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RESEARCH ARTICLE

Influence of Cultural and Religious Practices on the Management of Pregnancy at Mbombela Municipality, South Africa: An Explorative Study

Lucia Drigo¹, Lufuno Makhado^{2,*}, Rachel Tsakani Lebeso³ and Maphuti Judas Chueng³

¹Nelspruit Community Health Centre, 10 Brander Street, Mbombela Municipality, Ehlanzeni District, Mpumalanga Province, South Africa

²Department of Public Health, University of Venda, Thohoyandou, South Africa

³Research office, School of Health Sciences, University of Venda, Thohoyandou, South Africa

Abstract:

Background:

Cultural norms bring substantial weight in women's decision-making, especially concerning the choice of the birth location. Cultural and religious practices may influence how pregnant women respond to Antenatal Care (ANC) services, feel confident about which questions to ask, or participate in the discussions about their care plan or birth options.

Purpose:

The study aimed to explore and describe the influence of cultural practices on the management of pregnancy in the Mbombela Municipality of Mpumalanga Province.

Methods:

Using a qualitative approach, pregnant women who failed to completely attend ANC services were purposively sampled, and individual unstructured in-depth interviews were employed to collect data. The study consisted of a sample size of 18 pregnant women, and data saturation was reached. Tech's method of analysis was followed for data analysis.

Results:

Study findings revealed a significant theme: cultural practices and pregnancy management, encompassing three sub-themes: cultural practices in pregnancy, cultural medication taken by pregnant women, and the effects of cultural practices on pregnancy management.

Conclusion:

It is recommended that women should be given health education concerning ANC services every day while they wait in primary health care clinics. Accordingly, the healthcare professionals should encourage the active involvement of all pregnant women in health promotion gatherings and offer chances for clarity seeking. Despite the availability of free maternal healthcare services in primary healthcare clinics, women still consult traditional healers during pregnancy and believe in cultural practices. It is therefore important that programs developed for maternal services be congruent to the cultural practices of women to be serviced.

Keywords: Influence, Cultural practices, Management, Pregnancy, Primary health care, Antenatal natal care.

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1. INTRODUCTION

Culture plays an important role in determining how society's health practices are shaped and contribute to access or barriers to how people from different cultures manage their health, including health-seeking behaviours. In deciding where

to give birth, women are heavily influenced by cultural norms during pregnancy [1, 2]. Pregnant women may choose to deliver their babies at a Health care facility through the assistance of a professional health provider or at home through the assistance of a traditional birth attendant given their cultural perspectives and upbringing. Cultural barriers have been a significant determinant of healthcare seeking behaviour in many populations. Women from traditionally varied

* Address correspondence to this author at the Department of Public Health, University of Venda, Thohoyandou, South Africa;
E-mail: lufuno.makhado@univen.ac.za

backgrounds without any prior experience with the western healthcare system might find it difficult to understand the motives for Antenatal Natal Care (ANC) visits, medical procedures, and use of technology [3, 4]. Cultural practices have the potential to influence pregnant women on how to respond towards available ANC services, feeling confident in terms of which questions to ask or even partake in the deliberations regarding their whole pregnancy care plan or available birth options.

Differences in cultural beliefs and opinions might also influence some important aspects related to ANC; this includes the level of participation of the father or husband throughout pregnancy, informed consent towards necessary interventions, comprehension of provided dates and times of appointments, and understanding of relevant medical interventions during pregnancy [5 - 7]. Cultural factors must be taken into consideration in the planning and delivery of services as this is an important step in reducing maternal mortality and effective service uptake of such services. It is known that in various regions of the world, some interventions have been implemented to address cultural factors that affect the use of ANC services. However, the literature has not been synthesized [8].

Women are believed to have stronger trust in their cultural practices than in the ANC services that are rendered by skilled healthcare workers [3, 4]. Additionally, the cultural beliefs and practices of pregnant women influence their attendance in antenatal clinics [6]. Furthermore, factors such as fear of being bewitched caused were also found to delay attendance of ANC services [6, 9]. Women were found to be using herbs to preserve and protect their unborn babies from harm [9 - 15]. They trusted the knowledge of traditional birth attendants and preferred their care and expertise as compared to the harsh treatment they received from midwives in hospitals and clinics who discourage them from their indigenous beliefs and practices [6].

