



Publisher

African Journal of Social Work
 Afri. j. soc. work
 © National Association of Social Workers-Zimbabwe/Author(s)
 ISSN Print 1563-3934
 ISSN Online 2409-5605

Licensed under a Creative Commons Attribution-Non-commercial 4.0 International License

Indexed & Accredited with: African Journals Online (AJOL)|University of Zimbabwe Accredited Journals (UZAJ)|SCOPUS (Elsevier's abstract and citation database)|Directory of Open Access Journals (DOAJ)|Society of African Journal Editors (SAJE)|Asian Digital Library (ADL).

UNDERSTANDING MATERNAL HEALTH CARE THROUGH THE ROLE PLAYED BY DIETARY FOOD TABOOS IN BINGA

ZINYEMBA, Lizzy

ABSTRACT

Globally studies have shown that pregnant women and infants are amongst the most nutritionally vulnerable populace, the situation is even worse in rural areas of most developing countries. This makes such groups a cause of concern in maternal health care. In Zimbabwe, this problem is exacerbated by the role that food kutondwa hold in many societies and the different knowledge on maternal health care, received by pregnant women from different sources in the society. The understanding maternal health care through the role played by dietary food taboos study was guided by the following objectives to explore food kutondwa followed by the Tonga women when pregnant, to examine the role played by food kutondwa in maternal health and to evaluate the significance of the food kutondwa in the Tonga society. The study made use of a qualitative research approach making use of focus group discussions, observations and key informant interviews as data collection methods. The research found out that there were a number of foods kutondwa that were followed by pregnant women like not consuming eggs, game meat and not eating left over foods on the morrow. The study hence concluded that food kutondwa generally are seen as unavoidable in the Tonga society and the reasons behind continuity of such food kutondwa remain a dilemma to most maternal health care providers. Finally, the study recommends the need to understand the role and significance of food kutondwa associated with prenatal care for the achievement of maternal health care.

KEY TERMS: kutondwa, pregnant woman, neonate, prenatal care, maternal health care, maternal mortality, kutondwa food

KEY DATES

Received: 02 November 2019

Revised: 02 December 2019

Accepted: 10 December 2019

Published: 20 February 2020

Funding: None

Conflict of Interest: None

Permission: Not applicable

Ethics approval: Not applicable

This article appeared in a special issue of the African Journal of Social Work (AJSW) titled *Ubuntu Social Work*. The special issue focused on short articles that advanced the theory and practice of ubuntu in social work. In the special issue, these definitions were used:

- Ubuntu refers to a collection of values and practices that black people of Africa or of African origin view as making people authentic human beings. While the nuances of these values and practices vary across different ethnic groups, they all point to one thing – an authentic individual human being is part of a larger and more significant relational, communal, societal, environmental and spiritual world.
- Ubuntu social work refers to social work that is theoretically, pedagogically and practically grounded in ubuntu.
- The term ubuntu is expressed differently in several African communities and languages but all referring to the same thing. In Angola, it is known as *gimuntu*, Botswana (*muthu*), Burkina Faso (*maaya*), Burundi (*ubuntu*), Cameroon (*bato*), Congo (*bantu*), Congo Democratic Republic (*bomoto/bantu*), Cote d'Ivoire (*maaya*), Equatorial Guinea (*maaya*), Guinea (*maaya*), Gambia (*maaya*), Ghana (*biako ye*), Kenya (*utu/munto/mondo*), Liberia (*maaya*), Malawi (*umunthu*), Mali (*maaya/hadama de ya*), Mozambique (*vumuntu*), Namibia (*omundu*), Nigeria (*mutunchi/iwa/agwa*), Rwanda (*bantu*), Sierra Leone (*maaya*), South Africa (*ubuntu/botho*), Tanzania (*utu/obuntu/bumuntu*), Uganda (*obuntu*), Zambia (*umunthu/ubuntu*) and Zimbabwe (*hunhu/unhu/botho/ubuntu*). It is also found in other Bantu countries not mentioned here.

