

Medical Education Article

Assesment of Factors Determining Anc Utilizationamong Women Who Gave Birth In Dire Dawa Town At Gendekore Kebele From January 1 – February 30, 2015.

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Every year approximately 600,000 women die and some 62 million women suffer from pregnancy and delivery related problem at the height of their productivity and family responsibility. Around 80% of maternal deaths are the result of complication arising during pregnancy, delivery and purperium. However most of such death can be prevented by proper utilization of maternal health care service provided in health institution. The aim of this study was to identify factors determining the utilization of antenatal care among women who gave birth in Dire Dawa town Gendekore kebele from January1 to February 30,2015. Community based Descriptive cross sectional study was conducted in Dire Dawa town Gendekore Kebele from January 1 to February 30. A total of 357 mothers who gave birth were selected from Keble of Dire Dawa town. Systematic Sampling technique is used after getting the starting household by simple random (lottery) sampling method. This study revealed that antenatal care service utilization in the study area was 86.8%. However, from those who attended antenatal care service 96.52%got antenatal care visit greater or equal to four and significant proportion 3.48%had less than four visits. Husband attitude ,unwanted pregnancy, and too far facility were major predictors of antenatal care service utilization. Though the antenatal care service utilization is high in the study population, four in ten of the mothers did not have the minimum number of visits recommended by World Health Organization. Promoting information, education and communication in the community is recommended to favorably affect the major predictors of antenatal care service utilization.

Keywords: ANC, factors, Dire Dawa

INTRODUCTION

BACKGROUND

Antenatal care is a care which is given to pregnant women during pregnancy. It's more beneficial in preventing adverse pregnancy out come when it's sought early and continue throughout the delivery. Its goal oriented with the aim of meeting both psychological and medical need of pregnant women.

Antenatal care provides a valuable opportunity for determining the progress of the pregnancy, diagnosis and treating morbidity such as anemia, hyper tension,

STI, for information and educational activities and to make a contact with health system anticipation of any complication of pregnancy.

Date of 2000-2001 shows that just over 70% of wide have at least one ANC visit with skilled provider during their pregnancy time. In industrialized country the coverage is extremely high with 98% of women having at least one ANC visit in developing countries ANC use is around 68% but it indicate considerable successful

programmers aimed at making ANC available. The region of the world with the lowest level of use is south Asia where only 54% of pregnant women have at least one ANC.

In the Middle East and North Africa, use of ANC is somewhat higher at 65% pregnant mother. In Sub-Saharan Africa generally to region with the lowest level of health care use, fully 68% of women report at least one ANC visit. The lowest in the region of the world range from 82%-86%.

Recent studies have demonstrated an association between lack of ANC and adverse pregnancy outcome such as maternal mortality, pre natal morbidity, low birth weight and pre mature delivery

Regular ANC is important for identifying women in increasing risk of adverse pregnancy outcome and establishing good relation between the women and the health care providers. Routine ANC visit may also range awareness about the need for care at delivery or give women and their families familiarity with the health facility that enable them to seek efficiently during crisis. Scope of benefit may be great in developing countries where morbidity and mortality of mothers and infants are higher.

ANC can also be used to provide TT immunization, malaria prophylaxis, treat STD and to identify pregnant mother living with HIV virus and subsequently to prevent transmission of virus from mother to child.

Very little is known about the effectiveness of ANC in reducing maternal mortality and morbidity because of obstetric random and in predictable events.

For example the main cause of maternal death are obstructed labor in stunted women, hemorrhage, eclampsia and prenatal period. Therefore emergency obstetric care should be available within the nearest health faculty or there should be proper feral system, and transportation to save the mother's life.

Statement of the Problem

Most of this death could be prevented if adequate care is available. Studies raveled that the cause of maternal mortality in developing countries mostly due to poor accessibility to maternal health service. Poor referral, appropriate antenatal and delivery care unit and inadequacy of available care. Studies also suggest that most of the maternal death were preventable, with improved coverage of antenatal service, safe delivery and postnatal care.

In ANC Anemia, STI and Intestinal parasites are treated effectively and early detection of hypertension are the core elements .But in case of delay from the professional, delay from the client and delay in transportation are the causes of failurity of ANC utilization. Since Hypertension is one of the leading cause of maternal mortality and Anemia is the indirect

cause of maternal mortality if we screen early ANC is well addressed.

