



## ABSTRACT

Radio is one of the most accessible media platforms upon which health communication messages are driven. Despite this, studies have shown that Nigeria loses a high number of under 5 children and women of child-bearing age yearly especially those residing in rural communities of developing countries. This study therefore investigated the use of the radio programme (*Dokita wa*) as

# RADIO PROGRAMME (*DOKITA WA*) AS TOOL FOR DRIVING THE ADOPTION OF MATERNAL HEALTH CARE PRACTICES AMONG WOMEN OF REPRODUCTIVE AGE IN ILISHAN-REMO, OGUN STATE

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## Introduction

The attempt to circumvent maternal complications and threats to the life of mother and child is a major reason why women present for ante natal clinical services once pregnancy is confirmed. Although this age-long practice is seen as wise and proactive, medical practitioners and modern gynaecologists suggests that women of reproductive age can begin maternal health care even before conception (Sotusa, 2015). Maternal health refers to the health of women before and during pregnancy, at childbirth and during the postpartum period (WHO, 2017). Maternal death, on the other hand, is when a woman dies during pregnancy or 42 days after the end of a pregnancy due to lack of proper care (WHO, 2006). The World Health Organisation (WHO, 2017) emphasize that the overall health and lifestyle choices of parents can affect fertility, maternal health and their



infants' probability of developing chronic conditions later in life. Consequently, WHO agrees that people contemplating pregnancy should be screened for health problems, which need to be identified and managed before, during and after pregnancy. However, while the practice of seeking maternal care during and after pregnancy is common among women, screening for health problems prior to conception has remained unpopular among most women especially in underdeveloped regions of the globe. This has resulted to unrealistic efforts towards reducing or eradicating maternal complications during pregnancy, childbirth and the postpartum period. Nigeria ranks among the bottom five out of 191 countries with the poorest-performing maternal health care service delivery systems globally. While sub-Saharan Africa's maternal mortality ratio of 510 per 100,000 live births is more than twice the

*tool for driving the adoption of maternal health care practices among women of reproductive age in Ilishan-Remo community, Ogun state, Nigeria. The study utilized the pre-test, post-test experimental design. Questionnaires were distributed to 100 women of child bearing age before and after exposure to the radio programme (Dokita wa). Results showed that women of child bearing age in Ilishan-Remo community had little knowledge about maternal mortality and therefore paid little or no attention to it before exposure to the radio programme. However, after the intervention, the women had broadened knowledge about maternal mortality, its causes and preventive practices and were willing to participate in the war to combat the scourge. The study therefore recommended that in order to put an end to maternal mortality, radio and other media platforms should be utilized in creating more awareness and educating women on safe maternal practices that can help reduce the incidence of maternal mortality.*

**Keywords:** *Maternal mortality, maternal health, reproductive age and radio health programme (Dokita wa) and media messages*



global average, the ratio in Nigeria is 560 per 100,000 live births (NPC & ICF Macro, 2014), which makes the country the second largest contributor to maternal mortality worldwide. Each day, about 109 Nigerian women die in childbirth - approximately one death every 13 minutes (Izugbara, Wekesah & Adedini, 2016). The country's estimated annual 40,000 pregnancy-related deaths account for about 14% of the global total (Hogan, 2010) placing it among top 10 most dangerous countries in the world for a woman to give birth (Global One, 2015). These facts heighten the need for the adoption of safe maternal health care practices among women of child bearing age in the country. The World Health Organisation's Sustainable Development Goal (SDG) target 3.1 aims to reduce the global mortality ratio to less than 70% per 100, 000 live births by 2030. This implies that the health and well-being of women and children should matter to every individual, society and country since maternal mortality is a multi-dimensional problem, which does not only affect the family involved but has a great effect on the society as whole (Odesanya, Hassan & Olaluwoye, 2015).

