

## INFLUENCE OF BROADCAST MEDIA MESSAGES ON AWARENESS, PERCEPTION AND ATTITUDE OF MATERNAL HEALTH AMONG REPRODUCTIVE WOMEN IN ILORIN

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ABSTRACT: Poor knowledge and insufficient information about maternal health among women have been identified as some of the factors responsible for increasing maternal mortality in developing countries. Since the broadcast media is regarded as one of the effective means of communication in such countries, this study examined perceived impact of broadcast media messages on knowledge, attitude and perception of maternal health among women in Ilorin. The objectives of the study were to (i) find out women's level of exposure to broadcast media messages, (ii) investigate the level of awareness of women about maternal health messages on broadcast media, (iii) examine women's perception of maternal health messages on broadcast media (iv) and investigate the influence of maternal health messages on broadcast media on women's attitude towards maternal health. Using survey quantitatively, a sample size of 382 respondents was selected for this study. While 400 copies of questionnaires were distributed to women in ancient and new settlements of Ilorin to anticipate return. Stratified sampling was used to allocate questionnaires equally between settlements while purposive sampling was used to distribute the questionnaires individually to female respondents. Data were analysed using frequency and percentage tables, mean, standard deviation, correlation and regression analysis.

The study made the following findings:

- 1. Women in Ilorin depend mostly on broadcast media as a major source of information on maternal health but they identified radio as more effective than television in disseminating maternal health messages (58.2%).
- 2. Besides talk show and health programmes, maternal health messages were rarely promoted through other programmes (31.4%, 41.2).
- 3. Women agreed to the statement that broadcast media positively change their attitude towards maternal health (M=1.9, SD=1.1).
- 4. Women used broadcast media as a major source of enlightenment on maternal health (M=2.2, SD=1.2).
- 5. Women expressed a positive perception about broadcast media messages on maternal health (M=2.3, SD=1.2).
- 6. Hypotheses confirmed that awareness of women on maternal health has positive influence on their attitude (R2=.552, P=<.000).
- 7. Perception of maternal health messages on broadcast media positively influences attitude of women towards maternal health r=.739\*\*.

The study concluded that broadcast media is popularly used by women and is a major source of enlightenment on maternal health issues but radio was identified as more effective than television in disseminating maternal health messages. It was therefore recommended that television should be properly used for maternal health campaigns for its advantage of sound and motion picture and that maternal health messages should be promoted through broadcast media programmes such as drama, documentary and news.

**KEYWORDS**: Broadcast Media, Women, Maternal Health, Awareness, Influence, Nigeria



#### INTRODUCTION

## **Background to the Study**

Broadcast media such as radio and television are engaged to give out information on health issues in order to inform, educate, influence, and change health behaviour of the public, putting into consideration great importance quality generally placed on health in human society. (Soola, 2009).

Onabajo (2000, p.3), states that the broadcast media report and interpret information about the society unit, highlighting its successes and failures, as well as its norms and values. It also provides cultural guidelines that help to teach the citizens how to live, how to behave and what is expected of them through various programme contents.

Kuewumi (2009, p.139) defines broadcasting as the planned provision of information, education and entertainment to a large and heterogeneous audience through two major media of mass communication of the radio or television. According to Onabajo (2000, p.2), broadcast audiences are able to access broadcast messages on the radio and television through their receivers which help in decoding such information.

The radio is popularly defined as a 'blind medium' of mass communication. It broadcasts messages through speech so delivered to appeal to imagination (chioma, 2014). Fleming (2010, p.85) defined the radio as a 'live predominantly personal' broadcast medium which is personified through the voice of its on-air personnel who project a personality, through which its listeners can: identify, connect and establish a personal relationship with the station.

Radio is considered to be an important medium for primary education in Africa. Because the medium is relatively cheap, it provides the opportunity for majority of Africans who are largely rural uneducated settlers to get broadcast information, education and entertainment (chioma, 2014).

The television on the other hand is considered to be the most powerful mass medium invented by man. Unlike the radio, television provides its audience the opportunity to view as well as listen to its messages. However, it is an expensive medium because of the high costs of acquiring a set, lack of electricity and weak coverage (chioma, 2014).

According to Zamawe, Banda and Dube (2016) people needlessly die every day as a result of inadequate access to health information or health workers which would have allowed them to make appropriate decisions. Therefore, access to reliable health information is a cornerstone for improved and sustainable health outcomes (Godlee, et al, 2015). In underdeveloped and developing nations, poor access to health information among women living in rural areas is a major problem. It undermines efforts to bring health care services closer to the people. Hence, innovative strategies are required to meet the goal of 'Health Information for All (HIFA) (A global campaign, 2015).

Women in developing countries like Nigeria seem to utilise reproductive health services more during pregnancy and for post-natal check-up and family planning or when faced with various gynecological problems (Arnolu, Orakwue & Oyeneyin, 2004). Hence, the need to provide relevant educative information capable of positively influencing the women to change their behaviour towards the preventive measure against maternal mortality.



Pregnancy period is regarded as a dangerous time for too many of the 9.2million women and girls who become pregnant in Nigeria each year. They face a lifetime risk of maternal death of 1 in 13 compared to 1 in 31 for sub-Saharan Africa as a whole (Wekesah & Chimaroke, 2017).

Wekesah and Chimaroke (2017) reported that Nigeria's estimated annual 40,000 maternal deaths account for about 14% of the global total. Nigeria is also the second largest contributor to maternal mortality worldwide, while India tops the chart. One Nigerian woman dies every 13 minutes from preventable causes related to pregnancy and childbirth. For each death, there are an estimated 30 to 50 women who will experience life-long conditions and disabilities such as obstetric fistula. The estimated average maternal mortality ratio in Nigeria is 814 for every 7133 live births (WHO, UNICEF, UNFPA, World Bank Group, and United Nations Population Division, 2015)

Recent statistics from the United Nations Inter-Agency Estimates indicate that from 1990 to 2015, the global maternal death ratio reduced by 44% from 385 deaths to 216 deaths per 100,000 live births (UNICEF, 2016). Although this is commendable but it is less than half the 5.5% annual rate needed to obtain the three-quarters reduction in maternal deaths that was targeted for 2015 in Millennium Development Goal 5 (UNICEF, 2016). Every region in the world experienced declines in levels of maternal death between 1990 and 2015, but levels in sub-Saharan Africa remain unacceptably high (Kalipeni, Iwelunmor & Toussaint, 2017).

Since mass media are tools for disseminating different types of information, exposure to the media has brought about positive health outcomes concerning family planning, awareness of HIV/AIDS, and a skilled birth attendant (SBA) at delivery (Asp et al, 2014). The preparations for child delivery by pregnant women, their families, and communities, are important recommendation of the World Health organization (WHO) to lessen maternal deaths in underdeveloped and developing countries (Bhutta, Cabral, Chan & Keenan 2012).

Mass media have been used to promote family planning initiatives for over five decades (Mwaikambo, Speizer, Schurmann, Morgan, & Fikree, 2011). Communication through mass media has been popular due to the opportunity that it affords to reach a large audience and address issues that are sensitive or culturally taboo in an entertaining and informative manner (Mwaikambo et al., 2011).

Communication is therefore a very vital tool for behavioural change because public health programmes invariably require behavioural change; behavioural change cannot occur if the specific target audience are not aware of the messages disseminated to them (Alexander, 2005; Thornson, 2006). The fact is that if people are aware of the messages that pose dangers to their health, they might change their bad habits. (Hajara, 2014).

#### **Statement of Problem**

A woman living in sub-Saharan Africa has a 1 in 16 risk of dying during pregnancy or childbirth as compared to 1 in 3,700 in North America (United Nations Millennium Project 2005). Close to 60% of world maternal deaths occur in Africa and at 500 maternal deaths per 1,000 live deaths, the region has the highest maternal mortality rate ratio (MMR) in the world (Trends in maternal deaths: 1990 to 2013 by WHO, UNFPA, UNICEF, and the World Bank estimates). This paints a very dire picture. There are several factors responsible for maternal deaths which according to United Nations Fund (UNFPA) include negligence to family



planning, HIV and AIDS, unwanted pregnancy, finance, lack of education and ignorance. There should be a renewed push to educate and enlighten those involved especially the women in these areas on maternal health and this can be achieved through television and radio (broadcast media).

Omoloso, (2009, p. 183) stated that; "television, radio and print advertising can attract; Television entertainment programmes and movies exert enormous impact over our ideas, beliefs, values and behaviour". Recognizing the powerful tool of the media as having strong impact on their audience, television and radio as a media of entertainment and information seeks to keep the woman educated, enlightened and informed.

Researchers have specifically identified education and sensitisation of women as vital aspects which requires continual attention in order to reduce maternal death in Nigeria as these enable women make the right health decisions concerning pregnancy and delivery (Idowu, 2014; Okereke et al 2013).

In Africa, a continent where health service is marred by low economic power and literacy rate, the enormous role of the media in disseminating health information is very crucial. According to WHO's Media Centers World Health Statistics, the life expectancy in Africa is 64 years. The prevalence of communicable and non-communicable disease is high (2014). Formerly when a disease like HIV/AIDS was difficult to control, beside other communication methods, the media played great role in awareness creation through different means.

The under-utilisation of Antenatal Care services (ANC) by pregnant women is borne out of the assumption that most of the pregnant women are not adequately exposed to health information from the media (Kistiana, 2009). Research has shown that frequent media exposure, usage and awareness on ANC services can lead to a reduction in maternal mortality (Sood, Sengupta, Shefner-Rogers, & Palmer 2009; Kistiana, 2009; Paek, Lee, Salmon, & Witte, 2008). Several studies (Kistiana, 2009; Sood et al., 2009; Paek, Lee, Salmon, & Witte, 2008; Ngilangwa, 2007; Morton & Duck, 2001; Navaneethan & Dharmalingam, 2002; Valaente & Saba, 1998) have confirmed the fact that exposure to the media can lead to greater awareness of health-related issues.

Despite the above fact that media exposure leads to greater awareness of health-related issues, most pregnant women in Nigeria seem not to be adequately exposed to the media for awareness on the importance of utilising antenatal health services. Even where the women gain access to the media, there seem to be insufficient educative programmes on health to make them attend ANC (Hajara, 2014). Several studies have reported that inadequate antenatal care for pregnant women is highly associated with negative ANC consequences and poor results (Raatikainan, Heiskanen, & Heinonen, 2007). Cox (2009) also found that insufficient antenatal care delivery including communication of health promotion advice among other factors was significantly associated with adverse pregnancy outcomes.

Several factors such as illiteracy and poverty among others tend to limit women's media exposure and usage. Most pregnant women rely only on radio programs that are produced in their local languages and cannot read newspapers or magazines because of a literacy barrier (Hajara, 2014).

Television as another medium of information requires electricity to operate and in most cases it seems that there is inadequate supply of electricity. For those women who have access to



radio, the timing of the radio programmes may or may not be suitable for them due to their busy household chores. Again, the type of programmes aired on ANC may not be the women's preference. Similarly, the few media programmes on health are not adequately enough to make the women attend ANC. Therefore, all of these factors tend to compound and limit their access, exposure and usage of the media, which consequently will affect their awareness on utilising antenatal health care services (Hajara, 2014).

It is against this background that this study examines the perceived impact of broadcast media messages on knowledge, attitude and perception of maternal health among women in Ilorin so as to find out the effectiveness of such media in promoting women's positive behaviour towards maternal health services.

## **Objectives of the Study**

The main objective of this study is to find out how far broadcast media in Ilorin have been engaged in knowledge, attitude and perception of maternal health through health programmes.

## The Specific Objectives are:

- 1. To find out women's level of exposure to broadcast media messages in Ilorin.
- 2. To investigate the level of awareness to maternal health messages on broadcast media among women in Ilorin.
- 3. To examine women's perception of maternal health messages on broadcast media.
- 4. To investigate the influence of maternal health messages on broadcast media on women's attitude towards maternal health care.

## **Research Questions**

The study sets out to provide answers to the following questions:

- 1. What is the level of awareness of women in Ilorin to broadcast media messages?
- 2. What is the level of awareness of women to maternal health messages on broadcast media?
- 3. How do women in Ilorin perceive maternal health messages on broadcast media?
- 4. To what extent are women in Ilorin influenced in their attitude towards maternal health care by their exposure to maternal health messages on broadcast media?

#### Significance of Study

This research is important because the world Health organisation 2015 reports shows that approximately 99% or 302,000 of maternal mortality globally occurs in developing nations in which sub-Saharan Africa constitutes the majority. For Nigeria, UNICEF 2014 observes that every day, Nigeria has maternal deaths of about 2,300 children who are under five-year-olds and 145 women of child bearing age.



Fifteen countries, including Nigeria have maternal mortality ratio of at least 1000 per 100,000 live births, of which all but Afghanistan and India are in sub-Saharan Africa. Since broadcast media, is an important organ of public education, this study, is expected to shed insights on the role being played by the media in educating the women on the maternal health care so as to reduce the level of maternal deaths in our society.

This work, therefore, is also expected to draw attention to the important role which the broadcast media can play in enlightening the women on ways of preventing maternal mortality amongst them.

