Integrated Media and Communication Approach in the Immunisation Campaign in Nigeria

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DOI: https://doi.org/10.5281/zenodo.14033329

Abstract

This study is an appraisal of how integrated media and communication approach can make a difference in the immunisation campaign in Nigeria. The researchers used secondary sources of data. The researchers argued that since using the mass media alone will have little effects on behaviour change, using evidence-based and resign-driven model such as the ACADA model will be a game-changer. The acronym ACADA means Assessment, Communication Analysis, Design and Action. It was developed by UNICEF as a strategic communication intervention initiative on development and health-related issues. The researchers discussed how the integrated media and communication approach can reduce vaccine hesitancy in child immunisation in Nigeria and recommended among others that, there should be multi-stakeholder engagements which will involve international donor agencies/partners, the governments in Nigeria at all levels, religious, traditional and political leaders across all spectrums and women's associations so that not only will the desired target audience be reached, but this target audience (nursing mothers) and their spouses should be persuaded to adopt the ideal behaviour towards immunisation.

Keywords: Appraisal, Immunisation Campaign, Integrated Media and Communication Approach, Nigeria

Introduction

Over the years, there has been visible effort to sensitise the Nigerian public on the imperative of child-immunisation against certain vaccine-preventable diseases such as Diphtheria, Hepatitis B, Measles, Poliomyelitis, Tetanus, Tuberculosis and Yellow Fever. Some international organisations such as the Bill and Melinda Gates Foundation have contributed immensely to the campaign on the eradication of Polio, especially in Northern Nigeria. According to UNICEF (2017), well over 2000 children die every year in Nigeria from diseases that could easily have been prevented by vaccination. These deaths could be attributed to poor implementation of the health communication strategies as well as the issue of ignorance of the public based on socio-cultural and religious factors. WHO (2023) notes that immunisation is perhaps the best and the most-effective way of reducing the mortality of children. It is against this backdrop that WHO launched the Expanded Programme on Immunisation in 1974 in order to reduce child mortality from six Vaccine-Preventable Diseases (VPDs), some earlier mentioned.

However, in Nigeria, the EPI was launched in 1978 to carryout massive immunisation of children that are less than two years. Although the programme recorded some level of successes, as five of the morbid childhood diseases were reduced, but Polio became a nightmare especially in Northern Nigeria (Temitayo-Oboh, Adegbola, Dedeke, Adeniyi, Soyanno, Ajewole & Sanni, 2023). It follows, therefore, that the National Demographic Health Survey (NDHS), launched in 2023 revealed that only about 30% of the children aged 12-23 months have received all the appropriate vaccinations for their age-range, while 40 % of the children had received three doses of Diphtheria, Pertussis, Tetanus toxoid (DPT); three doses of Oral Polio Vaccine (OPV) and one dose of Vaccine for Measles. It is imperative to note that although Nigeria has the highest number of unimmunised children in the world, estimated at well over 5 million in 2023 (WHO, 2023), the free vaccines provided by the Nigerian government, has yet to close the gap in terms of coverage rates, as the country still falls below 50% expected average, partly due to poor health communication strategies (Adedire, Ajayi, Fawole, Ajumobi, Kasasa, Wasswa & Nguku, 2023). In a seeming support for the above, the Strategic Advisory Group of Experts on Immunisation (SAGE) Working Group on Vaccine Hesitancy argues that communication was not a determinant of vaccine hesitancy, rather a tool of addressing vaccine hesitancy. The SAGE also notes that poor communication could undermine vaccine acceptance, especially in the developing countries (Goldstein, Guirgois, & MacDonald, 2022).

Review of Empirical Studies

Empirical studies on immunisation have interdisciplinary dimensions. Apart from the medical field, there are also some others which are from the media and communication field. To this end, Temitayo-Oboh, Adegbola, Dedeke, Adeniyi, Soyannwo, Ajewole & Sanni (2023) assessed the immunisation coverage and dropout rates of children aged 0-23 months at the Federal Medical Centre in Abeokuta, Ogun State, Nigeria; they discovered that the level of immunisation coverage was a little bit low, with a good number of children not immunised. Anichukwu & Asamoah (2019) discovered that the percentage of fully-immunised children in Nigeria was quite low, with just about 25.8% of the children aged 12 months fully-vaccinated.

