

## Nursing Mothers' Perception of Maternal and Childcare Television Messages in Lagos, Nigeria

Afolayan G. Aramide Aluko<sup>1</sup>, Kehinde Oyesomi<sup>2</sup>, Lanre Amodu<sup>3</sup>, Evaristus Adesina<sup>4</sup> and Funke Omole<sup>5</sup>

*Department of Mass Communication, Covenant University, Nigeria*

*E-mail: <sup>1</sup><afolayan.aluko@covenantuniversity.edu.ng>*,

*<sup>2</sup><kehinde.oyesomi@covenantuniversity.edu.ng>*, *<sup>3</sup><lanre.amodu@covenantuniversity.edu.ng>*,

*<sup>4</sup><evaristus.adesina@covenantuniversity.edu.ng>*,

*<sup>5</sup><olufunke.omole@covenantuniversity.edu.ng>*

**KEYWORDS** Broadcast Media. Childbirth. Childcare. Health Information. Maternal Health. Nursing Mothers

**ABSTRACT** This study addresses the critical issue of maternal and childcare knowledge among nursing mothers in Lagos, Nigeria, with a focus on the impact of exposure and adherence to television messages. The objective was to investigate the relationships between exposure, adherence, and knowledge levels. A survey design was used, employing a Structural Equation Modelling approach, specifically Partial Least Squares. Data were collected from 391 nursing mothers aged 18 to 49. The findings revealed significant positive relationships between exposure and adherence to maternal and childcare television messages and the knowledge levels of nursing mothers. The conclusion highlights the need for targeted television interventions, while recommendations underscore the importance of tailoring content and collaborating with broadcasters to optimise the impact of maternal and childcare campaigns. The policy implications suggest the integration of television as a strategic tool in disseminating evidence-based information to enhance maternal and childcare practices.

### INTRODUCTION

Maintaining a state of good health is vital for most people (Arriguzoh et al. 2021). Before the information and communication technology era, mother and child health information was passed to people through the means of direct communication (Obasola and Mabawonku 2018). However, communication through broadcast media increasingly gained wave with time because it allows for the use of the entertainment-education strategy to reach a broader audience (Frank and Falzone 2021). The adoption of broadcast media, such as television, mobile phones and radios, to facilitate the dissemination of health information was prompted by the need for better healthcare outcomes (Obasola and Mabawonku 2018). In this respect, Liao (2023) stressed that the media has developed into a potent tool not only for disseminating knowledge but also for encouraging people to seek out additional information and assisting them in applying that information to their attitudes. As a result of this perception of effectiveness, the preference for using broadcast media, such as television, to scale up maternal and childcare services has grown significantly, with Nigeria gradually adopting this strategy in the dissemination of public health information to change healthcare atti-

tudes and practices (Obasola and Mabawonku 2017; Yakubu 2021).

Generally, nursing mothers are among the group of health service consumers who watch television to learn about their health (Naveena 2015). The factors that motivate nursing mothers to look for health information include their wish for education about maternal and infant care among others (Popoola and Muraina 2019). Access to and use of health information can give mothers knowledge on health care practices, including infant and child care, disease prevention, and coping with breast-feeding challenges (Popoola and Muraina 2019). This is in relation to television maternal healthcare messages, which according to Atakiti and Ojomo (2015), can take the shape of jingles, campaigns, drama series, and talk shows. Globally, there have been initiatives in recent years that use broadcast media campaigns to obtain greater coverage in the direction of achieving improved health outcomes (Seymour 2018). To specifically target the public and persuade them to adopt the desired healthy behaviours, governments have used health lectures and television commercials (Yakubu 2021). Since encouraging positive changes in health-related behaviours is the primary objective of these television health programs, it is crucial to assess

and make use of the health-related information available on this platform.

Despite the efforts of governments, organisations, and health professionals to disseminate mother care information, poor maternity and childcare practices are still recognised as the primary causes of infant sickness and mortality (Igbinoba et al. 2020). This trend has been attributed to mothers' ignorance and insufficient awareness of childcare and maternal health. It is significant to note that the issue of nursing moms' restricted access to childcare knowledge and expertise appears to be influenced by the environment and people's perceptions of different sources of health information (Barnes et al. 2019). Indeed, mothers' perspectives, attitudes, and dispositions toward health information are important factors in achieving the goals of childcare practices, in addition to the accessibility of childcare information (Zamawe et al. 2016; Obasola and Mabawonku 2018). This might affect the kind of health information that people comprehend, relate to, and interpret. Therefore, examining the perception of nursing mothers on the importance and effectiveness of television childcare messages becomes important.

There is little research on nursing mothers' perceptions of television childcare information particularly, despite some studies on how mothers and women perceive the media and information about maternal health in Nigeria (Chidinma 2019; Obasola and Mabawonku 2018). Chidinma (2019) investigated how women perceived maternal health themes in broadcast media and how these messages affected women's attitudes towards maternal health in Ilorin, Nigeria. According to Chidinma (2019), mothers in Ilorin depend on broadcast media, including the radio and television, as a primary source of information about maternal health although radio was found to be used more frequently than television in terms of spreading maternal health messages.