INTRODUCTION

Unlike in the developed world, in most developing countries almost everything has a spiritual or a supernatural explanation, including taboos which are defined as a prohibition rule designed to foster psychological control on the part of the individual to affect a certain action or omission without physical or external policing and has the effect of a religious belief (Hari and Iqbal, 2015). Taboos are also developed over time and cover various dimensions of life hence they affect social development thus cannot be ignored in the provision of maternal health care. Taboos were not designed to communicate material facts but were intended to limit individual behavior, where the universal consequences of action or omission are not known or are a known disaster. Research has also shown that taboos are dynamic like culture henceforth some taboos vanish with time while others survive and dominate societies with the changing of cultures. (Phuong, Tina, Sunny, Lan, Kaosar, Zeba, Bachera and Purnima, 2017).

Dharma and Umesh, (2015) define food taboos as purposeful prevention of food items for reasons not merely disliking the food, which have a psychological conditioning effect, to willfully desist from eating specified foods, which according to the state of knowledge or indeed ignorance of the practicing people. Studies by Dodzo, Mhloyi, Moyo and Dodzo-Masawi (2016), further conclude that the choice of food is often determined by a number of factors which include availability, religious factors, traditional beliefs and social status of the family. Ironically scholars like Riang, Nangula, Broerse, (2017) note that eating food that is prohibited is believed to cause pregnancy complications, child death, and on the other hand they are also known to protect pregnant women from allergies and misfortune amongst other reasons.

In some developing countries foods such as potatoes are prohibited, as they are reported to cause a bad smell on the child and the mother. While in some countries, peppers were also prohibited as they were reported to cause the neonate to become hairless. (Uzma Eram, Tamanna and Humaira, 2016). While in Ethiopia foods high in carbohydrates were forbidden as it was reported that avoiding such foods reduced the probability of painful labour, with the fetus being proportionate in size to the birth canal. (Nejimu, Biza and Zepro, 2012). High protein foods like milk, eggs and some meats are also prohibited in most parts of Africa (Uzma Eram, Tamanna and Humaira, 2016).

These food taboos often lead pregnant women being deprived of high protein foods. Such food taboos have been a cause of concern as the prohibited sources of food are the main sources of nutrients which are necessary for pregnant women (Hari and Iqbal, 2015). However, it has not been established whether some foods that by custom substitute these common prohibited high protein foods are not equally nutritious. Another factor is whether such foods do not cause some other health problems that, in the wisdom of those practicing, the health costs of taking them outweighs the nutritional benefit. For example, it is a well-known fact that foods that are high in cholesterol increase chances of such conditions as hypertension or heart failures. These foods are hence discouraged for particular people like the diabetic and hypertensive patients. A lot of studies have also shown that egg white is very high in protein, sodium, selenium, folate and calcium. It has about sixteen calories and may trigger allergic reactions like rashes, swelling, nausea, vomiting, wheezing and sneezing among other reactions (Seabrook, 1997).

Strong, (2005) cited in Iqbal, Said, Mansor, (2015) has shown the importance of food during pregnancy and have proved that food is more beneficial as foods rich in folic acid are necessary in the development and growth of cells in the neonate, to some extent such foods prevent birth defects in the new born child. On the other hand, scholars like Meyer-Rochow, (2014) have noted that dietary food taboos help to maintain group cohesion amongst societal members as it is believed to maintain the society's identity as compared to other societies. Meyer-Rochow, (2014) further notes that such food taboos help maintain group cohesion amongst people in communities, as they share the same group identity differentiating a community from the other communities, bringing a sense of belonging amongst the community members.

Meyer-Rochow, (2014) also noted that the reasons why societies have food taboos which are not only followed by a particular people, is that food taboos are designed to celebrate certain events in societies and meant for a particular kind of people. Such food taboos are present in societies to demonstrate the dominance of the male sex for example where certain foods are not consumed by women and children. They can also be meant to highlight events that are unavoidable in societies like the '*kusungira*' concept among the Shona people of Zimbabwe, where women are taken back to their agnatic family for the delivery of the first child (Gelfand 1985). Concurring to this notion Meyer-Rochow, (2014) notes that, among the Christian societies before Easter celebrations which is the Lent period most Christians observe food taboos where they are not allowed to consume certain delicacies during this period due to their religious beliefs. Such a concept is mainly as a result of religious or cultural beliefs of a particular people (Meyer-Rochow, 2014). In Zimbabwe for example most people do not consume their totem due to their cultural beliefs. On the other hand, Christians are also reported not to consume certain foods due to their interpretation of their religion.

