

# A Qualitative Explorative Study from Service Providers' Perspective of Reasons Influencing Timing of First Antenatal Care Attendance, In Dire Dawa City Administration, East Ethiopia

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## Abstract

**Background:** The timing of first Antenatal Care (ANC) attendance is referred to be late when a pregnant woman starts her first ANC booking after 16 weeks of gestational age and is referred early if she starts before 16 weeks of gestation. Though there is marked improvement in ANC coverage, more than half of the pregnant women in Dire Dawa city initiate their first ANC attendance late. **Objective:** The overall purpose of this study was to explore the reasons that influence the timing of First Antenatal Care booking in public health facilities of Dire Dawa city Administration, from ANC service providers' perspective. **Subjects and Methods:** Ten ANC service providing professionals from 10 public health facilities of Dire Dawa city Administration who were selected using purposive convenience sampling technique were involved in this qualitative explorative study that employed phenomenology study design to collect data of in-depth interviews. The tape recorded data were transcribed and manually analyzed using Colaizzi's data analysis matrix method. **Results:** Five themes emerged as reasons for late initiation of first ANC booking: poor maternal knowledge, noninvolvement of spouse in decision making of ANC attendance, unplanned and/or unwanted pregnancy, non courteous and non-empathic service providers and past maternal negative reproductive experiences. **Conclusion:** These five identified reasons of late first ANC attendance problems could be minimized through strategic interventions that improve women's knowledge and practice towards early initiation of first ANC booking and family planning utilization, provision of counseling services to both partners and provision of refreshing in service trainings to health professions about considerations of ethical issues. Conducting further research on this matter is also recommended.

**Keywords:** first antenatal care booking timing, qualitative reasons.

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## Introduction

Antenatal care (ANC) is a type of care given for women during pregnancy and it is one of the pillars of ensuring maternal and child health.

The aim of ANC service is to early identify and manage problems of both the pregnant mother and her fetus and to ensure that each newborn child has a good start (WHO/UNICEF, 2003).

Under normal circumstances, the World Health Organization (WHO) recommends that a woman without complications should have at least four ANC visits. Ideally, the timing of first ANC is during first trimester; the second, close to week 26; the third around week 32; and the fourth and final is between weeks 36 and 38. The first ANC offers an opportunity to establish baseline information on the general wellbeing of the mother and the pregnancy. It also helps the expectant mothers' preparedness for motherhood and charts the likely course of the pregnancy (Abouzahr, C. et. al, 2003; WHO/UNICEF, 2003).

Based on the timing of first Antenatal Care (ANC)

attendance, ANC booking is classified as early and late. Early ANC initiation is when pregnant women start their first ANC booking before 16 weeks of gestational age and when they start at or after 16 weeks of gestational age it is referred as late first ANC attendance.

Early first ANC booking is more beneficial in preventing adverse pregnancy outcomes and timely referrals for women in high-risk categories or with complications (WHO/USAID, 2008; Banta, D., 2003; Carla et al, 2003).

Though 62% of all pregnant women received ANC from skilled provider in Ethiopia nationally and the ANC coverage has increased to 87.4% recently locally in Dire Dawa city, minority (20.4%) of the pregnant women made their first ANC before the fourth month of pregnancy in 2016. The median duration of pregnancy at first ANC was 4.9 months (EDHS, 2016).

According to Ethiopia's ministry of health report, it was unlikely that women initiate ANC early enough in pregnancy to follow the full basic component of the Focused ANC (Federal Democratic Republic of Ethiopia Ministry of Health, 2016).

Maternal mortality ratio of 412 for every 100,000 live births and the neonatal mortality rate of 29 per 1,000 live births were reported in 2016. These levels indicate that maternal and infant mortality are among the highest in the world (EDHS, 2016).

Maternal and neonatal morbidity and mortality have continued to be a major problem in developing countries despite efforts to reverse the trend. Globally, more than 500,000 mothers die each year from pregnancy related conditions, and neonatal mortality accounts for almost 40% of the estimated 9.7 million children under-five deaths. About 99% of maternal deaths occur in developing countries and approximately three-quarters of them are considered avoidable (World Health Organization, 2014). Many women in sub-Saharan Africa; tend to wait to start antenatal care until the second or third trimester (Wang et al, 2011)

The reasons that influence timing of first ANC attendance or visits of pregnant women are multiple, various and interlinked.

