International Journal of Development and Sustainability
ISSN: 2186-8662 – www.isdsnet.com/ijds
Volume 12 Number 2 (2023): Pages 39-51
ISDS Article ID: IJDS22083005

An assessment of traditional birth attendants as an untapped human resource to help sustain the health system in South Africa

Sogo France Matlala *

Department of Public Health, University of Limpopo, Sovenga, South Africa

Abstract

The purpose of this study is to explore motivations and experiences of women who became traditional birth attendants in South Africa. The study was designed to clarify some potential advantages of their integration into the health system to sustain maternal and child health services. A qualitative thematic analysis of 15 transcripts of semi-structured interviews with traditional birth attendants from seven provinces of South Africa, obtained from Human Sciences Research Council repository, was conducted. Data was analysed thematically guided by the framework analysis approach. Findings show that a critical situation characterised by lack of access to health facilities, skilled birth attendants, and ambulances, motivated women to learn the required skills to assist pregnant women in their communities. They learned the required skills through observation and practice under the guidance of experienced elders and some nurses. Traditional births attendants operated without government support but continued to provide valuable services to communities. Given the devastating impact of COVID-19 on the health system and persistent challenges with access to skilled birth attendants, the role of traditional births attendants should be revived to participate in maternal and child health services as partners with government. This will strengthen safe and accessible birth and other health services for women within their communities.

Keywords: Ambulance; Apartheid; Birth Aattendant; Pregnancy; South Africa

Cite this article as: Matlala, S.F. (2023), "An assessment of traditional birth attendants as an untapped human resource to help sustain the health system in South Africa", *International Journal of Development and Sustainability*, Vol. 12 No. 2, pp. 39-51.

* Corresponding author. *E-mail address:* france.matlala@ul.ac.za

1. Introduction

Traditional births attendants still exist in South Africa although their numbers are decreasing (Human Sciences Research Council, 2018) The South African National Department of Health (2021) defines a traditional birth attendant as a woman who assists pregnant women during childbirth after having learned the skills through working with experienced births attendants and then delivering babies herself, thereby perfecting her skills. This definition is in accord with the internationally accepted definition of a traditional birth attendant by the World Health Organization (2015), and based on this definition, the role of traditional birth attendant exists in many countries. Some communities in South Africa do not explicitly use the concept of a traditional birth attendant, instead they refer to them as women who assist other women during birth (Human Sciences Research Council, 2018). A recent synthesis of studies shows that the role of a traditional birth attendant is not limited to helping women during childbirth as they (traditional birth attendants) also support pregnant women before and after delivery (Ngunyulu et al., 2020). The practice of traditional birth attendants is not officially supported in South Africa and traditional birth attendants are therefore not integrated into the formal health system (Human Sciences Research Council, 2018; Ngunyulu et al., 2020).

South Africa faces many challenges, including human resources for health, to sustain its health system. Due to financial constraints, mismanagement, and corruption, there is a limit to the number of health professionals employed in government health services as well as a lack of equitable distribution of those employed (Maphumulo and Bhengu, 2019; Wishnia and Goudge, 2021). The outbreak of the novel coronavirus 2019 (COVID-2019) exacerbated the situation as the impact was felt across all the six health systems building blocks (Mbunge, 2020; Mlambo and Masuku, 2020) of service delivery; human resources for health; health information systems; access to essential medicines; health financing; and leadership and governance (World Health Organization, 2010). Healthcare workers, who, as human resources for health, are the backbone of the health system, were affected by COVID-19 with many becoming ill and some even losing their lives (Chersich et al., 2020; Rees et al., 2021; Wilson et al., 2022). Maternal and child health services in South Africa and other countries were not spared the negative impact of COVI-19 where many gains were reversed. Patients could not access health facilities due to, among others, fear of infection, stay-at-home directives and other restrictions imposed by government to protect health facilities from being overwhelmed (Adam et al., 2022; Ahmed et al., 2021; Ameyaw et al., 2021).

Based on this context for the availability of traditional birth attendants in South Africa, this study explores and describes motivations for South African women who became traditional birth attendants and continued practicing in the face of discouragement and lack of support from the formal health system. The study also proposes that South Africa tap into the role of traditional birth attendant when rebuilding its health system from the devastating effects of COVID-19 to ensure sustainability of maternal and child health services as well as the integrity of the whole health system.