Similarly, in four states of Nigeria, Obasola and Mabawonku (2018) investigated mothers' perceptions of knowledge about maternal and child health disseminated through various information and communication technologies. The research found that nursing mothers valued being informed about maternal and child healthcare through media outlets, with radio and the internet being used more frequently than television. Without focusing specifically on television, other studies have also ex-

amined how mothers' exposure to the mass media affects their understanding of and behaviour regarding maternal health (Adamu 2020; Igbinoba et al. 2020). Against this backdrop, this study seeks to contribute to existing research by examining how nursing mothers in Lagos, Nigeria perceive and adhere to childcare information conveyed through television.

### Objectives

Basically, the study will be guided by the following research objectives;

- i. To investigate the level of exposure of nursing mothers in Lagos to maternal and childcare messages on television.
- ii. To examine nursing mothers in Lagos' perception of maternal and childcare messages on television.
- iii. To ascertain the extent to which nursing mothers in Lagos adhere to television messages on maternal and child care.

### Development of Research Hypotheses

Exposure to maternal and childcare television messages plays a pivotal role in shaping the knowledge levels of nursing mothers. Results from studies such as those by Atakiti and Ojomo (2015) and Igbinoba et al. (2020) demonstrate the positive correlation between watching health-related television and raising awareness of concerns related to maternal health. Moreover, the study by Yakubu (2021) emphasises the significance of media campaigns in improving Northern Nigerian communities' access to maternal and child health information. These findings support the theory that nursing moms' knowledge is considerably expanded by viewing television shows about parenting and mothers. Building upon this, the following research hypothesis is formulated.

#### **H<sub>01</sub>: Exposure to maternal and childcare television messages has no significant impact on nursing mothers' knowledge**

The idea that nursing mothers' knowledge levels are greatly influenced by their adherence to maternity and childcare television messages is supported by empirical data from several studies. Chidinma (2019), for instance, demonstrates the

impact of broadcast media messaging on the knowledge, attitudes, and perceptions of maternal health held by reproductive women. Additionally, Popoola and Muraina (2019) emphasise the healthcare-seeking behaviour of nursing mothers in rural communities, emphasising the impact of adherence to televised health information. The findings align with the idea that consistent adherence to maternal and childcare television messages contributes significantly to the knowledge acquisition of nursing mothers. Building upon this, the following research hypothesis is formulated.

**H<sub>02</sub>: Adherence to maternal and childcare television messages has no significant impact on nursing mothers' knowledge**

## MATERIAL AND METHODS

### Research Design

A descriptive (survey) research design was utilised in the study to learn more about the demographics and socioeconomic status of women in Lagos state, Nigeria, and their level of exposure to maternal and childcare messages on television, their perception of maternal and childcare messages on television and the extent to which nursing mothers adhere to television messages on maternal and child care. Given the need for a large sample size, the researchers opted for a descriptive (survey) approach because of its large representativeness. Women in Lagos state, Nigeria between the ages of 18 and 49 (reproductive years) were surveyed for this study.

Located in the south-western part of Nigeria, Lagos State is one of the country's 36 states. Lagos state is noted to be the most developed state in Nigeria because it has high levels of life expectancy, education and income. The choice of Lagos as the urban study centre is due to its cosmopolitan nature and the fact that it is the only city qualified to be called a megacity in Nigeria because of its over 20 million populations (Labisi 2012). Also, Lagos, the second most populous state in Nigeria, is often characterised as the economic centre of the country (Elewonibi and BeLue 2019). In the southwest geopolitical zone, Lagos State has the highest number of women. Likewise, Lagos state is first in rank of birth rates in the southwest geopolitical zone.

Alimosho Local Government was purposively selected for this study. With a population of 2 million inhabitants, Alimosho is the largest local government area in Lagos State. Furthermore, the choice of Alimosho Local Government is premised on the rising number of advocacy initiatives emphasising the importance of maternal health. Government and non-governmental organisations have carried out similar projects in the local government area.

### Sample Size and Sampling Techniques

In light of the geographical composition of the survey population, a sample size of 384 participants was determined using random sampling. This approach aimed to provide sufficient representation of both semi-urban and urban regions within Lagos state for the survey. The recommendation made by Krejcie and Morgan (1970) on the appropriate sample size for a population exceeding 500,000 individuals, with a confidence level of 95 percent and a sampling error of 5 percent, influenced the decision to pick a sample size of 384 respondents. The researcher enlisted the services of two research assistants who had received prior training, and who were residents of the area being studied in Lagos State, Nigeria. Research assistants offered interpretation assistance to respondents who had problems in communicating in English.

In order to conduct this cross-sectional research, the Lagos State population was reduced to a controllable size through the multistage sampling procedure adopted. The first round of selection was the application of the purposive sampling approach to choose the Alimosho Local Government Area of Lagos State. In the next phase, a simple random sampling technique was employed to pick four wards from the previously selected local government. In the third step of the random sampling procedure, two streets per ward were selected randomly amongst eight wards in total. Therefore, eight streets were chosen in total. Finally, the street was segmented to contain residential dwellings. Consequently, the researcher employed a systematic sampling technique to select the residential buildings that were included in the sample. Questionnaire served as the primary research instrument of data collection.