There are study reports that maternal poor knowledge of the benefits of early and dangers of late ANC initiation are reasons for some pregnant women to initiate their first ANC late. a qualitative study that assessed about barriers and solutions for timely initiation of antenatal care in Kigali, Rwanda from health professionals perspective reported that poor knowledge of the benefits of early and dangers of late ANC visit initiation as one reason for late ANC booking and described "pregnant women don't understand the importance of prenatal visits and coming earlier. That it's necessary for them to come for the good health of their baby (Jill Hagey, 2013). There are research findings of quantitative studies that were augmented with qualitative studies that reported poor maternal knowledge is associated with late ANC visit initiation in researches which were done in Yem, south west Ethiopia (Bahilu T. et. al, 2008), Tanzania (Gross K. et.al, 2012) in Uganda (Matua, 2004), in Lesotho 2007 and a research done by (Dennill et al 1999).

There are study reports done in Gondar, North West Ethiopia (Temesgen W. et. al, 2012) and in Tanzania (2012) that reported not being supported by the husband or partner were reasons for a late antenatal care booking

The health professionals' poor courtesy to their clients as negative influencing factor are reported studies that were done by (Dennis et al. 1995) and (Nichols, 1997) that described it as "the reasons for initiation of ANC visit delay in some women were not treated well by the health service providers and the negative judgmental nature of some health workers towards pregnant women".

The women with pregnancies that were unwanted and/or unplanned by the women themselves and/or their spouses are also linked positively with late first ANC visit are in line with study results as reported by (Kogan et al. 1998) and studies done in Tanzania (Gross K , 2013), in Ethiopian public health facilities of DebreBerhan (Amtatachew M ,2013) ,Addis Ababa (Tariku A ,2010) and with a research conducted in Lesotho (Phafoli SH 2007) that reported denial of pregnancy by boyfriend of pregnant woman was

one of the reasons for delay in starting the first ANC visit.

The maternal negative reproductive experiences in her past pregnancy or delivery like miscarriages and stillbirths as influencing reason to early imitation of first ANC attendance is reported studies that were done in Cape Town, South Africa (Beauclair R , 2014), in Tanzania (Spangler SA, 2010) and (Gross K. et.al, 2012)

Socio-demographics, obstetric characteristics, ANC services quality and accessibility factors that are reported to be reasons of first ANC timing in several studies; but were inconsistent in number and type among different study settings. Thus, one reason that was found to be predictor in one study might not be in other study findings. (Okunlola et al, 2006; Tariku A. et. al, 2010; Isaac B. et. al, 2012; Gulema H. et. al, 2017).

### **Rationale**

Though antenatal care is provided free of payment, physically accessible and its coverage is increasing recently most of pregnant women start ANC booking. This situation contributes to an increase in pregnant women's chance of infant and maternal morbidity and mortality.

From the point of view of prenatal screening and complication prevention components of antenatal care, those pregnant women who booked after the recommended period of booking time are not benefiting from early pregnancy screening and counseling.

There was no adequate information or researches which address the magnitude and associated factors of first ANC timing in Ethiopia in general and in Dire Dawa city administration in particular. Therefore, this study was undertaken to assess the timing of first antenatal care booking and its predictors among pregnant women attending ANC in public health facilities of Dire Dawa city administration, Eastern Ethiopia.

### **Objective**

The overall objective of this study was to explore the reasons from service providers' perspective that influence timing of first ANC attendance in pregnant women attending ANC services in public health facilities of Dire Dawa city Administration, Eastern Ethiopia.

### **Subjects and Methods**

The study was conducted in Dire Dawa city administration which is located in the eastern part of Ethiopia and 515 Km from Addis Ababa, the capital city of Ethiopia during study period of from January up to February, 2017.

According to the Ethiopian central statistics agency report, the Dire Dawa city administrative had a total population of 607,321 in 2016, of which two-thirds live in the city proper (CSA, 2007) The city administration has a total of 5 hospitals of which 2 are public and 3 private, 15 public health centers of which 8 are urban and the remaining 7 rural health centers and 38 health posts

There are totally 65 health professionals that provide ANC services in the ANC clinics of all the 17 public health

facilities (FMOH, 2016)

The study was conducted in Dire Dawa city administration Phenomenology qualitative study design was used in this study in carrying out in depth interviews to explore the experiences and perspectives of health service providers about the reasons why pregnant women initiate their first antenatal care

The study population was ten purposively selected midwives and nurses who provide ANC services in the selected public health facilities of Dire Dawa city administration.