The findings of this study are expected to aid media and health practitioners, policy makers, advocates, other stake holders and government agencies to re-focus their strategies and media activities geared towards the prevention of mortality among women.

It is hoped that this study will provide an insight into the effectiveness of broadcast media as to whether maternal health information sent through it do make a difference in promoting positive behavioural change on maternal health care among women.

This study is also expected to contribute to the literature on issues of maternal health care and broadcast media; future researchers on the related topics may also find useful as a reference material.

#### **Scope of the Study**

This study was limited to issues on maternal health and maternal health messages on broadcast media, other forms such as print media, social media, etc. was not included in this study. For this study, the respondents were drawn from ojo-oba, balogun-fulani, tanke, and basin in Ilorin, kwara state. The respondents were strictly women within the prime age of child bearing. Data was collected at one point in time, within one week (July 25<sup>th</sup> -31<sup>th</sup> 2018).

#### **Definition of Terms**

**Influence**: means encouraging the development of policy, practice or service provision, shaping legislation and altering behaviour. (OECD-DAC, 2002).

**Broadcast Media**: refers to that form which uses audio-visual instruments (television and radio) to produce and disseminate content to listeners and viewers (Iredia, 2015).

**Broadcast Media Messages:** this is the material contained in the message transmitted through radio or television, which the source expressed. It is made up of ideas expressed, information reported, and thoughts to be shared (Sambe, 2005).

**Maternal Health:** maternal health refers to the health of women during pregnancy, childbirth and the postpartum period (WHO/maternal health, 2017).

**Awareness:** Darwin (2003) defines awareness as "a capacity to act". This makes the important distinction between the behavioural potential, which cannot be directly observed, and the observable performance or behaviour.



**Perception:** this is the process by which we utilise external sensory messages in relation with other internal conscious and unconscious workings of the brain to make sense of the world (Barry, 2002).

**Attitude:** is means a state of readiness shaped through the experience and influences the response of individual towards the stimuli. It is the precursor of the behaviour and varies from favourable to unfavourable through neutral (Bhargava & Pathy, 2014).

Reproductive: means the act of being able to reproduce living things.

**Women**: a woman is a female human from the age of 18 and above. It may also refer to a person's gender identity (Federal Ministry of Health of Nigeria, 2003).

**Ilorin:** is the capital of kwara state in north central Nigeria. As of 2006 census, it had a population of 296,821, making it the 6<sup>th</sup> largest city by population in Nigeria. (National Population Commission, (NPC).

## **Organisation of Chapters**

This study comprises five chapters, the first is introduction and is made up of the background of the study, statement of problem, research objectives and questions, significance of study, scope of study and definition of terms.

The second chapter is Literature review which consists of the conceptual review, theoretical review and empirical review.

The third chapter is Methodology, and it describes the research design, research method, population of study, sample size, sampling technique, data collection process and instruments the data analysis approaches.

Chapter four is Data analysis, where the data is presented, analysed and interpreted quantitatively.

The fifth chapter is Summary, conclusions (of the findings) and recommendations (based on study).

#### LITERATURE REVIEW

#### Introduction

Marshall, (2010) defined literature review as "a systematic method for identifying, evaluating, and interpreting work produced by researchers, scholars, and practitioners". It provides a summary of the best available research from previously published studies related to a specific topic (Green, Johnson, & Adams, 2006). The synthesis of the literature reviewed provides an informed perspective or a comprehensive overview of the knowledge available on the topic (Baker, 2016).

Hence, in this chapter, previous works related to the topic of this study are reviewed. To actualise this purpose, the review is divided into 3 sections, namely:



- 1. Conceptual review
- 2. Empirical review
- 3. Theoretical Framework.

## **Conceptual Review**

#### **Importance of Health Care**

Healthcare means paying attention to health-related issues to accomplish a satisfactory general level of wellness that strengthens productive, normal life for individuals affected, for instance pregnant women and their unborn babies. The provision of healthcare in Nigeria, is on the concurrent legislative list, this means that both the federal and state governments can improve and support the well-being of citizens by making provision such as healthcare delivery infrastructure such as hospitals, medical equipment, support personnel, medical consumables necessary in proffering solution to the medical needs of citizens (Odesanya,Hassan & Olaluwoye, 2015).

The American Heritage Medical Dictionary (2008) described healthcare as the avoidance, care, and treatment of illness and the control of mental and physical well-being through the services rendered by the medical and health practitioners. It can equally be described as the preservation and restitution of health through medication and prevention of disease, by skilled and certified medical practitioners (Merriam Webster's Online Dictionary, 2014).

Health care is provided at three levels: primary healthcare, secondary healthcare and tertiary healthcare. Primary health care is a kind of public service to the citizens at a lower rate through the public health system; self-funded and certified private practitioners in the private health care system can equally offer it, but above what the government may levy.(odesanya et al., 2015).

According to WHO (2014), primary healthcare is basically healthcare that is low-cost, easily obtainable by all in the community and fully unrestricted, and whose aim is to achieve better health for all and sundry.

Primary healthcare (PHC) In Nigeria is accessible at community-based healthcare facilities, such as primary healthcare centres. Primary healthcare centres are proximate to the people, and serve as a first point of contact for medical consultation by residents in the communities they are stationed. At this stage, primary care providers (PCPs), be they doctors, nurses, qualified community/public health professionals, attend to important health needs relating to high blood pressure, vaccination, immunisation, hypertension, including maternal and child health-related services like family planning. It is part of a comprehensive healthcare support plan of governments throughout the world. The primary care givers refer patients to these care givers (Torrey, 2014).

Secondary healthcare services are services offered by medical practitioners that do not have first contact with patients. It is the care offered by a certified expert who has more experience than the professionals working at the primary healthcare centre. This type of health care places emphasises on specialisation and is at the mid-level. For example, oncologists specialize on cancer treatment, cardiologists treat patients with heart problems; while



gynaecologists focus on the health needs of women. Medical practitioners define the care offered at this level, general hospitals in Nigeria come under this level (Torrey, 2014).

Tertiary healthcare is a higher level that offers special care. This involves the expertise of highly specialised medical equipment and help of practitioners in areas such as plastic surgeries, vaginal reconstruction, renal dialysis, surgery to separate conjoined twins, chemotherapy, and other complications related to health. Teaching hospitals in Nigeria are at this level (Torrey, 2014).

#### **Maternal Health**

Jegede, (2010) and Idowu, (2013) defined health as a process of perfect physical, mental and social wellness and not simply the absence of disease or ailment.

WHO (2010) defined maternal health as the "physical wellbeing of a mother during pregnancy, childbirth and postpartum". Idowu (2010:13) noted that, "maternal health includes prenatal care and postnatal care of mother and child up to the age of five years".

Since nature leaves no room for vacuum, preservation and increase of the human race rely on the ability of humans to procreate. The population of the human race is a manifestation of the number of people belonging in it. Be it male or female. Therefore, to avoid the extinction of humanity, it is important that the mature males and females biologically reproduce, that will in turn multiply (Odesanya, Hassan, & Olaluwoye, 2015).

This way, the human race will continue to expand without going into extinction. Men and women of reproductive age developed sexual reproductive cells called gametes. Gametes are responsible for human population growth. The process of reproduction begins with the male, continues and completes in the female. The process of becoming a mother begins when a man has intimate sexual relations with the woman, during intercourse fast swimming spermatozoa leave the male's testicles and swims towards the ovaries of the woman. At this point, Fertilisation takes place, which eventually leads to pregnancy (Odesanya et al., 2015).

During the 21<sup>st</sup> century, presidents of the then 189 but now 193 members-states of the United Nations (UN) came together in New York headquarters of the UN for the year 2000 United Nations Millennium Summit, at the conference the member- states adopted the United Nations Millennium Declaration, they vowed to achieving a set of eight development-related goals (Odesanya et al., 2015). On this issue, Adeniran (2009) recalled, their pledge was to alleviate the suffering of men, women, and children from the abject and inhumane state of poverty" (p.30). In the same vein, Odesanya et al., (2015) noted that, their pledge was to wage war against conditions that hinders human development. They vowed to focus more on humanity and poverty. To achieve this, they set a deadline for year 2015, the deadline date is far gone, and most of the goals have not been achieved. The fifth goal out of eight goals is maternal health an important developmental issue, especially for African countries such as Nigeria; the objectives of this goal include: To reduce maternal deaths by three-quarters between 1990 and 2015; and to achieve global access to reproductive health by year 2015.

Maternal health means the health of women, it includes all types of care that a woman can get when she is pregnant (antenatal care), at childbirth and after (postnatal care). Statistically, in Africa, a woman dies from pregnancy-related problem every minute, adding up to about 529,000 every twelve months. Many of such deaths occur in developing countries, where



women have a 1 in 16 chance of dying in pregnancy or at childbirth complications, compared to a 1 in 4,000-risk in developed countries; this is the difference between poor and rich countries of any health indicator (UNICEF, 2014).

Becoming pregnant is the most dangerous thing a woman does in her life time and 289,000 women die each year during pregnancy and childbirth (WHO, 2013).

According to UNICEF (2014), in Nigeria about 2,300 children under- five-year-olds and 145 women of childbearing age during pregnancy die every single day. This makes Nigeria the second largest contributor of maternal death rate in the world. India tops the chart. Mojekwu and Ibekwe (2012) observed that while an annual fall of 5.5 per cent death ratios between 1990 and 2015 was mandatory to attain MDG 5, figures published by WHO, UNICEF UNFPA and the World Bank show an annual decrease of less than 1 per cent. Although UNICEF acknowledged the efforts of Nigeria in improving maternal health care and reducing maternal deaths, the UNICEF'S judgment was that the plan of the Nigerian government in improving maternal health care moved at a very slow pace (Odesanya et al 2015).

Cooke and Tahir (2013) noted that, in Nigeria, there are substantial inequalities among regions; the northern region has the highest maternal death rates than the prosperous south. The awfully poor North East has a projected maternal death rate of 1,549, more than five times the global average. Poverty, poor of investment in health systems, low educational levels, and poor infrastructure have each resulted to the large difference among regions; cultural factors that give women limited autonomy and access to formal health care system and a little or no say in household and personal decision making also adds to it, the extent of the women's authority are constantly lower than in most of Nigeria's southern states.

According to a survey carried out by World Health Organisation (WHO) in Nigeria, between 2005-2012, more women 53% received antenatal care from experienced health practitioners at least once than 45% of women who received care during pregnancy per every 10,000 population (WHO, 2013, P. 102).

Results from the findings concerning maternal health in Nigeria's 2013 National Demographic and Health Survey (NDHS) found that maternal health care utilisation by mothers depended on whether they were urban or rural dwellers, or whether literate or not (Butawa, Tukur, Idris, Adirin & Taylor, 2010).

Pregnancy, child birth and other maternal health related issues and practices across Nigeria are particularly often intertwined with the traditions and cultural practices of various communities within the country (Igberase, 2012). Ndep (2014) however, argued that reduction of Nigeria's unacceptably high maternal mortality status required a paradigm shift in maternal health related socio-cultural norms and practices. Indeed, studies have indicated that culture has implications for maternal health behaviour and practices in Nigeria (Ajaegbu, 2013; Ogunlenla, 2012; Ononokpono, & Odimegwu, 2014). These studies identify harmful cultural beliefs and practices in various parts of the country as impediments to health care seeking thus exposing women to complications in pregnancy and other causes of maternal mortality. Undoubtedly, knowledge about such harmful cultural practices can help to point out areas that need to be addressed in maternal health promotion and sensitisation (Omoloso, Ahmad, & Ramli, 2017).



There have been instances of leadership on maternal health in the North, in 2003, Kano state in particular was the first in Nigeria to introduce free maternal health care services for women, but it has not always been maintained. The violent assaults by the extremist group, Boko Haram, have compelled many health and development workers to close down operations in the North, and public health practitioners are scared that prolonged insecurity would very likely destroy the achievements made in the last decade (Cooke & Tahir, 2013).

Maternal health statistics according to states in Nigeria showed that, most women had babies in Kano, with figure 3,024, Katsina and Jigawa, came second with 1,703 and 1,594 births respectively. Ekiti had the lowest number of births. Comparatively, Osun state recorded the highest percentages for antenatal 98.2% and neonatal tetanus protection (94.1). The survey showed that, three states had the lowest birth rate (five years preceding the survey). Low birth rates were recorded in Ekiti (200), Territory Abuja (209), and Bayelsa (233) (Odesanya et al, 2015).

#### **Maternal Mortality**

Maternal mortality is the loss of women from pregnancy- related issues. It can arise at the time of pregnancy, at childbirth or after. Having children in Africa can be very difficult, as a result of the present level of healthcare delivery to citizens in the continent. Better experienced than imagined is the agony that women have to withstand during before and at childbirth alone; the loss of a woman during childbirth is always a blow to her family (Odesanya et al., 2015).

