

ORILE-OKO LESSON: A HEALTH COMMUNICATION VIDEO DOCUMENTARY INTERVENTION FOR CHILDHOOD IMMUNIZATION

OMOLAYO OLUSOLA. JEGEDE

Lecturer, Department of Mass Communication, Babcock University, Ilishan-Remo, Ogun State, Nigeria. Email: jegedeo@babcock.edu.ng

OLUSEGUN WEHINSE OJOMO

Lecturer, Department of Mass Communication, Babcock University Ilishan-Remo, Ogun State, Nigeria. Email: ojomoo@babcock.edu.ng

PATRICIA E. ERNEST-ONUORI

Lecturer, Department of Mass Communication, Babcock University Ilishan-Remo, Ogun State, Nigeria. Email: ernest-onuiripa@babcock.edu.ng

Abstract

Background: Nigeria is one of the leading African countries with a high infant and childhood mortality rate. Studies have revealed immunization as a preventative measure to most childhood killer diseases. However, there appears to be few intervention studies on improving childhood immunization. This study evaluated the effect of a Video Documentary (VD) communication intervention on the knowledge, attitude and perception of childhood immunization among women in Orile-Okoko community in Ogun State, Nigeria. **Method:** The study adopted the quasi-experimental design. Hundred (100) women of reproductive age were selected through multi-stage sampling, with a six-week intervention programme implementation, following baseline measures of the variables of interest, and at seventh week, follow-up data were collected for comparison. **Results:** Findings revealed homogeneity in the personal characteristics of the respondents in both the experimental and control groups. At baseline, the mean scores of participants for knowledge, attitude, and perception were (43.84±6.04, 14.26±3.48 and 16.10±3.56) respectively for the control group. This showed no significant difference ($p>0.05$) from that of the experimental group (44.46±7.44, 14.16±3.67 and 15.92±3.72) respectively. However, at endline, the mean scores for knowledge, attitude, and perception for the experimental group (49.34±6.47, 12.76±1.96 and 14.70±1.32) respectively were significantly different ($p<0.05$) compared with the control group (43.58±5.98, 14.16±3.67 and 16.00±3.53 respectively). **Conclusion:** The study concluded that participatory communication is more effective than mainstream mass media in disseminating health messages among rural dwellers. It recommended awareness creation through video documentary for disseminating health messages to support government immunization programmes and reduce global vaccine hesitancy and misinformation.

Keywords: Childhood immunization; Child mortality; Infant mortality; Life expectancy; Primary health care; Vaccine hesitancy; Video documentary intervention; Orile-Okoko (community)

Introduction

Childhood immunization has been demonstrated to provide effective protection against many childhood killer diseases. Despite efforts by the WHO, donor agencies and governments at making immunization materials available at health care facilities, immunization programmes in many rural areas in Nigeria are yet to yield the expected outcome of reducing infant and childhood mortality. According to a Statistica report by Simona Vallerra, “as of 2021, the mortality rate of infants aged under one year old in Nigeria was measured at 58.23. This

means that there were about 58 deaths of children under the age of one year per 1,000 live births” [1]Principal among identified factors militating against the success of childhood immunization efforts, especially in rural Nigeria, is poor awareness of its benefits among most rural dwellers. This is evidenced in the analysis of government’s efforts at achieving the Millennium Development Goal 4 in 2015, [2] which [2] included capacity building of human resources at Primary Health Care (PHC) levels, commencement of research projects on Prevention of Mother-to-Child Transmission (PMTCT) of HIV, provision of Vesico-Vaginal Fistula (VVF) centres and the upgrade of existing centres, midwives’ training in Life Saving Skills (LSS), Integrated Management of Childhood Illnesses (IMCI), Maternal, Newborn and Child Health (MNCH), aimed at improving midwives’ performance in providing quality care. The media as the fourth estate of the realm, which should meet the information and health education needs of the citizens, have been unable to do this due to insufficient and inappropriate programmes on immunization to achieve reasonable change in audience knowledge, attitude and perception of childhood immunization. Further facts by the Nigeria Demographic and Health Survey (NDHS) [3] results showed that lack of information (27%) is the major reason given by caretakers, especially mothers for not vaccinating their children. Other reasons include fear of side effects (26%), and distance to health posts (13%). These are probably responsible for the higher percentage of un-immunised children in Nigeria. The report further indicated that Nigeria, with 1% of the world’s population contributes 10% of the global U-5 mortality. This means that one of six children in Nigeria will die before the age of five years [3]. Some aiding factors to the problem of inadequate immunization information are poor infrastructure in rural Nigeria, low literacy level, and language barrier. Nigeria’s rural settings are beset with such ills as limited infrastructure, minimal information media, low socio-economic development, and poor living standards. These have affected access to immunization information as several of these rural communities are distanced from the benefits of radio messages in the dissemination of health information. It has been further observed that current packages for immunization information are not harmonized with existing traditional practices; and are rarely participatory. To achieve sustainable change therefore, innovation information should align with and support existing culture and tradition. In the Nigerian cultural milieu, communication is largely demonstrative and participatory. Members of a clan sit round evening fires to listen to folklores. Monologue communication which characterizes most media health messages today is alien to Nigerian rural dwellers. It is against this background that this work focused on the assessment of the awareness level of Orile-Oko community in Remo North local government area of Ogun state on childhood immunization. The study was undertaken to investigate available and preferred health communication channels to rural dwellers in Orile-Oko community, Remo North local government area of Ogun state, Nigeria, and the impact of the communication on identified outcomes of immunization. The study further investigated the influence of the Video Documentary (VD) on respondents’ knowledge of the importance of childhood immunization. Respondents’ attitude to and perception of childhood immunization were also examined. The study raised questions on the extent to which the designed communication intervention would impact respondents’ knowledge and perception on childhood immunization, as well as their vaccine hesitancy level. As an expectation of the communication intervention programme, the study hypothesized that: there will be a significant difference in scores for participants’ knowledge, perception and attitudinal dispositions regarding childhood immunization between participants exposed to the video

