Original Article

# Midwives' Voices on Early Initiation of Antenatal Care Following a Positive Gravindex Test: A Qualitative Study


## Abstract

**Background:** Early Antenatal Care (ANC) initiation is aimed at improving maternal and perinatal health outcomes through the identification of complications and determining the level of care needed. This study aimed to determine the voices of midwives on the provision of early initiation of ANC following positive gravindex. **Materials and Methods:** The phenomenology approach underpinned the study. The participants included midwives providing ANC at health facilities under Tshino–Mutsha local area in May–December 2020. Nonprobability, purposive sampling was used to select four clinics and to sample 20 midwives. Semistructured face-to-face, in-depth interviews were conducted using an interview guide. Data saturation was reached at Participant 15; however, the researcher continued until Participant 20. Trustworthiness was ensured and ethical principles were adhered to. Data analysis was done using Tesch's open coding approach. **Results:** Two themes and seven subthemes emerged, as challenges related to the provision of midwifery practice and to pregnant women. The seven subthemes were the shortage of resources, poor support of midwives, poor adherence to the available protocol for the provision of ANC, blaming of midwives by management and community, late ANC booking by pregnant women, denial of pregnancy by young women ignorance leading to a general resistance to ANC instructions, hence late booking **Conclusions:** It was concluded that shortage of human and material resources hindered the initiation of early ANC to detect, prevent, and manage the existing and potential causes of maternal and newborn mortality and morbidity.


**Keywords:** *Antenatal screening, maternal status, midwives, pregnant women*


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## Introduction

The World Health Organization (WHO) recommends that pregnant women should book for Antenatal Care (ANC) first before 12 weeks of gestation. Early antenatal initiation provides opportunity to prevent and manage existing and potential causes of maternal and newborn mortality and morbidity.[1] Globally, there is a call to reduce perinatal and maternal morbidity and mortality (WHO), and early ANC initiation and booking have been the answer to this call.[1] Initiation of early ANC is still a significant challenge, especially in low- and middle-income countries, including South Africa.[2] The WHO developed different models of ANC, where each country adopts the model suitable for them. The universal recommended model advocated for initiating ANC on or before 12 weeks of gestation.[2]

The Department of Health outlined that pregnant women should be screened for risk factors and other medical conditions that can be treated early during the first trimester.[3] Furthermore, complications such as hypertension and gestational diabetes mellitus can be detected, prevented, and treated early.[4] Through early ANC booking, midwives can identify and detect the risks in pregnancy, and preventative measures against pregnancy and labor complications are implemented to ensure the safe delivery of a child.[5] Additionally, early initiation of ANC also assists the health workers in providing appropriate information and care based on the screening results, gestational age, and health condition.[6] The study conducted by Solarin in 2012 revealed a delay in the initiation of early booking by midwives as they inform women who come to consult to come back later, and some end up booking during the third trimester.

The postponement of timely booking at 12 weeks has a possible adverse impact


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on both mother and baby, hence poor maternal and neonatal outcomes. Untreated maternal diseases can cause intrauterine growth restrictions, preterm birth, and newborn death, whereas untreated pregnancy-related conditions can cause complications for mothers and cause their death. If identified before 12 weeks of gestation, most maternal complications can be treated and yield positive pregnancy results.[7,8] As such, the researcher has observed that midwives at these health facilities seemed not comply with the minister's priority of initiating ANC on the same day of receiving positive gravindex test results. ANC was initiated during the late second or early third trimester, irrespective of an early diagnosis of the positive gravindex results. This study aimed to determine the voices of midwives on the provision of early initiation of ANC following positive gravindex results. The study findings may assist in formulating interventions to improve maternal and childcare in rural settings in Tshino–Mutsha local area, Limpopo province.