It is important to concentrate on antenatal elements that are provide to the benefit of the mother as well as her new born in reducing maternal and infant mortality. Complication related to pregnancy and child birth is one of the main causes for maternal death. ANC has demonstrated positive impact on the outcome each pregnancy.

Although recent figures indicate that globally 600,000 women die during pregnancy and child birth year. Most African cultures value children highly but few people including women themselves understand and the risk involved in bearing children this is why women in Africa die much more frequently from the complication of pregnancy and child birth than women in Europe and north America. In sub-Saharan Africa this complication is sometimes the most common cause of death for women of child bearing age. All except of the annual 600,000 maternal death occur in developing world.

Women in Africa have the highest lifetime risk of maternal death because the effect high mortality rate is compounded by high fertility. For many Africans lifetime risks of dying from pregnancy related cause is as high as one in 15. In contrast the industrialized countries are between one in 1750 and in 10,000.

The intervention in the mother baby package can't be considered luxuries. Each one is an indispensable component of health care system. In brief "minimum package" of the intervention includes ANC, clean and safe delivery, recognition to the mother and baby, early detection and management of obstetric complication, postpartum care , family planning and sexual transmitted infection diagnosis and treatment.

The maternal mortality ratio (MMR) OF Ethiopia is estimated to be 673 per 100,000 give birth, one of the highest in the world. In addition, infant mortality rate (IMR) estimated at 77 per 100,000 live births.

Significance of the Study

Increasing maternal mortality rate in developing countries is highly related to the fact that fewer women utilize ANC service. The purpose of this study is to identify factors determining the utilization of ANC service.

Also the outcome of this study enable us to identify the reason of mother for not utilize ANC and factors determining ANC utilization, it will gives a baseline information for the researchers in governmental and NGO who work on this area and also evaluate ANC service status of individual mothers who will participate in the survey.

The significance of this research to the target population is to change the community attitude towards ANC utilization service by teaching the community so as to give birth at health institution to manage the

complication by giving education about the complication during ANC.

LITERATURE REVIEW

Antenatal care has long been considered as essential component of maternal health service. In the past it was seen as to identify women at risk for service complication and refer for appropriate treatment and care. Maternal mortality and morbidity have repeatedly emphasized the need for ANC. Antenatal care strategy target pregnant women in order screen and detect early sign of or risk factor for disease, followed by timely intervention, originally with the aspiration of reducing maternal and prenatal mortality and morbidity. However, the contribution of ANC specifically maternal mortality reduction has been challenged. The acknowledge benefits of ANC to the baby in terms of growth, risk of infection survival however, remain the same.

A number of socio demographic characteristics of the individual affect the underlying tendency to use ANC. In this regard parental education, birth order, family income, residential place, age of the mother, distance of health facility, marital status, exposure to mass media and knowledge.

The use of ANC was found to be related to mother's level of education. Mothers with primary education level more likely to attend ANC than women who are unable to read and write. This is in line with other studies conducted in southern Ethiopia (2003) and EDHS 2006.

According to study done in Ethiopia Muslim women are 30% more likely to receive professional ANC service, while women who belong to traditional faith are 50% less likely to use ANC service than Orthodox or Catholic women.

2006/07 Report of Ethiopia Minister of Health (EMOH), national ANC utilization was 52%.

There is huge regional difference from 7.4% in Somalia region to 88.3% in Addis Ababa.

Harare region was 79.8%. Periodic health check up during ANC is necessary to establish confidence between the women and health care provider and managing maternal complication or risk factor. In addition ANC has been shown to influence women's use of delivery service, probably the most effective intervention in reducing maternal mortality in developing world (4).

In Ethiopia use of ANC service is strongly related to the mother's level of education. Women with at least secondary education 81% more likely to receive ANC than women with primary education 39% and those with no education 22%. Study done in Harari region revealed that ANC use is higher among those attend school. Grade 7 and above 97.1%, 1-6 grade 73.3% and those with no education 65.2%.

The age of women at the time of child birth wasn't found to be significantly associated with prenatal care use. A study done in Ethiopia use of ANC is about 28% for women under age of 35, while it is 21% for those over the age of 35 year. Other study done in eastern part show that use of ANC in women age less than 35 is 76% and between 35-49 is 65%.