The Sustainable Development Goals (SDGs) for 2030 were presented in September 2015. The SDGs aim to guarantee healthy lives and promote well-being for all ages. SDG Number 5 aims to accomplish gender equality and empower all women and girls. Targets include the reduction of the global Maternal Mortality Rate (MMR) to no more than 70 maternal deaths for each 100 000 live births by 2030 [16, 17]; in addition, a national target was set with the condition that no country should have a maternal mortality rate of more than twice the global average which means that no country must have an MMR of more than 140 maternal deaths per 100 000 live births by 2030 [18]. In South Africa's MDG report, ANC coverage using the District Health Information System (DHIS) of the National Department of Health, it is evident that the available data presents an unusually high coverage with over 100% of pregnant women utilizing ANC at least once during pregnancy from 2006 to 2015 [16, 19, 20]. However, the further report projects that maternal mortality rates amplified between 2002 and 2009 but presented to have declined in 2010. Thus, maternal deaths increased from 133 to 299 for every 100 000 live births in 2002 and 2007 [16]. The maternal mortality rate further presented its increment to 300 and 312 in 2008 and

2009, respectively, and then declined to 269 maternal deaths for each 100 000 live births in the year 2010 [16, 17, 19, 20]. Given the presented findings, it can be concluded that South Africa as a country is still struggling to meet the set SDG target of fewer than 140 maternal deaths per 100 000 live births [16].

A significant encounter in addressing maternal deaths in South Africa is the lack of multi-sectoral planning to address socio-economic inequalities essential for successful Primary Health Care (PHC) [16]. The sixth report on the confidential inquiries into maternal mortality in South Africa confirms that obstetric haemorrhage and hypertensive disorders (which could have been prevented through appropriate screening and diagnosis during pregnancy) are among the key causes of maternal deaths [16, 20]. The confidential inquiries into maternal mortality in South Africa committee maintain that above and beyond improving health systems and the standards of PHC, South Africa needs to be mindful in the development of policy interventions that attempt to reduce maternal mortality through nurturing economic development, empowering women, lowering fertility rates, improving the country's educational status and health systems [21].

The Mbombela Municipality in Mpumalanga is mainly rural with strong cultural practices. The influence of culture also plays an important role in determining the health-seeking behaviours of pregnant women, including adherence to ANC usage. ANC services are provided as per recommendations and guidelines of the National Department of Health. One of ANC objectives in South Africa is to provide information to pregnant women [21]; the information provided must inform women when to start ANC, health education regarding pregnancy, benefits, and importance of antenatal care services, however, this has proved to be a challenge. In the Saving Mothers Report [22], it is reported that between the years 2014 to 2016, Mpumalanga Province had 300 reported maternal deaths, with 145 in Ehlanzeni District, where Mbombela Municipality is located. The most frequent patient behaviour was related to avoidable factors like delays in accessing medical help and poor or no ANC attendance [22]. A total of 19.7% of maternal deaths were attributed to women who did not attend ANC facilities, 20.0% attended ANC facilities infrequently, and 27.0% delayed seeking medical help [22]. Since cultural practices influence how pregnant women decide whether or not to seek help or services during the pregnancy, the influences on pregnancy management at Mbombela Municipality, Mpumalanga Province, were explored. This study aimed to explore the cultural practices and beliefs influencing the management of pregnancy in the primary health care setting in the Mbombela Municipality of Mpumalanga province, South Africa.

2. METHODS

The study employed a qualitative approach that used an explorative, descriptive, and contextual design [23]. Participants included pregnant women attending ANC at the Primary Health care clinics of Mbombela Municipality in Limpopo province of South Africa [20]. Purposive sampling was used to select pregnant women who did not attend ANC services as expected. Participants narrated their cultural practices based on the posed question, for instance, "can you

explain how you manage your pregnancy at home?" which was followed by probing and follow-up questions [23]. The study was conducted in the Mbombela Municipality, Mpumalanga province of South Africa, which is dominantly rural and most deeply rooted in their African traditional and cultural beliefs.