## Materials and Methods

The study was conducted in the year 2020 and a phenomenological design was employed in the qualitative research process. It allowed the researcher to listen to the narrative data from the midwives in a real-life setting concerning the provision of early ANC initiation.[9] The study was conducted at the Tshino–Mutsha local area, which is clustered under the Makhado area, Vhembe district, Limpopo province. The health services in Vhembe district are delivered by 1 regional hospital, 6 district hospitals, 1 specialized psychiatric hospital, 8 community health centers, 112 clinics, and 22 mobile clinics. The local area has eight clinics, Davhana, Tshimbupfe, Manavhela, Tshino, Ha-Mutsha, Tshakhuma, Levubu, and Vyeboom, as well as one mobile team that serves areas that are more than 5 km from clinics and refers patients to regional hospitals. The communities serviced believe in Christianity, while others believe in tradition. There are many traditional healers within the area. The clinics render 24-h services through the on-call system from 18H00 to 06H00 daily. The local area has a maximum of three midwives per shift in each clinic, with one advanced midwife posted to oversee all nearby clinics.

The population was registered midwives working at Tshino–Mutsha local area. Purposive sampling was used to select 20 midwives at 4 clinics chosen with the highest statistics of women who had booked for ANC after 20 weeks of gestation. The inclusion criterion was they should have 2 years or more in the service, with basic midwifery or advanced diploma in midwifery and rendering ANC services at selected local areas and who voluntarily agreed to participate. Five midwives were sampled from each clinic; data saturation was reached with 15 midwives when no new code or category emerged. After obtaining ethical clearance and permission from the relevant authorities, data were collected by the primary researcher in all four clinics for eight months.

Data were collected from May to December 2019; the analysis, writing, and presenting the report for the final dissertation was from January to April 2020. The researcher was the main instrument to collect data and had no relationship with the participants though she is a midwife. The researcher managed biases by not collecting data from the clinic she was working but using other settings from the same local area. The interviews were mainly conducted on Wednesdays, Fridays, weekends, and holidays in a private consulting room as arranged. The researcher did a trial or mock interview using the semistructured interview guide [Table 1]. The researcher modified the interview guide using the mock interview results to ensure trustworthiness. The main question was "Could you share with me your perceived challenges of initiating/commencing the antenatal care on the same day of gravindex confirmation test?" [Table 1]. Probing was used to gather more information and follow-up questions were related to human and material resources. English was used to conduct the interviews because all the participants were professional nurses. The voice recordings were done with the permission of the participants. Each interview lasted for 30–45 min. Data saturation, which was the point of redundancy and no information was emerging, occurred at midwife number 15; however, it continued until 20 midwives were interviewed. Tesch's open coding method was used to identify, analyze, and report the transcribed data.[9] The researcher familiarized herself with the collected data, assigned preliminary codes to data, identified similar patterns or themes across the transcripts, reviewed the developed theme, assigned them names, and then wrote the report.[10] Themes and subthemes were created from coded data and the related texts, as outlined in Table 2. Trustworthiness was ensured by applying four principles suggested by Lincoln and Guba:[11] credibility, transferability, dependability, and confirmability. Credibility was ensured through prolonged engagement with participants and capturing the interview proceedings (audio recorder and field notes). During the interviews, the researcher spent time with the participants listening and observing them as they were interviewed. The participants were interviewed to the point at which there was data saturation. A member

**Table 1: Interview guide**

| Main question | Probing question |
|---|---|
| "Could you share your perceived challenges of initiating/commencing the antenatal care on the same day of the gravindex confirmation test?" | 1. Based on your experience, describe how early antenatal booking in your facility is initiated?<br>2. Explain your perceived barriers or challenges to providing early antenatal initiation in your facility<br>3. Probing questions will emanate from the interview |