### Ethical Clearance

The Covenant Health Research and Ethics Committee provided ethical approval for the research, with the protocol number CHREC/132/2022. The study's rationale was presented to the participants prior to the distribution of the questionnaire. Given that their involvement was entirely voluntary, participants were not compelled to finish the study. Additionally, no incentive was provided to participate. Participants who decided to participate in the research completed a consent form. The participants' anonymity was protected by a request that they not include their names on the surveys.

### Analysis

The data analysis section delved into the issues central to this study, gathering 391 responses through an online platform from women within the reproductive age range of 18 to 49. The demographic split presented in Table 1 emphasises the significance of including perspectives from a diverse age range. This data can be used to better target television messages on mothers and childcare, taking into account the diverse demographics of the study participants.

Table 1's demographic features provide valuable insights into the traits of the nursing mother profile. A substantial portion of the participants,

that is, 89.2 percent of the sample overall, are between the ages of 18 and 39. This suggests that the study mostly captures the perspectives of relatively young mothers, which may have implications for changing parenting and childcare-related television messages to better meet the needs and interests of this demographic. Furthermore, the educational distribution reveals that a significant proportion of participants (52.9%) had only completed the FSLC/WASSCE, indicating the possible necessity for targeted and accessible communication strategies. The majority of the population consists of either students (34.8%) or public servants (52.9%), which emphasises the need of effectively reaching these groups through channels that these professional segments may regularly use. The aforementioned demographic trends emphasise how important it is to consider factors like age, education level, and occupation when developing and distributing television messages about motherhood and childcare. Additionally, it is important to make sure that the content is appropriate and easily understood by the diverse spectrum of nursing moms.

### Analysis of Research Objectives

This study encompasses three primary objectives, each analysed and presented in the corresponding Tables 2, 3, and 4. Table 2 elucidates the extent of exposure among nursing mothers in La-

**Table 1: Demographic characteristics**

		<i>Frequency</i>	<i>Percentage</i>
<i>Age</i>	18 - 28 years	164	41.9
	29 - 39 years	185	47.3
	40- 49 years	42	10.7
Total	391	100.0	
<i>Academic Qualification</i>	FSLC/WASSCE	207	52.9
	OND/HND/B.SC	147	37.6
	MSC/PH.D	37	9.5
Total	391	100.0	
<i>Occupation</i>	Student	136	34.8
	Civil Servant	207	52.9
	Self-employed	48	12.3
Total	391	100.0	

*Note:*

- ♦ FSLC: First School Leaving Certificate
- ♦ WASSCE: West African Senior School Certificate Examinations
- ♦ OND: Ordinary National Diploma
- ♦ HND: Higher National Diploma

*Source:* Author

gos to maternal and childcare messages on television. Moving forward, Table 3 delves into the perception of nursing mothers regarding these television messages on maternal and childcare. Lastly, Table 4 assesses the level of adherence exhibited by nursing mothers to television messages regarding maternal and childcare practices. Through these Tables, the study comprehensively addresses its objectives, offering insights into the exposure, perception, and adherence of nursing mothers to television messages, contributing valuable information for the enhancement of maternal and childcare communication strategies.

### Analysis of Research Objective 1

The analysis of research objective 1 is presented in Table 2. Table 2 elucidates the extent of exposure among nursing mothers in Lagos to maternal and childcare messages on television.

Table 2 looks at how much maternal and childcare messaging nursing moms see on television and finds some interesting trends. A sizable percentage of participants (42.7%) experience these programs at least once every week, suggesting a consistent interaction with content related to mothers and childcare. In addition, 42.5 percent of respondents say they watch these shows once a week, indicating a regular audience. 43.7 percent of participants said that family planning and contraception were the most informative topics. These results highlight the chance to improve television

messages related to mothers and children by matching content to the most well-liked and significant subjects found, making sure that viewers are consistently exposed to educational material. Furthermore, this study suggests that television can be a powerful medium for distributing important information about mother and childcare to nursing mothers, given the relatively high frequency of exposure.

The degree to which nursing women in Lagos are exposed to parenting and child rearing-related television messaging is shown in Table 2. Notably, a high exposure rate was shown by the fact that 85.3 percent of participants reported seeing these kinds of messages either regularly or once a week. This highlights the potential usefulness of television as a popular and convenient medium for disseminating information about parenting and children. The present study corroborates the outcomes of prior investigations (Atakiti and Ojomo 2015; Igbinoba et al. 2020) and aligns with the submission of Adamu (2020) who stressed the effectiveness of television as a medium for messages concerning mothers and childcare.