Women with degree of exposure to mass media were more likely to have ANC than those who had less exposure. In Rajasthan only 15.2% of women who has not exposed to mass media (Radio, TV or Cinema) used ANC as compared to 50.7% of those who had such exposure. Study done in Harari region show that having frequent exposure to only one media at home 63.9% more likely to use ANC than those not exposed 60.3% and exposure to both mass media 91.9%.

In Ethiopia with highest wealth quintile are nearly 5 times more likely to receive ANC than those with lower quintile. Study shows that family with monthly income of greater than 1000 birr 98.3% more likely use ANC than 501-1000 birr which is 86.6% and less than 500 is 65.2%.

Every year approximately 600,000 women die and same 62 million women suffer from pregnancy and delivery related problem at the height of their productivity and family response. Roughly 4 million neonates die before their first month of life and unequal number are still born.

Women who were pregnant with their first child were more likely to use ANC than women who haven't had 2 or more pregnancy. Study done in eastern Ethiopia show that the use of ANC is higher among more than with first pregnancy 88.5% and those 2-4 parity 76.1% compared to mother with parity 5 and above 6 is 3.4%.

Single mother could feel stigmatized or discriminated against by health worker or other people of health setting. Therefore, they could chose not to have ANC. However, according to study done in Ethiopia married women are 40% more likely to receive ANC from health provider than unmarried women. The study show that married women are more likely to use ANC 74.7% than divorced 71.4% and widowed 66.7%.

The study done in India shows that women with high school education and above were 11 times more likely to use ANC compared to illiterate women. Women whose husband had at least high school level education were 4 times likely to receive and checkup relative to women whose husband had no education.

According to study done in Turkey, both women with 1 to 5 years of schooling and women with 6 or more year of schooling were substantially more likely to use prenatal care than women without any schooling.

Women living in rural area were less likely to receive ANC service in health institution. A percent of women who receive ANC was 21.4% and 73.1% for rural and urban area respectively in southern Ethiopia. In Harari region 83% of urban women and 66% of rural

women receive ANC. According to study in Ethiopia 22% of rural women and 60% of women from urban receive ANC.

Objective

General Objective

To identify factors determining utilization of ANC service among mother who gave birth in Dire Dawa town at Gendekorekebele 04 from January 1- February 30,2015.

Specific Objectives from

- To identify socio-economic factors determining ANC service utilization .
- To determine awareness of women towards ANC utilization.
- To estimate the ANC utilization service during pregnancy.

METHODOLOGY

Study area and period

Dire Dawa is one of the two town administrations of Ethiopia found 512Km far from Addis Ababa (AA) city eastern part of the country. The administrative organization is directly under the federal government and has its own administrative. It has 19 urban and 32 rural kebele. The administration is located b/n 9^o27 north latitude and 41^o3, and 42^o19, East longitude. The administrative council has a total surface area 1288.02Km². The town consists on are of about 91% Shinile zone of Somali national regional state and Eastern Hararge zone of Oromiya national regional state bound it. Annual average temperature ranges from 20^oc-27.5^oc. Average annual rainfall is 676.3mm. Total population of the administration is around 342,824 and their main cause of income is trade. In Dire Dawathe health coverage is 100% but the ANC coverage is 90% (17).There are four hospital,12 public health center, 33 health posts, and more than 12 privately owned higher 7 medium clinics. Dill-Chora hospital was founded in 1956 kebele 03 preview suppression of what is called Ezana.

Study period

The study was conducted from January 1 - February 30, 2015.

Study design

The quantitative community based cross sectional study was conducted.

Study and source population

Source population

All Mothers under reproductive age group (15 – 49 years) living in Dire Dawa town Gendekorekebele 04.

Study population

All mothers who gave birth at least one year in Dire Dawa town Gendekorekebele 04.

Sampling techniques and sample size

Sample size

The sample size was determined using the formula assumptions

$$n = \frac{\left(\frac{Zx}{2}\right)^2 P (1 - p)}{d^2}$$

$$y = \frac{(1.96)^2 0.3(1-0.3)}{(0.5)^2}$$

$$y = 3.84 \times 0.21$$

$$0.25$$

$$y = 3.226(100)$$

$$y = 322.6$$

$$n = 322.6 + 10\% \text{ of } y$$

$$12$$

$$= 322.6 + 32 \text{ our sample size is } n = 354.6 = 357$$

P=0.3 from the previous research which done in Hadiya zone.