Childbirth in developing countries like Nigeria may be life threatening. Literally every minute, a woman dies from preventive complications caused by pregnancy. This adds up to approximately half gazillion mortality every year. In Nigeria, maternal death rate reaches 3,200 women (number of women per 100,000 births that die within 42 days after delivery). In Nigeria, the death rate is higher in the north. The maternal death rate is even higher in places where many women have many babies in little span of time without proper feeding (malnutrition), poor hygienic conditions and no access to medical treatment from skilled health attendants (http://www.maternal-health.org/nigeria/maternal-health-in-nigeria/index. html).

UNICEF in 2012 declared that sub-Sahara Africa and Southern Asia face the greatest challenges in child survival, and currently account for more than 90 per cent of global underfive deaths.

Maternal and infant mortality is worse in sub-Saharan Africa than any part of the world. The WHO 2015 report showed that approximately 99% or 302,000 of maternal mortality occur in developing nations in which sub-Sahara Africa constitutes the majority. For Nigeria, UNICEF (2014) observed that every day, Nigeria records about 2,300 loss of under-five-year-olds and 145 women of childbearing age.

According to Mojekwu and Ibekwe (2012), the causes of maternal deaths generally in Nigeria, can be classified into medical factors, health factors, reproductive factors, unwanted pregnancy and socioeconomic factors. According to the authors, medical factors include direct obstetric deaths, indirect obstetric deaths and unrelated deaths. Direct obstetric deaths result from worsening of some existing conditions (such as hepatitis) by pregnancy. Health services factors include deficient medical treatment, mistaken or inadequate action by



medical personnel, lack of essential supplies and trained personnel in medical facilities, lack of access to maternity services and lack of prenatal care. Other risk factors for maternal deaths in Nigeria include maternal age, illiteracy, inadequate use of maternal health services and grand multiparty.

Nigeria, in 1995 had the third topmost number of maternal mortalities in the world (around 45000 deaths). By the year 2000, for every 100,000 live births recorded, about 800 women passed away during childbirth. Out of the 27 million women of childbearing age at that time, about 2million did not stay alive either during pregnancy or the process of childbirth. In 2008, as stated by the UN report, the number was at 1000 and 1500 deaths per 100,000 live births. The state of the world children reports 2009 stated that 1 out of 9 global maternal mortality took place in Nigeria (Ogunjimi, Ibe, & Ikorok, 2012).

On the state of maternal health in Nigeria, Cooke and Tahir (2013, p.7) observed that Nigeria recorded the 10<sup>th</sup> highest maternal death ratio in the world, the UN estimates shows that about 630 women die per 100,000 births, a higher percentage in Afghanistan or Haiti, and only slightly lower in Liberia or Sudan. An estimated 40,000 Nigerian women pass away during pregnancy or at childbirth yearly, and another 1 million to 1.6million suffer from severe disabilities from pregnancy and birth related causes yearly. About 8 women in Nigerian have an average total of 5.7 childbirths in their life, with each pregnancy exposing them to the dangers of maternal health complications. A woman's risk of dying from pregnancy related complications or childbirth in Nigeria is 1 in 29, as against sub- Saharan average of 1 in 39 and the global average of 1 in 180. In advanced regions of the world, a woman's risk of maternal mortality is 1in 3,800.

Lowering the social plague menacing and frightening the female populace is the fifth goal of the United Nations' Millennium Development Goals (MDGs), which the UN introduced in 2000 as global programme to alleviate the sufferings of men, women, and children from the horrible and inhumane conditions of poverty" (Adeniran, 2009:30). Ogunjimi et al., (2012) noted that they expected to achieve that by paying attention, resources, and action on improving the welfare of all citizens. Closely related to these objectives are to reduce maternal deaths by two-thirds between 1990 and 2015; and to promote the right to use reproductive health facilities and services within the same period. Nigeria belongs to the UN and is a participant of the MDGs. (Odesanya et al., 2015).

In 2013, the projected figure of maternal mortality globally was 293,000, 99% of these deaths took place in underdeveloped countries (Kassebaum, et al., 2014). The continent of Africa is unevenly affected; about 17 of the 20 countries with the topmost maternal death ratios globally are in Africa (Kassebaum et al., 2014). Most maternal loss can be prevented and the goal of preventing maternal deaths has received increasing attention and devotion. The goal to reduce Maternal mortality was included as one of the Millennium Development Goals (MDG 5), with the intention of decreasing maternal deaths by 75% from 1990 to 2015 (WHO, 2005). However, development towards this goal has been extremely slow in many ways in sub-Saharan African countries, especially Nigeria.

Nigeria is one of the six countries that contributes 50% of the total maternal deaths globally, decrease in maternal mortality ratio (MMR); number of maternal loss per 100,000 live births) have been incoherent. The 2014 national data estimates of maternal deaths for Nigeria are 576 loss per 100,000 live births 95% CI: 500–652 (NPC and ICF International 2014). Earlier



estimates of maternal deaths in Nigeria allied from 608 loss per 100,000 live births (95% CI: 372–946) in 2008, to 473 loss per 100,000 live births (95% CI: 360–608) in 1990 (Hogan et al., 2010).

According to Graham et al., (2008) maternal death is complicated to measure particularly in areas where the highest affliction exists. Figures on the number of loss of women of childbearing age, their pregnancy status at the time of demise and the medical cause of death is needed for precise measurement. This can be extremely difficult to get in low-income environment where vital figures are often incomplete or do not exist. Estimates are most times based on hospital data, which may not mirror the maternal dangers within communities.

Community based studies using direct estimation to measure maternal deaths face lots of challenges such as high sample sizes needed to produce trustworthy results, and the fact that most maternal loss happen at home and follow up is therefore time consuming and expensive. Indirect methods for measuring maternal deaths have been established to bring about practical, low cost alternatives for predicting the maternal deaths in areas where information on vital proceedings are not regularly collected. The Sisterhood Method for predicting MMR, includes collecting information on maternal mortality among sisters of respondents, is the best approach for such location because it requires a few number of respondents than cohort studies, and data collection is fast and easy (Sharma,Brown, Kainuwa, Leight & Nyqvist 2017). The Sisterhood Method has been endorsed and used successfully in African and Asian countries (Sharma et al 2017). Conversely, this method does not give a current prediction of MMR for the year the survey is carried out and cannot be used to measure development in a short period of time (Sharma et al 2017). Longer time developments in MMR, on the other hand, have been appraised using the Sisterhood Method (Beltman et al., 2011).

In Nigeria, there is momentous difference in the MMR between regions in the country, with the highest ratios in the north (Adamu, Salihu,Sathlakumar & Alexander 2003; Ezugwu, Onah, Ezugwu & Okafor 2009; Omo-aghoja, Aisien, Akuse, Bergstrom & Okonofua 2010; Abe, Omo-aghoja 2008; Doctor, Olatunji, Findley, Afenyaadu, Abdulwahab & Jumare 2012; Doctor, Findley, Afenyadu 2012). The tremendously poor health outcomes for mothers in Northern Nigeria are directly connected to factors such as poor health infrastructure, illiteracy and large distances from health facilities (Alabi, Doctor, Jumare, Sahabi, Abdulwahab, & Findley 2014). Skilled birth attendance (SBA) is awfully low with only 13% of women delivering with qualified practitioners (Doctor, Findley, Ager, Cometto, Afenyadu & Adamu 2012). Besides, important occurrences registration is nearly non-existent in the north and most maternal loss occurs at home and are undisclosed. This puts forward that maternal deaths data gathered at the facility level may not be reliable, and community-based method to evaluate MMR such as the Sisterhood Method may be useful.

Earlier studies predicting MMR in Northern Nigeria through the use of the Sisterhood Method disclosed an MMR of 1,049 maternal loss per 100,000 live births (95% CI: 1021–1136) in Zamfara State while 1,271 maternal loss per 100,000 live births (95% CI: 1152–1445) was recorded in Zamfara, Jigawa, Katsina and Yobe States (Doctor, Olatunji, Findley, Afenyadu, Abdulwahab & Jumare 2012; Doctor, Findley & Afenyadu 2012).



## Women's Autonomy and Husband's Participation in Maternal Health

Autonomy is a multidimensional concept and therefore difficult to quantify. It can be defined as "the ability, technical, social, and psychological" to obtain information and to use it as the basis for making decisions about one's private concerns and those of one's intimates" (Thapa & Niehof, 2013).

Early literature on women's autonomy focused on education, occupation, and demographic characteristics like age at marriage and age differences between spouses as proxies for women's autonomy. More recently, autonomy has been defined as women's enacted ability to influence decisions, control economic resources, and move freely (Thapa & Niehof, 2013).

Women's autonomy, though measured in different ways, has been associated with maternal health care utilisation (Ahmed, Creanga, Gillespie, Tsui 2010; Baral, Lyons, Skinner, & van Teijlingen, 2010; Mistry, Galal, & Lu, 2009).

Gupta (1995) cited in Thapa and Niehof (2013) provided an overview of women's autonomy and health outcomes from a life-course perspective. They concluded that women of childbearing age have the lowest level of autonomy, which had negative implications for their own health and the health of their children. Other studies have highlighted the significance of improving women's autonomy to improve maternal health service utilisation in developing countries (Ahmed et al., 2010; Furuta & Salway, 2006).

In 1993, the International Conference on Population and Development (ICPD) Programme of Action also noted that "improving the status of women also enhances their decision-making capacity at all levels in all spheres of life, especially in the area of sexuality and reproduction" (Thapa & Niehof, 2013).

In 2008, approximately 358,000 women died due to pregnancy and childbearing causes and 83% of these deaths occurred in South Asia and Sub-Saharan Africa (WHO, UNICEF, UNFPA, & The World Bank, 2010).

Although maternal mortality slightly declined in every country of the world the gains are still too little (Hogan, Foreman, Naghavi, Wang & Makela, 2010). Low utilisation of maternal health care services during pregnancy at delivery and in the postnatal period contributes to high maternal mortality and morbidity (Prata, Sreenivas, Vahidnia & Potts, 2009).

A low level of women's autonomy is considered a factor that contributes to poor maternal health service utilisation among women (Sharma, Sawangdee, & Sirirassamee, 2007).

Women have an inferior position and have considerably less power than their male counterparts in making household decisions and even in decisions concerning their own healthcare which puts them in a position to depend on their husbands for their health and well-being. Despite these facts, the role of husbands in maternal health is largely ignored by researchers and policy makers. The idea of increasing men's involvement in reproductive health care has received attention since the late 1990s (Thapa and Niehof, 2013).

Much of the work on male involvement has concentrated on issues like family planning (Goldscheider & Kaufman, 1996; Prata et al., 2009), abortion (Rasch & Lyaruu, 2005;



Silverman, Decker, MacCauley, Gupta, Miller, 2010), sexually transmitted infections (Brewer, 2005), and breast-feeding (Earle, 2000; Stremler & Lovera, 2004).

Comparatively few studies have been conducted on male involvement in maternal health care. Husbands' approval of and involvement in ANC has been shown to have a positive influence on ANC utilisation (Biratu & Lindstrom, 2006). Husbands' help during pregnancy was associated with improved pregnancy health of rural Nepalese women (Wasti, Lim, & Pathak, 2012). A study in rural Bangladesh (Story et al., 2012) found that husbands' involvement was associated with professional care during delivery. In Pakistan, husbands' approval was an important determinant of institutional delivery (Agha & Carton, 2011). In India, a husband's knowledge of reproductive health and his presence during ANC were associated with professional care during delivery (Chattopadhyay, 2012). Mullany (2006) found that lack of knowledge about maternal health among Nepalese husbands impedes positive involvement in maternal health care. Husbands can also influence maternal health care utilization by contributing to developing a birth plan (Kakaire, Kaye, & Osinde, 2011). A randomised controlled trial on the impact of involving male partners in antenatal health education programmes yielded increased postnatal health service utilisation among women who were educated along with their husbands (Mullany, Becker, & Hindin, 2007). Involving husbands in health education programmes enhances communication between partners and promotes health seeking behaviour (Turan, Nalbant, Bulut, & Sahip, 2001). The studies suggest that male involvement is an important aspect of maternal health care utilisation.

#### **Mass Media and Maternal Health**

The Nigerian people have over the years recognised the central role of the media in their lives and in relation to their society (Sambe, 2005). Sambe (2005) postulates that next to God, is perhaps the press that legitimise what Nigerians consider to be the truth in any given situation.

Mass media no doubt are instruments for disseminating information, scouting the environment for what is known as SWOT- strength, weakness, opportunity and threats and tell it to the society.

Since the mass media are instruments through which messages are disseminated from sources to receivers, the mass media are saddled with the responsibility of creating awareness about issues in the society and calling the attention of people to whatever constitutes danger, terror and fear to our comfort. Maternal health and mortality are topics of general concern by all; it is expected to be one of the issues of interest to the mass media, who have been certified with the ability to change attitude (Odesanya et al., 2015).

Odesanya et al (2015) believed that the mass media such as radio, television and the other media can be useful in changing people's attitude. They further stated that mass media can be an influential instrument not only for creating knowledge and understanding about innovations but also for motivating aspirations in people of more information, and for facilitating their efforts to apply the information to their own attitude. Similarly, the use of entertainment-education method, which uses the element of entertainment of the mass media to disseminate intended messages, is on the other hand, becoming appealing to communication experts. This method uses songs and dances to pass important messages to the audience.