Izugbara, Wekesah and Adedini (2016) observed that the root causes of high maternal mortality and morbidity in Nigeria just like many other sub-Saharan African countries include weak development planning, poverty, illiteracy, and low utilization of formal maternal health care services. Their observation revealed that in the last decade, the completion of four or more antenatal care visits among pregnant women has been low, averaging less than 50%, while home deliveries have been consistently high, at about 60% of all deliveries since the 1990s. Postnatal care utilization has also remained low, averaging only about 33% since 2003. Other drivers of poor maternal health outcomes in Nigeria include low literacy levels, high level of violence against women and girls, early marriage and childbearing, unintended pregnancy, wrong use of contraceptives, the poor quality of maternal care, weak health systems and women's low socio-economic and cultural status in the country (Garba & Umar, 2013; Ononokpono & Azfredrick, 2014). A 2012 British Council report on gender in Nigeria revealed that in eight northern Nigerian states, over 80% of women are unable to read and over two-thirds of girls aged 15-19 in the same region are unable to read a



sentence. Furthermore, violence against women is also common, with about one third of Nigerian women having experienced some form of gender-based physical and sexual violence (British Council, 2012).

As a result of the multi-faceted nature of the problems militating against maternal health care in Nigeria, many believe that the media can play key role in disseminating needed information that can educate and create awareness regarding acceptable maternal health care practices among women of reproductive age, especially in rural areas where access to vital health information is limited. Information is central to all forms of human activity. Odesanya (2015) pointed out that mass media can be a powerful tool not only for creating awareness about important developments in society, but also for stimulating desires in people for more information, and facilitating their efforts to apply such information to their behaviour for their own benefit. Furthermore, Odesanya (2015) maintained that through the mass media, especially broadcast media such as radio and television, people's behaviour can be influenced to better their health, education, politics and other aspects of society. Through the broadcast media, people acquire new knowledge, attitude and skills thus enable them cope with a better life (Onabajo, 2004), since they are among the most powerful means of education man has ever developed. To this end, it is safe to say that radio can be effective in educating women of reproductive age on all they need to know about maternal health care because of its qualities of accessibility, spontaneity, affordability and portability (Odesanya, 2015). Therefore, this study intends to examine the knowledge and practise of women of reproductive age regarding maternal health education using *Dokita wa* – a radio health education programme as instrument.

### **Problem statement**

Mother and child mortality in the world is generally an intensive issue that cannot be ignored. Eradicating maternal death was the fifth of the 2015 eight Millennium Development Goals (MDGs) of the United Nation (UN) which apparently failed, and resurfaced in the on-going Sustainable Development Goal (SDG) target 3.1 that aims to reduce the global mortality ratio to less than 70% per 100, 000 live births by 2030. Thus poor



maternal and child health care remains a prominent issue in today's world especially in less developed countries. According to the United Nations Children's Emergency Fund (UNICEF, 2014) Nigeria loses about 2,300 children under the age of five and 145 women of child bearing age every day. This makes the country the second largest contributor to the under-five year old and maternal mortality rate in the world (UNICEF, 2014). Although successive government in Nigeria has put in efforts in the past to curb maternal and child mortality in the country, it is apparent going by available statistics that there is still so much to be done. Stakeholders suggest that mass media, especially radio, can help bridge the lacuna in dissemination of information capable of helping women of reproduction age take proactive actions towards ameliorating the problem of child and maternal healthcare across regions of the country. Hence, the need to investigate the knowledge and practise of women of reproductive age in Ilishan-Remo, Ogun state, regarding maternal health education using *Dokita wa* – a radio health education programme as tool.

### **Objective of the study**

The general objective of this study is to investigate radio programme as tool for driving the adoption of maternal health care practices among women of reproductive age in Ilishan-Remo, Ogun State. The specific objectives are to:

1. investigate the role of radio in enhancing the knowledge of safe maternal health care practices among women of reproductive age in Ilishan-Remo;
2. examine the influence of radio health education programme (*Dokita wa*) on the practice of safe maternal health care routines among women of reproductive age in Ilishan-Remo.

