5%)	254(40.5%)
36-49	60(44.1%)	76(56.9%)
>50	7(31.8%)	15(68.2%)
Education		
Secondary and above	106(87.6%)	15(12.4%)
Un able to read and write	157(45.4%)	189(54.6%)
Can read and write	177(55.7%)	141(44.3%)
Occupation		
Civil servant	51(78.5%)	14(21.5%)
Merchant	166(81.8%)	37(18.2%)
Farmer	223(43.1%)	294(56.9%)
Residence		
Urban	183(73.2%)	67(26.8%)
Rural	257(48%)	278(52%)
Source of information	Good	poor
Neighbors	161(85.6%)	27(14.4%)
Media and veterinary	279946.7%)	318(53.3%)
Training		
Yes	40(80%)	10(20%)
No	400(54.4%)	335(45.6%)

3.7. Practice related characteristic on prevention of rabies

The respondents that take immediate action after bite were 40% tie the wound with cloth, followed by 28% wash the wound with soap and water and 24.7% apply herbal extracts. Those respondents take action on rabid animals were 68% says kills the animal. Those respondents prefer to use traditional healer were 47% and those dislike were 53%.

Table 6: Practice of the community in prevention of rabies

Variable	Frequency(n)	Percent (%)
Immediate action after bite of rabid dog		
Tie the wound with cloth	314	40
Wash with water and soap	210	26.8
Apply herbal extracts	194	24.7
I dont know	67	8.5
Action for rabid animal		
Kill the animal	534	68
Tie them	230	29.3
Nothing	21	2.7
Management practice for dog		
Left free	640	81.5
Keep in door	145	18.5
Traditional healer		
Yes	416	53
No	369	47