## **Broadcast Media and Health Programmes**

Broadcast media are transmitters which generates waves (electronic impulses) that carry voice transmissions or messages which make up radio and television programmes. These waves travel through the air, carrying the programmes to homes and other locations where they are received through radio and television sets (Okunna, 1999). In Nigeria, research evidence shows that the use of radio as a medium of information is truly widespread, even among rural populations (Okunna, 1992; Okigbo, 1995; Sobowale & Sogbanmu, 1984). It has, therefor, been identified as the best mass medium at the country's level of development for education of rural dwellers (Moemeka, 1981:33). Okigbo (1995:57) points out some of the advantages of radio. According to him, the attraction radio has for rural dwellers are derived from its cheap price and cost of operation. Radio is easily portable and can be used by both the educated and illiterate. At the state level, some radio stations broadcast more than 80 per cent of their programmes in the vernacular.

In addition to the similarities and advantages which television shares with radio, the broadcast medium of television has an added advantage of combining sound with vision qualities to make it "one of the most powerful forces in the history of civilisation" (Sandman et al., 1976).

Television as a tool for development has a distinct advantage over radio because of its combination of sight and sound. Television has been found to be effective in situations where radio is limited, like in cases requiring demonstration (Atakiti & Ojomo, 2015). Akinfeleye (2003:46) notes that at the initial stage of television for development in Nigeria, the basic philosophical foundation was for education. He however, observed that it is being used today for national development and mobilisation of the citizens for developmental efforts on family planning, primary health care, and many more.

Television health messages can be in form of soap operas or drama series, jingles, campaigns, talk shows and magazine format (Atakiti & Ojomo, 2015).

An example where television has been used for health educational purposes is the Nigerian drama "SHUGA". The drama focuses on issues encountered daily including HIV prevention. In Ilorin, for example, the state television, Kwara Television features a number of health programmes. Some of these programmes include Health line, which educates viewers on different health issues; documentary on AIDS and malaria; including jingles on Lassa fever, Ebola etc. Its federal television station Nigerian Television Authority (NTA) features "Mother Care" this programme focuses on women and it is a programme mainly to educate women on maternal health.

Television stations outside Ilorin metropolis such as Television Continental features Health Wise, Health center and Healthy living; African Independence Television (AIT) features *Health Talk on Mondays by 6:45pm.* Whilst OGTV features Health Scope and Ilera: a Yoruba programme that translates health (Atakiti & Ojomo, 2015). Miller (2010: 24) asserts that the different genres of programmes and range of factual and fictional output on television channels appear to offer vast choice and to address the needs and desires of different viewers.

Radio over the years has proven to be effective. Gebreel and Butt, (1997) cited by Farhana & Ahmed, (2008) noted that in Afghanistan, a radio drama serial carrying messages vital to the well-being of the population, backed up by more detailed information in reinforcing radio



programmes and cartoon magazine, proving effective in increasing people's knowledge of immunisation and other subjects.

In Myanmar for example ABCID media development project worked with Myanmar Radio and television (MRTV) to produce an eight-part, radio drama series on maternal health issues. Ma Ma Oo is a radio drama series about real life issues in a village setting in Myanmar. The drama aims to provide citizens with entertaining and engaging radio content about maternal and child health (MA MA Oo, 2016).

In Nigeria, radio stations used to educate listeners on health through its programmes. For example, Radio Kwara features feminine matter; omo kaola, a Yoruba programme that focuses on health issues; kiddies' health etc. Harmony FM features health monitor; NFDAC and your health; Afinjuwojo, a Yoruba programme designed at correcting negative tendencies that are harmful to the health; Abiro and Ifeto siomobibi, Yoruba programmes that focuses on maternal health and family planning respectively.

#### **Mass Media and Maternal Health Promotion**

Health promotion is aimed at enabling people to have greater control over health as well as the improvement of their health (WHO, 2017). It involves engaging and empowering of individuals and communities towards the adoption of healthy behaviours and reduction of health risks and morbidities (Rural Health Information Hub [RHIH], 2017). Omoloso, Ahmad and Ramli (2017) identified three core tenets of health promotion; the first relates to health as a state of well-being which can be facilitated when individuals learn and adopt skills and traits that prevents them from being vulnerable to "disease-inducing events and situations".

The second tenet is premised on the belief that improved functionality is beneficial to everyone; hence there should be promotion of well-being for all people. Thirdly, health promotion recognises the significance of contextual factors; thus "promotion of the individual's well-being is best viewed within the context of the family and family within the context of its community" (Omoloso, Ahmad and Ramli 2017). Health promotion is fundamentally comprehensive as it involves diverse players and adopts multisectoral approaches while it is set to respond to diverse global developments including cultural values and traditions which have either direct or indirect bearing on health (Kumar & Preetha, 2012; WHO, 2008).

Navaneethan and Dharmalingam (2002) submitted that well-informed women are in a better position to receive ANC services. This shows that exposure to mass media promote health-related behaviour in utilising maternal health services. Therefore, health conscious women may be more likely than other women to initiate ANC early, maintain a regular schedule of visits, and search for prompt medication like birth controls, inter-conception care as well as proper feeding (Walford, Trinh, Wiencrot, & Lu 2011; Alexandra & Kotelchuck, 2001).

Buttressing the above, findings of a study on Impact of SIAGA Campaign on Maternal and Neonatal Communication Knowledge of Danger signs and birth preparedness in West Java, Indonesia revealed that awareness through the channels of mass communication leads to well informed decisions about severe bleeding as a danger sign as well as increased birth preparedness and antenatal behaviors (Sood, Sengupta, Shefner-Rogers & Palmer 2009, Valante & Saba, 1998). On their path, Valante and Saba (1998) in a study of mass media and



interpersonal influence in a reproductive health communication campaign who found that the mass media has a great influence of speeding social change, while Kistiana (2009) in Indonesia found that women's exposure to media had a strong connection to ANC uptake and other maternal health services. Therefore, the hypothesis:

*H0:* Women's awareness of broadcast media messages on maternal health does not influence their attitude towards maternal healthcare.

In a study on prenatal health promotional needs of immigrant women in Winnipeg, Mugweni (2009) identified lack of knowledge of available resources as the main contributor to nonattendance at ANC clinics. The participants in the study expressed the need for increased awareness of ANC services. Which could be achieved through the media, Therefore, comprehensive health promotion through raising awareness using the mass media could help to improve uptake of ANC services .Thus the media perform the necessary functions of providing information that empowers users to action and are an alternative source people rely on for health information about new health risks, disease outbreak and healthy living The WHO (2005) also recognised that the media both print (Simkhada et. al., 2006). (newspaper, magazines etc.) and the electronic (radio and TV) have very important roles in driving public opinion and actions to raise their awareness regarding promotion of maternal and child health care. The media have also been recognised as powerful mechanisms to promote the awareness and education of public issues and can probably influence decisions of government and policy makers on health policies and medical care (Evans & Ulasevich, 2005). Therefore, the mass media play a central role in informing the public about health and medical issues (Thorson, 2006). Hence, the mass media has the ability to create an informational environment where development is stimulated (WHO, 2005). As Agudosi (2007) maintained, one major way of promoting health care is by engaging in a mass media campaign, which is believed, will reach the target audience and change their behaviours. Thus, the hypothesis:

**H0**: There is no positive relationship between women's perception of broadcast media messages on maternal health and their attitude towards maternal health care.

## **Theoretical Framework**

#### **Theory of Planned Behaviour**

The Theory of Planned Behaviour an extension of Fishbein and Ajzen's Theory of Reasoned Action (Fishbien & Ajzen, 1975) has been the predominant theoretical method to guide works on health-related attitudes for three decades. The theory is known to research scholars, students, practitioners and policy-makers (Ajzen, 1985).

The theory posits that behaviour is determined by behavioural intention, which is in turn predicted by Attitude to the behaviour, Subjective Norms and Perceived Behavioural control (PBC) (Ajzen, 1988).

Attitude is predicted by instrumental beliefs about the consequences of performing the behaviour (e.g. 'it will save time), weighted by outcome evaluations of the desirability of those consequences (e.g. 'saving time would be a good/bad thing'). A more recent development to the TPB is the idea that attitude consists of two components; affective attitude reflecting enjoyment or pleasure associated with performance of the behaviour, and



cognitive attitude reflecting perceived benefit (e.g. whether the behaviour is judged to be good, beneficial and wise). There is confirmation that affective attitude is the better predictor of intention to perform a health behaviour (Payne, Jones & Harris, 2004), although, Paisley and Sparks (1998) found both types of attitude to be equally predictive of expectations to reduce fat intake.

Subjective Norms are predicted by normative beliefs about whether significant 'referents' (e.g. mother, partner) would approve of one performing the behaviour in question, weighted by one's motivation to comply to behave in a manner which would meet each referent' approval. PBC is thought to influence behaviour both directly and through behavioural intentions. PBC can be defined simply as perceived ease of performing or refraining from a particular behaviour, or as the product of two sets of factors, control beliefs about one's ability to perform or refrain from the behaviour in various circumstances and control frequency: how often one is in those circumstances (Stead, Mackintosh, Tagg & Eadie, 2002).

To put simply, the theory of planned behaviour predicts that human activities are regulated by three forms: readily accessible beliefs about the possible outcomes of the behaviour and the evaluations of these outcomes (behavioural beliefs), readily available beliefs about the normative expectations and actions of important referents and motivation to comply with these referents (normative beliefs), and readily available beliefs about the existence of certain parameters that may help or obstruct the execution of the perceived power and behaviour of these parameters (control beliefs). In their respective aggregates, behavioural beliefs produce a favourable and unfavourable attitude toward the behaviour; normative beliefs result in perceived social pressure or subjective norm; and control beliefs give rise to perceived behavioural control. In combination, attitude toward the behaviour, subjective norm, and perception of behavioural control lead to the formation of a behavioural intention (Ajzen, 2012). Usually as a rule, the more favourable the attitude and subjective norm and the higher the perceived control; the stronger the person's intent to exhibit the behaviour. Finally, given a sufficient degree of actual control over the behaviour, people are expected to carry out their intentions when the opportunity arises. Intention is thus assumed to be the immediate antecedent of behaviour. However, because much behaviour pose difficulties of execution, it is useful to consider perceived behavioural control in addition to intention. Perceived control influences perseverance in the face of difficulties and, to the extent that it is veridical, it can serve as a proxy for actual control and contribute to the prediction of behaviour (Ajzen, 2012).

First, no postulations have been made in the theory of planned behaviour that behavioural, normative, and control beliefs are developed in a logical, impartial way or that they rightly represent what is real. Beliefs mirror the messages people have in relation to the execution of a given behaviour, the messages are most often than not untrue and inadequate; it may rest on impractical premises, which are tendentious by self-serving motives, or fail to mirror what is real. Precisely, this is a far cry from a logical actor. More so, no matter how individuals get at their behavioural, normative, and control beliefs, their attitude toward the behaviour, their subjective norms, and their impression of behavioural control follow unquestionably and steadily from their beliefs. It is only in this sense of direction that behaviour is said to be planned. No matter how untrue, biased, or unreasonable, beliefs produce attitudes, intentions, and behaviours in line with these beliefs (Geraerts et al., 2008).



Second, there is no postulation in the theory that individuals critically and consistently review all their beliefs every time they are about to perform a behaviour. On the other hand, theory of planned behaviour postulates that most behaviours in day to day life are exhibited without much cognitive effort. In agreement with contemporary theorising in social psychology (Chaiken & Trope, 1999; Caver & Scheier, 1998; Petty & Cacioppo, 1986). It is assumed that the degree of information people processes to perform a behaviour differs along a continuum, from shallow to deep (Ajzen & Sexton, 1999).

In-depth processing is stored for high significant decisions and behaviours in unsual situations that require thoughtful consideration of the behaviour's likely outcome, the normative outlook of significant others, and the obstruction that may be faced. When it comes to day to day activities such as eating breakfast, watching the news on television, taking vitamin supplements to improve health conditions, going to work, and so on. No critical thinking is required. Attitudes, subjective norms, and perceptions of control as well as intentions in line with these kinds of behaviours are presumed to guide behaviour completely without cognitive effort and conscious awareness (Ajzen & Fishbein, 2000).

The TPB has been widely applied to health behaviours including diet Dennison and Shepherd, 1995; Conner, Martin, Silverdale 1996; Povey, Conner, Sparks, James, shepherd 2000), contraceptive use (Jamner, Wolitski, Corby, Fishbein 1998), attendance for health screening (Rutter, 2000).