Kaufman, Ames, Bosch-Capblanch, Cartier, Cliff, Glenton, Lewin, Muloliwa, Oyo-Ita, Rada & Hill (2017) conducted a research entitled: "Comprehensive "Communicate to Vaccinate" Taxonomy of Communication Interventions for Childhood Vaccination in Routine and Campaign Contexts. The researchers, based on their discoveries, classified the taxonomy of communication into seven categories: "Inform or Educate;" "Remind or Recall;" "Teach Skills;" "Provide Support;" "Facilitate Decision-Making;" "Enable Communication" and "Enhance Community Ownership." They concluded that this taxonomy of communication can be used by those who plan, implement, research and fund immunisation campaign not only as a communication strategy, but also to either synthesise or identify evidence gaps. However, from these empirical studies, none discussed the efficacy of the integrated media and communication approach in the immunisation campaign, especially with the use of strategic communication models, such as the ACADA Model. This paper makes a modest contribution in this regard.

Theoretical Framework

This paper is anchored on the Health Belief Model and Social Marketing Theory. The Health Belief Model was developed in the 1950s by social psychologists Irwin Rosenstock, Godfrey Hochbaum, Stephen Kegeles and Howard Leventhal at the United States. Public Health Service to better understand the widespread failure of screening programmes for tuberculosis (Karen & Rimer 2008). The Health Belief Model (HBM) is a psychological health behavior change model developed to explain and predict healthrelated behaviors, particularly with regards to the uptake of health services. Zampetakis & Melan (2021) argue that the Health Belief model has been applied to predict a widevariety of health-related behaviors such as being screened for the early detection of asymptomatic diseases and receiving immunisations. More recently, the model has been applied to understand patients' responses to symptoms of disease compliance with medical regimens, lifestyle behaviours (risky sexual behaviours), and behaviours related to chronic illnesses, which may require long-term behaviour maintenance in addition to initial behaviour change. The model also suggests that people's beliefs about health problems, perceived benefits of action and banters to action and self-efficacy explain engagement (or lack of engagement) in health-promoting behaviour. A stimulus or cue to action, must also be present in order to trigger the health-promoting behavior. It follows, therefore, that if there are socio-cultural and religious factors which tend to inhibit nursing mothers and their spouses, as well as some opinion leaders from embracing immunisation, then such needs to be tackled through the use of integrated media and communication approach.

The social marketing theory was developed and popularised by Philip Kotler and Gerald Zaltman, two eminent Marketing experts, in 1971. The theory presupposes the design, implementation and control of programmes, calculated to influence the acceptability/adoption of social ideas, which involves the consideration of product planning, pricing, communications, distribution, and marketing research. Furthermore, the theory focuses mainly on influencing consumer behaviour by emphasising the strategies/techniques aimed at addressing the problems defined. Also, social marketing includes the application of commercial marketing techniques/strategies to analyse, plan, execute and evaluate programmes designed to influence the voluntary behaviour of the target audience, in order to improve their well-being (Altman & Piotrow, 2020; Manoff, 2021; Lefebre & Fiora, 2022; & Andreason, 2023). Lending credence to the above, Nussbaum & Friedrich (2022) as well as Kim (2020), note that social marketing is a development communication strategy which involves audience research, market segmentation, product development, incentives and promotion along with the theoretical principles of behaviour change, which have been incorporated into the planning of communication strategies for development programmes, such as family planning, HIV/AIDS prevention and control, responsible parenthood, and appropriate sexual behaviour. The relevance of this theory can be seen in the fact that using the ACADA Model which is embedded with the integrated media and communication approach will make the immunisation campaign in Nigeria to be evidence-based and research-driven.

Methodology

This research, being a qualitative one used secondary sources of data, such as books, journals, online resources and reports.

Overview of Integrated Media and Communication

Integrated media and communication is the strategic deployment of all the media and channels of communication in addressing an issue of importance in order to ensure that the objectives align with the outcomes. It is the adept and adroit use of effective communication to ensure that what is said is what is meant, what is meant is what is understood and what is understood is what is carried out or complied with. Integrated media and communication uses promotional skills in disseminating persuasive messages to the target audience so that the tactics and strategies of a health communication campaign match the desired objectives (Smith, 2022). To this end, the indigenous, conventional/traditional/legacy and the digital media can all be used to carry out massive campaign and mobilisation on health issues. This combination is imperative due to the fact that majority of Nigerian still live in rural communities and they equally need to be reach with health messages (Santas, 2018).