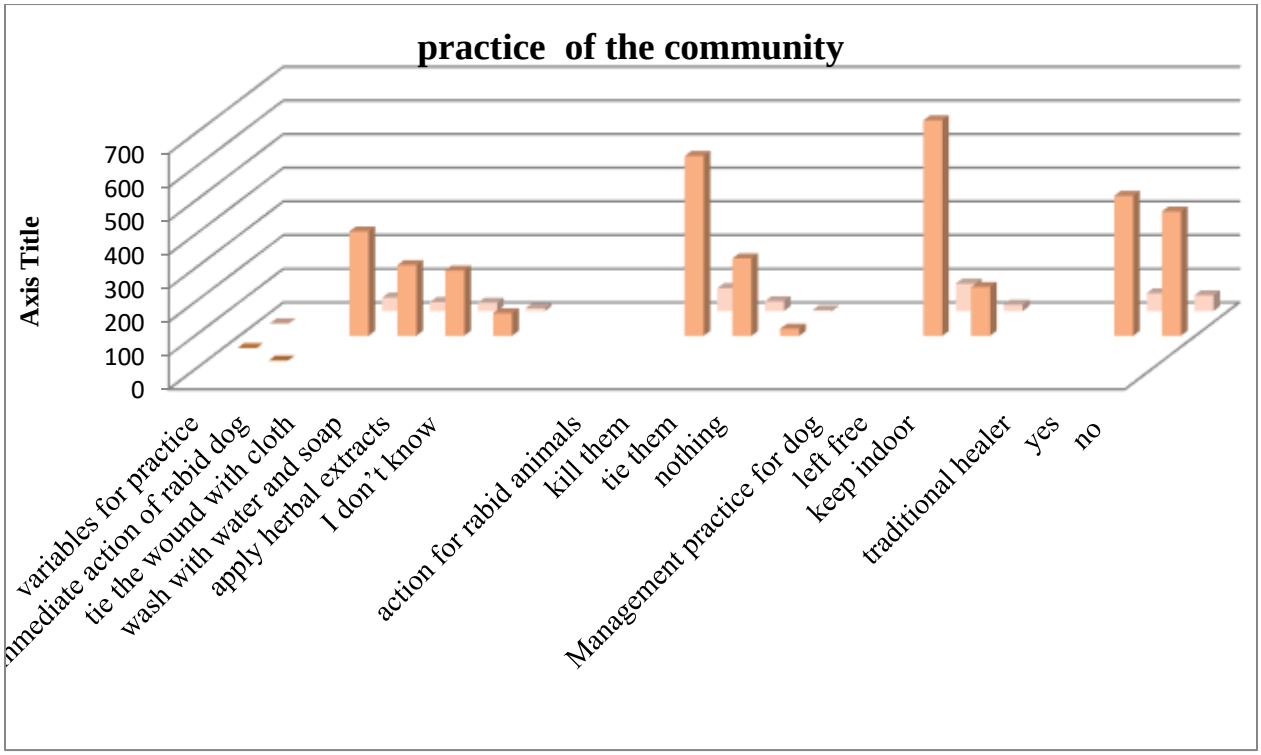

Figure 5: Practice of the community on prevention of rabies

3.8. Factors affecting knowledge towards rabies prevention

Multivariable logistic regression output shows that analysis was made to identify association between factors and knowledge on prevention of rabies. Variables like sex, age, education, previous history attacked by dog and post exposure prophylaxis were eligible for multivariable analysis. After fitting multivariable analysis, having PEP exposure and previous history of dog attack were factors significantly associated with knowledge.

Respondents who had post exposure prophylaxis experience were 4.45 times more likely to have good knowledge about rabies prevention than their counter parts(AOR=4.45, 95%CI: 1.068-18.580). Those who had previous history of dog attack were 11 times more likely to have good knowledge than those had no history of dog attack (AOR=11.103; 95%CI: 2.622-47.007).

Table 7: Bivariable and multivariable logistic regression results of factors associated with knowledge status of the respondents.

Variable	Knowledge		COR with 95%CI	AOR with 95%CI
	Good	Poor		
Previous history of dog attack				
Yes	721	21	27.181(12.943-57.08)	11.103(2.622-47.007)
No	24	19	1	1
Postexposure prophylaxis				
Yes	397	60	1	1
No	43	285	0.192(0.090-0.410)	0.002 (0.001-0.019)

P-value <0.05 were significantly associate.

3.9. Factors associated with practice towards rabies prevention

Bivariable and multivariable logistic regression analysis was made to identify association between factors and practice on prevention of rabies. Factors like age, sex, residence, education, training and knowledge were eligible for the final analysis.

After fitting the final model, age, education residence, training and knowledge were significantly associated with practice towards rabies prevention. Respondents whose age is between18-35yrs were 1.17 times more likely to have good practice towards rabies prevention as compared to those greater than 50 year (AOR=1.778; 95%CI: 1.102-2.868). Those who can read and write were 2.8 times more likely to have good practice than those having secondary education and above (AOR=2.818; 95%CI: 1.186-6.678). Respondent who live in urban were 1.96 times more likely to have good practice than their counter parts (AOR=1.961; 1.273-3.022).

Those respondents who had not participated on training about rabies prevention were 58% less likely to have good practice towards rabies prevention (AOR=0.422; 95%CI: 0.191-0.931). Regarding their knowledge, those having poor knowledge 0.25 times less likely to have good practice than their counter parts (AOR=0.253, 95% CI: 0.119-0.541).

Table 8: Bivariable and multivariable logistic regression results of factors associated with practice status of the respondents

Variable	Practice		COR with 95%CI	AOR with 95%CI
	Good	Poor		
Age				
18-35	285(92.2%)	24(7.8%)	3.014(2.026-4.482)	1.778(1.102-2.868)
36-49	310(96.9%)	10(3.1%)		
>50	125(94.9%)	6(3.8%)	1	1
Education				
Secondary education and above	106(87.6%)	15(12.4%)	1	1
Un able to read and write	177(55.7%)	141(44.3%)		
Read and write	157(45.4%)	189(54.6%)	0.074(0.039-0.140)	2.815(1.186-6.678)
Residence				
Urban	183(73.2%)	67(26.8%)	1	1
Rural	257(48%)	278(52%)	2.955(2.130-4.098)	1.961(1.273-3.022)
Information source				
Neighbour	269(47.6%)	296(52.4%)	6.796(4.385-10.534)	4.180(2.579-6.777)
Media and veternary	171(77.7%)	49(22.3%)	1	1
Training				
Yes	40(80%)	10(20%)	1	1
No	400(54.4%)	335(45.65%)	0.299(1.417-5.490)	0.422(0.191-0.931)
Knoweldge				
Good	427(57.3%)	318(42.7%)	1	1
Poor	13(32.5%)	27(67.5%)	0.359(0.182-070)	0.253(0.119-0.54)