Food taboos have also been developed to protect the societal resources, meant to preserve certain animals or resources from being extinct in the community. In such scenarios such food taboos have an environmental

background in that society (Nejimu, Biza and Zepro, 2012). On the other hand, food taboos have developed to monopolize resources that are usually a rare species to come by. In Zimbabwe for example, the pangolin is only consumed by kings and not ordinary people. It can thus be noted that society has its own cultural explanations as to why food taboos should be followed (Gelfand, 1985).

It cannot be disputed that nutrition is a major determinant of a positive outcome of pregnancy, however not much is known on the negative effects of some prohibited foods during pregnancy. In the wisdom of those practicing the food taboos the positives might outweigh the negative results as not many studies have been conducted to check the nutritional quantities of the options taken when women are prohibited to take certain foods during pregnancy.

This study therefore tries to bring out the role that food taboos play in maternal health care from an indigenous knowledge perspective, which is knowledge developed within indigenous societies which is independent of and prior to the advent of the modern scientific knowledge system. This is local knowledge which is from the native person's perspective. The indigenous knowledge perspective brings out the stand point of the indigenous people (Molefi, 2014).

METHODOLOGY

Qualitative research methods were used to explore food taboos followed by the Tonga women when pregnant, to examine the role played by food taboos in maternal health and to evaluate the significance of the food taboos in the Tonga society.

The study was conducted in Binga Ward 1 as the Tonga people of Binga have managed to preserve their culture despite modernization and the infiltration of other cultures (UNICEF, 2014). Both men and women who are in the reproductive age group were targeted as they all contribute directly or indirectly to maternal health care (Zimstat, 2012). Knowledgeable people in the area of maternal health care were also targeted as key informants in the study.

In trying to answer the above stated objectives the research made use of a qualitative research approach making use of observations, focus group discussions and key informant interviews as methods of data collection. An open-ended focus group discussion guide was used to collect data for the focus group discussions. Respondents for the focus group discussion were conveniently sampled from Ward 1 in Binga which has a total population of 1945 females and 1733 males in 29 villages under Chief Sinakatenge and chief Sinamusanga (Zimstat, 2012). Two cohorts were developed dividing the participants by sex and they were further divided by age namely the young reproductive age group, middle aged reproductive group and the elderly reproductive age group, to ease the group discussions for the focus group discussions summing up to a total of 12 focus group discussions. The group discussion consisted of 6-12 people with at least two focus group discussions being conducted per every group to check for consistency on the topic under study.

A key informant interview guide was also used to collect data from knowledgeable people in the area of maternal health. Purposive sampling technique was used to sample at least 3 key informants from the traditional birth attendants, nurses, village health workers and religious health care workers, chiefs and village heads making a total of 18 key informants.

An observation guide was used to observe the taboos that women practice during pre-natal care. The observations were conducted to check if pregnant women really practiced the taboos, how they practiced them in their communities and their significance in the Tonga society. The observations were done in Ward 1 Binga which has 887 households under Chief Sinakatenge and chief Sinamusanga (Zimstat, 2012).

Permission to conduct the study was sought from the local authorities in the area under study; this included the District administrator and the local leaders of ward 1 who were Chiefs and Head-men of the area. Each participant who participated in the study filled in a detailed consent form which explained to the respondent before participating in the study on the objectives, risks and benefits of the study. The researcher also observed strict confidentiality, anonymity and voluntary participation during the entire data collection process. Finally, data was analyzed using Nvivo application which helped with arranging data into themes and data storage.

FINDINGS

The study found out that most respondents in the Tonga society change their diet during pregnancy and did not consume products of animals like eland, zebra, elephant, bush pig, eggs, hippopotamus and fish. The key informants further revealed that these animals were forbidden as they caused poor growth while other foods caused skin diseases. It was observed that such foods were rarely prepared at homesteads that had pregnant women as compared to homesteads that did not have pregnant women in the Tonga tribe. Hence the researcher concluded that this was done so that pregnant women would not be tempted to consume such foods. To ensure that food *kutondwa* were followed, the researcher observed that the Tonga people cook in one big pot and the whole

extended family ate from the same pot. The researcher then noted that this was a way of ensuring that pregnant women would by no means consume prohibited foods.

This was noted in the focus group discussions were one respondent noted that; “...when a woman is pregnant she is not to consume most of the animals that are hunted in the forests by men...”