2. Methods

2.1. Data collection and analysis

This study used secondary qualitative data obtained from the Human Sciences Research Council research data repository in South Africa. The Human Sciences Research Council is South Africa's statutory research agency

established in 1968 to inform government policy formulation, implementation, monitoring, and evaluation. It facilitates research by making data, through a research data repository, and research results, available to researchers and by helping to build research capacity and infrastructure for the human sciences (Human Sciences Research Council, 2022). A research data repository is a database infrastructure created to collect, store, and share datasets. Researchers can access data from a data repository and use it to conduct their own research (Chigwada et al., 2019).

The Human Sciences Research Council dataset accessed for this study consists of 15 transcripts of semi-structured interviews with traditional birth attendants from seven (7) of the nine (9) provinces of South Africa. Data was collected for six (6) months (01 May - 31 October) in 2014. It is indicated in the dataset that it was a challenge to find traditional birth attendants willing to participate in the interviews in the remaining two provinces as the practice of traditional birth attendant is not encouraged in many communities (Human Sciences Research Council, 2018). Even in the seven provinces that participated in the study, finding willing participants was not easy, and few traditional birth attendants were interviewed in any province in total. This challenge to find willing participants in the historical record contrasts with a recent qualitative study which had 26 traditional birth attendants from just one rural traditional community in Mopani District of South Africa participating in focus group discussions (Ngunyulu et al., 2020). Due to challenges with identifying potential traditional birth attendants to participate, the Human Sciences Research Council used snowballing sampling technique (Parker et al., 2019) to collect primary data, while the current study used total population sampling by analysing all 15 available transcripts. Total population sampling is a type of purposive sampling method suitable for smaller populations where the whole population that meet the inclusion criteria is selected to participate (Etikan et al., 2016).

Data was analysed by using framework analysis as described by Srivastava and Thomson (2009), and Goldsmith (2021). Framework analysis is appropriate for research that has clearly identified research questions and specific issues to explore. These specific issues guide the development of themes while some themes emerge from the data. Researchers using framework analysis do not force data to fit the identified themes but allow some themes to emerge from the data. Deductive and inducting coding are therefore used in framework analysis.

In a similar study, Goldsmith (2021) analysed secondary data on traditional birth attendants and argued that framework analysis is useful in studies using secondary data once a research question that can be supported by the available dataset is identified. The research question identified for the current study is *"What motivates women to become traditional birth attendants?"* Another question that this study identified, which is not based on the Human Sciences Research Council dataset, but on the author's opinion, is *"What is the implication of the practice of traditional birth attendants to sustainability of the health system in South Africa?"*

3. Results

3.1. Characteristics of participants

Table 1 shows the characteristics of traditional birth attendants who were interviewed in South Africa in 2014 when primary data was collected. Fifteen traditional birth attendants were interviewed by two interviewers using an interview guide. Interviews were conducted in seven provinces of South Africa's nine provinces

(South Africa Gateway, 2022a). Two participants were from the Free State province, three from Gauteng province, four from Mpumalanga province, two from Northern Cape province, two from Western Cape province while one each were from Limpopo province and Northwest province. Eight different languages, namely Afrikaans, English, IsiZulu, Sepedi, Setswana, Sesotho, Siswati and Xitsonga, were used during the interviews. Traditional birth attendants were interviewed in the language of their choice although there are 11 official languages in South Africa (South Africa Gateway, 2022b).

Table 1. Characteristics of participants

Participant	Age	Province	Location	Language	Experience
1	Born 1953	Free State	Rural	Sesotho	Not indicated
2	Born 1937	Free State,	Urban	Sesotho	Since 1960
3	Born 1956	Gauteng	Rural	Not indicated	5 to 10 years
4	Born 1979	Gauteng	Urban	English and IsiZulu	From 2006
5	Born 1949	Gauteng	Urban	English, Sepedi, and Setswana	Not indicated
6	Born 1947	Limpopo	Rural	Xitsonga	Not indicated
7	Not indicated	Mpumalanga	Rural	English and Siswati	Since 2008
8	Not indicated	Mpumalanga	Rural	Siswati	For 15 years
9	Not indicated	Mpumalanga	Rural	Siswati	Since aged 10
10	Not indicated	Mpumalanga	Urban	Siswati	Since 1998
11	Born 1952	Northern Cape	Rural	Afrikaans	Since aged 12
12	Not indicated	Northern Cape	Urban	English and Afrikaans	From 1982
13	Not indicated	North West	Urban	Setswana	From 1977
14	Born 1941	Western Cape	Rural	English and Afrikaans	Since aged 17
15	1939	Western Cape	Rural	English and Afrikaans	Not indicated