**Table 2: Outline of themes and subthemes indicating the midwives' challenges in initiating/commenting on antenatal care**

| Main theme | Themes | Subthemes |
|---|---|---|
| Midwives' voices on early commencement of antenatal care following a positive gravindex test | 1. Challenges related to the provision of midwifery practice | 1.1. Shortage of various resources that aid early initiation of care |
| | | 1.2. Poor support of midwives in their effort to initiate early antenatal booking |
| | | 1.3. Poor adherence to available protocol among midwives during the provision of antenatal care |
| | | 1.4. Blaming of midwives by management and community |
| | 2. Challenges related to consumers (pregnant women) | 2.1. Late booking by pregnant women |
| | | 2.2. Denial of pregnancy by young women/teenagers |
| | | 2.3. Ignorance leading to general non-compliance to Antenatal Care (ANC) instructions |

check was conducted to validate the truth and to confirm the findings. Transferability was ensured through the thick description of the research methods. Confirmability was guaranteed by having an assistant transcribe the same data and then check if the data were reconciled.[11] The recorded interviews were transcribed word by word, and the nonverbal cues (e.g., silence/sigh, frowns, and lean back) were included in brackets of the transcripts to ensure authenticity. Dependability was ensured through an independent coder's involvement in conducting an inquiry audit to examine the processes of data collection, data analysis, and the interpretation of research study results.[11]

### Ethical considerations

Before data collection, the researcher received the ethics certificate from the University of Venda for the ethics committee (SHS/20/PDC/18/0608). The Department of Health Research Committee provided permission to access the health facilities (LP2020-08-057). Participants were informed about the aims and objectives of the study and that participation is voluntary. Ethical principles of anonymity and confidentially were maintained using numbers instead of names.

## Results

The total number of participants was 20; females were 18, while males were only 2. The age distribution of the participants was as follows: between 30 and 40 were 4, 41 and 50 were 12, and 51 and 60 were 4. The participant with advanced midwifery and neonatology was only 1, while those with basic midwifery were 19. Participants with 2–10 years of experience were 14, and those with 10 years and more were 6. The study findings are presented based on the themes and subthemes that emerged during thematic analysis.

Two major themes revealed challenges related to the provision of midwifery practice and to consumers (pregnant women). The seven subthemes were shortage of various resources to uninitiated ANC, poor support of midwives during initiation of ANC, poor adherence to available protocol among midwives during provision of ANC, blaming of midwives by management and community, late ANC booking by pregnant women, denial of pregnancy by young women leading to poor adherence to health protocols, and ignorance leading to general in compliance to ANC instructions including early antenatal booking [Table 2].

#### *Challenges related to the provision of midwifery practice*

Most participants alleged that failure to initiate ANC earlier or at 12 weeks as recommended was due to various factors related to their daily practice. They indicated that a shortage of staff and other medical materials and supplies led to pregnant women not starting ANC the first day they received their positive gravindex results. They showed that additional elements, such as diminished emotional support for their efforts to initiate ANC, had an adverse impact by slowing their practice. Another participant pointed out that poor adherence and inconsistency in applying the protocols by midwives during care provision also led to delayed initiation of ANC.

#### Shortage of various resources that aid early initiation of care

Most participants echoed that staff shortage was the major problem that hampers efficiency in service delivery. Even though women were answering the call for early booking, they did not receive sufficient care, and some of them were sent home without being seen since there were insufficient supplies. They were referred to the other date beyond 12 weeks of gestation. Participant 2, a 32-year-old midwife, said: "For me, it is not manageable due to shortage of staff, but I do encourage women who missed their period to come for gravindex test, and if positive they can book for ANC early. But when there is no gravindex kit, the woman will be turned back and advised to come and check again."

#### Poor support of midwives in their effort to initiate early antenatal booking

Participants shared experiences as barriers due to management's lack of support, which they view as important. This was referred to as a lack of emotional and psychological support by midwife managers, leading to frustration and fear, hence the provision of substandard ANC. Participant 6, a 42-year-old midwife, said: "We experience limited support from management. They hardly

pay a support visit to the facility to identify the gaps and to determine how they can support us, as facility needs are not uniform."

