International Journal of Allied Medical Sciences and Clinical Research (IJAMSCR)

IJAMSCR |Volume 7 | Issue 4 | Oct - Dec - 2019
www.ijamscr.com

ISSN:2347-6567

Research article *Medical research*

Socio demographics and Determinative Components affecting First Antenatal Care Visit among Pregnant Women Attending DessieReferal Hospital ANC Unit, Dessie Town, North East Ethiopia

Mengistu Abate[1], Shambel Wodajo[2], Prem Kumar[3]

[1]*Lecturer, Department of Midwifery, College of Medicine & Health Sciences (CMHS), Wollo University, Ethiopia*
[2]*Asst. Professor, Department of Public Health, CMHS, Wollo University, Ethiopia*
[3]*Asst. Professor, Department of Comprehensive Nursing, CMHS, Wollo University, Ethiopia.*
***Corresponding Author**: **Dr. Prem Kumar**
Email id:greenwater3020@gmail.com

ABSTRACT

Introduction

Antenatal care service, which is among strategies to maintain maternal and fetal well being, is strongly recommended to be initiated early during pregnancy. Late first visit is one of the three common problems throughout sub Saharan Africa (SSA) posing difficulty in accomplishing world health organization (WHO) recommendation.

Objective

The objective of this study was to determine the proportion and associated factors of timely first ANC visit among pregnant mothers in Dessie Referral Hospital.

Methods and Materials

Institution based cross sectional study design was applied. The consecutive sampling technique was used to select 284 pregnant mothers and participants are interviewed by using structured questionnaire.

Results

It is revealed that timely ANC visit was found as 27.3%. maternal educational status and knowledge of the time for first ANC visit were statistically significant variables with the mother having first ANC visit timely at a p- value <0.05.

Conclusion

The study concluded thatutilization timely first ANC visit is affected by the maternal educational level and ANC awareness.

Keywords: Socio demographics, Antenatal care, Determinative Components, Pregnant women

INTRODUCTION

Antenatal care, which is given to pregnant mothers, is widely used for prevention, early diagnosis and treatment of general medical and pregnancy related complications [1]. It aims to prevent maternal and prenatal mortality and morbidity. Approximately 536,000 maternal deaths occur annually, of which over 95 % occur in sub Saharan Africa and Asia [2]. In sub

Saharan Africa mothers' risk of dying from treatable or preventable complications of pregnancy and child birth over the course of their life time is 1 in 22 compared to 1 in 7,300 in the developed regions [3].

The utilization of ANC from a trained provider is important to monitor the pregnancy and reduce morbidity and mortality risks for the mother and child during pregnancy and delivery [4]. Early ANC and regular follow up of service usually provide a range of opportunities for delivering health information and interventions that can significantly enhance the health of the mother and the fetus [5].

The standard of care when evaluating mothers with a potentially complicated first trimester pregnancy is to take a detailed history of the risk factors and ascertain the clinical course because it will help to have enough time for essential diagnosis and treatment regimen. But this will happen only if the mothers come to health institutions early in the first trimester.

An additional 300 million women suffer from short- or long-term illnesses related to child bearing [6]. In many developing countries, complications of pregnancy and childbirth are the leading causes of death among mothers of reproductive age. A mother dies from complications from childbirth approximately every minute [7].

Early detection of problems in pregnancy leads to more timely referrals for mothers in high risk categories or with complications. This is particularly true in Ethiopia where three-quarters of the population live in rural areas and where physical barriers pose a challenge in providing health care.

For many years, like that of many other developing countries Ethiopia has been implementing a narrow focused maternal and child health programs.

According to the systematic review made on antenatal care as a means of increasing birth in the health facility and reducing maternal mortality, the minimum antenatal care visits recommended by WHO (4 visits) was possible only for less than about one-third of the pregnant mothers in some SSA countries like Niger (15%), Ethiopia (19%), Chad (23%), Burundi (33%), Mali and Rwanda (35% each) [8,9].

The 2016 EDHS results show that 62 percent of women who gave birth in the five years preceding the survey received antenatal care from a skilled provider at least once for their last birth. Three in 10 women (32 %) had four or more ANC visits for their most recent live birth [10].