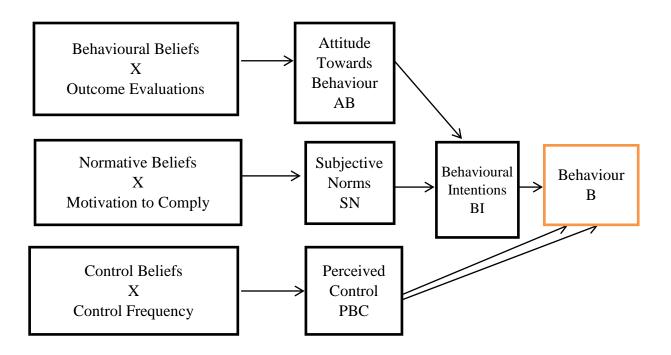


Figure 1: The TPB Model

(Source: Conner and Sparks, 1995)



## Relevance of TPB to this Study

The theory of planned behaviour can be used to design interventions that target health-enhancing individual behaviour that may be socially unacceptable such as condom use, smoking cessation, self-check-ups, voluntary testing, medication adherence and other behaviours that warrant individual decisions but have a varying level of social acceptability (WHO, 2008).

Individuals are much more likely to intend to have healthy behaviours if they have positive attitudes about behaviours, believe that subjective norms are favourable towards those behaviours and believe they are able to perform those behaviours correctly. Also, a person's intention will be stronger when they have all three of the above than when they have one. The stronger a person's intention to have a healthy behaviour, the more likely that person will actually perform that behaviour. But it is important to remember that many outside factors and restrictions can prevent an individual from performing a behaviour, even when they have an intervention to do so (http://people.Umass.edu/aizen/tpb.html).

To eliminate barriers to positive behaviour, implementers need to study the beliefs that control the subjective norm, the intention to perform a particular behaviour and the actual behaviour that is traditionally performed. Understanding barriers to positive behaviour and considering additional skills that individuals might need to succeed in taking action is extremely important for behaviour change programme design. Formative research, knowledge, attitude and behaviour (KAB) assessments should be performed prior launching programme activity because the results can help health presenters focus on issues that present the most barriers to behaviour change (http://people.Umass.edu/aizen/pdf/tpb.questionnaire .pdf).

It is up to health presenters to decide which areas the interventions will be the target, eliminating barriers to individual behaviour change or promoting social attitudes favourable to change (WHO, 2008).

With regard to the issue of maternal health campaigns in Ilorin, the theory of planned behaviour is a valuable tool for exploring such important aspects as the people's readiness to act or not, their perceived severity of the situations, perceived benefits of mother and child health care and perhaps confidence in one's ability to take action.

#### **Criticism of Theory of Planned Behaviour**

Theory of planned behaviour has been highly criticised. The harmony between parsimony and validity has been interrogated by critiques; is a theory of voluntary behaviour established on just four analytical concepts fully elaborated? For example, the theory has been condemned for its focus on rational reasoning, excluding unconscious impact on behaviour (Sheeran, Gollwitzer & Bargh, 2013) and thefunction of emotions besides predictable affective outcomes (Conner, Gaston, Sheeran, & Germain, 2013). More so, the nature of the Theory of planned behaviour does not help to understand the effects of behaviour on cognitions and future behaviour (McEachan et al., 2011; Sutton, 1994).

Critiques have also interrogated the hypotheses got from the model whether they are open to empirical fabrication, or just common-sense statements that cannot be fabricated (Ogden, 2003; Smedslund, 1978). Results under ceteris paribus conditions proposed that people will



most probably act in ways they enjoy less, feel incapable of doing or do not plan to do appears unbelievable and would cause disbelief on the information rather than the underlying theory. Ogden (2003) discovered that researchers of studies with results against the assumptions of theory of planned (null correlations between variables hypothesised to be closely related) barely interrogates the validity of the theory, but takes into consideration other justifications such as the operationalization of their study measures. Critiques have always focused on the insufficient predictive validity of the TPB.

Studies revealed that many of the variability in perceived behaviour is not reported for by measures of the TPB. Specifically, the issue of 'inclined abstainers', individuals who come up with an intention and fail to act, has been a significant limitation of the TPB that is yet to be addressed by the theory (Orbell & Sheeran, 1998).

The issue with the theory of planned behaviour is not that it is not giving adequate explanations about the difference in behaviour; some of the theory's postulations are obviously untrue. Specifically, the mediation propositions in the theory of planned behaviour are in disagreement with evidence. Beliefs, for instance are found to predict behaviour over and above intentions (Araújo-Soares et al 2013; Conner et al., 2013). The hypothesis predicting that all theory-external effects on behaviour are reconciled through the theory of planned behaviour is empirically and conceptually untenable and false. For instance, there is consistent proof that physical health, mental health, age, socio-economic status, and features of the environment forebodes objectively measured physical activity when theory of planned behaviour predictors are controlled for (Sniehotta et al., 2013).

The theory of planned behaviour explicate an accurate, clearly stated and statistically tested model for explaining how behavioural, normative and control beliefs influence attitude, subjective norm and PBC (using multiplicative composites of expectancy beliefs and outcome evaluations). French and Hankins (2003) have demonstrated that this approach is deceptive and have proposed different methods.

There is enough proof that habit strength (Gardner, De Bruijn, & Lally, 2011), motivational measures like self-determination, anticipated regret and identity (Conner & Armitage, 1998) or self-regulatory measures which includes planning (Carraro & Gaudreau, 2013) regularly proposed behaviour over and above theory of planned behaviour measures. Nudging, that is., making slight changes to the choice architecture through varying the salience, cost and support of behavioural choices outside of the person's knowledge, can bring about behavioural change without influencing intention or PBC (Marteau et al, 2011). Many moderators of the relationship between behaviour and Theory of planned behaviour measures have also been recognised (e.g. Rhodes & Dickau, 2013). The theory of planned behaviour appear to be more predictive among young individuals, who are fit and affluent and also when proposing self-reported behaviour over a short time (McEachan, Conner, Taylor, & Lawton 2011; Sniehotta et al., 2013), which is not consistent with populations where behavioural change theory is needed. Paying attention to correlations between measures over time is not adequately acceptable test of theory, specifically, when there are obvious possibilities for testing more robust designs (Weinstein, 2007). The theory was equally criticised for lacking rigorous factorial experimental studies to support the theory of planned behaviour. Experimental tests have been so rare because different from Social Learning Theory (Bandura, 1977) the theory of planned behaviour did not propose how cognitions change, therefore, questioning whether the theory is a behaviour change theory. Making it



difficult to come up with replicable priori interventions to improve attitudes, subjective norm and PBC, thereby impeding independent tests. Unclear propositions enables apologists to brush off studies bringing evidence in contrast with the theory of planned behaviour such as inadequate operationalisations of the theory and decide that there is an absence of evidence, rather than proof falsifying the propositions of the theory in question.

Where experiments have been attempted, observations have not been in agreement with the theory of planned behaviour, giving the most sufficient evidence for its lack of appropriateness as a theory of behaviour change (Chatzisarantis & Hagger, 2005; McCarty, 1981; Sniehotta, 2009).

One must admit that the fact that amidst all the criticisms and literal battles against the theory, the theory of planned behaviour has been a great story in itself. Thousands of papers have been written and many thousands of projects carried out on the basis of this theory.

## **Empirical Review**

Mass media reportage of maternal health issues has drawn the interests of a number of scholars such as Bankole, 1994; Firmansyah et al., 2001; Adeniran, 2009; Abubakar et al 2013.

One of such studies is that of Firmansyah, et al., (2001), they discovered that few journalists have had experiences in reporting the health of women, or have a network of knowledgeable sources of news on health of women. This led them to carry out a research on a project (FRONTIERS) in Indonesia with the aim of making the journalists to step up report more on critical reproductive issues. Results from the project showed a little rise (7%).

A total of 22 journalists from both national and regional media took part in the project. The researchers, in September, 1999, interacted with health editors from print media and experts in reproductive health. A workshop was organized for journalists in January, 2000 to increase their understanding and awareness of reproductive health and to improve their writing articles using research findings. Training modules that used different methods, role play, simulation, testimony, field visits were used to examine different techniques for gathering information and also practice writing articles on topics of interest. Findings showed that the project had a positive impact on the reportage of reproductive health in Indonesian print media (120 articles out of 1,836). News articles were written more, the feature articles. This means that coverage of maternal health issues increased in the media after some interventions, although the figure was still low (Firmansyah, et al., 2001).

Abubakar et al., (2013) carried out a study with the aim of finding the extent of media coverage of cervical cancer, also a maternal health issue, they purposively picked nine copies of national weekly newsmagazines which was qualitatively, using content-analysis. Random sampling method was used to select editions from each month, which represented three per month from TELL and The News Magazines to get a sample size of 18 editions. The researchers focused on the nature of the story, its focus, position, source and length. They discovered a very low level of reportage of maternal health in magazines. The contents of the magazines were largely on politics, business and advertising. Thus, their results were no different from that of Firmansyah and his colleagues.



Adeniran (2009) investigated media reportage of the millennium development goal (MDGS), which includes maternal health issues. The researcher selected two Nigerian newspapers namely: The Punch and The Guardian. The contents of the newspapers were content-analysed. The researchers used editorials, straight news stories, news analysis, features and opinions as basis of analysis for stories in the newspapers selected over a span of six month. It was discovered that MDGS on hunger and poverty, global partnership, and environmental sustainability were reported most. While issues on maternal and child health and universal primary education were reported less. He equally discovered that out of 22,750 stories published across 182 editions of the punch newspaper very few burdened on maternal health. (As only 592 (2.6%) were MDGS). In the same vein, the Guardian newspaper with publications over 25,480 stories across 182 editions had a slightly higher portion of (3.3%). The total number of stories in the newspaper used was 48,230 only about 2.9% were about MDGs. The findings of this study are similar to other research works discussed earlier.

According to a study conducted by Asp et al., (2014) on the relationship between exposure to mass media and birth preparedness among women living in Mbarara District, southwest of Uganda showed that high media exposure had no significant relationship with birth preparedness of the female respondents interviewed in the study (Asp et al, 2014).

As a result of the findings of the studies, they recommended that, mass media must double their efforts in the coverage of maternal and child health; because mass media have the capacity to shape opinions and mold behaviour (Asp et al, 2014).

Yahaya, Fadairo and Ogundele (2009) studied Attitude and the Effect of Health-Based Entertainment-Education Strategies on the Knowledge and Behaviour of women in Lagos State they discovered that information, entertainment and education are very significant to women. Hence, health presenters on broadcast media should always add elements of information, education and entertainment in their health and developmental messages targeted at women to attract their attention and change their attitude. They found and concluded from their study in Lagos that women had a significant improvement in awareness and a positive change in their health behaviour as a result programmes on family planning on radio and television.

Gbenga and Amoo (n.d) equally discovered that the common reasons that impede the use of antenatal care services are lack of funds and serious traditional practices. They discovered that there was also high degree of resistance to family planning use in the environment as a result socio-cultural and economic determinant, most especially religious beliefs, low literacy levels poverty, misinformation, and poor communication among couples.

Atakiti and Ojomo (2015) on the influence of television programme on maternal health in Nigeria inter-land found that while TV health programmes had a moderate effect on women in the two local government areas in Lagos state, their level of exposure is equally low. The study came to a conclusion that women health programmes should be a blend of not just educational but also entertainment (edutaiment)

The study on Nepal by Suwal (2001) examines the main determinants of infant mortality using a logistic regression model and finds that among all variables analysed parity, place of residence, immunisation, and ethnicity are important factors. Black, Morris and Bryce (2003) stated that malnutrition, infectious and communicable diseases are often linked with child



mortality. More so, causes of child mortality differ substantially across countries. According to WHO (2005) 73% of child mortality is due to pneumonia, diarrhea, malaria, measles, sepsis, preterm delivery and asphyxia, including 54% responsible for four communicable diseases. Titaley, Dibley, Agho, Roberts (2008) use multilevel logistic regression to investigate the determinants of neonatal deaths in Indonesia. They discovered that the odds of survival depend on region, number of deliveries assisted by skilled delivery attendants, employment status of the parents, birth interval and postnatal care.

A number of studies have been undertaken to explore the determinants of infant mortality in Bangladesh. The study used both bivariate and multivariate analysis. Kamal (2012) the study discovered strong negative relationship between maternal awareness and neonatal deaths in Bangladesh. Maternal age, birth order, religion, and antenatal care utilization are also significant determinants of neonatal mortality in Bangladesh. Hong and Ruiz-Beltran (2007) used a multivariate survival model to investigate infant's survival in Bangladesh. They discovered that receiving prenatal care during pregnancy increases infant's survival when other factors are in check. However, many explanatory factors such as maternal education, nutritional status, household access to hygienic toilet, location of residence included in the analysis are not found significant. Rubayet, Shahidullah, Hossain, Corbett, Moran, Mannani, Martin, Wall, Pfitzer, Mannani, Syed (2012) identified community initiatives, donor funding, which increase the reportage of key interventions which includes trained birth attendance and postnatal care as significant factors of neonatal mortality in Bangladesh. Rahman (2013) cited in Hossain, (2015) used the Cox proportional hazard model to examine the factors affecting child survival in Bangladesh. He found that antenatal care utilization, place of delivery, and mother's awareness are important factors of child deaths in Bangladesh. The study by Pervin, Moran, Rahman, Razzaque, Sibley, Streatfield, Reichenbach, Koblinsky, Hruschka, Rahman (2012) indicates that antenatal care utilization is linked with improved facility-based delivery, which can improve perinatal survival in Bangladesh.