According to Recio-Roman (2023), the mass media do not only constitute a significant source of information on immunisation, but they can help with other factors to shape opinions and attitudes and can also engender misinformation and foster division, based on certain interests.. Also, Clark (2022) argues that the strategic use of the mass media in immunisation campaign can help in creating awareness, increasing knowledge and changing health-related behaviours. Asemah, Nkwam-Uwaoma & Santas (2017) are of the opinion that the mass media still wield a lot of influence in regards to health intervention campaign, especially in rural communities in Nigeria. It is in this light that the mass media are seen as change-agents and the collective conscience of society. Other scholars such as Zhou (2022) & Singh (2020) also assert that the media can make a fundamental contribution to human progress if they can collaborate with the government and relevant Non-Governmental Organisations (NGOs) by educating and sensitising the public, especially mothers on the benefits of child immunisation against the well-known morbid diseases. So, through such media content like news, news analysis, editorials, documentaries and so on, the media can set agenda on the importance of immunisation in the Nigeria society, especially in Northern Nigeria because of socio-cultural and religious dogmas.

In the light of the above, FAO (2019), argues that of all the conventional media of mass communication, radio remains the most effective and potent in sensitising the people, especially the rural-dwellers on the imperative of immunisation. Radio is a flexible medium because its content can be consumed even when an individual in engaged in some other activity. Even the poorest countries of the world can still afford to establish radio stations, while the poor can still afford a radio set. It is perhaps the most widely-used medium in Northern Nigeria (Danjuma, Agir, Zubairu & Agya, 2021; Santas, Inobembe & Garba, 2023). In addition, radio programmes are quite flexible because some of them can be done in the indigenous languages and local dialects of the

people. FAO (2019, pp. 56-57) itemises the potential and impact of radio for development purposes as follows:

- a. An important mechanism for rapid diffusion of development information in a diversity of languages and to widespread, often remote geographical areas.
- b. A channel for interactive communication, for dialogue and debate on the major issues of rural development.
- c. A platform for democratic and pluralistic expression on the opinions, needs and aspirations of rural communities.
- d. A tool for cultural expression and entertainment; and a means of collecting, preserving and enhancing the oral and musical heritage of rural communities.
- e. A medium for collecting local information, social issues, which is essential for defining, planning and implementing developmental efforts.
- f. A means of raising public awareness and motivation, and
- g. A tool which when combined with other media, can be used for training and the transfer and exchange of knowledge and technologies.

Furthermore, as a way of intervening in the reduction of the morbid child diseases through effective health communication, there are certain radio programmes/formats which can be used. These are: lecture/straight talk, interview/discussion, drama, music, jingles/slogans, magazines, infotainment, news presentation and testimonials, among others. Each of these programmes/formats, discussed below, has its own approach:

Lecture/Straight Talk: This can be used to present general facts or issues concerning immunisation; how vaccine hesitancy can be addressed and how to achieve massive immunisation of children, especially in the North.

Interview/Discussion: This format requires more than one person and opinion to be aired. It can be with health officials and other experts versed on issues of immunisation, with the latest data. This can also provide a good platform for participatory radio, where listeners can call-in to make contributions and ask questions. Some of the programmes using this format should be in the people's language.

Drama: This is one avenue of providing vicarious experience to people. According to Agbasiere (2020), drama, folktales, oral poetry and music, when aired through the radio medium, laden with rich development messages and ideas, have the potential to mobilise people for development. To this end, the dramatisation or reflection on the people's attitude to immunisation should contain messages on behaviour change. Drama, thus can generate interests and arouse the attention of the listeners towards immunisation issues.

Music: This format can be adopted for communities which have love for singing and dancing. The themes and content of the songs can be used raise awareness or promote positive attitudes towards immunisation.

Jingles/Slogans: This can be done by a radio station as a form of social responsibility, the governments at all the levels, or an NGO working on immunisation. But since this is a

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commercial message aimed at creating awareness or making the target audience to adopt a positive attitude towards immunisation, the sponsor must be identified.

Magazine: This is a radio format which contains a number of issues, or miniprogrammes within its allotted time. It can be shaped as news report or have a number of different elements such as interviews, music and straight talk. So in this case, the programme themes/messages should focus on the imperative immunisation.

News Presentation: This is also an important format that can be used to inform and educate the people on issues on immunisation. The objective and factual accounts of issues on immunisation should be make the people to be well-informed.