2.1. Participants

The professional nurse from the PHC clinic assisted in the identification of all pregnant women who failed to completely attend ANC [23]. The professional nurse communicated with them for permission to participate in the study using the telephone, and those who were interested and willing to participate signed the informed consent, and agreed on an interview date [23].

2.2. Data Collection

Individual unstructured in-depth interviews were used to collect data by asking a central question which was, "can you explain to me how you manage your pregnancy at home" The authors (LD and RTL) employed probing questions and paraphrasing to expand the interviews while obtaining rich data. To best capture the interview discussion, the authors used observations, field notes, and audiotape [23]. The authors used Isiswati language to collect data as the participating pregnant women were comfortable expressing themselves in their home language [23]. About eighteen (18) pregnant women participated in this study, and this sample size was determined by data saturation that was reached at participant 15 [23].

2.3. Data Analysis

Tech's method of analysis was employed in this study for data analysis [23]. Collected data were transcribed verbatim, after which they were translated from Isiswati to English through a language expert and back-translated to Isiswati to establish if the meaning remains the same [23]. The authors then immersed themselves in the collected, transcribed, and translated data through immense data reading, coding and clustering; additionally, sub-themes and themes were established.

3. MEASURES TO ENSURE TRUSTWORTHINESS

Trustworthiness was ensured by employing the following criteria: The authors established credibility by maintaining contact with pregnant women before, during, and after the interview process [23]. We observed the entire data processor, not only verbally but also non-verbally, in-depth [23]. Furthermore, consultation with peers and the use of an audiotape recorder and presentation of data to pregnant women strengthened the data verification. Transferability was warranted using a dense description of the research design and methods employed in this study [23]. Conformability was sustained through the employment of a qualitative research design where the narrated data represent the unique information provided by the pregnant women themselves [23]. An audit trail was ensured using an audio tape recorder to record the individual in-depth unstructured interviews and the presentation of well-planned research design and methods [23].

The collected data were subjected to an external assessment, and a separate co-coder ensured consistency by independently verifying the coding by the authors and external assessor [23].

4. RESULTS

The study was conducted in six selected PHC clinics of Mbombela Municipality [23]. About three (3) pregnant women from each of the selected PHC clinics participated in the study, making a total of eighteen women who participated. The participants' age ranged from 18 to 38 years [23]. The individual unstructured in-depth interviews took an average time ranging from 45 to 60 minutes [23]. Table 1 presents the theme and sub-themes that emerged from the analyzed data.

Table 1. Themes and sub-themes reflecting the following.

Cultural Practices and Management of Pregnancy	1.1 Existing cultural practices during pregnancy
	1.2 Use of traditional medicines during pregnancy
	1.3 The influence of cultural practices on the management of pregnancy

4.1. Description of Cultural Practices and Management of Pregnancy

Cultural practice in the management of pregnancy was shared by all participants. Participants view practising culture in the management of their pregnancy as a way of connecting with their ancestors, and this practice will also enable them to pass this information on to the next generation.

"you know the elders at home know what is expected of me when I am pregnant. Some of the practices are sacred if you do not follow them you will be in trouble and your baby is not protected.....people might bewitch your unborn child" (P4, 38yrs, Gravida 4).

The following sub-themes emerged from the main theme: Cultural medication taken by pregnant women during pregnancy and the influence of cultural practices in the management of pregnancy.

4.1.1. Existing Cultural Practices Followed During Pregnancy Outlined

In the socially and culturally diverse sites that were visited, the pregnant women interviewed believed that they had to consult a traditional healer or their prophets in their church when they found that they were pregnant. They believed this would prevent miscarriages and keep evil spirits away. Some of the women mentioned that since they were Christians, they did not practice any cultural practices during pregnancy, but in some churches, they have practices performed for pregnant women. This was confirmed by the following excerpts:

"We consult to traditional healers and they throw bones down and they tell you that you have imfelo [mole] and you need to put a rope around your tummy, they knot the rope according to the number of pregnancies that you have had if it is your fifth pregnancy they put five knots on the rope and I drink imbita [herbal medication] until you deliver the baby because if you stop drinking it you will have a miscarriage and the rope it is removed by the elders at some point when they

feel that I am no longer in danger of having a miscarriage” (P6, 30yrs, Gravida 2).