Available health professionals who provide ANC services in the public health facilities irrespective of their qualification and employment period during the study period were included in the study, whereas those health professionals who were on annual, sick and maternity leave during the data collection period were excluded.

10 health professionals who provide ANC services and who met the inclusion criteria were selected using purposive convenience sampling technique at selected ten ANC clinics from the ten selected public health facilities of Dire Dawa city Administration were involved in the study.

The data collection methods and the data collection instruments were in depth interviews, audio recorders, field notes and other stationary items respectively.

The procedure in data collection, initially open ended guiding and clarifying in depth interview questions related to the possible factors or reasons for late first ANC visit timing like "could you share with me your responses why pregnant women initiate their first ANC booking late?" were prepared both in English and Amharic language, the investigators were the data collectors and contacted the participants once they agreed to participate, before the in depth interview to prepare them for the actual meeting and to answer any preliminary questions. At the time of the first interview the researcher obtained informed consent and permission to tape record the conversation that were later transcribed on paper notes.

The In depth interviews were conducted during the participants work off days and in the selected health facilities' isolated rooms that were made to be free for the moment. Each tape recorded interviews lasted approximately 20-30 minutes. The languages of communication were both Amharic and English.

The tape recorded in-depth interview data were transcribed into transcript notes and using the method of Colaizzi's phenomenology data analysis matrix the transcripts were analyzed manually in the following sequence. After reading the transcripts thoroughly, the significant statements were identified. Meanings were formulated from the significant statements and the formulated meanings were organized into themes. Then the themes were integrated and clustered into an exhaustive description. The essential structure of the phenomenon was produced and returned to all study participants for verification of the fundamental structure.

The investigators reviewed the process of interviews regularly, and adjustments were made if necessary.

The study was conducted after getting a full ethical

approval from Dire Dawa university and Dire Dawa Administration Health Bureau .

Prior to the data collection, informed consent was obtained from the study participants and who were also told to have the right not to be involved at all and to withdraw at any time from the study and their privacy and confidentiality were assured.

All the information collected from the study subjects was used for the research purpose only and handled strictly confidential and was not disclosed to any individual other than the investigators.

## Results

### The analysis is presented under the following two headings:

1. Demographic Characteristics of the Participants and
2. Analysis of the verbatim of Participants

#### A. Demographic Characteristics of the participants

- Seven out of the 10 (70%) of the participants were females and the rest 3 were males
- Four of out the 7 female participants themselves had history of early first ANC booking in their past pregnancies
- Five out of the 10 of the participants' qualification were BSc. midwifery , while the other 5 were BSc. clinical nursing
- All of the 10 participants work at ANC clinics of their respective public health facilities for 2 years and above

#### B. Analysis of the verbatim of Participants

##### Theme 1- poor maternal knowledge

Majority of the participants told that "maternal lack knowledge about the benefits of early and dangers of late first ANC initiation is one of the reasons for the pregnant women who start their first ANC booking late"

"Most of the pregnant women don't understand the importance of early first ANC visits and come after four months of their gestation age.

That it is necessary for them to come for the good health of their baby, to make sure everything is ok, but they don't know" — Participant 3.

##### Theme 2-non-involvement of spouse in decision making of ANC attendance

Most of the study participant health professionals suggested that "some pregnant women do not come to their antenatal visits early when their spouses are not involved in decision making as to the time of starting first ANC visits"

"I think that it is not only the pregnant women lack of knowledge about the importance

of early first ANC initiation but also the lack of their spouses' involvement in decision making, because those pregnant women who have decided together with their spouses don't come late for their first ANC booking." — Participant 2.

##### Theme 3 – unplanned and/or unwanted pregnancy

Most of the health professionals involved in the study also

suggested that "the pregnant women whose pregnancies were unplanned and/or unwanted pregnancy and who have negative attitude towards the pregnancy usually start their first ANC booking late".

"One of the reasons for pregnant women to start their first ANC booking late is when the pregnancies were unplanned or unwanted or both by the women or by their respective spouses. When the pregnancy is unwanted or unplanned, the women show less concern about the safety of her pregnancy and don't start early their first ANC attendance"—Participant 9

**Theme 4-** past maternal negative reproductive experiences  
Majority of ANC service providing professional participants explained that "some women come early to their antenatal visits, if their previous pregnancies or deliveries were negative experiences like miscarriage or stillbirth, they will be very afraid that the same thing will happen with the current pregnancy and usually they start their ANC booking early".