Women empowerment has been recognized as one of the most significant factors of development and has been identified as one of the developmental goals of national and international agencies (Malhotra and Schuler, 2005). The theoretical model by Eswaran (2002) revealed that if the bargaining power of the wives relative to their husbands improves, it might bring about a decline in fertility and the mortality rates of children. In a district-wise analysis of the census data of India, Murthi, Guio and Dreze (1995) cited in Hossain, (2015) showed that variables related to women's empowerment (specifically,female literacy and female labour force participation) highly explained differences in child deaths, fertility, and gender inequality in child mortality. Kravdal (2004) observed that the lower mortality of children is linked to women's autonomy. There exists a bivariate relationship between a high mean autonomy level and women without child mortality in Egypt (Hossain, 2015). Hossain and Hoque (2015) discovered that women empowerment contributes highly to the antenatal care utilization in Bangladesh.

Women empowerment seems to be related to the fertility and child mortality in developing countries. Duflo (2012) highlighted three dimensions of women empowerment: (i) education, (ii) participation in decision making process, and (iii) involvement in economic activities. An educated woman is expected to be more knowledgeable and be more conscious and can make better decisions for herself and family (Hossain and Hoque, 2015). She may be well informed about how the health care system functions and can get better access to it. Further, she can easily interact and communicate with health service providers to get required care for her as



well as for her newborn (Bloom, Wypii & Gupta 2001). That is, an educated woman is expected to make use of all available resources and information effectively which reduce the risk of child morbidity and death.

In developing countries, like Nigeria, where the man is normally the head of a family and also makes important household decisions; the wife experiences no equity in this process (Holland & Hogg, 2001). For example, men most often control the financial matters no matter who earns the cash and make decisions regarding major household purchases. This means financial vulnerability and lack of independence of a woman and more dependent on the man. In this situation, a woman who is in need of health care services has to rely on her husband's decision and willingness to spend on such cares (Hossain and Hoque, 2015). It can be proposed that the higher the involvement in the household decision making process by women, the higher the likelihood of receiving heath care, which may reduce the death of a child in a developing country.

# **Research Hypotheses**

This study raised the following hypothetical statements:

**H0**: There is no positive relationship between women's perception of broadcast media messages on maternal health and their attitude towards maternal health care.

**H0:** Women's awareness of broadcast media messages on maternal health does not influence their attitude towards maternal healthcare.

#### **Chapter Summary**

This chapter gave a review of literature on the importance of healthcare. Maternal health and concepts related to maternal health, as well as empirical reviews of scholars related to the study were provided while theory of planned behaviour served as the theoretical backings for this study.

#### RESEARCH METHODOLOGY

#### **Research Method**

This study adopted the survey method to acquire necessary information from the respondents. Survey method According to Kowalczyk (2003) is a means of collecting information from a large population on their understanding, opinion, feelings, beliefs, or experience about a specific topic using questionnaires.

#### **Research Design**

Research design as defined by Creswell (2012) is strategic plan and structural technique of investigating and analysing data. The research design used for this study is a single cross-sectional research design. Cross-sectional research design was adopted to enable the researcher examine certain variables and interrelationships and develop explanation (Creswell 2010). The design was used to investigate the impact of broadcast media exposure



on the promotion of maternal health care among women in Ilorin. The researcher adopted this method because it is fast and relatively cheap, as the data was gathered at one point in time.

#### **Area of Study**

The study was carried out in Ilorin, the capital of Kwara state. The choice of Ilorin as an area of study is because Ilorin city is an interplay of the urban and semi urban dwellers with a population of 296,821, making it the 6th largest city in Nigeria. (National Population Commission).

## **Population of the Study**

The population of study was women of reproductive age (from eighteen and above). According to the results of the 2006 population census of Nigeria as published by the National Population Commission (NPC), the population of women in Ilorin is 393,140, while those that fall within eighteen years and above amounted to 200,265.

#### Sample Size

A total number of 382 women were selected for this study, according to Krejcie and Morgan table (1970). The figure is sufficient to the study of the population at 95% confidence level and =5% error margin. The figure was rounded up to 400 in order to make provisions for the missing data. The sample was picked in accordance with the settlement pattern of the city which consists of the urban and semi-urban popularly referred to as Ancient and New Settlements of Ilorin. The questionnaires were divided into two equal parts to ensure equal representation of the two settlements as their population according to settlement was not available at the National Population Commission (NPC). A total of 400 copies of questionnaire were distributed to anticipate return.

### Sample Technique

Stratified sampling method was used to allocate the questionnaires equally between ancient (Balogun Fulani and Ojoba) and new settlements (Tanke and Basin). (Source: Ilorin West Local Government Secretariat). While purposive sampling was used to distribute the questionnaires to individual respondents who are women between the ages of 18 and above. The stratified method is considered by the researcher to ensure that each settlement was represented in the study.

Ilorin was divided into two strata for this study and the strata are Ancient and New settlements (source: Ilorin West Local Government Secretariat). Hence the questionnaires were divided equally among each settlement. Purposive sampling is considered because the researcher purposely gave questionnaires to women of reproductive age.

Settlement	No of Distributed questionnaires	No of Returned Questionnaires	Missing Copies of Questionnaire
Balogun-Fulanin(ancient)	100	64	36
Oja-oba (ancient)	100	66	34
Tanke (new)	100	97	3
Basin (new)	100	91	9



#### **Data Collection Instrument**

The data for this study was gathered through the use of self-administered questionnaire. The questionnaire was constructed in a close ended format. Major constructs in this study were measured with 5-point Likert scale items adapted by the researcher through extensive consultation with relevant literature and project supervisor. The questionnaire was made up of 5 sections in line with the research questions.

# **Section 1: Demographic characteristics**

This section contained questions about respondents' personal data.

**Section 2: Respondent's exposure to media** this section asked about the type of media respondents are exposed to and how often they use their preferred media.

## Section 3: Knowledge of maternal health messages on broadcast media

This section asked about the level of exposure of the respondents to maternal health messages on broadcast media.

## Section 4: Perception of broadcast media messages on maternal Health

This section assessed respondents' perception of maternal health messages on broadcast media.

# Section 5: Attitude of respondents to broadcast media messages

This section asked about the respondent's' attitude after being exposed to maternal health messages on broadcast media.

#### **Operational Definition of the Measurement Variable**

**Broadcast media:** This refers to that form which uses audio-visual instruments (television and radio) to produce and disseminate content to listeners and viewers (Iredia, 2015).

**Broadcast media use:** This refers to the pattern of usage of the broadcast media among the respondents to elicit information. It is measured by the number of hours per-day and days in a week used to watch television or listen to radio.

**Awareness of maternal health messages**: This refers to the usage of broadcast media by the respondents to access maternal health information. This was measured by statement using 5 point scaled item on the questionnaire, which are Strongly agree, Agree, Undecided, Strongly Disagree, Disagree.

**Perception of maternal health messages**: This is the process of making meaning out of the contents of various maternal health messages the respondents are exposed to on broadcast media. This was also measured by statement using a 5-point scaled item on the questionnaire.

**Attitude:** This means the messages that have affected their attitude towards maternal health care. This was measured by statement using a five-point Likert scale on the questionnaire, which are Strongly agree, Agree, Undecided, Strongly Disagree, Disagree.



## Validity and Reliability of the Research Instrument

According to okoro (2001) validity refers to the accuracy of an instrument i.e. how well it measures what it is supposed to measure. To test for validity of the instrument, the researcher adopted content validity through moderation by the project supervisor and other lecturers of the department of the Mass Communication, university of Ilorin.

The pilot test conducted between May 25<sup>th</sup> and 3<sup>th</sup> of June 2018 helped in refining the questionnaire based on the result of the pilot study. On the reliability of the questionnaire items, 40 copies of the questionnaire were distributed at Tanke, oko-oba. Which was excluded from the main study. 38 out of 40 properly filled questionnaires were used for the analysis. According to Creswell (2014) a scale is reliable if it reaches 0.60 0.70. Thus, the result of the pilot test was subjected to cronbach alpha reliability test.

Table 1: Cronbach Alpha Reliability Test for Pilot

Variables	No of Items		Reliability Test
_		N	Alpha
Exposure to maternal health messages	7	38	.953
Perception of media messages on	7	38	.961
Maternal health			
Impact	7	38	.981

The result of the reliability test shows that this study achieved a statistical acceptable internal consistency as all its constructs recorded Cronbach alpha's above the recommended 0.60 and 0.70.

#### **Data Collection Process**

The questionnaires for this study were distributed personally to sample respondents in Ilorin between July 25<sup>th</sup> and July 31th, 2018. Each respondent completed the questionnaire based on the stipulated instructions. A copy of the questionnaire is in (Appendix A). Out of 400 questionnaires distributed, a total of 318 valid questionnaires were used for the analysis, while 82 copies were found to be invalid or unreturned.

#### **Data Analysis and Interpretation**

To achieve the objectives of the study, descriptive data analysis which summarised the data collected in frequency and percentage, mean, standard deviation, and charts was adopted and inferential statistics which consists of correlation and regression was used to answer the hypotheses. Data were given in summary tables and were analysed in line with the study objectives. Statistical package of social sciences (IBM SPSS 21.0) was used to aid the analysis of the data.

#### **Ethical Concern**

Fishman (2009) provides the following definition of plagiarism:

Plagiarisms occurs when someone



- 1. Uses words, ideas, or work products without proper identification of the source
- 2. Attributable to another identifiable person or source
- 3. Without attributing the work to the source from which it was obtained
- 4. In a situation in which there is a legitimate expectation of original authorship
- 5. In order to obtain some benefit, credit or gain which need not be monetary (P.5)

Plagiarism, which could attract serious sanctions and legal actions, was avoided in this study. Articles, journals and textbooks used in this study were properly cited and referenced.

During the process of gathering data, the researcher never manipulated the data, the data analysed for this study was giving willingly by the respondents. The data gathered was treated with great anonymity and confidentiality.

## **Chapter Summary**

This chapter provided detailed description and justification of the research methodology used. In this case, survey research method was used and the population of the study is women of reproductive age in Ilorin.

## DATA ANALYSIS, PRESENTATION AND DISCUSSION OF FINDINGS

#### **Demographic Profiles of the Respondents**

The demographic characteristics of respondents in this study include: age, marital status, educational status, and occupation. Table 4.2.1 presents respondents' demographic characteristics.

**Table 4.2.1: Demography of Respondents** 

Demographic profile	Frequency	Percentage
Age Group		
18-29	60	18.9
30-39	194	61.0
40-49	55	17.3
49 and above	9	2.8
Total	318	100.0
Marital Status		
Single	78	24.5
Married	206	64.8
Divorced	16	5.0
Widowed	17	5.3
Others specify	1	0.3
Total	318	100.0

Researchers field work, 2018



<b>Educational status</b>		
No formal education	65	20.4
SSCE	47	14.8
Degree	183	57.5
Postgraduate	23	7.2
Total	318	100.0
Occupation		
Business	159	50.0
Civil/public servant	111	34.9
Others specify	48	15.1
Total	318	100.0
Do you have a child of your	r own?	
YES	273	85.8
NO	45	14.2
Total	318	100.0

Researchers field work, 2018

Results from table 4.1 shows that more than half of the respondents (61.0%) fall between 30-39 years, while those between the ages of 18-29 came second with (19%) of the respondents and those between 40-49 came third (17.3%). The analyses indicate that respondents that fielded responses are within the prime age of child bearing. The majority (65%) of the respondents are married, while about one quarter (25%) are single. Divorced and widowed women formed (5%) of the respondents respectively. This shows that most of the respondents are potential mothers by virtue of the fact that they are married. This does not rule out the possibility of other single women being productive, for the fact that some of them are widows and divorced. The results indicate that respondents (56%) who filled the questionnaire are degree holders while about a quarter of the respondents (20.4%) have no formal education. On occupation, half of the respondents (50%) are into private businesses while (35%) of the respondents work under the government (civil/public servants) and most of the respondents (86%) have kids of their own.

#### **Data Cleaning and Screening**

Frequency and percentage analysis were run to identify and remove invalid data, 400 questionnaires were distributed but at the end, only 318 were proven to be valid after the screening.

#### **Missing Value Analysis**

According to Tabachnick and Fidell (2007) missing rate of 5% or less is non-significant Although there is no rule on the acceptable number of missing values in a data set for making a valid statistical inference, this study had more than 5% missing questionnaires.



Table 4.3.1: Missing Value

Latent Variables	Missing values
Women	82
Total	82 out of 400 data points
Percentage	20.5

#### **Response Rate**

After administration of questionnaires, only 318 of 400 were retrieved, which makes 79.5 per cent of the total sample size.

**Table 4.3.2: Response Rate** 

Response Rate	Frequency	Percentage
Number of returned	360	90
Valid filled questionnaires	318	79.5
Invalid	42	10.5
Number of distributed questionnaires	400	100

## **Answers to Research Questions**

#### RQ1 what is the level of exposure of women in Ilorin to broadcast media messages?

#### Media Usage

In this section, the patterns of media usage are highlighted. It includes their preferred medium of exposure, the frequency of correspondents and the type of programmes they are exposed to. The results are presented in table 4.4.1 with the pictorial representation in the following chart.