3.2. Themes and sub-themes

Data analysis yielded four themes and 11 sub-themes. Consistent with framework analysis, the development of three themes was guided by the three components of maternal healthcare delivery system described by Thorsen et al. (2014) while the fourth theme emerged from the data. The three components are skilled birth attendants; an enabling environment; and a functioning referral system. Sub-themes falling under each of the three themes emerged from the data as shown in Table 2.

Table 2. Themes and sub-themes

THEMES	SUB-THEMES
1. Skilled birth attendants	1.1 Accessibility of skilled birth attendants 1.2 Assisting pregnant women is a calling, a gift, and a duty to care 1.3 Getting encouragement from others
2. An enabling environment	2.1 Accessibility of clinics and hospitals 2.2 Home delivery as a normal practice in the area
3. A functioning referral system	3.1 Accessibility of telephones 3.2 Accessibility of ambulances
4. Learning the required skills	4.1 Being taught by nurses 4.2 Being taught by mothers and mothers-in-law 4.3 Being taught by themselves 4.4 Learning by observing experienced birth attendants

3.2.1. Theme 1: Skilled birth attendants

This theme outlines availability of skilled birth attendants in the areas where traditional birth attendants were living at the time of becoming traditional birth attendants. A skilled birth attendant refers to a trained and competent healthcare professional who takes care of women and their children during pregnancy, birth and immediately after birth (Thorsen et al., 2014; South African National Department of Health, 2020). Furthermore, a skilled birth attendant should have skills to identify complications and perform necessary interventions which may include early referral for further management to ensure positive maternal and child health outcomes (Ayele et al., 2019). Three sub-themes which emerged are accessibility of skilled birth attendants; assisting pregnant women is a calling, a gift, and a duty to care; and getting encouragement by others, are described below.

3.2.1.1. Sub-theme 1.1: Accessibility of skilled birth attendants

Participants described desperate situations they found themselves in, where pregnant women were about to give birth and there were no skilled birth attendants to go to for assistance.

> *"My younger sister was due to deliver... the ambulance was not coming, and my mother was scared."*

Another participant indicated that a woman gave birth alone without any assistance as there was neither a skilled birth attendant nor a traditional birth attendant to help her.

> *"She delivered the baby by herself, her last born of 1960".*

Another indicated simply that the desperate situation she faced moved her to become a traditional birth attendant.

> *"It was because there was nobody who could help these people, so I developed the urge to help them. There was no way unless you helped out".*

3.2.1.2. Sub-theme 1.2: Assisting pregnant women is a calling, a gift, and a duty to care

Given the desperate situation they faced, some women became traditional birth attendants and described their roles as a duty.

> *"I think it is my duty to help others".*

Others described their role as a gift from God or ancestors.

> *"Due to my calling as a traditional healer...".*
>
> *"My grandmother, whom I was named after ... she passed the gift to me".*
>
> *"I am just making use of my talent, which God gave me..."*

3.2.1.3. Sub-theme 1.3: Getting encouragement from others

Participants described people who requested them to help pregnant women and encouraged them to become traditional birth attendants. Family members, church members and people at work were mentioned as sources of encouragement.

> *"At the church where I am attending, they saw I can help people... they asked me to help, and I became successful".*
>
> *"I used to be a cleaner at the clinic, when it got busy, the nurses will call me to help with deliveries ... I'm used to doing it, it doesn't scare me anymore".*
>
> *"My own mother encouraged me".*

3.2.2. Theme 2: An enabling environment

This theme describes the environment which motivated participants to become traditional birth attendants. An enabling environment refers to a context providing skilled birth attendants with the necessary environment to fulfil their responsibilities. Such an environment should have an adequate infrastructure with equipment, supplies, procedures, rules, and supervision (Thorsen et al., 2014). Participants indicated that their environment was not enabling, and this is described in two sub-themes; accessibility of clinics and hospitals; and home delivery as a normal practice in the area.