OBJECTIVES

- To assess the socio-demographics of visit among pregnant mothers at Dessie Referral Hospital, 2018.
- To determine proportion of timely first ANC visit among pregnant mothers at Dessie Referral Hospital, 2018.
- To identify associated factors for time of first ANC visit among pregnant women at Dessie Referral Hospital, 2018.

METHODS & MATERIALS

- **Settings & study period:** The study was conducted in Dessie Referral Hospital from June 1- 30/2018.
- **Study design:** An institutional based cross-sectional study design employed.
- **Sampling techniques & Size:** The sampling technique was consecutive sampling technique used to select 284 participants.
- **Study population:** The study populations were pregnant mothers who have ANC follow up at Dessie referral hospital during the study period.
- **Data collection procedure:** Prior permission was obtained from the concerned authority. Informed consent obtained from the study subjects. The Data were collected by three trained diploma nurse by using structured questionnaire.
- **Statistical analysis:** Data processing and analysis was done by SPSS version20. All the quantitative findings were described in detail and summarized in percentages, tables and graphs. Binary logistic regression was used to indicate the gross association between each independent variable with the outcome variables. Assumption of significance to analyze the associated factors was 95% confidence interval and P <0.05% from the final mode.

RESULTS

Socio-demographic characteristics

The response rate was 95.4% (271). Most of theparticipants (82.7%) were in the age between 20 and 34 years. Among the participants 262 (96.7%) were married. Most of the participants (60.9%) were Amhara in ethnicity. Only 104 (38.4%) mothers were beyond secondary education. Nearly half of the participants were employed (57.5%).

Table 1: The demographiccharacteristics of the mothers who attend ANC at Dessie Referral Hospital, 2018

No	Variables Socio-demographic characteristics		Frequency	ercentage (%)
1	Age (year)	<20	13	4.8%
		20<34	224	82.7%
		35<49	34	12.5%
2	Marital status	Single	9	3.3%
		Married	262	96.7%
3	Religion	Muslim	179	66.1%
		Orthodox Christian	76	28.0%
		Protestant Christian	15	5.5%
		Other	1	0.4%
4	Ethnicity	Amhara	165	60.9%
		Oromo	85	31.4%
		Tigre	14	5.2%
		Afar	7	2.6%
5	Education	Cannot read & write	18	6.6%
		Can read & write	66	24.4%
		1^0 education	64	23.6%
		2ry education	19	7%
		Beyond 2ry education	104	38.4%
6	Occupation	Employed	156	57.5%
		Unemployed	115	42.5%

Obstetric Characteristics of the participants

From the total participants, 11.8% and 5.9% reported that they had encountered abortion and stillbirth respectively.

Table 2: The obstetrics characteristics of pregnant mothers attending ANC service at Dessiereferral hospital, 2018

Variables		Frequency	Percent
History of gravidity	Para	56	20.7%
	Multi Para	215	79.3%
History of abortion	Yes	32	11.8%
	No	239	88.2%
History of still birth	Yes	16	5.9%
	No	255	94.1%
Previous pregnancy complication	Yes	69	25.5%
	No	202	74.5%
current Pregnancy is planned	Yes	240	88.6%
	No	31	11.4%
Current pregnancy complication	Yes	31	11.4%
	No	240	88.6%

Knowledge about ANC

Below half of pregnant mothers (42.8%) knew about ANC from health education. Thirty-five-point eight present of the participants got information about ANC from mass-media and 15.5% use both mass-media and health education as a source of information and the rest 5.9% of mothers don't know about first ANC visit.