“I just use the oil from church, which I smear on my stomach to prevent the baby from dying and I believe that it works” (P14, 28yrs, Gravida 2).

“If there are things that are troubling me and they cannot help me here at the clinic, I go to church and they pray for me and if you believe everything becomes fine. My pastor is a prophet and he heals people, if you have pains and he prays for you they stop” (P12, 24yrs, Gravida 3).

“We report to the ancestors before you come to the clinic, we gather at the house and they brew traditional beer and use it to report to the ancestors and ask for protection if it happens that [sic] you are bewitched and also that you don’t get a miscarriage and that you deliver in time, not with post-dates and when the time for delivery comes you must drink *imbiba* (herbs) to help you during labour that it doesn’t become prolonged” (P10, 28yrs, Gravida 4).

4.1.2. Explanation of Cultural Medication taken by Pregnant Women during Pregnancy

It is a cultural practice for some pregnant women to consult prophets or herbalists, also known as traditional healers, during pregnancy. It has been revealed that during the consultations, pregnant women are given herbal medication made from different types of roots, leaves, or stems of local plants. Participants confirmed by saying:

“You boil the tail of the monkey and you drink the water when you go for delivery so that the delivery will be fast, and also the *inkaka* [green vegetable] you boil and drink it and it also helps for the delivery by inducing strong contractions and there is also *imbiba* [herbal medication] and we get all these from the traditional practitioners...when we go there you tell him/her that you are pregnant and they know which kind of herbs to give you and they also make incisions in your body and put *muti* [Traditional Medication] so that people will not be able to bewitch you and cause you to deliver post-term” (P5, 18yrs, Gravida 1).

“We use *isiwasho* [water that is prayed for by the leading woman in our church]. Nothing is added to the water, they just pray for it and I drink it whenever I am thirsty there are no measurements. The water is to protect me and my baby from evil things that can be cast towards us, I drink it throughout the pregnancy and I take it to the hospital when I go for delivery for safe labour purposes because it has Holy Spirit” (P6, 30yrs, Gravida 2).

4.1.3. Influence of Cultural Practices in the Management of Pregnancy Outlined

The pregnant women mentioned that they take their herbal medication together with the medication given by healthcare workers. This might cause interaction with the prescribed medication or cause side effects since the herbal medication is taken without measurements. The participants explained by saying:

“Yes I take the herbal medication and pills from the clinic

at the same time, but I don’t drink the pills every day because they make me eat a lot. You know *imbiba* [Herbal Medicine] is like water, they don’t even boil the herbs they just put them in water and you drink and I really believe it works [sic]” (P1, 31yrs, Gravida 3).

“I stopped drinking the holy water because it was causing lower abdominal pains and headaches and my in-laws were against it. But my mother is still encouraging me to go there because she says if I had gone back I would have delivered by now. When you go there they induce vomiting and they smear the Vaseline [Petroleum Jelly] around your abdomen and in few weeks you deliver your baby. My sister-in-law also delivered when she was eight months because they induced the labour by the prophets in our church” (P16, 29yrs, Gravida 3).

5. DISCUSSION

Data gave light to the extent to which cultural practices, including the use of medication from such services, play a most important role in how pregnant women utilize ANC services. Traditional beliefs and cultural practices that are common to the community may contribute to how health services are used. Culture is a set of guidelines which can be explicit or implicit (obvious or unspoken) that individuals inherit as members of a community, and which informs them on how to view and understand the world, how to experience it emotionally, and how to conduct themselves around it concerning other people, to supernatural or paranormal/mystical forces or supernatural being and the natural setting [3]. Furthermore, culture provides people with a way of conveying these guidelines from one generation to the next generation through the usage of symbols, language, art, music, dance, and rituals.

Health care provided to pregnant women by health care workers should consider and allow for all the different cultural variations. Cultural awareness, competency, transparency, and openness are essential in a caring relationship between the pregnant woman, her partner, and the family with the addition of health care providers. The taboos, rituals, and prescriptions surrounding pregnancy and childbirth are what define what is acceptable or unacceptable culturally to the pregnant woman [24]. This reveals that most women’s acts may be positively or negatively influenced by the culture they bear in response to the necessary health care required during pregnancy and childbirth.