Tortoise meat was also reported to be *kutondwa* if consumed by pregnant women. The reasons for not consuming it were that it would affect the character of the unborn child both mentally and physically. It was assumed that if a pregnant woman ate tortoise meat the baby would be slow to learn, be it school work or house hold chores.

This was clearly reported by some of the respondents who noted that; “...one could not consume the tortoise or any animal in its family as it resulted in the child being slow in all the activities that he / she might want to undertake.”

It was also a *kutondwa* to consume the porcupine while pregnant in the Tonga tribe as it was reported to have negative consequences on the Tonga traditional culture, which was valued to great extent by the Tonga people.

One of the respondents clearly noted that; “...the porcupine resulted in children who would not have manners and would be proud of themselves when they grew up, looking down upon their elders.”

Sea foods were also not to be consumed when a woman was reported to be pregnant. This included foods like fish, and the hippopotamus. Such foods were reported to give unborn children skin diseases like ring worms that could not be treated. Ironically this *kutondwa* was mainly observed by the older reproductive generations as they feared that people would be coming to see the new born baby hence the child should be smart and have a beautiful skin, rather than a skin that is already tarnished. As a substitute to the above stated foods the researcher observed that such households mainly depended on wild vegetables while on rare occasions chicken and goat meat were prepared.

The study also revealed that pregnant women were not supposed to eat left over foods on the morrow. Upon further investigation it was interesting to note that starchy foods were the most prohibited as they were reported to have high side effects during the delivery process. The foods most prohibited were foods from heavy grains like maize, sorghum and millet. Failure to observe this *kutondwa* was believed to result in pregnant women messing themselves during delivery. Upon further investigation it was also a hygienic precaution that was taken by the traditional birth attendants who did not make use of protective clothing during delivery. Upon further investigation it was interesting to note that this *kutondwa* was not followed by most respondents of the younger age group as compared to the older generation. It was also interesting to note that most respondents agreed that religion did not have a bearing on this *kutondwa*. This showed that despite the religious stance of the respondents they still followed this *kutondwa* in their households.

This was supported by one traditional birth attendant who reported that; “...this was to be observed as pregnant women would push her bowels instead of the child during delivery.”

When asked if pregnant women were expected to cut meat alone, the study brought out that it was a *kutondwa* for expecting women to cut meat alone, without anyone assisting them as it resulted in women giving birth to selfish children. Meat in this society symbolized the best relish to be prepared in a home which is a delicacy in most rural areas that people do not normally have the privilege of consuming on a daily basis. People were thus expected to share such delicacies. As a way of avoiding blame on pregnancy for the bad behavior family members made sure this *kutondwa* was followed. This *kutondwa* was done to ensure pregnant women get assistance to cut meat so that they share meat with the rest of the family members. This encouraged and kept the spirit of the Tonga people of eating together. To ensure that this *kutondwa* was followed, the researcher observed that food is prepared outside the house so that the whole clan can see and smell what was being prepared amongst different families that make up a clan. The reasons behind this *kutondwa* was of much value to the Tonga people than the *kutondwa* itself, as it was more of encouraging the spirit of togetherness as compared to the prohibition of the food itself.

One respondent from the focus group discussions noted that; “...my mother in-law made sure that my husband’s sister was always there to assist in food preparations.”

While one key informant retaliated that: “...unhu ubuntu was very important in the Tonga society as it is because of the spirit of togetherness that the tribe has managed to keep its identity, thereby preserving their Tonga culture.”

The research revealed that women heavy with child were not supposed to dig a “*musikka*” tree which is a popular fruit tree in Binga. The “*musikka*” tree has additional source of vitamins. It was believed that if pregnant women

dug the “*musikka*” tree they were likely to give birth to preterm babies. Allowing pregnant women to dig the tree was an indication that the clan was not in support of the woman who would have been married by their relative and they were not happy with the union to the extent that they were against anything that made the union strong like children. On the other hand, it was also a sign that they needed the pregnancy to be aborted which was a sign of witchcraft in the Tonga tribe.