documentary and those not exposed to it in Orile-Oko community at the end of the intervention period.

Video as Development Communication Tool

Video as a development communication medium, [4] can be an incredibly powerful medium of behavioural change in the hands of development communication programme planners to change behaviour from that which puts individuals at risk of adverse outcomes to that which enhances wellbeing. Corroborating this, [5] noted that video, if well planned, packaged and applied by the “trained and skilled change agent, is capable of bringing development information to several groups in the rural areas”; thereby giving voice to the voiceless and contributing to decisions regarding their health. Quoting Richardson, 1997 and Moetsabi 1998, Isiaka [5] further noted that “there have been several calls for decentralisation of the city-centered mass media” stating that:

Television stations concentrate their programmes mainly to satisfy the elite consumer. These include sports, business, entertainment, and politics that have very little bearing with sustainable development of the “masses”. Many rural dwellers cannot afford television and hence not opportune to be informed through television broadcast.

Although video has its limitations, its advantages are more. The FAO corporate document repository [6] sees video as a prestigious and persuasive medium capable of drawing audience attention. It also has high credibility, a quality that recommends it for health information dissemination because it can be viewed together by several people. Once the equipment is procured and well maintained, video has minimal running costs. It can provide immediate feedback for education or awareness creation. When post-production is required, video allows a very effective content manipulation to reinforce the intended message or theme and make it more appealing. It is an effective medium for documenting and monitoring community activities. It can also be used effectively in presenting community viewpoints to policy and decision makers. The paper emphasised the capacity of video to be tailored to narrow audiences; video messages can also be designed for specific developmental purposes. This was particularly applied in this study as immunization messages aimed at improving respondents’ knowledge, attitude and perception about childhood immunization were packaged and shown to the respondents. In spite of these merits, video has its drawbacks among which is a high initial cost. Also, video equipment are quite delicate, they must be stored in the right places and handled with care. They usually require proper maintenance to function optimally over a period of time. The powerful visual effect of video can make it rather self-absorbing, diverting audience’s attention from the intended content, to the video itself. Video also loses its mass media advantages in rural areas where TV penetration is low. When used for informational purposes, it requires complex preparation in terms of content (what should be presented) and format (how it should be presented and shot). Hence, it also requires specific know-how seldom available in rural communities. This study however aligns with previous study’s [5] submission that if video is well packaged and handled by trained professionals, it can be used to achieve developmental purposes. This is especially so as findings in the study confirmed the effect of video communication intervention at significantly improving the knowledge, attitude and perception of respondents.

Method

The study adopted the Pretest-posttest Nonequivalent Control Group quasi-experimental design.

Participants

The primary audience for the documentary were women of reproductive age living in Isan zone in Orile-Oko community, Remo north local government area of Ogun state, Nigeria. They formed the experimental group. The secondary audience consisted of women living in Ajana zone of the same local government who were the control or comparison group. In order to ensure that the result of the study is generalizable and that the content of the video documentary was not morally offensive, the women in the control group were adequately informed on the purpose of the study both at the baseline (formative) and endline (feedback) stages. The research showed great success in using video documentary in the dissemination of information on childhood immunization with the settings, locations, characters and other images in the documentary reflecting those of the audiences in both the experimental and control groups. The respondents understood the implications of lack of childhood immunization with the result being a significant increase in their knowledge, attitude and perception of childhood immunization at the end of the intervention. Also, the study created a shift in the respondents' perception of childhood immunization because they could understand the message better with the use of their native language (Yoruba). The original script (narration) was written in English language for understanding by the team members and other stakeholders in the production process; the script was however translated to Yoruba and retranslated to English to ensure the intended meaning was maintained all through the process. The narration was done in Yoruba Language by an indigenous speaker.