The results highlight the fact that indeed pregnant women are provided with traditional and holly medications that are culturally and religiously known or used during their entire pregnancy. These medications can either be prescribed by the consulted traditional healer or given to the women by an experienced family member, traditional birth attendant, or the church by the faith healer. It is believed that if a pregnant woman had an *imfelo* (black mole) that has developed on her body, it would cause her to have a miscarriage and that she should take herbal medicine to prevent it from happening. Similar findings resulted from a study conducted in Bohlabelo on pregnant Zulu women, which revealed that the traditional birth attendants tie medicated strings around the pregnant woman’s waist to maintain the pregnancy till term and also

prescribed medication to keep evil spirits away [6].

The revealed belief saw women consulting their ancestors first when they discovered that they are pregnant, and this process mostly happens before they start their ANC, which then delays them from starting ANC. Hence, there is still a need for the community and pregnant women to be offered adequate information regarding pregnancy, maternal health, late presentation for ANC, and the risks of being attended by an unskilled person during pregnancy. Additionally, the findings further revealed that certain rituals are performed towards the ancestors to help deal with ancestor-related illnesses or to request protection for the pregnant woman and unborn baby and good fortune during pregnancy and delivery. Furthermore, the traditional medicines taken during pregnancy are believed to serve different purposes, which include treating abdominal cramps, preventing miscarriages, ensuring safe delivery, inducing strong contractions during delivery, and keeping the evil spirits away, which may harm the fetus [9, 24, 25].

There are many formulas of traditional medication taken by women during pregnancy. In a study conducted in Ekurhuleni, it was revealed that herbal medication such as *imbelekisane* [some herbal medicine that assists with the delivery of the baby] is ingested during pregnancy to prepare for sound fetal growth, to prevent oedema and the presence of vernix on the new-born [6]. *Isinwazi* [*rhoicissuscuneifolia*] is a mixture where roots are boiled with parts of a crocodile, and the women take a cupful of the mixture daily until delivery to quicken the process of labour, and herbs are given to the pregnant woman orally to promote post-natal bleeding as retained blood is regarded as impure and will cause sickness to the woman. Traditionally pregnant women are given information about pregnancy, childbirth, and post-natal disorders by the older women in their communities, mothers or mothers-in-law, and traditional practitioners or prophets in their church. This information depends on local knowledge, which has been passed on from generation to generation. In a study conducted in Tanzania, it was found that the use of traditional birth attendants was still widely used by pregnant women for pregnancy care and childbirth services. Most of the traditional birth attendants were traditional healers, and they were believed to be capable of solving infertility problems and/or any other health problems using traditional medicine [26].

During history-taking, healthcare professionals should use a trans-cultural approach to avoid undermining the patient's subjective history that includes her perceptions about disease and health. What the patient views as appropriate forms of treatment and what she believes to be the cause of her illness plays an important role in a women's health during pregnancy. Despite the incompetence and unskilled practices of traditional practitioners, they need to be included when implementing health campaigns. It is evident that traditional remedies and medicines are not well-researched and can be harmful to pregnant women and unborn babies. When tested within a western research framework, it has been found that herbal medications have oxytocic effects and have the power to induce uterine contractions, which may often result in the

rupture of the uterus [24]. It has been found that these herbs are taken without recommended dosages and are taken throughout pregnancy. They can induce labour, cause a miscarriage or congenital abnormalities [27].

As a member of the community, a mother and a wife, the pregnant woman is expected to behave according to social norms, beliefs, and traditions while on the other hand, for her survival and that of the unborn baby, she is required to adhere to skilled maternal healthcare requirements during pregnancy, labour, and the puerperium. Unless there is a common understanding between the skilled healthcare providers and community or traditional practitioners, the pregnant woman remains in the middle without proper information on how to react during the process of pregnancy, labour, and puerperium.

The reason for consulting traditional practitioners and following cultural practices may be caused by the knowledge deficit that pregnant women have regarding ANC. It is evident that traditional practitioners don't have the expertise or they are not skilled in conducting maternal healthcare as most of the procedures used focus on stopping pain rather than on preserving pregnancy until delivery. The perceptions and misinformation from their communities could be changed if women are equipped with proper maternal information during their ANC visits.