Table 3 analysed the nursing mothers' perceptions of maternal and childcare messages on television, revealing insightful trends. A substantial majority of respondents find the television messages relevant (84.4%), with 45.3 percent expressing an improvement in their understanding of maternal and childcare. Moreover, over 50.0 percent believe that these messages contribute to the health

**Table 2: Exposure of nursing mothers to maternal and childcare messages on television**

S.No.	Questions	Everyday	Once a week	Fortnightly	Once a month	Never	Total
1	How often do you <b>come across</b> television programmes on maternal and childcare practices?	59 15.1%	167 42.7%	127 32.5%	35 9%	3 0.8%	391 100%
2	How often do you <b>watch</b> television programmes on maternal and childcare practices?	79 20.2%	166 42.5%	91 23.3%	50 12.8%	5 1.3%	391 100%
Items		Immunisation/	Contraceptive/ Vaccination	Diet/ Family planning	Total Nutrition		
3	Which of the following maternal/ childcare topics presented on television do you find most informative?	150 38.4%	171 43.7%	70 17.9%	391 100%		

Source: Author



**Table 3: Nursing mothers' perception of maternal and childcare messages on television**

S.No.	Statements	SA	A	D	SD
1	I find television messages on maternal and child care relevant	132 33.8%	198 50.6%	54 13.8%	7 1.8%
2	My understanding of maternal and childcare has improved as a result of maternal and childcare messages broadcast on television	177 45.3%	170 43.5%	36 9.2%	8 2%
3	Maternal and childcare messages broadcast on television assist and promote the health and well-being of children	159 40.7%	175 44.8%	48 12.3%	9 2.3%
4	Maternal and childcare messages broadcast on television assist and promote the health and well-being of nursing mothers	137 35%	204 52.2%	39 10%	11 2.8%
5	It is easy to adapt the maternal and childcare messages broadcast on television to the way I raise my children	132 33.8%	196 50.1%	46 11.8%	17 4.3%
6	Nursing mothers should take advantage of maternal and childcare messages broadcast on television	115 29.4%	205 52.4%	54 13.8%	17 4.3%
7	Maternal and childcare messages broadcast on television can effectively resolve the challenges faced by mothers in the course of pregnancy	209 53.5%	149 38.1%	28 7.2%	5 1.3%
8	Maternal and childcare messages broadcast on television can effectively resolve the challenges faced by mothers in the course of childcare	138 35.3%	202 51.7%	42 10.7%	9 2.3%
9	Maternal and childcare messages broadcast on television are in line with hospital standard practices	99 25.3%	207 52.9%	74 18.9%	11 2.8%

Frequency [n] = 391

Source: Author

and well-being of both children and nursing mothers. Interestingly, a significant proportion (53.5%) feels that maternal and childcare messages on television can effectively address challenges faced during pregnancy, emphasising the potential impact of such content. However, the alignment with hospital standard practices receives a comparatively lower endorsement (25.3%). These findings imply a generally positive reception of maternal and childcare television messages among nursing mothers, suggesting an opportunity to further enhance the content's alignment with healthcare standards to maximise its effectiveness in promoting the well-being of mothers and children. The study underscores the importance of refining television messages to bridge the gap between public perception and established healthcare practices.

Analysing the results from Table 3, it is evident that nursing mothers in Lagos generally hold a favourable perception of maternal and childcare messages on television. A significant percentage of respondents expressed agreement or strong agreement with statements indicating the relevance and positive impact of these messages on maternal and childcare practices. Specifically, 84.4 percent found the messages relevant, 88.8 percent believed that their understanding of maternal and

childcare had improved, and 85.5 percent felt that these messages effectively addressed challenges faced during pregnancy. This analysis supports the works of Popoola and Muraina (2019) and Yakubu (2021) who emphasised the positive impact of maternal and childcare television messages on nursing mothers. The findings also align with the submission of Atakiti and Ojomo (2015), Naveena (2015), Zamawe et al. (2016) and Chidinma (2019) that highlighted the potential effectiveness of such messages in promoting understanding, health, and well-being.

Table 4 reveals a noteworthy 83.4 percent reliance on television guidance among nursing women who were tested on their compliance with parenting and maternal television messaging. Television messages have a significant impact on decision-making, particularly when it comes to choices regarding pregnancy-related nutrition and diet (85.4%), labour and delivery (86.2%), and infant care product selection (79.6%). Family planning decisions (85.5%), general infant care (84.1%), newborn feeding and nutrition (87.2%), and maternal self-care (85.4%) are among the decisions that have an impact. These findings demonstrate that nursing mothers' decision-making processes on a variety of maternity and childcare-related topics are significantly influenced by television messaging.

**Table 4: Nursing mothers' adherence to television messages on maternal and childcare**

S.No.	Statements	SA	A	D	SD
1	I depend on maternal and childcare messages broadcast on television for guidance	123 31.5	203 51.9	50 12.8	15 3.8
2	Maternal and childcare messages broadcast on television impact on the choices I make about diet and nutrition in pregnancy	138 35.30%	196 50.10%	46 11.80%	11 2.80%
3	Maternal and childcare messages broadcast on television impact on the choices I make about delivery and childbirth	133 34%	204 52.20%	43 11%	11 2.80%
4	Maternal and childcare messages broadcast on television impact on the products I use on my newborn	111 28.40%	200 51.20%	62 15.90%	18 4.60%
5	Maternal and childcare messages broadcast on television impact on the choices I make as concerning my newborn's food and nutrition	137 35%	204 52.20%	38 9.70%	12 3.10%
6	Maternal and childcare messages broadcast on television impact on the choices I make about caring for my newborn	139 35.50%	190 48.60%	45 11.50%	17 4.30%
7	Maternal and childcare messages broadcast on television impact on the choices I make about caring for my body as a mother	144 36.80%	190 48.60%	40 10.20%	17 4.30%
8	Maternal and childcare messages broadcast on television impact on the choices I make about family planning	116 29.70%	218 55.80%	45 11.50%	12 3.10%

Source: Author

The ramifications underscore the necessity of factual, empirically supported content that conforms to optimal practices for women and child care, and underscore the capacity of focused and instructive television content to influence healthcare decisions in a favourable manner.