Whereas: n = sample size
 Z = score value
 X = level of confidence
 q = proportion of failure
 P = population proportion

Sampling techniques

Systematic random sampling method was used. Determining the K value by counting the total households in Gendekorekebele 04. A total of 774/357=2.16. After getting this k value we picked randomly (lottery) method so as to get the initial household that we are going to interview by visit every k value that is every 2 in subsequent households.

Inclusion and exclusion criteria

Inclusion criteria

Women who gave birth and those who are volunteer to participate in the study.

Exclusion criteria

Mothers who have ill during data collection time and Mothers who are mentally ill.

Pre test

The structured questioner was pre tested 10% of the total sample size. At the time of pretest the questioner is assessed for clarity, completeness and consistency. The data was collected for pretest is not included in the actual data. Because the pretest was done before selecting the framework. The pretest was done at Harar Genela woreda kebele 14.

Data quality assurance

Our method of data collection was quantitative by using structured questioner and face interview. Data completeness was checked by supervisors. Lastly, cross check was done for completeness.

Data processing and analyzing

The collected data was processed and analyzed manually by using frequency count and dummy table, scientific calculator. In addition chi-square test is done to check for association of influencing factors. Finally the result was presented using appropriate tables, graph and text.

Variables

Independent variables

The independent variables are age, marital status, educational status, occupational status, ethnicity Parity.

Dependent variables

The Dependent variable were utilization of ANC and Prevalence of ANC

Operational definition

Antenatal care: is a comprehensive care which is given during pregnancy for the women .

Prenatal Period: is a period before delivery

Focused Antenatal care: A special attention care which is given for the pregnant mother in each visit that is in four visits.

Good utilization of ANC: Those mothers who answer >70% of the questions.

Poor utilization of ANC: Those mothers who answer <50% of the questions.

Ethical consideration

The proposal was approved by Haramaya University School of Nursing and Midwifery research committee. Official letter sent to our study area of administrative office. In addition to this informed consent have taken from individual study subject to know their willingness to answer our questions. We also kept the confidentiality and moral law of the respondents.

RESULT

Socio demographic characteristics

In table 1, from 357 child bearing women included in the study those whose age 25-29 takes the major place about 115(32.22%) and those whose age was between 15-19 takes the least 13(3.64%) .Out of 357 mothers 89.08% were educated and the rests were unable to read and write and 78.7% of the respondents were married and 5.6 % of them were single. In these study area most of the respondents were Oromo and orthodox 50.8%and47.05% respectively.

Family income

In these study area out of 357 mothers 53% of them got>1000and 19% of them got < 500birr in a month averagely.

From 357 women that we asked 189(52.1%) of them had both radio and TV in their home where as 37(10.36%) had only radio and 111(31.1%) had only TV. The rest 23 (6.4%) had neither radio nor TV in their home (see figure 1).

Determinants and ANC service utilization

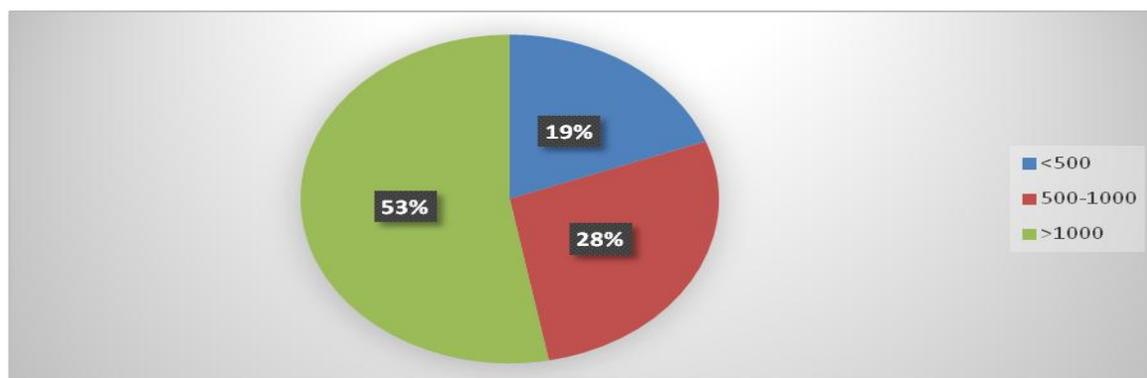
Out of the total 357 mother including in the study 317(88.79%) of them heard about ANC and 40(11.21%) of them didn't heard .Among those who heard about ANC 245(77.28%)of them from health worker, 190(59.93%) from mass media, 4 (1.26%) from TBA,2(0.63%) from user and220(69.4%)from HEW .All mothers that heard about ANC definitely knew where they get ANC services.