### **Research question**

1. What is the role of radio health programme in enhancing the knowledge of safe maternal health care practices among women of reproductive age in Ilishan-Remo?

### **Hypothesis**



**H<sub>01</sub>:** Radio health education programme (*Dokita wa*) will not significantly influence the practice of safe maternal health care routines among women of reproductive age before and after exposure.

### **Radio Health Programme (*Dokita wa*)**

Radio broadcasting is a central and established form of mass communication in nearly all societies. Radio serves as a low-cost, passive form of communication that has the capability to reach listeners in different languages at home, at work, in stores, gyms, eateries, or in personal vehicles. The majority of radio listening occurs away from homes (Arbitron, 2008) thus making radio a portable and accessible media source in a variety of locations. More than 92% of individuals over age 12 listen to some form of radio programming each week (Arbitron, 2008). According to Arbitron (2008), radio listening is high across all age groups and “consumers tune in to one or more radio stations more than 2.6 hours per day–18.5 hours per week.” Health professionals have therefore recognized the benefits of using radio to broadcast health messages and have subsequently utilized radio to educate listeners about diverse health issues both in the past and in recent years. Producing and airing different health programmes on radio is important for individuals exposed to them because as Dutta-Bergman (2004) observed, “serendipitous learning from radio can serve as a primary form of health information gathering” (p. 279). Consequently, the radio programme *Dokita wa*, which airs on HopeFM 89.1 discusses maternal and clinical health matters, and educates listeners on maternal health care procedures and safe practices. A segment of the programme is dedicated mainly to maternal health with women of reproductive age as the target audience. Reproductive health implies that individuals are able to have a responsible, satisfying and safer sex life and that they have the capability to reproduce and the freedom to decide if, when and how often to do so. The programme (*Dokita wa*) is utilized in this study to enhance the knowledge of women of reproductive age on maternal health education, after which their behaviour towards the new knowledge will be examined to ascertain whether or not they put to use



the newly acquired knowledge in their practice of maternal health care procedures.

### **Maternal Healthcare Practices**

Maternal healthcare includes antenatal care (ANC) for intending mothers and postnatal care (PNC) after delivery of babies by qualified health care providers or skilled birth attendants. Maternal health care also include all necessary actions to be taken by an expectant mother, her spouse and others around her to ensure safety of mother and child before, during and after delivery. Nuamah, Agyei-Baffour, Mensah, Boateng, Quansah, Dobin and Addai-Donkor (2019) explain that focused ANC has been found to offer the opportunity for early detection and timely treatment of diseases, leading to improved maternal health outcomes. The detection and treatment of high blood pressure, for example, help to prevent eclampsia, and greatly reduce mortality (McCaw-Binns, Ashley, Knight, MacGillivray & Golding, 2004). Similarly, improved maternal outcomes have been observed through the detection and treatment of anemia (Reynolds, Wong & Tucker, 2006). The attendance of ANC is known to help augment healthcare during pregnancy through the provision of preventive health services, such as prophylactic treatment of malaria, the immunization against neonatal tetanus (Babalola & Fatusi, 2009) and screening for sexually transmitted diseases such as HIV infection and hepatitis. The problem has been that many women in developing countries either do not have access to quality antenatal and postnatal care due to poverty, illiteracy or unavailability of health facilities.

The postpartum period, which is usually 42 days after childbirth, is equally important for mothers. More than 60% of maternal deaths are known to occur during this period (Gill, Pande & Malhotra, 2007). The death of a mother further exposes her newborn child to high risks of morbidity and mortality. In developing countries, the most common causes of maternal deaths during the postpartum period are hemorrhage, infections and hypertensive disorders (Gill, Pande & Malhotra, 2007). These conditions and any other life-threatening or debilitating conditions that may require urgent medical attention could be identified during PNC. Other services and information, such as



maternal and child nutrition, immunization, hygiene, and sanitation can all be provided during PNC. It is however reported that less than 30% of women in developing countries receive PNC (Starrs, 2006).