Table 4.4.1: Respondents level of media exposure

Media exposure	Frequency	percentage
Television	112	35.2
Radio	185	58.2
Others specify	21	6.6
Total	318	100.0

Source: Researchers field work, 2018

The result shows that the respondents were users of radio and television as majority 58.2% of the respondents said they listen to radio, 35.2% watch television while a few of them 7% said they are exposed to other types of media (i.e. social media). The result above is consistent with the findings of Nwagbara, (2017) in her study that majority of the midwives (95%) believed the mass media were very useful in disseminating vital information on the health of



mothers and that of their children. The result is also consistent with the findings of Meekers et al (2007) on the impact of radio communication campaigns on reproductive health in Malawi that 79% of women listen to radio while 11% of women watch television.

Table 4.4.2: Respondents frequency of broadcast media exposure

Frequency of exposure	Frequency	Percentage
Always (7days)	125	39.3
Often (5-6days)	89	28.0
Sometimes (3-4days)	63	19.8
Rarely (1-2days)	41	12.9
Total	318	100.0

Source: Researchers field work, 2018

On the frequency of exposure, (39.3%) of the respondents said they use broadcast media daily, while more than a quarter (28.1%) said they use broadcast media often i.e. between 5-6days a week, 19% of respondents said they use broadcast media between 4-6days a week. while (13%) rarely use broadcast media. The results show that women are exposed to broadcast media on a daily basis.

Table 4.4.3: Respondents hours of broadcast media exposure

Hours spent	Frequency	Percentage
Less than 15mins	60	18.9
15-30mins	98	30.8
31-1hr	10	3.1
More than 1hr	150	47.2
Total	318	100.0

Source: Researchers field work, 2018

On hours in a day of exposure, (47.2%) of the respondents use broadcast media daily for more than 1hour while a quarter (31%) use broadcast media 15-30mins a day. This implies that there is high frequency of exposure to broadcast media among respondents. The researcher therefore submits that women spend time on broadcast media.



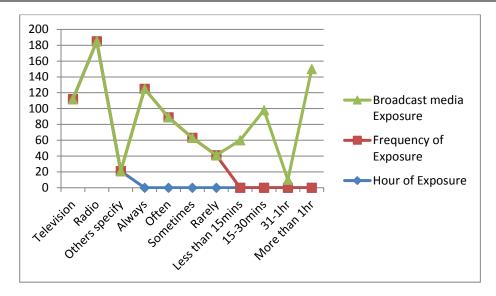


Figure 2

Table 4.4.4: Respondent's level of exposure to broadcast media programmes

Programmes	Frequency	Percentage
News	37	11.6
Talk show	88	27.7
Feature	40	12.6
Advert	110	34.6
Health programmes	41	12.9
Others forms	2	0.6
Total	318	100.0

Source researchers field work, 2018

On the programmes respondents are exposed to, on broadcast media, (35%) said they are exposed to advert, a little above a quarter (28%) are exposed to Talk show, while 13% of the respondents are exposed to health programmes and talk show. The result indicates that women are exposed to programmes on broadcast media.

Table 4.4.5: Broadcast media programmes that contains maternal health messages

Programmes	Frequency	Percentage
News	47	14.8
Talk show	100	31.4
Feature	9	2.8
Advert	11	3.5
Health programmes	131	41.2
Others forms	20	6.3
Total	318	100.0

Source researchers field work, 2018



Findings from the research showed that a fewer portion of the respondents get maternal health messages on Adverts (4%), News (15%), Feature (3%) and other programmes (6.3%) while Talk show (31.4%) and Health programmes (41.2%) had an almost average portion. It can be deduced that women from Ilorin are highly exposed to health programmes on broadcast media. This is probably so because talk show and Health programmes are prominent among respondents viewed programmes on broadcast media

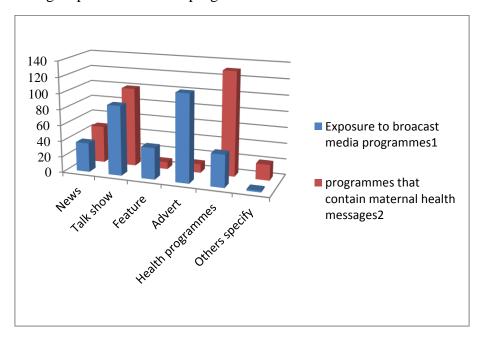


Figure 3

# RQ2 what is the level of awareness of women to maternal health messages on broadcast media?

Table 4.5: Respondents' awareness/ exposure of broadcast media messages on maternal health

Exposure to maternal health messages	Level of Agreement*(%)
	1 2 3 4 5 M SD %
My major source of information about maternal health is the broadcast media	51.9 24.2 7.5 5.7 10.7 1.9 1.3 91.4
I have heard about maternal through other means	44.0 35.5 13.2 2.2 5.0 1.8 1.0 95.9
I receive information about maternal health messages through broadcast media regularly	14.5 37.7 23.6 5.7 18.6 2.7 1.3 85.2
I receive information about maternal health messages through broadcast media occasionally	22.0 41.5 11.3 8.5 16.7 2.5 1.3 86.6



I receive information about maternal health messages through broadcast media once in a month	29.2 36.8 15.4 12.6 6.0 2.2 1.1 95.2
The information I receive on maternal health is adequate	27.4 42.1 11.0 12.3 7.2 2.2 1.2 94.2
The information I receive on maternal health is beneficial	21.4 59.1 6.9 8.5 4.1 2.1 0.9 96.7
Total	2.2 1.2 92.2

NOTE: 1: Strongly Agree, 2: Agreed, 3: Undecided, 4: Strongly Disagree, 5: Disagree

Source: Researchers field work, 2018

The result shows that almost all respondents 92.2% (M=2.2, SD=1.2) are knowledgeable about maternal health messages on broadcast media. For instance, the statement which says "My major source of information about maternal healthcare is the broadcast media" scored 91.4% (M=1.9, SD=1.3). Another statement which says "I receive information about maternal health messages through broadcast media regularly" got 85.2% (M=2.7, SD=1.3) while, "The information I receive on maternal healthcare through broadcast media is adequate" got 94.2% (M=2.2, SD=1.2) and the statement which says "The information I receive on maternal health is beneficial" recorded the highest percentage 0f 97% (M=2.1, SD=0.9). The findings show that women are active users of broadcast media for maternal health messages.

# RQ3 How do women in Ilorin perceive the maternal health messages on broadcast media?

Table 4.6: Respondents' perception of broadcast media messages on maternal health

Respondent's perception of broadcast media Messages on maternal health	Level of Agreement*(%)							
integginges on muterium meuron	$\frac{2}{1}$	2	3		5	M	SD %	
Programmes on maternal health are informative and enlightening.	37.1	24.2	24.5	5.0	9. 1	2.2	1.2 92.6	
The Information created awareness about maternal health issues.	27.7	41.5	17.3	3 5.0	8.5	2.2	1.16 93.2	
Messages explain that maternal mortality can be prevented through proper care.	21.7	25.5	8.2	8.5	36.2	3.1	1.6 71.1	
Maternal health messages are based on. risk factors	21.1	55.3	8.5	5.7	9.4	2.2	1.1 92.4	



					ww	w.auj	Ourna	18.01g
Messages explain that all women of productive age are at risk of maternal mortality.	36.2	26.4	21.7	4.1	11.6	2.2	1.3	90.7
Maternal health messages explain the various services available to pregnant women.	22.6	24.2	44.3	5.7	3.1	2.4	1.0	97.4
Maternal health messages addresses issues that can affect women during pregnancy	30.5	38.4	19.8	7.5	3.8	2.1	1.0	96.9
Total						2.3	1.2	90.6

NOTE: 1: Strongly Agree, 2: Agreed, 3: Undecided, 4: Strongly Disagree, 5: Disagree Source: Researchers field work, 2018

Results indicate that the overwhelming majority 91% (M=2.3, SD=1.2) have positive perception of broadcast media messages on maternal health. For instance, the statement which says "Maternal health messages addresses issues that can affect women during pregnancy" got 97% (M=2.1, SD=1.0) and the statement which says "The information explains the various services available to pregnant women" got 97.4% (M=2.4, SD=1.0). The statement which says "The messages created awareness about maternal health issues got 93.2.1% (M=2.2, SD=1.1) while the statement which says "Programmes on maternal health messages are informative and enlightening" got 93% (M=2.2, SD=1.2).

It can be construed from the analyses that women perceived broadcast media messages on maternal healthcare as informative. The findings are consistent with the submissions of Atakiti and Ojomo in their study that majority of the respondents claimed their knowledge on maternal health have increased as a result of the health programmes on television.

RQ4: To what extent are women in Ilorin influenced in their attitude towards maternal health care by their exposure to maternal health messages on broadcast media?

Table 4.7: Respondents attitude due to broadcast media messages

Respondents level of attitude change		Level of agreement*(%)						
	1	2	3	4	5	M	SD	<u>%</u>
Broadcast media exposure prompts me to take care during pregnancy.	52.5	26.4	7.5	5.0	8.5	1.9	1.2	93.1
I undergo antenatal care during pregnancy due to enlightenment from broadcast media.	51.3	31.4	6.3	6.0	5.0	1.8	1.1	96



Broadcast media programmes on maternal 28.6 16.7 11.0 41.8 1.9 2.7 1.3 98.4 health positively change my attitude towards maternal health care.

Due to enlightenment from broadcast media, 55.3 20.1 7.9 9.1 7.5 1.9 1.2 93.9 I go to competent hospital to deliver my baby.

Exposure to broadcast media messages on 22.6 57.9 10.7 2.2 6.6 2.1 1.0 94.7 maternal health prompts me to take precautionary measures against the risk factors of maternal mortality.

My exposure to broadcast media motivates 58.2 20.1 10.1 4.4 7.2 1.8 1.2 94.2 me to use antenatal services during pregnancy.

I take proper care during pregnancy due to 56.6 28.0 10.4 1.6 3.5 1.6 0.9 97.3 enlightenment from broadcast media.

Total 1.9 1.1 95.3

NOTE: 1: Strongly Agree, 2: Agreed, 3: Undecided, 4: Strongly Disagree, 5: Disagree Source: Researchers field work, 2017

Results show that broadcast media has positive impacts on the respondents as almost all respondents 95.3% (M=1.9, SD= 1.1) said they had a change in attitude due to their exposure to broadcast media messages on maternal health. For instance, respondents agreed to the item which says "My exposure to broadcast media programmes on maternal health positively change my attitude towards maternal health care" got 98.4% (M=2.7, SD=1.3), the statement which says "I undergo antenatal care during pregnancy due to enlightenment from broadcast media" scored 96% (M=1.8, SD=1.1), Another statement which says "Exposure to broadcast media messages on maternal health prompts me to take precautionary measures against the risk factors of maternal mortality" got 95% (M=2.1, SD=1.0) while the statement which says "I take proper care during pregnancy due to enlightenment from broadcast media" scored 97.3% (M=1.6, SD=0.9).

However, the findings of this study are consistent with the findings of kistiana (2009) which stated that women's exposure to media has a strong connection to antenatal ANC uptake and other maternal health services.

# **Result of the Hypotheses Testing**

To test the expected influence, the three key variables (exposure, perception and behaviour) that were measured using scaled items were completed and subjected to correlation statistics. Two hypotheses were raised in this study to find out whether exposure to maternal health messages on broadcast media predict attitude towards maternal healthcare and whether perception of broadcast media messages on broadcast media predict attitude towards maternal health care. The first and second hypotheses were tested using linear regression.



**H0:** There is no positive relationship between women's perception of broadcast media messages on maternal health and their attitude towards maternal health care.

**H0:** Women's awareness of broadcast media messages on maternal health does not influence their attitude towards maternal healthcare.

Usually, before regression is run on variables, there is need to make sure that there is correlation among variables. Both the dependent and independent variables in the study were correlated as a part of the requirements in parametric statistical test.

Table 4.9 reveals the results from the inter-items correlation.

**Table 4.9: Inter-item Correlation** 

Variables	Awareness	Perception	Attitude
Awareness	1	.884	.898**
		.000	.000
Perception	1	.888**	
		.000	
Attitude	1		

Correlations are significant at 0.1level (2tailed)

The result of the inter-item correlations shows that variables were correlated and there is extreme or high correlation among the variables.

Correlation statistics was used to answer the first hypothetical statement raised:

H0: There is no positive relationship between women's perception of broadcast media messages on maternal health and their attitude towards maternal health care.

Table 4.9.1: Predicting perception of maternal health messages

Variables	Perception	Attitude
Perception	1	.739**
	318	000
Attitude	.739**	318
	000	1
	318	318

Correlations are significant at 0.1level (2tailed)

From the analyses above, the result indicates that variables, perception and attitude are extremely correlated. Perception and attitude correlates at (r=.739\*\*). This study therefore rejects the null hypotheses and accepts the alternative hypotheses showing a relationship between the two variables.



# H0: Women's awareness of broadcast media messages on maternal health does not influence their attitude towards maternal healthcare.