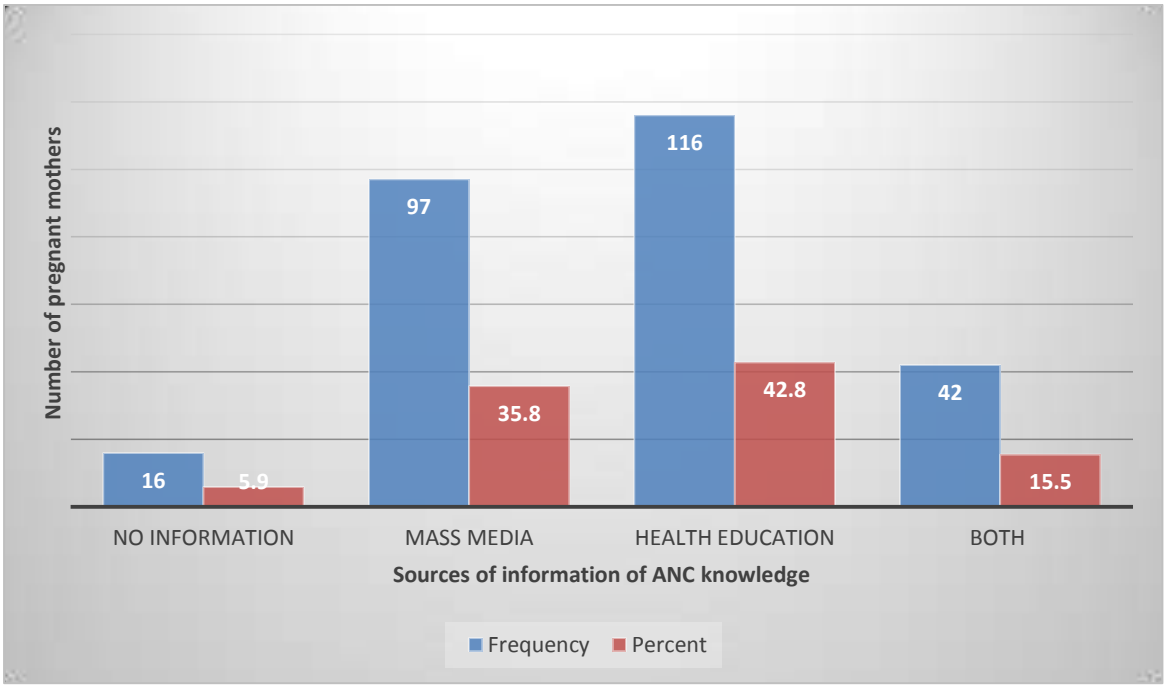

Fig. 1: Number of pregnant mothers and their sources of information about ANC

Seventy-three (26.9%) mothers know about the first ANC time. And around half of (53%) the mothers believed that ANC visit is important for both the mother and the fetus.

Table 3: Knowledge of pregnant mothers' about of ANC visit at Dessie Referral Hospital, 2018.

No	Variables Characteristics		Frequency	Percentage (%)
1	Knowledge about ANC	Yes	189	69.7%
		No	82	30.3%
3	Knowledge about time of first ANC	Yes	73	26.9%
		No	198	73.1%
5	ANC is important	For the fetus	34	12.5%
		For the mothers	87	32.1%
		For both fetusand mothers	145	53.5%
		Haven't important	5	1.8%

Pregnant mothers' Practice of ANC

Majority of the participants (83.7%) had ANC visit in their previous pregnancy. Regarding theircurrent pregnancy, 27.3% of them had attended their first ANC on time (before12 months).

Table 4: The practices pregnant mothers in utilizing ANC service at Dessiereferral hospital, 2018

No	Variables		Frequency	Percentage
1	ANC visit for the last pregnancy	Yes	217	80.1%
		No	54	19.9%
3	Having time of first ANC for the current pregnancy	<12week	74	27.3%
		12-24 week	143	52.8%
		24-28 week	46	17.0%
		28-40week	8	3.0%

Associated factors that determine first ANC visit

The result of multivariable logistic regression analysis showed that maternal educational status and knowledge of the time for first ANC visit were statistically significant variables with the mother having first ANC visit timely at a p- value <0.05.

Table 5: Variables that show statistically significant association by logistic regression analysis at Dessie Referral Hospital, 2018

Variable	Timely first Visit		COR (95%CI)	AOR (95%CI)	p-value
	Yes	No			
Educational status					
Cannot read & write	11	7	1	1	0.463
Can read & write	52	14	1.35(0.47, 3.91)	1.80(0.37, 8.73)	0.466
1^0 education	53	11	1.48(0.51, 4.34)	1.66(0.43, 6.47)	0.453
2ry education	15	4	1.92(.433, 8.54)	1.87(0.37, 9.58)	0.463
Beyond 2ry education	99	5	5.63(1.6, 19.85)	**7.95(1.56,40.58)**	**0.013**
Know the time of first ANC visit					
Yes	15	66	0.26(1.86, 0.78) 1	**6.44(1.64, 25.2)**	**0.008**
No	58	132		1	

DISCUSSION

Our study finding is in line with and different from some other study findings. This study found out the proportion of having timely first ANC visit as 27.3% which is almost incongruent with a finding in Durban, South Africa that is 23.4% [11]. This similarity might be due to sociocultural similarities between the two countries. But it is lower than the findings revealed by the studies done in Addis Ababa and Mekelle, Ethiopia that reported 40.2% and 48% respectively [12]. The difference can be justified due to accessibility and availability differences of health facility and public awareness differences among these cities.