### **Methodology**

This study utilized the pretest-posttest experimental method on respondents in order to yield a corroborative report. Respondents for this study were selected and their knowledge on maternal health care examined before they were exposed to the radio health programme 'Dokita wa' (Our Doctor) and later their knowledge and practise of safe maternal health practices after the exposure was investigated. Study sample was one hundred (100) women of reproductive age (15-45) in Ilishan-Remo community in Ogun State, Nigeria. Instrument for data collection was a structured and validated questionnaire which was administered before and after exposing respondents to the radio health programme in a bid to properly examine their knowledge and practise of maternal health care amongst respondents. Due to the experimental nature of the research, it was ensured that respondents followed the recommended radio health programme (*Dokita wa*) by reminding them via phone calls and text messages. Data analysis was carried out using descriptive and inferential statistics.

### **Results and discussion of Findings**

Below is the presentation of the result of the findings radio health programme as tool for driving adoption of maternal health care practices among women of reproductive age.

**Research question one:** What is the role of radio health programme in enhancing the knowledge of safe maternal health care practices among women of reproductive age in Ilishan-Remo?

**Table 1: The Role of Radio Programmes on Influencing the Knowledge of Women about maternal health practices**

<i>Items</i>	<i>Test</i>	<i>SA</i>	<i>A</i>	<i>U</i>	<i>D</i>	<i>SD</i>	<i>Total</i>
Women believe whatever they hear on the radio concerning maternal health practice	<b>Pre</b>	17 (19.1)	7 (7.9)	40 (44.9)	10 (11.2)	15 (16.9)	<b>89</b> <b>(100%)</b>
	<b>Post</b>	24 (27.0)	36 (40.4)	16 (18.0)	11 (12.4)	2 (2.2)	<b>89</b> <b>(100%)</b>
	<b>Difference</b>	<b>+7</b>	<b>+31</b>	<b>-24</b>	<b>+1</b>	<b>-13</b>	



Women practice whatever they hear on the radio	<b>Pre</b>	5 (5.6)	21	52	11	0	<b>89</b>
			(23.6)	(58.4)	(12.4)	(0.0)	<b>(100%)</b>
	<b>Post</b>	19	26	24	15	5	<b>89</b>
		(21.3)	(29.2)	(27.0)	(16.9)	(5.6)	<b>(100%)</b>
	<b>Difference</b>	<b>+14</b>	<b>+5</b>	<b>-28</b>	<b>+4</b>	<b>+5</b>	
Maternal health programmes on radio are of educative value to women of reproductive age.	<b>Pre</b>	17	23	36	13	0	<b>89</b>
		(19.1)	(25.8)	(40.4)	(14.6)	(0.0)	<b>(100%)</b>
	<b>Post</b>	29	20	15	12	13	<b>89</b>
		(32.6)	(22.5)	(16.9)	(13.5)	(14.6)	<b>(100%)</b>
	<b>Difference</b>	<b>+12</b>	<b>-3</b>	<b>-21</b>	<b>-1</b>	<b>+13</b>	
Maternal health programmes can increase women's knowledge on the need to attend ante natal clinics	<b>Pre</b>	15	14	27	23	10	<b>89</b>
		(16.9)	(15.7)	(30.3)	(25.8)	(11.2)	<b>(100%)</b>
	<b>Post</b>	37	28	14	7 (7.9)	3	<b>89</b>
		(41.6)	(31.5)	(15.7)		(3.4)	<b>(100%)</b>
	<b>Difference</b>	<b>+22</b>	<b>+14</b>	<b>-13</b>	<b>-16</b>	<b>-7</b>	
Maternal health programmes can influence women's attitude to antenatal clinic attendance	<b>Pre</b>	15	14	27	23	10	<b>89</b>
		(16.9)	(15.7)	(30.3)	(25.8)	(11.2)	<b>(100%)</b>
	<b>Post</b>	28	21	17	14	9	<b>89</b>
		(31.5)	(23.6)	(19.1)	(15.7)	(10.1)	<b>(100%)</b>
	<b>Difference</b>	<b>+13</b>	<b>+7</b>	<b>-10</b>	<b>-9</b>	<b>-1</b>	
Radio programmes on maternal healthcare does not influence women's attitude to ante natal clinics attendance in any way.	<b>Pre</b>	5 (5.6)	21	49	11	3	<b>89</b>
			(23.6)	(55.1)	(12.4)	(3.4)	<b>(100%)</b>
	<b>Post</b>	11	9 (10.1)	17	33	19	<b>89</b>
		(12.4)		(19.1)	(37.1)	(21.3)	<b>(100%)</b>
	<b>Difference</b>	<b>+28</b>	<b>-2</b>	<b>-32</b>	<b>0</b>	<b>+6</b>	