3.2.2.1. Sub-theme 2.1: Accessibility of clinics and hospitals

Participants indicated that clinics were not available in their areas.

> *"... there were no things like clinics".*
>
> *"Long time ago there were no clinics".*

Some indicated that hospitals were available but were far from where they were living.

"The hospitals where far".

"It was that time when the hospitals were far".

3.2.2.2. Sub-theme 2.2: Home delivery as a normal practice in the area

Participants described home delivery as being a normal occurrence in their areas.

"There was no way an ambulance will be called during those times ... it was that a person will give birth at home".

"All children were delivered at home and even us, our mothers gave birth to us here at home".

"Everybody will give birth from home... they were never taken to the hospital or doctors at birth."

3.2.3. Theme 3: A functioning referral system

A functioning referral system is a system which enables movement of a woman and her child from the primary level to the secondary and tertiary levels of care, depending on their needs for healthcare (Thorsen et al., 2014). Sacks et al. (2021) use the concept of 'a functional transport and referral system' as a referral which requires an appropriate mode of transport. A referral requires a telephone to communicate between facilities as well as transport to move patients between the facilities (South African National Department of Health, 2020). Participants expressed their experiences of a non-functional referral system by describing accessibility of telephones and ambulances. Two sub-themes on accessibility of telephones and accessibility of ambulances emerged and are described below.

3.2.3.1. Sub-theme 3.1: Accessibility of telephones

Participants indicated that there was a need to refer pregnant women to clinics or hospitals, but telephones were not available in their area.

"I've started in the farms and there was no way an ambulance will be called during those times... there were no phones to call an ambulance".

In some cases, telephones were available but the process to make a telephone call was complicated.

"They say we must call another place ... which must then connect you to the hospital".

3.2.3.2. Sub-theme 3.2: Accessibility of ambulances

Participants indicated that ambulances would either not come or if they do, would come late.

"The ambulance was not coming".

"... the ambulance delays only to find that it's already time for that woman to deliver the baby..."

3.2.4. Theme 4: Learning the required skills

Attending to a pregnant woman giving birth requires appropriate knowledge and skills, thus the concept of skilled birth attendants (South African National Department of Health, 2015). Traditional birth attendants also need skills to assist pregnant women when they give birth. In this theme, traditional birth attendants described how they learned the necessary skills. Their descriptions are in four sub-themes, which are described below.

3.2.4.1. Sub-theme 4.1: Being taught by nurses

Some participants who were employed, one as a domestic worker for a nurse while another was a cleaner at a clinic, indicated that the nurses taught them the skills required to assist women giving birth.

> *"A white woman taught me ... she was a nurse. She showed me what I should do with a pregnant woman. I worked for her, domestic work I will say".*

> *"It was God's mercy that those nurses asked me to help, that's how I got to learn".*

3.2.4.2. Sub-theme 4.2: Being taught by mothers and mothers-in-law

Participants indicated that their mothers taught them the skills required to assist pregnant women when they give birth.

> *"We were trained by our mothers".*

> *"The only training I had, was from my mother".*

Other participants indicated that they were taught the required skills by their mothers-in-law.

> *"My mother-in-law taught me and when she passed away, I taught myself further".*

> *"It's the training that I've received from the grannies just like when you are a daughter-in-law, and you are at the in-laws. When someone gives birth they will show you for future use, they are the ones who have trained us on how to give birth".*

3.2.4.3. Sub-theme 4.3: Being taught by themselves

Some participants indicated that they learned the required skills on their own.

> *"I delivered my lastborn baby by myself, that's where my knowledge started, never went to any training, it just happened".*

> *"I haven't undergone any training. It was a natural thing always".*

3.2.4.4. Sub-theme 4.4: Learning by observing experienced birth attendants

Participants indicated that they learned the required skills by observing experienced traditional birth attendants when they assisted pregnant women to deliver babies.

"I would be around when the elders help with labour".

"I just received training by experiencing while it happened at home".

"I saw the elders ... and learned from them".