"pregnant women particularly those who are multigravida or multipara whose pregnancies or deliveries in the past were uneventful are habituated felt that they did not have to come early to the clinic for antenatal appointments during their current pregnancy"—Participant 4

**Theme 5-** poor courtesy and no empathy of health professionals to their clients

Majority of the participants suggested that health professionals "health professionals with poor courtesy and little empathy towards their clients leads to delay in initiation of ANC visit attendance".

"I think women who were not treated well by the health service providers and the poor courtesy and negative judgmental nature of some health workers towards to their clients are reasons for initiation of ANC visit delay in some pregnant women"—Participant 1

## Discussion

The maternal poor knowledge of the benefits of early and dangers of late ANC initiation as reason for majority pregnant women in public health facilities in Dire Dawa city administration to initiate their first ANC late revealed in this study was in line with the a qualitative study that assessed about barriers and solutions for timely initiation of antenatal care in Kigali, Rwanda that reported health professionals perspective to a late first ANC initiation reason as "pregnant women don't understand the importance of prenatal visits and coming earlier. That it's necessary for them to come for the good health of their baby (Jill Hagey, 2013). This research finding is also consistent with reports of quantitative studies that were augmented with qualitative studies and which were done in Yem, south west Ethiopia (Bahilu T. et. al, 2008), Tanzania (Gross K. et.al, 2012) in Uganda (Matua, 2004), in Lesotho 2007 and a research done by (Dennill et al 1999).

The finding of this study that mothers who don't involve their spouses in decision making ANC attendance and that who don't decide together with their spouses was a negative

influencing factor for early initiation of first ANC initiation is consistent with study reports done in Gondar, north west Ethiopia (Temesgen W. et. al, 2012) and in Tanzania (2012) that reported not being supported by the husband or partner were factors significantly associated with a later antenatal care booking

The finding of health professionals' poor courtesy to their clients as negative influencing factor found in this study is consistent with studies done by (Dennis et al. 1995) and (Nichols, 1997) that reported the reasons for initiation of ANC visit delay in some women were not treated well by the health service providers and the negative judgmental nature of some health workers towards pregnant adolescents respectively.

The women with pregnancies that were unwanted and/or unplanned by the women themselves and/or their spouses revealed in this study to be linked positively with late first ANC visit are in line with study results reported by (Kogan et al. 1998) and studies done in Tanzania (Gross K , 2013), in Ethiopian public health facilities of DebreBerhan (Amtatachew M ,2013) ,Addis Ababa (Tariku A ,2010) and with a research conducted in Lesotho (Phafoli SH 2007) that reported denial of pregnancy by boyfriend of pregnant woman was one of the reasons for delay in starting the first ANC visit.

The maternal negative reproductive experiences in her past pregnancy or delivery like miscarriages and stillbirths found in this study as a positive influencing reason to early initiation of first ANC attendance is consistent with reports of other studies done in Cape Town, South Africa (Beauclair R , 2014), in Tanzania (Spangler SA, 2010) and (Gross K. et.al, 2012)

## Conclusion

The five themes emerged as reasons for late initiation of first ANC booking are: poor maternal knowledge ,non involvement of spouse in decision making of ANC attendance, unplanned and/or unwanted pregnancy, non courteous and non empathic service providers and past maternal negative reproductive experiences  
Therefore, strategic interventions that minimize the identified problems and which enhance the pregnant women knowledge and practice towards early initiation of first ANC booking, improving the accessibility of ANC, family planning and provision counseling services to both partners, provision of refreshing in service trainings to health professions emphasizing consideration of ethical issues and further operation research on ANC service delivery are recommended.

### List of Abbreviations

ANC.....	Antenatal Care
AOR.....	Adjusted odds ratio
COR.....	Crude odds ratio
CSA.....	Central statistics agency
DDCA .....	Dire Dawa city administration
EDHS .....	Ethiopian Demographic Health Survey

EMDHS .....Ethiopian mini demographic health survey  
FANC .....Focused Antenatal Care  
FREMOH .....Federal Republic Ethiopia Ministry of Health  
UNICEF .....United nations children`s fund  
USAID.....United States Agency for International Development  
WB..... World Bank  
WHO .....World Health Organization

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