This theme was supported by traditional birth attendants who indicated that; “...*digging the tree laid a heavy burden on pregnant women as the tree was normally consumed during the dry season.*”

DISCUSSION OF FINDINGS

The indigenous knowledge perspective tries to explain the reasons behind the behavior of people from an African perspective. The prohibited food *kutondwa* in the study were mainly game meats that were mainly hunted by man. In the wisdom of the indigenous people this could be a way that the Tonga people made sure that men participated in the pregnancy related issues and were available to assist pregnant women especially with the running around, when the pregnant woman during pregnancy. Even though it can be noted by scholars like Uzma, Eram, Tamanna and Humaira, (2016) that this *kutondwa* led women to be protein and iron deficient, it could also be seen from an indigenous perspective as a way in which society controls its people from food items that are very difficult to come by as meat is rarely consumed in most rural areas. Hence instead of pregnant women putting pressure on their husbands demanding foods that were difficult to come by they were regarded as a *kutondwa*, while on the other hand allowing and giving time to the husband to participate in maternal health care issues (Wiredu 1996, Sadomba and Wakandigara, 2015).

It can also be argued that the Tonga people in their wisdom had seen that the negatives associated with the *kutondwa* foods like not to consume pork and eggs during pregnancy outweighed the positives, as a lot of studies by Glanz, Ramer and Viswanath, (2008), Enkin, Keirse and Chalmers, (2014) have also shown that, pork is high loaded with artery- clogging cholesterol and saturated fats which is the major cause of heart diseases, arthritis and impotence among other diseases. In line with studies by Meyer- Rochow, (2014) most religious groups do not consume pork as they report that it was forbidden. Eggs on the other hand have been reported to have high cholesterol and are cancerous if consumed in excess. From an indigenous perspective it can thus be argued that cancer is still a cause of concern in most third world countries and is not easily treated as hospitals are not close by, hence in the wisdom of making sure that pregnant women live longer to look after their children such *kutondwa* was put in place.

The *kutondwa* of not consuming starchy foods that were reported to have high side effects during the delivery process can also be seen from an indigenous knowledge perspective that the traditional birth attendance are the main providers of maternal health during delivery as clinics and hospitals are far and costly for most of the rural populace, in their wisdom hygienic precaution had to be taken especially in this era of diseases like HIV and AIDS. As a lot of studies by WHO, (2012) have noted that a lot of untrained birth attendance are infected with a number of diseases due to not making use of protective clothing in rural communities.

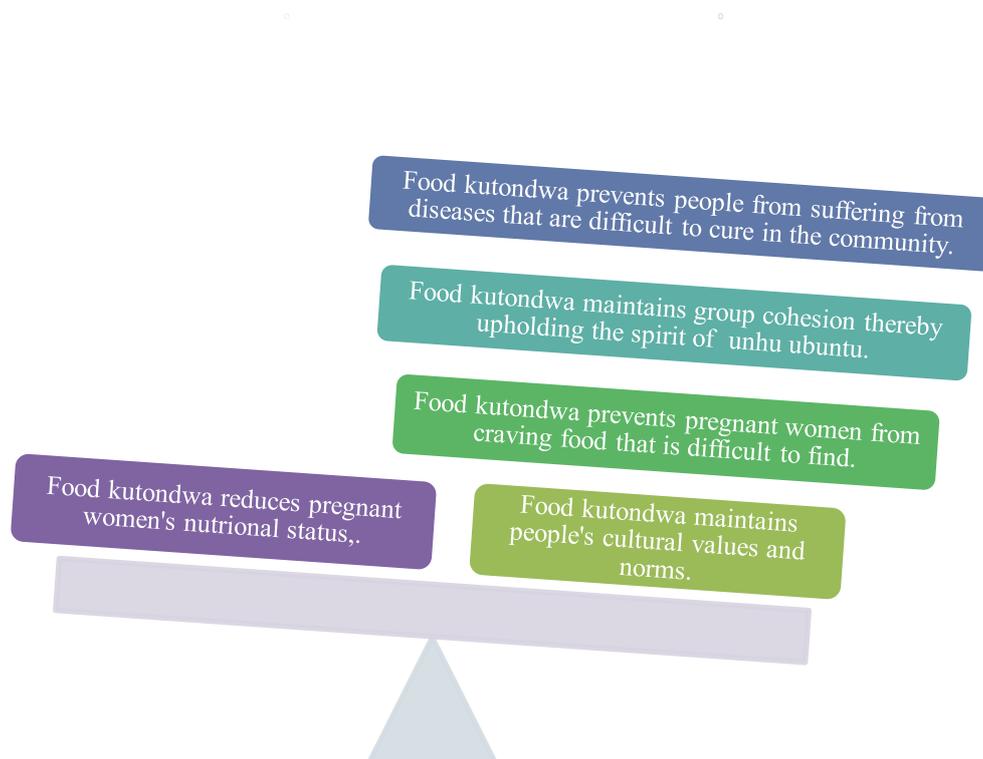
The study also revealed that pregnant women were not supposed to eat left over foods on the morrow, this was in line with a lot of studies that have noted that eating left over foods that is past the recommended amount of time could result in food borne illness or food poisoning and food poisoning is always associated with diarrhea and or vomiting. It can thus be seen that in the wisdom of the indigenous populace they knew such side effects and knew that there were no ways of preserving cooked foods while staying in a very hot rural area like Binga which is in region five of Zimbabwe, hence they made it a taboo to avoid the negative effects of food poisoning. Such a body of knowledge is also supported by WHO, (2014), who notes that left over foods are usually unhygienic as food is supposed to be eaten while hot.