### Poor adherence to available protocol among midwives during the provision of antenatal care

Participants indicated that though the maternal guidelines are available to guide them when providing ANC care, there is inconsistency in practice among midwives. The South African Maternal health guidelines and policies emphasize early ANC booking. But many environmental factors and challenges are barriers and influence the decisions of midwives to provide early ANC booking on the same day. These factors could facilitate the decision of midwives to postpone the ANC initiation and give them a new appointment. Participant 9, a 36-year-old midwife, said: "The maternal guideline, which is our national protocol for excellence midwifery care, is always available for midwives to refer surprisingly many do not open it to use due to the pressure of work in front of them."

### Blaming of midwives by management and community

Most participants indicated that they received blame from their supervisors and colleagues at the hospital. The managers do not supply all necessary materials, such as maternity case records. Midwives end up using any booklet to record patient data. When the patient is referred to the hospital without the maternity case record, they are blamed by colleagues; on the other hand, patients blame them of not having all materials and supplies. They described it as survival by resilience. Participant 14, a 34-year-old midwife, said: "Participants indicated that when things go wrong, nobody considers the situation such as lack of material or shortage of staff led to all the mistakes. They judge them."

Participant 6, a 40-year-old midwife, said: "If you use a booklet for the high-risk client due to no maternity case record, it becomes an issue, the phone and embarrasses you."

### *Challenges related to consumers (pregnant women)*

The midwives described the challenges they experienced from pregnant women when initiating/commencing early antenatal bookings.

### Late booking by pregnant women

The study revealed a lack of trust from pregnant women in the antenatal services provided in primary health-care facilities resulting in the late booking. This lack of confidence was induced by the poor health service they received during their previous visit to the facility. Participant 10, a 54-year-old midwife, said: "Women had the information of reporting early before or at 12 weeks, however when they come, they are returned due to shortage of staff, So, it is presumed as a lie or empty promise if failed to fulfil, no trust in the use of health facilities in future pregnancies."

### Denial of pregnancy by young women/teenagers

The following were listed as the causes of late booking: fear of continuing a pregnancy, choosing a pregnancy termination, fear of partner rejection due to lack of trust and knowledge, fear of being blamed by parents because they are still in school. These fears led women to use clinics that were far away. Many pregnant women, especially adolescents, tend to start ANC late, not benefiting from preventable and curative services due to a perceived lack of support. Participant 4, a 41-year-old midwife, said: "Here, we also have many students from TVET who come for a test, and when they test positive, they opt for termination of pregnancy. Some say as they are here only for school, they will book at their home clinics, but you can see that pregnancy is not wanted, it was just confirmation so that further steps can be taken."

### Ignorance leading to general compliance with ANC instructions

The study results revealed that women who have had previous pregnancies tend to book for ANC late. They believe they are well equipped with knowledge on managing pregnancy. This made their report to the facility at an advanced gestational age. Participant 13, a 48-year-old midwife, said: "These multiparas come late due to experiences. At the same time, those who know that they should be transferred to high-risk delay themselves without any reason, while some don't go to the hospital when referred, you will see them when in labour progressed themselves."

## Discussion

The findings of this study were assigned to two main themes: challenges related to the provision of midwifery practice and challenges related to consumers (pregnant women).

Concerning the theme challenges related to the provision of midwifery, practice midwives were concerned about the existence of lack and or shortage of various resources such as the gravindex test kits and the need for staff members leading to late initiation of ANC booking in their respective clinics. A similar study was conducted by Tesfaye *et al*.[12] among the midwives who reported a shortage of resources, including staff in a health facility.[12] Worldwide all countries should control maternal and child mortality rates by 2030. Hence, literature revealed early booking is a cornerstone of maternal and perinatal care.[13]

In addition, Warri and George[14] described an overload of work on the staff, staff shortages, and budget cuts as aspects impeding midwives from rendering maternal health-care services.[15] On the other hand, a poor socio-economic

status that contributes to limited access to health services was described as one of the contributors to late ANC presentation.[16]