P-value <0.05 were significantly associated

4. DISCUSSION

The overall result of this study revealed that 745(94.9%) of the respondent had good knowledge about prevention of rabies and heard about rabies from different source of information (23). This finding was in agreement with the report (96.4%) from Gondar zurya worda [29] and (96%) reported from Bahirdar university study [24]. However it was higher when compared with reported proportion (68.7%) in survey of knowledge and practices about rabies in the community of India [27]. The reason behind this variation is due to knowledge and attitude about rabies in different countries and ability towards awareness creation of responsible people that is why the survey showed different findings. The severity of the disease may decline in the Community due to coordination of health extension workers, similarity of study area with the previous study [30]. Those respondents know about sign of rabies were 89% (704), in similar with study was done in Dedo District of Jima (88.9%) knows sign of dog and way of transmission in my study was 47% by biting also in relation with 51.9% of dedo district [25], and also 58% in the study from Srilanka [26] and 67.8% from Addis Ababa [27].

Respondents in the study area agree with vaccine for dog can prevent rabies (85.7%), in study done around Gondar zurya were 50% can prevent rabies and study reports from Srilanka were 93% and they were interested to vaccinate their dog. Respondent in the study area were interested to use post exposure prophylaxis (58.2%), in similar with the study done on Rabies prevention in Dedo where 65.9% participants prefer post exposure vaccination for bitten human 65.2% of the respondent replied that it should be given immediately after exposure [21]. Another study conducted in Bahir Dar town reported 55.7% response for immediate post exposure vaccination [22]. The World Health Organization (WHO) also recommends wound washing and vaccination immediately after contact with a suspected rabid animal which can prevent almost 100% of Rabies deaths [28].

The practice of the respondent in this study was 56 % and study conducted in Ambo was 63.5%. Those respondent believe in traditional healer were (53%) and they want to consult with local traditional healer rather than gone to hospital, these were in similar with study done in dedo districts [29] among the total respondents on immediate action after exposure to bite by rabid animal; nearly half (47.2%), of the respondents used to consult traditional healers. This may lack of medical support and availability of post exposure prophylaxis and well established health center in many districts of the country. Respondent in the study area consider the main symptom for rabid dog were salivation (21. 5%). Respondent in this study were get training 6.4% and among them 40 (80%) good knowledge, this was slight difference from study done in Gondar respondent get training were 11% [35]. This may be the study done in community of Gondar were mainly around the town [31].

Limitation of the study were: No standard measurement tool to assess knowledge**,** There is no accepted measurement tools are available to assess the knowledge status of many zoonotic disease, There may be social desirability bias during data collection, regarding to rabies prevention and due to lack of supported by qualitative research, in case of short period of time.

5. CONCLUSION AND RECOMMENDATION

Knowledge about Rabies is a well-known disease in the study area but the practice towards rabies prevention founds to be low. Having experience of post exposure prophylaxis and previous history of dog attack were the determinant factors for knowledge about rabies prevention, while Age and knowledge were factors affecting the practice towards rabies prevention because many disease expansion arise from: Lack of education about the disease in the community and Problem of follow up from the concerning body regarding to their status on training. So, continuous and strategic community awareness programs are very critical to prevent human cases in the current study area. Most of the participants had not received any type of education by professionals on what to do if bitten by rabid or rabies suspected animals. This strongly suggests that rabies is still a neglected zoonosis disease, at least in the study area and much has to be done by: Human health and veterinary professionals so that prevention of rabies becomes a priority, Education of the community as many individual rely on their practice, Approach of one health is the best method for solving the problem in related with rabies, Training professional, Community awareness and education at the community level should be done in the study area With integrated to other stallholder, prevent stray dog in the area and lastly Vaccination of dog should be taken as a majority measurement to prevent rabies in the area.

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