In line with the above arguments pregnant women are faced with a lot of dilemmas weather to please the family and the community at large by following the food *kutondwa* or to listen to the advice from the conventional health specialists who are usually unpopular in the family decision making structures. Sadomba and Zinyemba, (2014) further note that the decision that the pregnant women would take will have ripple effects on the way the family will accept the woman into the family thereby affecting her marriage and her stay in the family. Such lines of argument are also supported by scholars like Meyer-Rocher, (2014) who notes that some taboos are meant to ensure that there is group cohesion in the communities as the taboos are their way of identity, as pregnant women ended up following the food *kutondwa* in order maintain the group cohesion in the family and the community at large.

The reasons behind preventing pregnant women from digging the ‘*mussikka*’ had great value in the Tonga society as it tried to maintain the social fabric of the family and community at large (Meyer- Rocher, 2014). Despite the fact that the *kutondwa* itself on the other hand could have deprived pregnant women access to vitamin C, the Tonga community expected pregnant women to be assisted from all heavy chores as it was seen to be inhuman to let pregnant women perform heavy chores. In the spirit of maintaining *unhu/ Ubuntu* which is the

spirit of togetherness among people everyone was expected to assist pregnant women regardless or being related to them or not. Ironically, it has not been established whether some foods that by custom, that substitute vitamin C, are not equally good sources of vitamin C. Another factor is whether the *mussikka* tree did not have other nutrients that could cause other health problems that, in the wisdom of those practicing the food *kutondwa* the health cost of taking the vitamin C outweighed the nutritional benefit. For example, it is now a well-known fact that the *moringa* tree is an important source of anti-bodies and its leaves, barks and roots are used as a main source of improving the immune system; however, the roots have also been reported to cause paralysis in the long run.

Figure 1: The *kutondwa* model



The food *kutondwa* model explains the reasons behind pregnant women’s continuation of food *kutondwa* in their community. It can thus be noted that from the indigenous people perspectives the pros of following the *kutondwa* outweigh the cons of not following them. It cannot be disputed that food *kutondwa* reduces pregnant women’s nutritional status which in turn expose them to maternal mortality and morbidity. Proponents of this aspect are mainly the conventional health care providers who are stationed at the clinics and hospitals. This puts a lot of pregnant women in a dilemma of choice as they have to weigh the effects of food *kutondwa* with its benefits which are presented to them in the communities where they reside which include maintaining their cultural values and norms, in most cases these cultural values and norms are safe guided by the by their elders in the community. Food *kutondwa* have their hidden meanings as they do not merely detest pregnant women from not consuming certain type of foods but in the wisdom of the community elders such foods might be difficult to be found in the communities exposing those that go to look for the food at the risk of losing their lives. Food *kutondwa* can also be done to prevent pregnant women to suffer from disease that could also cost them their life if they cannot afford and access conventional health care treatment. Finally, food *kutondwa* defines who a particular people are; it distinguishes them from other people, maintaining their spirit of identity in this way they maintain group cohesion amongst themselves. It can therefore be concluded that the advantages of following the food *kutondwa* in the rural communities outweighs the reasons behind not following them as advocated by health professionals who are mainly outsiders.