Table 4's results demonstrate how closely nursing mothers in Lagos adhere to the instructions they see on television when it comes to providing care for their mothers and children. For instance, 83.4 percent of participants say they depend on these signals to guide them, indicating that television is an essential information source. The impact of television messages on decisions about nutrition and diet during pregnancy (85.4%), birthing and delivery (86.2%), and newborn care product selection (79.6%) is particularly noteworthy. These findings resonate with the works of prior studies such as Odesanya et al. (2015), Chidinma (2019) and Yakubu (2021), who underscored the substantial influence of maternal and childcare television messages on nursing mothers' decision-making across various aspects of maternal and childcare practices. The result also corroborates the submission of Obasola and Mabawonku (2018) and Igbino et al. (2020) who highlighted the pivotal role of television in shaping choices related to diet, childbirth, newborn care, and family planning.

### Analysis of Research Hypotheses

Two hypotheses were formulated for this study, encompassing distinct aspects of maternal and

childcare practices among nursing mothers in Lagos, Nigeria. The first hypothesis aims to explore the potential relationship between exposure to maternal and childcare television messages and the knowledge levels of nursing mothers, while the second hypothesis delves into adherence to maternal and childcare television messages and the knowledge levels of nursing mothers.

The study employed Partial Least Squares (PLS), a version 4.1 of Structural Equation Modelling (SEM) to look at the correlations between the variables. Structural equation modelling (SEM) is a powerful statistical technique that allows for the simultaneous examination of multiple linkages within a complex model (Hair et al. 2019). PLS in particular performs well for this kind of exploratory study because it makes fewer assumptions and manages small sample sizes effectively (Hair et al. 2017). The degree of knowledge that nursing women in Lagos possess is the dependent variable. The independent variable is unquestionably the exposure to and compliance with maternal and childcare television message, as it is expected to vary.

The examination included the interpretation of path coefficients, t-statistics, R-square values, and p-values. Conversely, the R-squared value indicates the proportion of variation in the knowledge of nursing mothers that can be attributed to exposure and adherence to maternal and childcare television messages. Table 5 shows the construct reliability and validity for exposure and adherence to maternal and childcare television messages and

knowledge of nursing mothers in Lagos, Nigeria. Table 5 indicates the path coefficients, discriminant validity and model fit.

**RESULTS**

The factor loadings for each assessment item related to nursing mothers’ knowledge, exposure to, and adherence to messages about mothers and childcare on television are shown in Table 5. The validity and reliability of the instrument were evaluated using composite reliability, Cronbach Alpha, and average variance extracted (AVE) calculation. Concurrently, the AVE, Cronbach Alpha, composite reliability, and factor loading requirements were satisfied. Construct validity was also determined by taking into account discriminant and convergent validity in the research. Evidence of a connection between exposure and adherence to maternal and childcare television messages and knowledge of nursing mothers is known as convergent validity.

The discriminant validity of exposure and adherence to maternal and childcare television messages and knowledge of nursing mothers is depicted in Table 6. The heterotrait–monotrait

(HTMT) ratio of correlations method was used to assess the discriminant validity. The results of the analysis indicate that every number is below the crucial HTMT 0.85 limit. The average heterotrait-heteromethod correlation is less than the average monotrait-heteromethod correlation when all of this is taken into consideration. The discriminant validity is thus proven. Likewise, VIF was used to assess the common method bias, as Table 6 illustrates. The outcomes fell within the suggested threshold of 3.3.

Table 6 shows the model fit for the exposure and adherence to maternal and childcare television messages and knowledge of nursing mothers. It was determined that every model fit indicator was satisfactory. Standardised Root Mean Squared Residual, or SRMR, is a representation of the standardised residual average between the hypothesised covariance matrices and the observed matrix. Since the SRMR value of 0.071 is less than the 0.08 criterion, it is regarded as trustworthy and indicates a good match. The  $\hat{\alpha}$  and P coefficients, which indicate the degree and importance of the correlation between nursing mothers’ knowledge and exposure to and adherence to maternal and childcare television messages, are evalu-

**Table 5: Construct reliability and validity for the exposure and adherence to maternal and childcare television messages and knowledge of nursing mothers**

Variables	Cronbach’s Alpha [ $>0.7$ ]	Composite reliability ( $\rho_a$ ) [ $>0.7$ ]	Composite reliability ( $\rho_c$ ) [ $>0.8$ ]	Average variance extracted (AVE) [ $>0.5$ ]
<b>Exposure</b> to maternal and childcare television messages	0.747	0.783	0.817	0.522
<b>Adherence</b> to maternal and childcare television messages	0.828	0.873	0.839	0.579
<b>Knowledge</b> of nursing mothers	0.835	0.899	0.884	0.591

Source: Author

**Table 6: Discriminant validity**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]
Frequency of Television Viewing [1]							
Duration of Exposure [2]	0.581						
Recall of Specific Message Content [3]	0.567	0.462					
Dependency on Television Guidance [4]	0.257	0.426	0.396				
Channel Loyalty [5]	0.375	0.365	0.317	0.351			
use products or practices recommended [6]	0.482	0.355	0.217	0.344	0.343		
Knowledge Retention [7]	0.375	0.400	0.333	0.316	0.300	0.289	

Source: Author



ated using the PLS Bootstrapping Model. Table 7 displays the p-value, which is a measure of statistical significance.