4. Discussion

Characteristics of interviewees show that all participants were born and grew up during the apartheid era between 1948 and 1993. During that period, health services in South Africa were not provided equally to all citizens, and some citizens had unrestricted access while others had restricted access due to their race. South Africa is a multiracial country having Blacks, Coloured, Indians and Whites as the main race classifications. Participants in the current study belonged to marginalised communities which typically experienced restricted access to health services (Brauns and Stanton, 2016; Maphumulo and Bhengu, 2019). Clinics and hospitals in marginalised communities were few and scattered, making access difficult. There was a need for an ambulance to transfer women in labour from their homes to the few health facilities available. To call an ambulance, a telephone was required but telephones were also not readily available. The few telephones that were available were rudimentary and inefficient (Stavrou, 1992) unlike the modern ones in use now. Ambulances were also not widely available, and some were said to be broken. Due to the small number of ambulances, poor road conditions and inefficient telephones among others, ambulances would sometimes arrive after the woman had already given birth.

According to the South African National Department of Health (2020), referral of a pregnant woman requires a telephone to call an ambulance, which will then move the woman from her home to an appropriate health facility depending on her condition. A skilled birth attendant, such as a midwife or an appropriately qualified ambulance attendant, is required to accompany the woman in the ambulance. Furthermore, reliable, and functional vehicles fitted with appropriate equipment are required for use as ambulances. Zaaijman (2015) pointed out the need for usable roads, in good condition, to complement the reliable and functional ambulance transportation staffed with skilled birth attendants.

This study shows that restricted access to maternal and child health services during the apartheid era (1948 – 1993) created a difficult situation in South Africa. Such a situation made communities innovate and devise means to access healthcare by, among others, consulting traditional health practitioners and learning the skills to assist each other. Some community members learned the skills required to assist women during pregnancy, labour, and the postpartum period; and were then referred to as traditional birth attendants. They learned through observation, and perfected their skills, as they practiced under the supervision of experienced traditional birth attendants. Traditional birth attendants were, and remain, highly skilled in assisting pregnant women during pregnancy, labour, and the postpartum period, but they are not referred to as skilled birth attendants.

The current situation regarding maternal and child health services in South Africa is a critical one, although, as Brauns and Stanton (2016) and Maphumulo and Bhengu (2019) indicate, health services have improved since the end of apartheid. There are new challenges brought by COVID-19, financial constraints, and poor management of the health system. These challenges are in the form of lack of access to ambulances, health

facilities, and an on-going shortage of skilled birth attendants. There are numerous media reports of ambulances being unable to reach communities that need them; some ambulances have been attacked by criminals (Palm, 2020; Chetty, 2022; Sefularo, 2022). The media also reports that women give birth outside health facilities since some facilities do not provide 24-hour services (Matlala, 2021a; Motseo, 2022). Shortage of nurses and midwives is one of the factors responsible for some health facilities lacking 24-hour service. The shortage of nurses and midwives is made worse by the challenges regarding training of nurses and midwives in South Africa (Matlala, 2021b; Molelekwa, 2022). There were also some challenges with telephones and poor condition of roads, which hampered transport to health facilities. With the arrival of cellular telephones and the use of modern fixed telephones, calling for an ambulance is now better although there are some new challenges, such as poor reception and service disruption in some areas. Some areas of the country still experience poor road conditions which has been shown to negatively affect access to health care (Lefafa, 2022; Sibiya, 2022).

5. Conclusion

This study described two critical situations in South Africa regarding availability of maternal and health services. The first situation occurred while apartheid policies were in effect, essentially before the new government of 1994. That situation led to the emergence of traditional birth attendants to assist pregnant women before, during and after birth. The current situation is a result of COVID-19, and mismanagement of the health system. The country is continuously rebuilding in an effort to sustain maternal and child health as well as the whole health system. Traditional birth attendants still exist and provide a valuable service to pregnant women although they are not recognised and supported by the formal health services. This study recommends that the country tap into traditional birth attendants by recognising their expertise and facilitating their integration into the formal health services to strengthen the human resource for health.

5.1. Limitations of the study

This study used secondary data from a research repository which has advantages and limitations. Researchers using secondary data experience some limitations as they cannot probe participants to collect rich data relevant to the aims and objectives of their studies. This study analysed the data that was available, thereby, denying the researcher an opportunity to probe.

5.2. Areas of future research

The findings and the limitations point to a need to interview women who were assisted by traditional birth attendants to explore their experiences with the services of traditional birth attendants. There is also a need to explore the views of health workers and managers about integration of traditional birth attendants in to the formal health services.

Acknowledgments

The author acknowledges the Human Sciences Research Council for making data available.

Funding

The study received no funding.

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