Out of 317 mothers who had knowledge about ANC 306(96.52%) Of them had attend ANC during their last pregnancy.

Regarding for the reason for not attending ANC 30(8.4%) of the other respond that they had lack of awareness towards ANC. Other reasons were too far facility , no husband support and unwanted pregnancy

Table 1: Socio demographic characteristics of mothers in Dire Dawa town gendekorekebele from January 1-February 30, 2015.

Variables	Frequency	percentage
Age		
15-19	13	3.64
20-24	49	13.72
25-29	115	32.22
30-34	55	15.40
35-39	59	16.52
40-45	44	12.32
45-49	22	6.70
Educational status		
Unable to readandwrite	39	10.92
Able to read and write	36	10.08
1-6	54	15.13
7-12	128	35.85
12+	100	28
Occupational status		
House wife	128	35.85
Merchant	65	18.2
Daily laborer	25	7
Gov'tal employer	64	17.92
Private employer	50	14
Students	25	7
Marital status		
married	281	78.7
Widowed	30	8.4
Divorced	26	7.28
Single	20	5.6
Ethnicity		
Amhara	131	36.4
Oromo	144	50.8
Harari	15	4.2
Gurage	38	10.6
Others	29	8.1
Religion		
Orthodox	168	47.05
Muslim	126	35.4
protestant	49	13.7
catholic	12	3.36
Others	2	0.56

**Figure 1:** Family average monthly income among mothers in Dire Dawa town Gendekore Kebele from January -- February 30, 2015.

Obstetric determinants of ANC services utilization .

Women who became pregnant at one times were 37%,36% of them had two times and the rest had more than and equal to three times (figure 2).

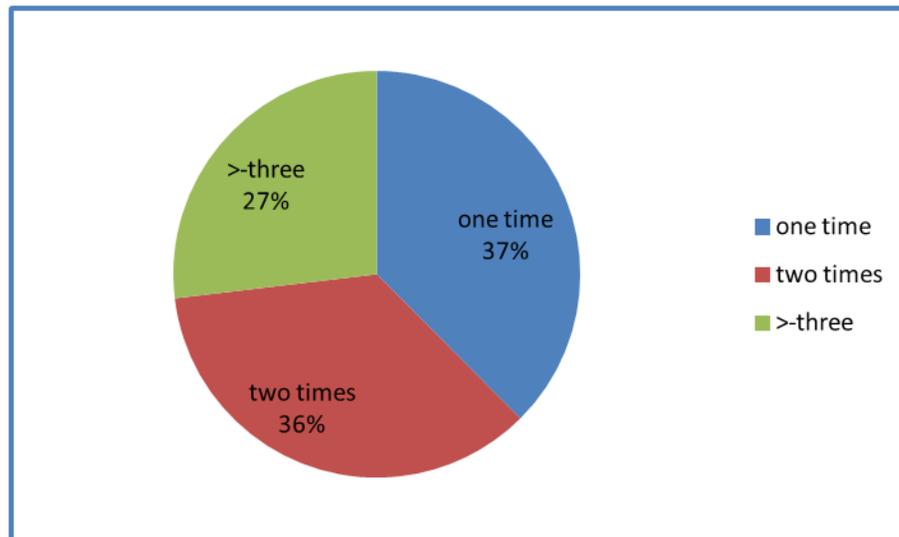


Figure 2: Shows number of pregnancy among mothers in Dire Dawa town Gendekore kebele from January 1—February 30,2015

In these study area 34% of the respondents had two children and those who had one child were 37% and the rests had more than and equal to three children (figure 3).