CONCLUSION

The study finally concludes that despite the nutritional effects that are caused by most dietary food *kutondwa* they are still followed and greatly entrenched in many societies. It further notes that food *kutondwa* do not only have negative effects on pregnant women but are also used as a means of maintaining the social fabric of the society. They are used as a way of passing on information among the local people that are of limited literacy hence very essential in safe guarding indigenous knowledge. Food *kutondwa* are thus used as a way of maintaining societal values and norms like keeping the Tonga culture intact.

REFERENCES

- Bhatta D. N., Aryal U. R. (2015). Paternal Factors and Inequity Associated with Access to Maternal Health Care Service Utilization in Nepal: A Community Based Cross-Sectional Study. *PLOS ONE* 10(6): e0130380. <https://doi.org/10.1371/journal.pone.0130380>
- Dodzo, M. K., Mhloyi, M., Moyo, S., Masawi-Dodzo, M. (2016). Praying until Death: Apostolicism, Delays and Maternal Mortality in Zimbabwe. *PLOS ONE*, DOI:10.1371/journal.pone.0160170, pp1-19
- Enkin, M. Keirse, M. and Chalmers, I. (2014). *A guide to effective care in pregnancy and child birth*. Oxford: Oxford University Press.
- Gelfand, M. (1985). *The Shona people*. Harare: Mambo Press.
- George, D. and Pamplona, R. (2005) *Enjoy it, foods for healing and prevention*. Barcelona: New life.
- Ganle, J. (2016). "How Intra-Familial Decision-Making Affects Women's Access to and Use of Maternal Healthcare Services in Ghana: A Qualitative Study." *BMC Pregnancy & Childbirth*, 1–17. <http://dx.doi.org/10.1186/s12884-015-0590-4>
- Glanz, K., Rmer, B. and Viswanath, K. (2008). *Health Behavior and health education theory research and practice*. San Francisco: Jossey- Bass.
- Hari, P. and Iqbal, W. (2015). *Culture and maternal health care: The good and the bad*. Barcelona: New Life.
- Kambarami, P. (2009). *The experience of women during pregnancy*. Not published.
- White, K. (2009). *An Introduction to the Sociology of health and illness*. London: Sage.
- Iqbal, A. Said, H. and Mansor, S. (2015). *The influence of social taboos on socialization of students: Evidence from a developing country*. *Mediterranean Journal of Social Sciences*, 6 (2).
- Nejimu, Biza, and Zepro, (2012). Food Taboos and Misconceptions Among pregnant Women of Shashemene District Ethiopia. *Science Journal of public health*, 3(3), 23-30.
- Olarenwaju O. F. (2013). Women empowerment as a determinant of investments in children in selected rural communities in Nigeria. *Multidisciplinary Journal Ethiopia*, 7(4) <http://dxdoi.org/104314/afrrrev.7i4.9.34>.
- Riang, N., and Broerse, (2017). *Culture and maternal health*. www.google scholar.maternalhealth//.studies9870.567. Accessed 15/06/2016.
- Sadomba. W. Z. and Wakandigara, A. (2014). *New methodology for African knowledge systems: Using taboos and proverbs as computers*. Harare: Research Council of Zimbabwe.
- Sadomba, Z. and Zinyemba, L. (2014). *Socio- cultural foundations of caregiver institutions: Lineages and community networks in Zimbabwe's health care systems*. *AJHAL*, 1(3), 20-31.
- Schott, J. and Henley, A. (2007). *Culture, religion and child bearing in a multiracial society*. London: MPG Books.
- UNICEF. (2014). *Maternal mortality*. Geneva: WHO.
- Seabrook, N. (1997). *Nutrition in general practice: giving advice to women*. Boston: Butterworth.
- Uzma E., Tamanna H., (2016). *Taboos and misconceptions associated with pregnancy among rural women in Aligarh*. *International Journals of Information Research and Review*, 3(12), 17-31.
- WHO. (2012). *Reduction of maternal mortality*. Geneva: WHO.
- WHO. (2014). *Maternal health care*. Geneva: WHO.
- Williams, S. (1993). *Nutrition in pregnancy and lactation*. Chicago: Mosby.
- Wiredu, K. (1996). *Cultural universals and particulars. An African perspective*. Bloomington: Indian University Press.
- ZIMSTATS. (2012). *Zimbabwe National Statistics*. Harare: ZIMSTATS.