In this study educational status of the mothersand knowledge of the time of first ANC visit are found as significantly associated with having timely first ANC visit. Mothers whose educational status beyond secondary education are eight times more likely to have timely first ANC visit than who cannot read and write. This finding is in line with finding found in Kwale District, Kenya which shows women with secondary education or above were more likely to attend ANC [13]. The similarity can be explained by the demographic similarity of the study subjects. The reason for time of first ANC visit knowledge became an associated factor can be justified as the more the mothers know about the time and benefits of first ANC visit, the higher they come on time for first ANC visit.

Conclusion and Recommendations

Educational status of the mothers and knowledge of the time of first ANC visit are found as significantly associated with having timely first ANC visit. This shows that the utilization of first ANC visit is affected by the maternal educational level and ANC awareness. Based on these findings we recommend to Ministry of health and related stake holders can strive to make more girls to go beyond secondary education and health care providers particularly Health Extension Workers should extensively disseminate the knowledge about the time and the benefits of first ANC visit.

Conflict of Interest: The authors declared no conflict of interest.

REFERENCES

[1]. WHO. Maternal health and safe mother hood progress report update, WHO, Geneva, 2009.
[2]. WHO. Maternal mortality in 2005, estimates developed by WHO, UNICE, UNFPA, and the World Bank Geneva, WHO 2007.
[3]. United Nations. Millennium development Goals report. Network, United Nations, 2008.
[4]. BulloughC, meda N ma kowleckaK,RonsmansC, AchadiEL, Hussein J. Current strategies for the reduction of maternal mortality. BJOG. 112(9), 2005, 1180-88.
[5]. Beeckman K, Louckx F, putman K. Predisposing, enabling and pregnancy related determinants of late initiation of prenatal care. Maternal and child health journal. 15(7), 2011, 1067 – 75
[6]. UniTalia M.an issue of culture, the effect of daily activities on prenatal care utilization patterns in rural South Africa. SocSci Med. 54 (9), 2004, 1843-55.
[7]. Wasabi W. extension workers drive Ethiopia's primary health care. lancet, 2008
[8]. WHO. Traditional birth attendants.Joint WHO/UNFPA/UNICEF/statement.2010.
[9]. Berhan Y and BerehanA. . Antenatal Care as a Means of Increasing Birth in the Health Facility and Reducing Maternal Mortality: A Systematic Review. Ethiopia Health Sci. 2014; Special Issue. 93-104.
[10]. Central Statistical Agency. 2016. Ethiopia Mini Demographic and Health Survey. Addis Ababa, Ethiopia
[11]. Tariku A, Melkamu Y, and Kebede Z. "Previous utilization of service does not Improve timely booking in antenatal care": cross sectional study on timing of antenatal Care booking at public health facilities in Addis Ababa. Ethiopian Journal of Health Development, 24(3), 2010, 226–233.
[12]. Tekelab T and Berhanu B. Factors Associated with Late Initiation of Antenatal Care among Pregnant Women Attending Antenatal Clinic at Public Health Centers in Kembata-Tembaro Zone, Southern Ethiopia. Arts Res. J. 3(2), 2014, 108-115.
[13]. Worku T, Meseret S, and Amano A. Timing and factors associated with first antenatal care booking among pregnant mothers in Gondar Town; North West Ethiopia. Pregnancy and Childbirth 2014, 14:287

How to cite this article: Mengistu Abate1, ShambelWodajo, Prem Kumar.Socio demographics and Determinative Components affecting First Antenatal Care Visit among Pregnant Women Attending DessieReferal Hospital ANC Unit, Dessie Town, North East Ethiopia.Int J of Allied Med Sci and Clin Res 2019; 7(4): 1291-1296.
Source of Support: Nil.**Conflict of Interest:** None declared.