The findings presented in Table 7 reveal significant relationships between exposure to maternal and childcare television messages, adherence to these messages, and the knowledge of nursing mothers. The path coefficient of 0.779 indicates a strong positive relationship between exposure to television messages and the knowledge of nursing mothers, with an R-square value of 0.903, suggesting that exposure to maternal and childcare messages explains a substantial amount of variance in nursing mothers' knowledge ( $\beta = 0.779$ ,  $R^2 = 0.903$ ,  $T_{value} = 19.489 > 1.96$ ,  $p\text{-value} = 0.000 < 0.05$ ). Similarly, the path coefficient of 0.273 for adherence to television messages signifies a significant positive relationship with nursing mothers' knowledge ( $\hat{\alpha} = 0.273$ ,  $R^2 = 0.903$ ,  $T_{value} = 6.091 > 1.96$ ,  $p\text{-value} = 0.000 < 0.05$ ). This suggests that while adherence plays a role in influencing knowledge, exposure has a more substantial impact.

The discriminant validity analysis, based on the Fornell-Larcker criterion, indicates that the square root of the average variance extracted for

each construct is higher than the correlations with other constructs, confirming discriminant validity among exposure to television messages, adherence to messages, and knowledge of nursing mothers. Moving on to model fit indices, the SRMR/RMSEA values are both below the threshold of 0.08, indicating good model fit. The GFI and NFI values also meet the recommended criterion of 0.90, further supporting the adequacy of the estimated model.

Exposure to maternity and childcare television messaging has been found to have a significant impact on maternal and childcare education. This finding implies that exposure to these messages has a bigger effect on nursing mothers' understanding than adherence. This demonstrates how important it is to develop effective television advertisements that ensure consistent and substantial exposure in order to maximise the learning results for nursing women. One approach to customising interventions to maximise exposure is to improve the frequency and distribution of relevant television messages. In the end, this might lead to more significant gains in understanding about childcare and mothers, which would be good for mothers' and children's health.

**Table 7: Path coefficients, discriminant validity and model fit for exposure/adherence to maternal and childcare television messages and knowledge of nursing mothers**

Variables	Co-efficient	R-Square	Adj. R-Square	T-Value	Sig.	Decision
<b>Exposure</b> to maternal and childcare television messages $\oplus$ <b>Knowledge</b> of nursing mothers	0.779	0.903	0.900	19.489	0.000	Significant
<b>Adherence</b> to maternal and childcare television messages $\oplus$ <b>Knowledge</b> of nursing mothers	0.273			6.091	0.000	Significant
<i>Discriminant Validity [Fornell Larcker Criterion]</i>						
			[EXPO]	[ADHR]		[KNOW]
<b>Exposure</b> to maternal and childcare television messages [EXPO]						
<b>Adherence</b> to maternal and childcare television messages [ADHR]						
<b>Knowledge</b> of nursing mothers [KNOW]						
<i>Model Fit</i>						
Indices	Decision rule			Saturated model	Estimated model	
SRMR/RMSEA	Below or equal 0.08 [ $<0.08$ ]			0.062	0.060	
Goodness of Fit Index [GFI]	Equal or Higher 0.90 [ $<0.90$ ]			0.941	0.938	
Normed Fit Index [NFI]	Equal or Higher 0.90 [ $<0.90$ ]			0.912	0.910	
Chi Square				139.173	139.173	

Source: Author

Table 7 shows that exposure [ $H_1$ ] and adherence [ $H_2$ ] to maternal and childcare television messages significantly impact on the knowledge levels of nursing mothers. This supports the works of previous studies by Popoola and Muraina (2019), Igbinoba et al. (2020) and Yakubu (2021) that emphasised the positive impact of maternal and childcare television messages on nursing mothers' knowledge. The findings also corroborate the works of Atakiti and Ojomo (2015), Naveena (2015) and Chidinma (2019) who demonstrated the pivotal role of television in shaping choices and understanding maternal and childcare practices, as proposed by other scholars.

### DISCUSSION

Table 7 shows the significant effects on nursing mothers' awareness levels of exposure (H1) and adherence (H2) to maternal and childcare television messages. These results align with earlier studies carried out in other contexts. Studies such as those conducted in the rural parts of Bauchi state by Adamu (2020) and Atakiti and Ojomo (2015) demonstrate how the media, especially television, influences public attitudes and behaviours pertaining to maternal health. Additionally, the findings support the findings of Chidinma (2019) and Yakubu (2021), which highlighted the influence of broadcast media on attitudes, beliefs, and knowledge regarding maternal health. These results consistently corroborate the idea that exposure to and adherence to maternal and childcare messages on television has a major impact on the knowledge levels of nursing moms.