Table 4.9.2 presents the results of the regression analysis of the second hypothesis raised on women's awareness of broadcast media messages and its influence on their attitude.

Table 4.9.2: Predicting awareness of maternal health messages

Model	В	SE	T	P
Constant	460	.074	-6.208	.000
Awareness .8	27	.024	34.061	.000

 $F(1,316) = 1160.121, P = .000, R^2 = .786.$  Dependent variable: attitude

Result of the regression analysis on the hypothesis with a significant ANOVA revealed that the independent variable (awareness) predicts 78.6% variance in attitude ( $R^2$ = .786, P=<.000) towards maternal health. This result indicates a strong relationship between awareness of maternal health messages on broadcast media and attitude change among women. The result further shows that awareness from broadcast media has a significant predictor with ( $\beta$ =.827, t=34.061, p=<.000).

This study therefore, rejects the null hypothesis and accepts the alternative hypothesis which shows a strong relationship between awareness of maternal health messages on broadcast media and attitude change towards maternal health care among women. The findings are consistent with the submissions of Asp et al, (2014) that exposure to mass media has resulted in positive health outcomes regarding family planning, knowledge of HIV/AIDS, and a skilled birth attendant (SBA) at delivery.

## **Discussion of Findings based on Research Questions**

Findings show that broadcast media (radio and television) are very popular among the majority of the respondents. More than half of the respondents are exposed to radio while a few are exposed to television. The overwhelming majority use television and radio daily and spend more than 1hour in a day on broadcast media. This means that women are not only active users of broadcast media but they also use them on a daily basis. When comparing the results with mass media exposure and birth preparedness reported in 2014, there is a similarity in the findings. An overwhelming majority were exposed to radio, as they listened to radio almost every day, while only 4.9% reported ever watching television (Asp et al., 2014).

The data shows a large number of respondents are aware of maternal health messages on broadcast media. This indicated serious improvement in knowledge. "Majority of the respondents admitted that their major source of information about maternal healthcare is the broadcast media" as this scored 91.4%, while the information I receive on maternal healthcare through broadcast media is adequate" scored above average. From the results gathered, women have heard about maternal health messages on broadcast media. The researcher therefore submits that women are aware of maternal health messages on broadcast



media. The findings are consistent with the submissions of Yar'zever and Said, (2013) a study carried out in Kano on the knowledge and utilization of maternal health services, found a high percentage of urban and rural respondents have a good knowledge of the range of maternal health services offered in health facilities.

The study findings also provide answer to research question raised to find out the perception of women about broadcast media messages they are exposed to. The result as analysed on Table 4.2.4 indicates that majority of the respondents agreed that broadcast media messages on maternal health are enlightening. Maternal health messages on broadcast media programmes from a general stand point satisfy most of the women's maternal health needs. Specifically, more than half of the respondents agreed that maternal health messages on broadcast media are based on risk factors and almost all the respondents slightly agreed that maternal health messages on broadcast media addresses issues that can affect women during pregnancy and most respondents slightly agreed that maternal health messages on broadcast media explain the risk of maternal mortality. This result shows that women considered broadcast media messages on maternal health to be informative. The findings are inconsistent with that of Lawoyin et al. (2007) a cross-sectional, community-based study to assess men's perception of maternal mortality in Nigeria; found that efforts were required to improve men's attitudes and knowledge in order to make them active participants in the fight to reduce maternal mortality. The inconsistent findings may be as a result of the respondents used for the study.

Another research question was designed to test the influence of broadcast media programmes on maternal health on women's attitude towards maternal healthcare. It was intended to measure their positive reaction to maternal health care after they have been exposed to maternal health messages on broadcast media. The result as presented on table 4.2.5 revealed that a large number of the respondents agreed that broadcast media programmes on maternal health exposed to have positively changed their behaviour towards maternal health care. Precisely, a large number agreed to have undergone antenatal care during pregnancy while majority of the respondents agreed to be taking precautionary measures against the risk factors of maternal mortality based on the information, they had been exposed to on broadcast media. The results are similar to the findings of Adewoye,Musa &Atoyebi, (2014) on knowledge and willingness to utilise antenatal care services among women of childbearing age in Ilorin-east Local Government Area, it reported that more than two thirds of the respondents (87.7%) were aware of antenatal care services and are willing to use them following pre and post interventions.

After subjecting the data collected for this study to different stages of statistical analysis, the variables that were subjected to correlation analysis had an extreme correlation while the first hypothesis raised was tested using correlation statistics and results showed that there is a relationship between perception of broadcast media messages and attitude change. The second hypothesis result showed an extreme influence between dependent variable (attitude change) and the independent variable (awareness). The null hypothesis was rejected while the alternative hypothesis was accepted.

## **Chapter Summary**

This chapter discussed the quantitative analysis covered by the study. The quantitative covered the descriptive and inferential analysis results of the data collected were analysed in



tables and charts. The study findings show that majority of the respondents rely on broadcast on a daily basis. They also agreed that maternal health messages on broadcast media are informative, beneficial and it positively changes their behaviour toward maternal health care

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

### **The Summary**

This study attempted to examine perceived impact of broadcast media messages on awareness, attitude and perception of maternal health among women. The objectives of this study include finding out whether women in Ilorin used to expose themselves to maternal health messages on broadcast media; whether the messages have impacted on them positively and promoted positive attitude towards maternal health care. The study made the following findings:

- 1. Result of this research show that women regularly use broadcast media and as such have been receiving messages about maternal health on broadcast media on a regular basis.
- 2. The results also show that women were well informed about maternal health through the use of broadcast media as the majority of the respondents agreed that messages, they received about maternal health on broadcast media was adequate and beneficial.
- 3. It was revealed in the result that the majority of the women that exposed themselves to maternal health messages on broadcast media agreed to have translated the information they received about maternal health into action. In other words, most of the respondents agreed that broadcast media programmes positively change their attitude towards maternal health.

The result of the hypothesis tested for this study showed that awareness and perception of broadcast media messages on maternal health positively influences attitude of women towards maternal health.

#### **Conclusion**

Results indicates that utilization of maternal health services can be enhanced through increased exposure to broadcast media, most especially radio, as this medium is highly used by the respondents. This means that radio has to be more accessible with regards to language and dissemination of maternal health messages. However, there is need for an innovative and all-inclusive approach to maternal health care in Nigeria, in other to meet the goals listed in the millennium development goal agenda (MDGs), one that encourages women to not only take charge of their health and a decline of the death of women (during and after pregnancy) and children. A paradigm shift is necessary because of the wide gap that exists between knowledge and use of maternal health services in African countries. In this approach, social elements are highly significant because they symbolise possibilities for prevention which are open to change.

From the findings of the study, women are aware of the issues of maternal health through broadcast media. Broadcast media have the capacity to drastically reduce maternal mortality



ratio to the barest minimum. Health presenters on broadcast media should first and foremost carry out a research on the type of broadcast media programme that will capture the attention of women and the time that will be suitable for them. Henceforward, the researcher recommends the inclusion of broadcast media campaign in interventions designed to promote maternal healthcare among women.

## **Recommendations Based on Findings**

Based on the findings of the study, that women depend on broadcast media for maternal health, it therefore becomes necessary to recommend that the use of broadcast media to disseminate maternal health messages should be intensified.

Since respondents are constantly exposed to adverts, broadcast stations should input maternal health messages in between daily adverts.

Television should be properly used for maternal health campaigns for its advantage of sound and motion pictures.

Maternal health messages should be promoted through other programmes such as drama, documentary, and news. Health workers should also give out information constantly on the broadcast media about the issues of maternal health.

## **Limitations of the Study**

This study was limited to Ilorin because of time. The researcher would have loved to extend the study to other local governments areas of kwara state so as to obtain a wider perspective on the phenomenon.

## **Recommendations for Further Study**

Since this study is conducted in Ilorin, future researchers should consider extending the study to other cities and local government in kwara state, as well as other cities and local government in other states of Nigeria.

Other researchers can also focus on the rural women in order to find out if broadcast media, especially radio is playing a positive role in enlightening them on maternal health issues.

Further studies may examine the programmes of broadcast media stations through the use of content analysis to examine the proportion of health programmes in their programme schedule and whether maternal health issues are given adequate proportions.

Survey questionnaire was used in this study, future researchers may consider other research methods such as interview, focus group discussions and case studies must be employed to have adequate information on the issue.

Other women's health problems like breast cancer, ovarian cancer etc. can also be areas of interest for further studies.



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#### **APPENDIX**

# Department of Mass Communication

Faculty of Communication and Information Sciences,

University of Ilorin, Ilorin. Nigeria

# IMPACT OF BROADCAST MEDIA ON THE PROMOTION OF MATERNAL **HEALTH**

This research attempts to investigate the impact of broadcast media on the promotion of maternal health.

You have been specifically selected to provide answers to the questions/items on this questionnaire. Kindly provide the answers that correspond to your thoughts and feelings, as there is no right or wrong answer and we greatly value your input.

Your response is strictly for research documentation and will be treated with great

confidentiality.	•		
Thanks	for your time.		

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M.sc programme

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## **Section A: Demographic Data**

This section asks about your demographic data

PI	ease fill as it applies to you
1.	Age range: 18-29 ( ) 30- 39 ( ) 40-49( ) 49 and above
2.	Marital status: single ( ) married ( ) Divorced ( ) widowed ( ) others specify
3.	Educational status: no formal educational ( ) SSCE ( )Degree ( ) Postgraduate ( )
4.	Occupation: Business ( ) civil/public servant ( ) others specify
5.	Do you have a child of your own yes( ) No( )



# **SECTION B: Media Usage**

# This section asks about your exposure to media

Ple	ease	fill	as	it	app	lies	to	you.

e fill	as it applies to you.
6.	Which of the following broadcast media do you expose to? You can tick more than one
	Television () radio () others specify
7.	How often do you use your preferred broadcast media?
	Always (7days) often (5-6days) sometimes (3-4days) rarely (1-2days)
8.	How many hours do you use your preferred broadcast media in a day?
	Less than 15 minutes ( ) 15-30 minutes ( ) 31 minutes- $1\ hour$ ( ) more than $1\ hour$ ( )

- 9. Which programmes are you expose to in your preferred broadcast media? You can tick more than one: News () talk show() Feature () advert () health programme () others specify
- 10. In the programmes you are exposed to, which ones contained any messages about maternal health programmes? You can tick more than one answer: News ( ) talk show( ) feature( ) advert ( ) health program( ) others specify ( )



# **SECTION C:** awareness of maternal health messages

This section asks about your awareness of maternal health messages/information.

NB: for your response below, the following are the meanings of the acronyms, SA-strongly agreed, A-agreed, U-undecided, SD-strongly disagreed, D-disagreed.

Please tick the statement that agrees with you view.

SN Statement	SA	A	U	D	SD
11. My major source of information about maternal health is the broadcast media					
12. I have heard about maternal health through other means ( I.e. doctor, family, friends, social group and others)					
13. I receive information about maternal health messages through broadcast media regularly. (Once in a week).					
14. I receive information about maternal health messages through broadcast media occasionally. (Once in two weeks).					
15. I rarely receive information about maternal health messages through broadcast media. (Once in a month)					
16. The information I receive on maternal health through broadcast media is adequate.					
17. The information I receive on maternal health through broadcast media is beneficial.					



# SECTION D: Perception of media messages on maternal health.

This section asks about your perception of media messages on maternal health.

NB: for your response below, the following are the meanings of the acronyms, SA-strongly agreed, A-agreed, U-undecided, SD-strongly disagreed, D-disagreed.

Please tick the statement that agrees with you view.

SN Statement	SA	A	U	SD	D
18. The programmes on maternal health messages are informative and enlightening					
19 The information created awareness about maternal health issues					
20 The messages explain that maternal mortality can be prevented, if proper care is taken during pregnancy.					
21 The maternal health messages on broadcast media are based on risk factors(factors likely to cause maternal mortality such as smoking, poor diets, inadequate use of antenatal care services)					
22 The messages explain that all women of productive age are at risk of maternal mortality when pregnant					
23 The maternal health messages explain the various services available to pregnant women					
24 The maternal health messages addresses issues that can affect women during pregnancy					



# Section E: Attitude.

This section asks about your attitude towards maternal health care

NB: for your response below, the following are the meanings of the acronyms, SA-strongly agreed, A-agreed, U-undecided, SD-strongly disagreed, D-disagreed.

Please tick the statement that agrees with you view.

NB Statement	SA	A	U	SD	D
25 My exposure to broadcast media motivates me to take proper care during pregnancy					
26 I undergo antenatal care during pregnancy due to enlightenment from broadcast media					
27The broadcast media programmes on maternal healthcare have positively changed my overall attitude and behaviour towards maternal healthcare					
28 Due to enlightenment from broadcast media, I go to competent hospital to deliver my baby					
29 My exposure to broadcast media messages on maternal health prompts me to take precautionary measures against the risk factors of maternal mortality such as smoking, poor diets and inadequate use of antenatal services					
30 My exposure to broadcast media motivates me to use antenatal services during pregnancy					
31 I take proper care during pregnancy due to enlightenment from broadcast media					

Thank you for participating in this study.