**Source: Field Survey, 2021**

Pre-test result in table 1 revealed that 40 (44.9%) of respondents were undecided as to whether women believe whatever they hear on radio concerning maternal health practices, while 60 (67.4%) respondents in the post-test agreed that they believe. Pre-test results further revealed that 52 (58.4%) respondents were undecided as to whether women practice whatever they learnt on radio while 45 (50.6%) agree. Pre-test and post-test revealed that 40 (44.9%) respondents and 49 (55.1%) respondents respectively agreed that maternal health programmes on radio are of educative value to women of reproductive age. Pre-test findings showed that respondents are undecided as to whether maternal health programmes can increase women's knowledge on the need to attend antenatal clinics while post-test results revealed that 65 (73.0%)



agreed. Maternal health programmes can influence women's attitude to antenatal clinic attendance as pre-test result revealed that respondents were undecided while post-test results revealed that, 49 (55.1%) agreed. This implies that respondents' opinions were altered by the post-test intervention.

The pre-test results further revealed that, 49 (55.1%) of respondents were undecided as to whether radio programmes on maternal health care influences women's attitude to ante natal clinics attendance in any way, while post-test results revealed that 52 (58.4%) respondents disagreed. Therefore, in answering this research question on the role of radio in enhancing the knowledge of women who are still in their reproductive age; post-test data as presented in table 1 summarily revealed that respondents;

- i. agreed that, women believe whatever they hear on radio concerning maternal health practices, as women tend to practice whatever they learnt on radio;
- ii. agreed that maternal health programmes on radio are of educative value to women of reproductive age and that such programmes can increase women's knowledge on the need to attend antenatal clinics;

The researchers therefore submit that based on post-test findings from respondents, radio programmes on maternal health play a crucial role in enhancing the knowledge of women of reproductive age to a very large extent because respondents believe that radio programmes are educative and increases knowledge on the need to attend ante natal clinics hence women are willing to practice whatever they hear on radio. One of the most powerful instruments to pass across messages to people is broadcasting. 'Broadcasting can be used to sensitize the people in the society. It can also be used as tool for national development' (Onabajo, 2011:3). Onabajo further asserted that the objective of broadcasting is to improve the lots of society, through the dissemination of developmental information that will bring about the desired attitudinal changes in the lives of the broadcast audience.

Chukwuma and Udeze (2013) concurred that the media plays a vital role of surveillance in the society. Surveillance in media terms is the function of the media to watch over the society and warn the people of dangers or educating them on tips that can help with their day to day lives. Since



the radio can be used in influencing people’s lives according to Odesanya, Hassas and Olaluwoye (2015), it is safe to state that radio can be effective in educating women of reproductive age on all they need to know about maternal health care. It is not out of place to presume that people today are largely media dependent especially the use of television and radio. The society largely lives and acts based on what they hear and see on media. Unlike some media platforms print especially, a person does not have to be literate or educated before they can listen to radio. Its simple technology system also makes it easy to operate (Odesanya, Hassas & Olaluwoye, 2015). Therefore, in order to influence or alter the knowledge and practice of women of child bearing age on maternal health issues on maternal health, more persuasive radio programmes are required to educate and keep women informed.