Testimonials: These are individuals, mainly celebrities used in advertisements to endorse products/services. In the case of immunisation campaign, since most of these influencers are believed to have credibility by their admirers, they can help the people to appreciate the importance of immunisation.

Following the above, radio is a very strategic medium in the immunisation campaign in a developing country, particularly in the North, because it helps to penetrate the barriers of time, distance, illiteracy, class, and power outage, among others. However, it is instructive to note some of the radio programmes/programming targeted at the people at the grassroots should done in their local languages. Apart from the mass media, traditional institutions and influential religious leaders can be used to mobilise the people to embrace immunisation. Most Nigerians at the grassroots tend to have respects for some of these opinion leaders; so when they talk to the people about the importance of immunisation, they (the people) will understand.

Behaviour Change Communication and the Immunisation Campaign

Behaviour Change Communication (BCC) is the use of strategic communication to make individuals and communities to embrace sustainable and life-changing health practices. It is an interventionist and interactive communication strategy and tactics to foster the adoption of positive behaviours among the people. According to the Global Health eLearning Centre (2022), its building blocks are: awareness, knowledge, contemplation, intention, action and maintenance. In discussing the centrality of communication in general terms in the participatory process, FAO (2019: 53-54), notes that communication can be used for:

- a. Better planning and programme formulation by consulting the people and actively involving them in making decisions that will affect them.
- b. People's participation and community mobilisation, by building their confidence to make and carry them out as a community in a self-reliant way.
- c. Changing lifestyles through the use of mass media to raise awareness, peer counselling techniques of interpersonal communication and social communication methods to pioneer attitudinal change.
- d. Improve training through communication media to bring alive new ideas and technicalities and energise programmes of training and human resource development.

- e. Rapid spread of information far and wide throughout a region or an entire country through the mass media.
- f. Effective management and co-ordination: communication approaches when crucial when a new development orientation is being introduced within a ministry, when strengthened teamwork is needed and policy-makers need to be kept abreast of the field situation.
- g. Gaining the attention of decision-makers and generating their support.

Against the backdrop of the foregoing, it is believed that strategic communication remains a key success factor in inducing behaviour change in the people, *vis-à-vis* the campaign on immunisation in Nigeria. BCC is a multi-dimensional tool for promoting and sustaining the embrace of immunisation in individuals and communities, by distributing measured and accurate health messages through a variety of communication media/channels. So BCC should lead to the drastic reduction in vaccine hesitancy in Nigeria, especially in the North. It follows therefore that BCC should be at the centre of the use of integrated media and communication strategies in the bid to mobilise the people, particularly mothers and even their spouses to embrace child immunisation against the six deadly diseases.

Immunisation Campaign and the Place of the ACADA Model



Figure 1: ACADA Communication Planning and Implementation Process

Source: Communication Handbook for Polio Eradication and Routine EPI Based on the fact that the mass media can sometimes be limited in impact when it comes to evidence-based and research-oriented behaviour change indicators, there has emerged

a scientific model which is all-encompassing and can be monitored through deliverables. This model, known as the ACADA model, which is cyclical in form was developed by UNICEF, as a strategic communication planning and implementation model for human-centred development, especially in the area of health communication campaigns. It aims at communicating behaviour-change induced messages to a target audience, so that they can adopt socially-acceptable behaviours and drop negative ones. The acronym ACADA stands for Assessment, Communication Analysis, Design, and Action. It has been accepted and used globally by development and health communication experts to promote development-oriented projects, especially in the developing countries (Nelson, 2023). The details of the acronym are as follows:

Assessment

The first step of the model which is "Assessment" will take a holistic, critical and comprehensive look at the statistics on immunisation in Nigeria through situation reports, data and other reviews, taking note of the weaknesses, strengths, failures, successes, challenges, as well as other salient issues and problems. Some of the data can be gotten from the NDHS as well as the Bill and Melinda Gates Foundation on Polio in Nigeria, among others. The preliminary step is very crucial because without it, the remaining steps of the model will be defective. This step must also note the fact that in spite of the rise in the level of consciousness of the importance of immunisation today, the coverage level is still less than 50% percent as noted (Oku, 2019). So, getting these facts is very important. In the course of assessing the situation, through scientific and methodological approach, it is imperative to know the percentage level of coverage in the 774 local governments and 36 states in the country. In addition, all the underlying issues and problems impinging on immunisation must be clearly-addressed because this will lead to the next phase of the model. UNICEF (2022) elaborates on the "assessment" stage of the model as follows:

- Review of programme status in terms of successes, failure/weaknesses, issues and problems, as well as the identification of those problems/interferences that can be overcome through the application of communication interventions.
- Review of existing communication interventions through the compilation of communication, training and learning materials, listing of the objectives of the Information, Education and Communication (IEC) materials and analysing the implications of pre-test reports and evaluation studies; definition of intended beneficiaries/participants with regards to location, language group, age, sex and Socio-Economic Status (SES).
- Review of existing behavioural/focus group data, attitudinal studies and monitoring/evaluation reports with regards to prevalent practices/habits, economic systems, socio-political relationships, cultural values and religious belief systems, gender relationships and the status of children/the elderly/
- Identification of missing information such as: which practices/behaviours need to be discouraged? Which of them need to be modified? Which of them need to be changed totally?

Communication Analysis

After the assessment stage, what follows logically is communication analysis. At this stage, it is pertinent to identify the problematic behaviour to be addressed; concentrate on the behavioural causes of the problem; prioritise the behaviours to be addressed; the target audience, as well as the channels/media for the behaviour. Some important questions will be: what are the appropriate behaviours we are trying to promote? What are the barriers to this "ideal" behaviour (political, social, economic, cultural and religious?); what existing factors can encourage these "ideal" behaviours? With respect to child immunisation, what factors can reduce vaccine hesitancy drastically? The above constitutes part of behaviour analysis, which is an integral part of communication analysis. According to UNICEF (2022), there are three types of behaviours, namely: ideal behaviours, current behaviours and priority behaviours, which are capable of alleviating a particular aspect of the problem. Current behaviours refer to the most prevalent behaviour/practices which are related to the problem, while priority behaviours indicate feasible behaviours which are bound to have a significant impact on the problem.

After dealing with behaviour analysis, the next step is the target audience. Under this, it is important to know the primary and secondary audiences, who should be performing or practising these behaviour; their role models and opinion leaders. In the case of immunisation campaign, nursing mothers constitute the primary audience, while traditional, religious, and political leaders constitute the secondary audience. These opinion leaders should be able to sensitise the nursing mothers and even their spouses on the need to adopt an ideal behaviour towards immunisation. Furthermore, another essential step of communication analysis, is the identification of communication objectives, bearing in mind that they have to be SMART; that is, Specific, Measurable, Achievable, Realistic and Time-bound. For example, a SMART objective can be to raise the awareness level of immunisation to about 80% of nursing mothers by the end of 2024 in a particular community, local government, state and so on. Having SMART objectives makes it easier to clearly-define what is supposed to be achieved, hence facilitating the monitoring and evaluation process. This also provides further support for the definition of the expected outcomes.

Communication objectives must among other things, address issues such as immunisation awareness, knowledge, attitude, behaviour change and participation. Each of these represents a communication level which needs to be dealt with separately. For example, if one of the objectives is to make the target audience to adopt the appropriate behaviour concerning immunisation, then such persons need to be told in unambiguous and persuasive terms the implications of not immunising their children aged 0-23 months. Concerning the evaluation of indicators, which entails measuring the process, impact and outcome of the communication objectives, all these should be geared towards measuring the short-term, medium-term, and long-term achievements of the communication objectives. In measuring the process of the communication analysis, some crucial issues are to include if the activities were carried out as planned; if the activities were efficiently done and if administrative and logistic support were effective. Measuring the impact should take into cognizance medium-term effects of the immunisation campaign. This will provide an avenue to see if the communication objectives have been achieved, while outcome indicators will focus on the long-term effects of the immunisation campaign.

Design

This stage of the ACADA model entails developing the strategies and activities of the immunisation intervention on the basis of the communication analysis, which will facilitate the achievement of the ideal behaviour. This stage is very crucial. The choice of the specific message appeal or tone, whether it will be positive or negative, rational or emotional, serious or humorous, should be driven by the nature of the behaviour being promoted. According to the Southern African Development Community Centre for Communication for development (SADC-CCD, 2022), when designing the message and themes, with regards to the immunisation campaign, it should be remembered that the participatory elements should be present as much as possible.