Furthermore, the findings of this study are consistent with the research of other scholars, such as Naveena (2015) and Seymour (2018), who have highlighted the significance of mass media campaigns and communication in altering health-related behaviours. The association that has been observed between exposure, adherence, and knowledge is consistent with the findings of Frank and Falzone (2021), which highlights the efficacy of family planning treatments that may also be extended to maternal and childcare practices. Moreover, the implications of the results of this study are consistent with the insights offered by Igbinoba et al. (2020), who highlight the favourable correlation between maternal health awareness and women's exposure to mass media. In conclusion,

the strong evidence from a wide range of academic works supports the importance of television messaging on mothers and childcare in influencing the degree of knowledge of nursing moms.

The results of the current study affirm the relationship between television messages and maternal health as has been observed in most recent studies. For example, Aboagye et al. (2022) found a direct positive correlation between television health programmes and awareness of maternal health among the rural and urban women. These observations corroborate findings from earlier studies such as the one done by Igbinoba et al. (2020) to show that television remains a popular medium with nursing mothers for the dissemination of healthcare practices. Besides, Torres et al. (2023) emphasize that TV influences viewers' perceptions regarding maternal and childcare significantly. These aligned studies with the current findings imply that Television, as a traditional media, is still effective in promoting maternal health behaviors, especially in low-resource settings.

The research evidence of the present study supports current literature in terms of explaining the role of mass media as a means of changing health-related behaviors. Even though the messages included in this study are related to maternal and child care, the impact of mass media on health behaviors is enormous. Ohaja et al. (2023) noted that mass media campaigns that promote family planning also enhance maternal and childcare practices. Ohaja et al. (2023) further demonstrate how primetime health interventions, especially television programs, can be crucial in advancing the general health of families across the globe, especially on issues such as child immunization, safe childbirth, and maternal mental health. Moreover, Damayanti et al. (2023) also strengthens this view by stating that frequent and consistent mass media exposure helps increase the awareness level among women of maternal health issues. These studies are consistent with the present study's findings highlighting exposure or adherence to maternal health messages as having an association with better knowledge and practices on the part of the women. The positive relationship between television exposure, adherence, and knowledge level has remained strong into the present and serves as a sound foundation on which subsequent maternal health intervention based on mass media may be anchored.

## CONCLUSION

The study's conclusions highlight how important it is for mothers and childcare programs on television to have an impact on nursing mothers' knowledge in Lagos, Nigeria. Maternal and childcare practices were found to be significantly influenced by exposure to these messages as well as adherence to them. The findings support and corroborate earlier research done in other parts of Nigeria in addition to adding to the expanding body of knowledge on the effect of mass media on maternal health. The strength and generalisability of the observed connections are shown by the consistent support from a variety of sources. These findings have significant ramifications for public health initiatives, highlighting the necessity of focused and successful television programs to raise nursing mothers' awareness levels and eventually improve the community's outcomes for maternal and child health.

## RECOMMENDATIONS

The findings of this study suggest several recommendations for both maternal and childcare television programs and policy formulation. Firstly, television broadcasters should tailor their content to ensure regular and engaging coverage of maternal and childcare topics, enhancing exposure. Additionally, public health policies should consider leveraging television as a strategic tool for disseminating evidence-based information, potentially collaborating with media outlets to strengthen the impact of maternal and childcare campaigns. Moreover, interventions should target specific demographic groups to address potential disparities in exposure and adherence, ensuring that the benefits of televised health messaging are accessible to all nursing mothers in Lagos.

## CONTRIBUTIONS TO KNOWLEDGE

This study contributes to knowledge by providing empirical evidence of the significant impact of both exposure and adherence to maternal and childcare television messages on the knowledge levels of nursing mothers in Lagos, Nigeria. The findings enrich the existing literature on the influence of mass media on maternal health, offering insights into the specific dynamics within the con-

text of Lagos. Furthermore, the study emphasises the importance of tailored television interventions in promoting maternal and childcare practices, providing valuable guidance for the development of effective public health communication strategies.

## LIMITATIONS OF STUDY AND SUGGESTIONS FOR FURTHER STUDIES

While this study enhances the understanding of the influence of maternal and childcare television messages on nursing mothers in Lagos, limitations include the reliance on self-reported data, which may introduce response bias. Additionally, the cross-sectional design restricts the establishment of causal relationships. Future research could employ longitudinal designs and incorporate objective measures to validate findings, and explore potential cultural nuances that may impact the effectiveness of television messaging in diverse communities.

## ACKNOWLEDGEMENT

This study is sponsored by the Covenant University Centre for Research, Innovation and Discovery (CUCRID), Covenant University, Ota- Nigeria.