Poor support of midwives in initiating early antenatal booking was also a concern. The study revealed that there is inadequate support from the management as a challenge. Hence, managers in the directorate offices are unaware of the problems experienced by midwives when providing maternal health services. The midwives were concerned that they had never seen the managers in their facilities; this could help identify the gaps in the clinics. More importantly,[3] it is emphasized that support empowers the midwives to improve maternal health-care services.[13] Consequently, a study conducted in the Democratic Republic of Congo among midwives revealed lack of supporting poor relationships with the managers contributes to insecurity and poor maternal health services.[17] While in South Africa,[18] the study recommended that one of the strategies that can be used to support midwives is involving them in the decision-making process regarding their profession. Moreover, this could be one of the motivational factors.[19] On the contrary, a study conducted in Ethiopia[20] reported that midwives received regular support from their managers through case presentations, seminars, and bedside rounds.[17]

This study also identified poor midwifery adherence to available procedures for providing prenatal care. This was shown by inconsistency regarding the implementation of early ANC. Some midwives were not referring to the maternal guidelines that require them to book the woman as soon as she missed her period. According to Wagnew *et al*.'s[20] research, midwives typically struggle to follow guidelines in low socioeconomic settings because of a lack of staff and resources. This may be because they are overwhelmed by work or there is scares availability of protocols in the units.[20]

Blaming of midwives by management and community members was also voiced, wherein midwives were worried that they were being accused by the patients and in the multiple levels of care for providing poor antenatal services. They also describe that sometimes due to the circumstances, they do not offer opportunities for early booking to pregnant women. Such occurrences are described as workload and the response (quarreling and yelling) of other patients waiting for health-care assistance. Midwives also expressed that they are sometimes also blamed and harassed by their colleagues in the referral hospitals for providing poor or incomplete information. Disrespect among health-care professionals is a significant concern affecting the midwives' confidence and morale. Grissinger[21] indicated that in most health-care settings, there was some form of disrespect among health-care professionals, involving peers, interdisciplinary teams, and patients.[21] Disrespect results in blame which can be in many forms, but in the end, it affects patient care. Mills *et al*.[22] described a case when a mother in the United States blamed a midwife for her child's death, saying, "I cry every day that my baby died due to a midwife error, and I won't let her loss be in vain."

Concerning challenges related to the consumers (pregnant women), midwives voiced that most women ignore the instructions to report to the clinic as soon as they miss their period. Pregnant women with second and third pregnancies who had the negative experience in their previous pregnancies tend to book late.[23] Similarly, one study reported that a lack of resources and staff shortage undermines the quality of ANC offered to pregnant women, resulting in dissatisfaction and harassment, and insults by patients and other health-care professionals.[24] In contrast, Mulondo recommended that to ensure trust and confidence, it is the responsibility of the midwives to promote relationships of mutual trust, respect, and dignity with pregnant women by providing ongoing support, advice, education, and counseling.[24]

Midwives also voiced that denial of pregnancy by young women/teenagers also contributes to delaying seeking ANC services, especially by young women. This was seen in young women from colleges and universities reporting pregnancy when they already had labor pains. In support of the findings, Tesfaye and Ewunetie *et al*. showed that unplanned or unwanted pregnancies were described as the contributory factors that also influence some pregnant women to delay initiating early antenatal booking because initially, they were planning to terminate the pregnancy.[12] Studies have reported that women with unplanned pregnancies book late for ANC after several attempts to terminate the pregnancy.[25] The study results do not reflect the views of all nurse-midwives at Vhembe District Municipality in Limpopo province, South Africa, or the world at large but for the local area, which is Tshino–Mutsha local area.

## Conclusion

The study findings spelled out that provision of neonatal care on or before 12 weeks was not possible due to two factors: first, facility or structural factors such as shortage of resources, and work overload, and second patient issues such as denial and unplanned pregnancy.

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## Conflicts of interest

Nothing to declare.

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