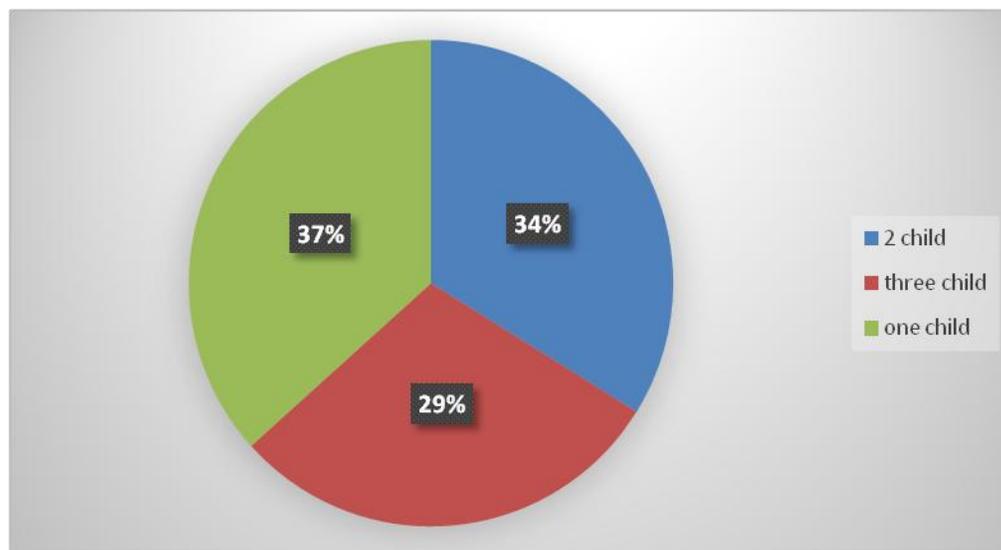


Figure 3: Shows number of children among mothers in Dire Dawa town Gendekore kebele from January 1—February 30,2015

Association between socio demographic factor with ANC services.

A number of socio demographic characteristics of the individuals affect the underlying tendency to use ANC. In this regard parental education , family income , age of the mother and marital status .As the study showed mothers whose

age was < 35 (59.38) and greater than thirty five 98 (27.45%) used the service. when we saw marital status women's who got married 26 (73.1%) used the service more than those widowed 5.04% , separated 4.48% and single 4.2%.

Women at least in secondary school used ANC services more than those in primary school and uneducated .Family with monthly income of greater than 1000 birr used the service more than others (table 2)

Table 2: Shows association of factors determining ANC service utilization in the last pregnancy among mothers who gave birth in Dire Dawa town Genedkore Kebele from January—February 30 ,2015.

Variable	User		Non-user		
	F	%	F	%	
Age < 35	212	59.38%	20	5.6%	
≥ 35	98	27.45%	27	7.56%	
Educational status	uneducated	29	8.12%	10	2.8%
	Educated	26	7.3%	10	2.8%
	1-6	46	12.88%	8	2.24%
	7-12	116	32.49%	12	3.36%
>12	93	26.05%	7	1.96%	
Income	< 500	40	11.2%	29	8.12%
	500—1000	89	24.93%	10	2.8%
	> 1000	181	50.7%	8	2.24%
Marital Status	single	15	4.2%	5	1.4%
	married	26.1	73.1%	20	5.6%
	Divorced	16	4.48%	10	2.8%
	Died	18	5.04%	12	3.36%

Observed frequency

Family income

Table 3: Family income

ANC	<500	500-1000	>1001	Total
User	40	89	181	310
Non- user	29	10	8	47
Total	69	99	189	357

Expected frequency

Table 4: Expected frequency

ANC	<500	500-1000	>1001	Total
User	60	86	164	310
Non- user	9	13	25	47
Total	69	99	189	357

Table 5: Educational status
Observed frequencies

ANC	Unable to read and write	Able to read and write	1-6	7-12	≥12	To
User	29	26	46	116	93	310
Non-user	10	10	8	12	7	47
Total	39	36	54	128	100	357

Hypothesis

HO: there is an association between users and family income
 HA: there is no association between ANC users and family income.
 Degree of freedom (df) = (R-1) (C-1)

$$(3-1) (2-1) = 2$$

$$X^2 \text{ tab } (5= 0.05 \text{ df}=2) = 5.99$$

$$X^2 \text{ cal} = \text{summation of } (o_i - e_i)^2 / e_i$$

$$= \frac{(40-60)^2}{60} + \frac{(89-86)^2}{86} + \frac{(181-164)^2}{164} + \frac{(29-9)^2}{9} + \frac{(10-13)^2}{13} + \frac{(8-25)^2}{25}$$

$$X^2 \text{ cal} > X^2 \text{ tab.} = 65.17$$

Therefore HO is rejected .HA is accepted.