**H<sub>01</sub>:** Radio health education programme (*Dokita wa*) will not significantly influence the practice safe maternal health care routines among women of reproductive age before and after exposure.

Paired samples analysis results as presented in tables 2 to 4 was applied to determine if a significant difference exists in the hypothesis. Note that:

BDW = Before *dokita wa*

ADW = After *dokita wa*

**Table 2: Paired Samples Statistics**

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	BDW (Before <i>dokita wa</i> )	3.3090	89	1.09947	0.11654
	ADW (After <i>dokita wa</i> )	3.5000	89	0.85944	0.09110

**Table 3: Paired Samples Correlations**

		N	Correlation	Sig.
Pair 1	BDW (Before <i>dokita wa</i> ) & ADW (After <i>dokita wa</i> )	89	0.940	0.000

**Table 4: Paired Samples Test**

		Paired Differences						
		Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference		t	Sig. (2-tailed)
					Lower	Upper		df
Pair 1	BDW - ADW	-.19101	.41462	.04395	.10367	.27835	4.346	88

**Source: Field Survey, 2016**



Note: t-critical value = 1.664 @ 88 degree of freedom

Results in tables 2 to 4 presented statistical figures for: t (degrees of freedom); t-value and  $p$  = significance level. That  $t(88) = 4.346$ ,  $p$  -value of  $0.000 < 0.05$ . As a result of the means of the two test (i.e. before and after test on exposure to *dokita wa*) and the direction of the t-value, it can be concluded that statistically, knowledge of women about maternal health after *dokita wa* was introduced to them is significantly different from  $3.3090 \pm 1.09947$  (BDW) to  $3.5000 \pm 0.85944$  (ADW) and with  $p$ -value (0.000) less than ( $<$ ) 0.05. In addition, results in table 3 revealed that the correlation value of 0.940 signifies that a strong positive relationship/association exists between before and after test on the introduction of *dokita wa*. This implies that more radio programme on maternal health should be aired and sustained as a means of influencing and educating women of child bearing age on issues concerning maternal health. Therefore, the knowledge women have about maternal health after *dokita wa* was introduced to them is significantly different. Findings above is corroborated by Radoff, Levi and Thompson (2013) who found that radio-education intervention (REI) is associated with improved maternal knowledge of pregnancy danger signs (PDS) in Nicaragua after results showed that REI was associated with improved knowledge of PDS among 77 pregnant and postpartum women in Nicaragua. Odesanya et al (2015) also mentioned that scholars interested in 'media enhanced socio-economic development'. Oso (2012) agree that mass media (radio, television, newspapers, and magazines as well as other associated platforms for mass-based engagements and interactions) enhances the dissemination of health information across different strata of the society.

According to Chukwuma and Udeze (2013), the media plays a vital role of surveillance in the society. Surveillance in media terms is the function of the media to watch over the society and warn the people of dangers or educating them with tips that can help in their day to day lives. Since radio can be used in influencing people's lives (Odesanya et al, 2015), it is safe to state that radio can be effective in educating women of reproductive age on all they need to know about maternal health care. It is not out of place to presume that people today are largely media dependent especially the use of television and radio. The society largely lives and act based on what they hear and see on the media. Unlike some media platforms print especially, a person does not have to be a literate or educated before they can listen to radio. Its simple technology system also makes it easy to operate (Odesanya et al, 2015).



## **Conclusion and Recommendation**

Results from this study revealed that women had little or no knowledge of safe maternal health care practices until the intervention of *dokita wa* which widened their knowledge about the focal things and practices relating to maternal health. Therefore, radio stations should embrace the production of educative programmes especially those that relate to maternal mortality so as to connect more with the women and provide them with useful information that can enhance healthy practices during pre and post-partum periods. This implies that more persuasive and informative radio health programmes are required to educate and keep women informed about safe maternal health practices in order to enhance the chances of mother and child survival before, during and after pregnancy.

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