CONCLUSION AND RECOMMENDATIONS

Based on the study findings, we make the following recommendations which may help in the improvement of the pregnant women's knowledge and attitudes about ANC: resources like pamphlets or brochures that can be readily available in PHC clinics and other forms of media (Facebook, Twitter, WhatsApp, television, radio etc.) must be accessible to all pregnant women to augment their knowledge, attitudes and raise awareness regarding the necessity of ANC services; constant and timely health promotion on ANC should be provided to all available pregnant women on a daily basis while they wait to be attended to in the PHC waiting areas, hence, the healthcare professionals must encourage active involvement of all pregnant women during the health promotive gatherings and allow participants seek clarity so as to detect the level of their knowledge and provide clarity where necessary; conduct workshops and training for healthcare providers aimed at improvement of the observed weaknesses which includes barriers of ANC services utilization; and that there should be a promotion of traditional health practitioners involvement in maternal healthcare programs so as to equip them with necessary information and skills needed for maternal care.

Cultural practices inherent in society play an important role in how decisions are made and also in how different cultures behave. Cultural practices are also a determinant of the health system to use when in need. Despite the availability of free maternal healthcare services in primary healthcare facilities, women still consult traditional healers during pregnancy and believe in cultural practices. It is therefore important that programs developed for maternal services be congruent to the cultural practices of women to be serviced.

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

Ethical clearance was sought from the University of Venda Ethics Committee (Ethics Number: SHS/16/PDC/37/0802) and permission to conduct the study from the Mpumalanga Province Department of Health.

HUMAN AND ANIMAL RIGHTS

No Animals were used in this research. All human research procedures were followed in accordance with the ethical standards of the committee responsible for human experimentation (institutional and national), and with the Helsinki Declaration of 1975, as revised in 2013.

CONSENT FOR PUBLICATION

Informed consent was sought from each participant, and they were informed of the use of audiotape and voluntary participation.

AVAILABILITY OF DATA AND MATERIALS

The data that support the findings of this study are available from the corresponding author [L.M], upon reasonable request.

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CONFLICT OF INTEREST

The authors declare no conflict of interest, financial or otherwise.