So, there is no association between ANC users and family income

Association in educational status

Educational status

Expected frequency

Table 6: Educational status

ANC	Unable to read and write	Able to read and write	1-6	7-12	≥12	Total
User	34	31	47	111	87	310
Non-user	5	5	7	17	13	47
Total	39	36	54	128	100	357

Hypothesis

HO: There is an association b/n ANC users and educational status.

HA: There is no association b/n ANC users and educational status

Degree of freedom (Df) (R-1)(C-1)

$$(5-1)(2-1) = 4$$

$$X^2 \text{ tab } (5= 0.05 \text{ df}=4) =9.48$$

$$X^2 \text{ cal} = \text{summation of } (o_i - e_i)^2 / e_i$$

$$= \frac{(29-34)^2}{34} + \frac{(26-31)^2}{31} + \frac{(46-47)^2}{47} + \frac{(116-111)^2}{111} + \frac{(93-87)^2}{87} = 2.12$$

$$X^2 \text{ cal} = \frac{(10-5)^2}{5} + \frac{(10-5)^2}{5} + \frac{(8-7)^2}{7} + \frac{(12-17)^2}{17} + \frac{(7-13)^2}{13}$$

$$= 14.38$$

since x2 tab < x2 cal

Therefore HO is rejected .HA is accepted

So, there is no association between educational status and the use of ANC services.

Even though most of the respondents had ANC follow up some of the respondents hadn't due to the following reasons. These were lack of awareness, too far facility, no husband support and unwanted pregnancy. From these 6.4 % of them had lack of awareness and 0.28 % of them had unwanted pregnancy (figure 5).

For those 357 women 45(12.6%)of them were become pregnant for the 1st time < 18years whereas 308(86.27%)is greater or equal to 18 and the rest 4(1.12%) didn't remember .

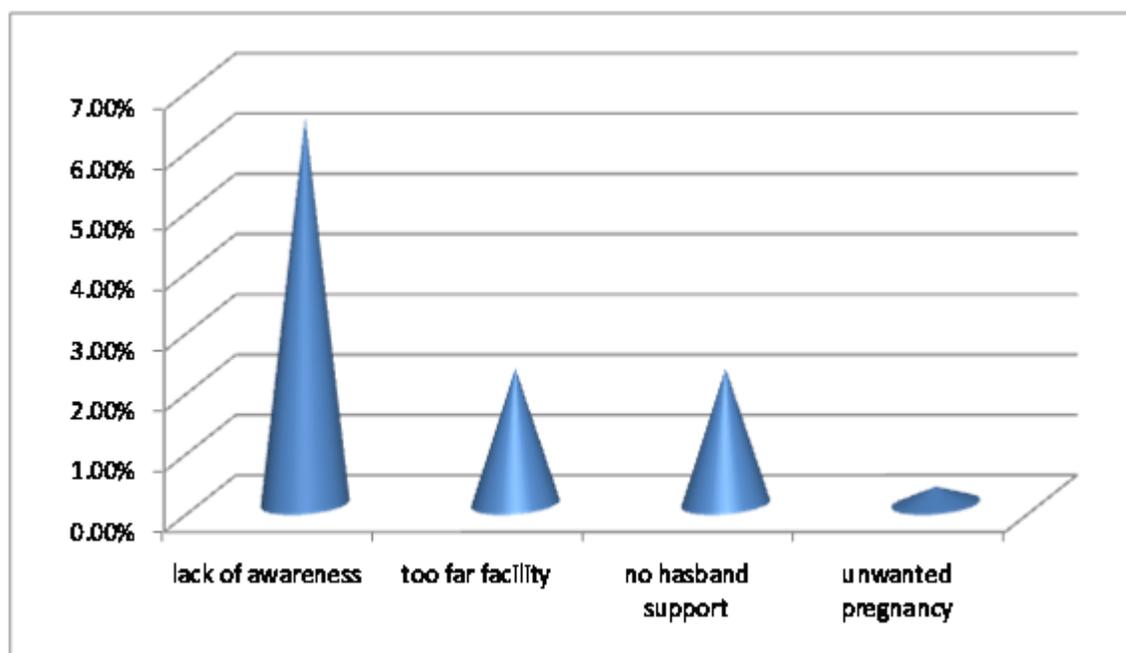


Figure 5: Reasons for not attending ANC among mothers in Dire Dawa town Gendekore kebele from January 1—February 30,2015

DISCUSSION

A percent of women who receive ANC was 21.4% and 73.1% for rural and urban area respectively in southern Ethiopia. In Harari region 83% of urban women and 66% of rural women receive ANC. According to study in Ethiopia 22% of rural women and 60% of women from urban receive ANC. In this study since it was conducted in urban who received ANC was 86.8%. This might be due to presence of mass media accessibility of health facility and infrastructure like road and transportation in urban area than rural.