## REFERENCES

- Aboagye RG, Seidu AA, Ahinkorah BO, Cadri A, Frimpong JB, Hagan JE 2022. Association between frequency of mass media exposure and maternal health care service utilization among women in Sub-Saharan Africa: Implications for tailored health communication and education. *Plos One*, 17(9): e0275202. <https://doi.org/10.1371/journal.pone.0275202>
- Adamu A 2020. Exposure of Hausa women to mass media messages: Health and risk perception of cultural practices affecting maternal health in rural communities of Bauchi state, Nigeria. *Communication Cultures in Africa*, 2(1): 6-30.
- Arireguzoh S, Amodu L, Sobowale I, Ekanem T, Omidiora O 2021. Achieving sustainable e-health with information and communication technologies in Nigerian rural communities. *Cogent Social Sciences*, 7(1): 1887433.
- Atakiti IO, Ojomo OW 2015. Influence of television health programmes on maternal health. *International Journal of Humanities and Social Science*, 5(8): 170-180.
- Barnes LA, Barclay L, Mccaffery K, Aslani P 2019. Complementary medicine products: Information sources, perceived benefits and maternal health literacy. *Women and Birth*, 32(6): 493-520.
- Chidinma UJ 2019. Influence of broadcast media messages on awareness, perception and attitude of maternal health

- among reproductive women in Ilorin. *African Journal of Social Sciences and Humanities Research*, 2(1): 57-116.
- Damayanti NA, Wulandari RD, Ridlo IA 2023. Maternal health care utilization behavior, local wisdom, and associated factors among women in urban and rural areas, Indonesia. *International Journal of Women's Health*, 665-677. DOI: 10.2147/IJWH.S379749
- Elewonibi B, BeLue R 2019. The influence of socio-cultural factors on breast cancer screening behaviors in Lagos, Nigeria. *Ethnicity & Health*, 24(5): 544-559. <https://doi.org/10.1080/13557858.2017.1348489>
- Frank LB, Falzone P 2021. Introduction: Entertainment-education behind the scenes. In: LB Frank, P Falzone (Eds.): *Entertainment-Education Behind the Scenes*. Cham: Palgrave Macmillan, pp.3-14. DOI:10.1007/978-3-030-63614-2\_1.
- Hair J, Hollingsworth CL, Randolph AB, Chong AYL 2017. An updated and expanded assessment of PLS-SEM in information systems research. *Industrial Management + Data Systems*, 117(3): 442-458. <https://doi.org/10.1108/ims-04-2016-0130>
- Hair JF, Risher JJ, Sarstedt M, Ringle CM 2019. When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1): 2-24. <https://doi.org/10.1108/eb-11-2018-0203>
- Igbinoba AO, Soola EO, Omojola O, Odukoya J, Adekeye O, Salau OP 2020. Women's mass media exposure and maternal health awareness in Ota, Nigeria. *Cogent Social Sciences*, 6(1): 1766260.
- Igbinoba AO, Soola EO, Omojola O, Odukoya J, Adekeye O, Salau OP 2020. Women's mass media exposure and maternal health awareness in Ota, Nigeria. *Cogent Social Sciences*, 6(1): 1766260. DOI: 10.1080/23311886.2020.1766260
- Krejcie RV, Morgan DW 1970. Sample size determination table. *Educational and Psychological Measurement*, 30: 607-610.
- Labisi A 2012. Lagos megacity or mega-slum? Towards a sustainable Lagos megacity development: Some basic planning considerations. *Journal of Sustainable Development in Africa*, 14(6): 145-159.
- Liao CH 2023. Exploring the influence of public perception of mass media usage and attitudes towards mass media news on altruistic behavior. *Behavioral Sciences*, 13(8): 23 -28
- Naveena N 2015. Importance of mass media in communicating health messages: An analysis. *IOSR Journal of Humanities and Social Science*, 20(2): 36-41.
- Obasola OI, Mabawonku IM 2017. Women's use of information and communication technology in accessing maternal and child health information in Nigeria. *African Journal of Library, Archives & Information Science*, 27(1): 21-37.
- Obasola OI, Mabawonku IM 2018. Mothers' perception of maternal and child health information disseminated via different modes of ICT in Nigeria. *Health Information & Libraries Journal*, 35(4): 309-318.
- Odesanya A, Hassan S, Olaluwoye D 2015. Mass media and maternal healthcare: A critical discourse. *New Media and Mass Communication*, 34: 63-71.
- Ohaja M, Senkyire EK, Ewetan O, Asiedua E, Azuh D 2023. A narrative literature review on media and maternal health in Africa. *World Medical & Health Policy*, 15(2): 123-147.
- Popoola OD, Muraina LO 2019. Health-care seeking behaviour of nursing mothers on childhood killer diseases in rural communities of Ondo State, Nigeria. *FULafia Journal of Social Sciences*, 2(1): 88-98.
- Seymour J 2018. The impact of public health awareness campaigns on the awareness and quality of palliative care. *Journal of Palliative Medicine*, 21(S1): 12-16.
- Torres A, Piña G, Southwell B, Garcia-Baza I 2023. Can local TV news affect parents' perceptions of parenting and child development research? Evidence from the Positive Parenting Newsfeed Project. *Psychology Public Policy, and Law*, 29. DOI:10.1037/law0000369
- Yakubu FNB 2021. Maternal and Child Health Media programmes and accessibility in selected Northern Nigerian Communities. *Global Media Journal*, 19(44): 269.
- Zamawe CO, Banda M, Dube AN 2016. The impact of a community driven mass media campaign on the utilisation of maternal health care services in rural Malawi. *BMC Pregnancy and Childbirth*, 16: 1-8.

**Paper received for publication in March, 2024**  
**Paper accepted for publication in October, 2024**