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REFERENCES

- [1] Espin O. *Latina realities: Essays on healing, migration, and sexuality* Routledge 2018.
- [2] Warren C. Care seeking for maternal health: Challenges remain for poor women. *Ethiop J Health Dev* 2010; 24(1) [http://dx.doi.org/10.4314/ejhd.v24i1.62950]
- [3] Titaley CR, Hunter CL, Dibley MJ, Heywood P. Why do some women still prefer traditional birth attendants and home delivery?: A qualitative study on delivery care services in west java province, indonesia. *BMC Pregnancy Childbirth* 2010; 10(1): 43. [http://dx.doi.org/10.1186/1471-2393-10-43] [PMID: 20701762]
- [4] Wilson R. 2018.
- [5] Moshokwa ML. Antenatal care an investigation of the time interval between the confirmation of pregnancy diagnosis and commencement. 2018.
- [6] Ngomane S, Mulaudzi FM. Indigenous beliefs and practices that influence the delayed attendance of antenatal clinics by women in the Bohlabele district in Limpopo, South Africa. *Midwifery* 2012; 28(1): 30-8. [http://dx.doi.org/10.1016/j.midw.2010.11.002] [PMID: 21146264]
- [7] Adataro P, Strumpher J, Ricks E, Mwini-Nyaledzigbor PP. Cultural beliefs and practices of women influencing home births in rural Northern Ghana. *Int J Womens Health* 2019; 11: 353-61. [http://dx.doi.org/10.2147/IJWH.S190402] [PMID: 31239788]
- [8] World Health Organization (WHO). Trends in maternal mortality: 1990 to 2015, estimates by WHO, UNICEF, UNFPA, The World Bank and the United Nations population division 2015. Available from: www.who.int/entity/reproductivehealth
- [9] Maputle SM, Mothiba TM, Maliwichi L. Traditional medicine and pregnancy management: Perceptions of traditional health practitioners in Capricorn district, Limpopo province. *Stud Ethno-Med* 2015; 9(1): 67-75. [http://dx.doi.org/10.1080/09735070.2015.11905422]
- [10] Illamola SM, Amaeze OU, Krepkova LV, *et al.* Use of herbal medicine by pregnant women: What physicians need to know. *Front Pharmacol* 2020; 10: 1483. [http://dx.doi.org/10.3389/fphar.2019.01483] [PMID: 31998122]
- [11] Al-Ramahi R, Jaradat N, Adawi D. Use of herbal medicines during pregnancy in a group of Palestinian women. *J Ethnopharmacol* 2013; 150(1): 79-84. [http://dx.doi.org/10.1016/j.jep.2013.07.041] [PMID: 23933314]
- [12] Bhatt P, Leong TK, Yadav H, Doshi A. Prevalence and factors associated with the use of herbal medicines among women receiving antenatal care in hospitals-Mumbai, India. *Int J Phytotherapy* 2016; 6(2): 82-90.
- [13] Dika HI, Dismas M, Iddi S, Rumanyika R. Prevalent use of herbs for reduction of labour duration in Mwanza, Tanzania: Are obstetricians aware? *Tanzan J Health Res* 2017; 19(2) [http://dx.doi.org/10.4314/thrb.v19i2.5]
- [14] Hall HG, Griffiths DL, McKenna LG. The use of complementary and alternative medicine by pregnant women: A literature review. *Midwifery* 2011; 27(6): 817-24. [http://dx.doi.org/10.1016/j.midw.2010.08.007] [PMID: 21247674]
- [15] Maliwichi-Nyirenda CP, Maliwichi LL. Medicinal plants used to induce labour and traditional techniques used in determination of onset of labour in pregnant women in Malawi: A case study of Mulanjé district. *J Med Plants Res* 2010; 4(24): 2609-14.
- [16] Statistics South Africa. Millennium Development Goals Country: Report. 2013.
- [17] Moran AC, Jolivet RR, Chou D, *et al.* A common monitoring framework for ending preventable maternal mortality, 2015-2030: Phase I of a multi-step process. *BMC Pregnancy Childbirth* 2016; 16(1): 250. [http://dx.doi.org/10.1186/s12884-016-1035-4] [PMID: 27565428]
- [18] World Health Organization. UNICEF Trends in maternal mortality Available from: <https://data.unicef.org>
- [19] Way C. The millennium development goals report 2015 UN. 2015.
- [20] National committee on confidential enquiries into maternal deaths. Saving Mothers 2011-2013: Sixth report on confidential enquiries into maternal deaths in South Africa 2014. Available on: <http://www.kznhealth.gov.za/mcwh/Maternal/Saving-Mothers-2011-2013-short-report.pdf>
- [21] National department of health, south africa. Guidelines for maternity care in south africa A manual for clinics, community health centres and district hospitals. 3rd ed. Pretoria: NDoH 2007; 171.
- [22] National Committee on Confidential Enquiries into Maternal Deaths. Saving mothers 2014-2016: Seventh triennial report on confidential enquiries into maternal deaths in South Africa: Executive summary. Pretoria: National Department of Health 2018.
- [23] Drigo L, Luvhengo M, Lebesse RT, Makhado L. Attitudes of pregnant women towards antenatal care services provided in primary health care facilities of mbombela municipality, mpumalanga province, south africa. *Open Public Health J* 2020; 13(1) [http://dx.doi.org/10.2174/1874944502013010569]
- [24] Withers M, Kharazmi N, Lim E. Traditional beliefs and practices in pregnancy, childbirth and postpartum: A review of the evidence from Asian countries. *Midwifery* 2018; 56: 158-70. [http://dx.doi.org/10.1016/j.midw.2017.10.019] [PMID: 29132060]
- [25] Brookes KB. Chemical investigation of isihlambezo or traditional pregnancy-related medicines. 2004.
- [26] Mwangakala HA. Pregnant women's access to maternal health information and its impact on healthcare utilization behaviour in rural Tanzania. 2016.
- [27] Mselle LT, Moland KM, Mvungi A, Evjen-Olsen B, Kohi TW. Why give birth in health facility? Users' and providers' accounts of poor quality of birth care in Tanzania. *BMC Health Serv Res* 2013; 13(1): 174. [http://dx.doi.org/10.1186/1472-6963-13-174] [PMID: 23663299]