Study done in Harari region revealed that ANC use was higher among those attend school. Grade 7 and above 97.1%, 1-6 grade 73.3% and those with no education 65.2%.

In this study showed that attend ANC Grade 7 and above 63.85%, 1-6 Grade 35.85% and those with no education 10.08%. This might indicate that as education level increases, awareness about ANC increase.

A study done in Ethiopia use of ANC is about 28% for women under age of 35, while it is 21% for those over the age of 35 years while in this study showed for those less than 35 age 59.38% and over 35 age 27.45%. This discrepancy might be due to good awareness among reproductive ages and mass media coverage.

In this study the prevalence of AN Coverage was 86.8%. According to 2006/07 Report of Ethiopia Minister of Health (EMOH), national ANC utilization was

52%. This discrepancy might be due to improvement of awareness towards ANC.

As the study showed mothers whose age was < 35 (59.38) and greater than thirty five 98 (27.45%) used the service. A study done in Ethiopia use of ANC is about 28% for women under age of 35, while it is 21% for those over the age of 35 year. Other study done in eastern part show that use of ANC in women age less than 35 is 76% and between 35-49 is 65%. So the age of women at the time of child birth wasn't found to be significantly associated with prenatal care use.

In these study among those who heard about ANC 245 (77.28%) of them from health worker, 190 (59.93%) from mass media, 4 (1.26%) from TBA, 2 (0.63%) from user and 220 (69.4%) from HEW. All mothers that heard about ANC definitely knew where they get ANC services. Women with degree of exposure to mass media were more likely to have ANC than those who had less exposure. In Rajasthan only 15.2% of women who has not exposed to mass media (Radio, TV or Cinema) used ANC as compared to 50.7% of those who had such exposure. Study done in Harari region show that having frequent exposure to only one media at home 63.9% more likely to use ANC than those not exposed 60.3% and exposure to both mass media 91.9%. So it was comparable.

In these study whose income were greater than 1000 received ANC more than two times from that of who got less than 500 and b/n 500-1000. In Ethiopia with highest wealth quintile are nearly 5 times more likely to receive ANC than those with lower quintile. Study

shows that family with monthly income of greater than 1000 birr 98.3% more likely use ANC than 501-1000 birr which is 86.6% and less than 500 is 65.2%. This might be due to lack of awareness about ANC importance.

CONCLUSIONS AND RECOMMENDATION

Conclusion

In this study the prevalence of ANC coverage was 86.8%

In general as we had understood from this study which was done in Dire Dawa town kebele 04 women's whose age was less than 35 (59.38%) use ANC services more than those whose age greater than 35 (27.45%) when we came to marital status of women the married one use ANC more than widowed and divorced.

Regarding to educational status those women whose grade is 7 to 12 (28%) use the services more than others, families whose monthly income is greater than 1000 birr 50.7% receive the services more than those who got less than 1000 birr.

Recommendation

Finally we recommend Haramaya university to create awareness to the community during TTP about no any payment regarding to ANC follow up since most of mothers who got the service whose monthly income is greater than 1000.

For Gendekore HEWs and Gendekore health center to give information all the aspects of ANC follow up danger sign during pregnancy, complication of birth and postnatal complications regarding to home delivery.

For policy makers and organizations it used as a base line for any purpose for example if they want to know about the prevalence and awareness about ANC in that study area.

For Dire Dawa health bureau even the prevalence of ANC in that area was high again they do too so as to decrease maternal morbidity and mortality by increasing ANC follow up to 100%.

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ABBREVIATION

ANC: Ante natal care

EMOH: Ethiopia minister of health

EDHS: Ethiopia demography and health survey

IMR: Infant mortality rate

HEW: Health extension worker

HIV: Human immune deficiency virus

MMR: Maternal mortality rate

MOH: Ministry of health

NGO: Non - governmental organization

STD: Sexual transmit disease

STI: Sexual transmit infection

TT: tetanus toxoid

TBA: Traditional birth attendant

PA: Principal advisor

PI: Principal investigator

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