The message to be passed on should be identified with the target audience. In an ideal situation, apart from discussing with the target audience on the content of the message, other approaches, appeals, media and channels to reach them should be discussed with them. However, it is important to pre-test every message or theme. Posters, brochures, radio, television, handbills, opinion leaders, and indigenous/folk media, among others, should be used to communicate the desired message to the target audience. Also, the mode of the message should include information, persuasion, promotion and advocacy/mobilisation. Information involves the treatment and transmission of data meant to provide objective facts on specific issues. Example of information approaches are those posters, radio jingles, TV commercials or advertisements in newspapers and the online media concerning the immunisation campaign. For the persuasion mode, first of all, persuasion can be defined as the process of trying to influence others through communication. A persuasive message has a point of view or desired behaviour that the recipient is supposed to adopt in a voluntary or passive way. In persuasion, there is a mutual understanding between the persuader and the persuaded, and this differentiates persuasion from propaganda. Persuasion attempts to cause a positive change either in terms of attitude or behaviour of the target audience.

Promotion on the other hand, is a sort of campaign aimed at making people to be aware and familiar of a product, service, data, idea, concept or behaviour. Through promotion, the development expert or change agent tries to create interest or a favourable impression around an idea or practice through motivation, image creation, and/or positioning. Often, promotion can either be top-down or horizontal in nature. While advocacy/mobilisation seeks to generate the support of opinion leaders and decisionmakers in the target community and in government at all levels. Such an approach is usually adopted to create a conducive environment that may lead to policy-initiations, which are sensitive to the issues at stake, in this case, the immunisation lethargy or vaccine hesitancy. Promotion can also involve those NGOS, the relevant Ministries, Departments and Agencies (MDAs) of the various levels of government in Nigeria, donor agencies/international organisations such as the Bill and Melinda Gates Foundation, the United States Agency for International Development (USAID), European Union (EU), UNICEF and WHO, among others. It follows, therefore, that advocacy/mobilisation is very crucial to the initiation of policy at the level of government, official support, and legitimisation (SADC-CCD, 2022).

Action

After designing and pre-testing the messages and themes, the next stage is the implementation of the plan. In this case, the communication plan has been developed in line with the communication objectives. Communication plans show the way on how to implement the communication activities, taking into consideration the target audience. But for an effective implementation of a given plan, it is advocated that an integrated media/communication approach be adopted at the level of advocacy, social mobilisation and behaviour change in respect to the immunisation campaign. This will also involve the use of interpersonal and group communication, indigenous/folk media, mass media, opinion leaders (religious, traditional and political) and women's associations and so on. In addition, supplementary media such as posters, handbills, fliers and banners can also be used. At the end of the ACADA model process, a holistic evaluation should be done to find out if the desired behaviours promoted have been adopted as well as the extent of adoption.

Conclusion and Recommendations

The focus of this paper was on the place of the integrated media and communication approach in the immunisation campaign in Nigeria. It was noted that strategic communication through the use of the ACADA Model was a panacea in the intervention on vaccine hesitancy or immunisation lethargy among the target audience in the country, especially in the North. Underpinned by research and evidence-based, the ACADA Model a multi-dimensional and strategic communication invention, has been used with varying degrees of success in the developing countries on development and health-related issues. Because of its cyclical and step-by-step approach, as well as diverse channels and media to be used, the model is strategic to the success of the immunisation campaign in Nigeria, particularly in the North. Arising from the above, the researchers recommend that there should be multi-stakeholder engagements which will involve international donor agencies/partners, the governments in Nigeria at all levels, religious, traditional and political leaders across all spectrums and women's associations so that not only will the desired target audience be reached, but this target audience (nursing mothers) and their spouses should be persuaded to adopt the ideal behaviour towards immunisation. There is the need to strengthen community health centres across the country in the area of advocacy on immunisation. More so, there should be concerted action by global and national policy-makers based on evidence to address the issue of vaccine-hesitancy, especially among the most disadvantaged and peripheral groups in Nigeria.

References

Adedire, E.B. Ajayi, I. Fawole, O.I. Ajumobi, O. Kasasa, S. Wasswa, P. & Nguku, P. (2023). Immunisation coverage and its determinants among children aged 12-23 months in Atakumosa-West district, Osun state, Nigeria: A cross-sectional study. *BMC Public Health*, 16, 905-915.

Agbasiere, C. (2020). Advancement of social justice, development and national security through drama in Ola Rotimi's If, A Tragedy of the Ruled. *AFFREV LALIGENS:* An International of Language, Literature and Genders Studies. 2 (1), 209-222.

- Altman, I. & Piotrow, P. (2020). Social marketing: Does it work? *Population Report*, 26. New York: United Nations Population Fund.
- Andreason, A. (2023). *Marketing for social change: Changing behaviour to promote health, social development and the environment.* San Francisco: Jossey Bass.
- Anichukwu, O.I. & Asamoah, B.O. (2019). The impact of maternal health care utilisation on routine immunisation coverage of children in Nigeria: A cross-sectional study. *BMJ Open*, 2019; 9:e026324. Doi: 10.1136/bmjopen-2018-026324.
- Asemah, E.S., Nkwam-Uwaoma, O.A. & Santas, T. (2017). Community media for rural development communication: Principles, theories and practice. Jos: University of Jos Press.
- Clark, S.E. (2022). The role of the media in tackling vaccine hesitancy. Retrieved from https://www.pubmed.nih.gov
- Danjuma, N.U. Agir, H.M. Zubairu, E. & Agya, A. (2021). Role of radio agricultural programmes on farmers' education: A case study of Radio Benue, Makurdi, Benue State. *Journal of Agricultural Economics, Environment and Social Science*, 7 (2), 152-160.
- FAO (2019). Knowledge and information for food security in Africa: From traditional media to internet. Rome: Food and Agricultural Organisation.
- Goldstein, S. Guirguis, S. & MacDonald, N. (2022). Health communication and vaccine hesitancy. *International Journal of Health Communication*, 17 (4), 288-300.
- Karen, B.K. & Rimer, K. V. (2008). *Health behaviour and health education: Theory, research and practice* (4th ed.). San Francisco, CA: Jossey Bass.
- Kaufman, J. Ames, H. Bosch-Cabplanch, X. Cartier, Y. Cliff, J. Glenton, D. Lewin, S. Muloliwa, A.M. Oyo-Ita, A. Rada, G. & Hill, S. (2017). Comprehensive "communicate to vaccinate" taxonomy of communication interventions for childhood vaccination in routine and campaign contexts. *BMC Public Health*, 17 (423), 1-11.
- Kim, Y.Y. (2020). Inquiry in intercultural communication and development. *Journal of Development*, 55 (3), 565-576.
- Lefebre, R. & Fiora, J. (2022). Social marketing and public health interventions. *Health Education Quarterly*, 299-315.
- Manoff, R. (2020). Social marketing: New imperative for Public health. New York: Praeger.
- NDHS (2023). The DHS program- Nigeria: Standard DHS, 2023.
- Oku, A.O. (2019). Childhood vaccination communication in Nigeria: A qualitative study. A PhD Thesis Submitted to the Faculty of Medicine, University of Ohio, United States of America.
- Recio-Roman, A. (2023). Influence of media information sources on vaccine uptake. Retrieved from https://www.mdpi.com
- SADC-CCD (2022). *Participatory communication strategy design*. Harare: Centre of Communication for Development.
- Santas, T. (2018). The relevance of indigenous communication systems in combating security challenges in Nigerian rural communities. In Ezonbi, B & Jonah, C. E. (eds.). *Security, elections and electoral violence in Nigeria* (pp 323-330). Jos: Eiwa Ventures Nig. Ltd.

- Santas, T., Inobembe, K. & Garba, M. (2023). Aspects of media and communication studies. Jos: University of Jos Press.
- Singh, W.S. (2020). Communicating immunisation: The mass media strategies. *International Journal of Health Communication*, 17 (4), 312-327.
- Smith, B.G. (2022). Communication integration: Analysis of context and conditions. Retrieved from https://www.sciencedirect.com
- Temidayo-Oboh, A.O., Adegbola, A.A., Dedeke, I.O.F., Adeniyi, M.A., Soyannwo, T., Ajewole, G.A. & Sanni, S.B. (2023). Immunisation coverage among children aged 0-23 months at a tertiary hospital, southwestern Nigeria: A retrospective study. *Babcock University Medical Journal*, 6(1), 1-8.
- UNICEF. (2017). *UNICEF immunisation road map (2018-2013)*. New York: United Nations Children Fund.
- WHO. (2023). WHO and UNICEF estimates of national immunisation coverage. Retrieved from https://www.who.int
- Zampetakis, L.A. & Melan, C. (2021). The health belief model predicts vaccination intentions against COVID-19: A survey experiment approach. *Applied Psychology: Health and Well-Being*, 18 (2), 469-484.
- Zhou, L. (2022). Media attention and vaccine hesitancy: Examining the mediating effects of fear of COVID-19 and the moderating role of the media. *PLOS ONE*, 17 (2), 45-58.