The Instrument

The development of the intervention instrument – video documentary involved a number of experts in video production and development communication. The experts had series of brainstorming sessions to determine the best approach to the intervention process and how best to communicate the benefits of childhood immunization information to the intended audience. Public health officers and nurses from Remo north Community Health Centre, Isan, Ikenne-Remo Community Health centres, Babcock University Teaching Hospital and Lecturers from the Public Health Department, Babcock University, provided preliminary information about the general knowledge, attitude and perception as well as cultural beliefs of the community on childhood immunization. Video production crew at Adventist World Radio, Nigeria and their associates provided language expertise, wrote, directed and produced the video documentary; while the theoretical expertise were offered by faculty from the departments of Mass Communication and Agriculture (Agricultural Extension Unit), Babcock university.

The Intervention Process

This was an experimental research which made use of a communication intervention – video documentary. It therefore involved a lot of interwoven stages. At the preliminary or formative stage of this research, focus group discussions were conducted with the selected respondents

in experimental and control groups from Isan and Ajana zones respectively in Orile-Oko community. This was done to get detailed information in designing and amending the research instrument. It also helped in identifying barriers, and assessing the overall knowledge, attitude and perception of respondents regarding childhood immunization. The focus group moderator obtained important data and informed the production crew on how best to package the video documentary to be socially and culturally acceptable. For instance some women said they would never take their children out for immunization since they had lost some children to immunization. The focus group discussion also helped to identify the language the audience would be most comfortable with – the Yoruba Language. Time of viewing the video documentary was also identified during the focus group discussions as most of the respondents were either farmers or businesswomen who preferred to view the documentary in the evening after the day's activities. The focus group discussion also brought the cordial communal relationship of the Yoruba to the fore as the audience members indicated that they would not turnout at the documentary viewing centre if the event fell on a day they had a wedding, funeral or market in the community. This was experienced when there was a sudden passage of a community member who had to be buried on one of the days slated for showing the documentary; necessary adjustments were quickly made and an alternate date chosen. A pre-intervention administration of the structured questionnaire to both the control group and the experimental group was done in the second week to determine the initial attitude, knowledge and perception of respondents about childhood immunization in the two groups. The primary audiences for the video documentary intervention were women of reproductive age in Ajana zone. These formed the experimental group while the secondary audience included respondents of same characteristics who served as the control group. Both groups reside in Orile-Oko community of Remo North local government area of Ogun state which consists of thirty-six villages. Although the two groups were expected to be homogeneous, in order to ensure that the intervention produced similar results even when it is exposed to the control group, baseline data on the knowledge, attitude and perception of the respondents in the two groups about childhood immunization were obtained. This was also to provide a basis for comparison between the two groups at the endline of the research work. The original concept for the video documentary script as conceived by the researchers was written in English language. The script was translated to standard Yoruba language by the researchers for proper understanding by the respondents who were mostly illiterates; and Yoruba language speaking. The script writing and translation were followed by shooting of the videos. The videos were shot in local settings which the respondents were familiar with. Some of the shots included personal testimonies of either the parents of, or victims/survivors of some of the childhood killer diseases noted in the study. Recording of videos was followed by editing, using the documentary style. The edited video documentary was tested for its suitability for conveying behaviour change information about childhood immunization. This was done by showing the video documentary to select public health specialists drawn from Public Health Unit of Babcock University Teaching Hospital and Public Health Department of Babcock University. The intervention instrument was certified suitable for accomplishing the research objectives by the public health experts. In week three to week six of the research/intervention process, the experimental group was exposed to the video documentary; the exposure spanned a period of four weeks. Each episode which was shown per week lasted for ten minutes and was followed with a counselling session during which the respondents stated the thoughts that had occurred to them while watching the video documentary. The

standard thought listing was taken because attitude change theory, according to Rutter & Quine [7] insist that thought listing is important in determining participants' understanding of the behaviour change communication. The counselling sessions were handled by a public health specialist from Babcock University Teaching Hospital, who was part of the research process from the start. The post-intervention administration of the questionnaire was in the seventh week. The objective was to conduct impact analysis of the intervention on the knowledge, attitude and perception of the respondents as regards childhood immunization. In the eighth week, there was a follow-up counselling session for the respondents as well as a question and answer session to ensure that the respondents' responses were still consistent with what was obtained immediately after the intervention. The researchers also visited the two health centres at the headquarters of the two zones. Statistics obtained showed a significant increase in the number of respondents who had started taking their children for immunization.

Results

Table 1: Results of Focus Group Discussion

Questions	Purpose	Findings MPA = Most Preferred Answer –	Implications
How often do you listen to radio?	To determine if respondents are exposed to any media of communication	When busy with our farm work, we don't usually listen	They have access to radio but do not listen regularly
What are your preferred/favourite programmes on radio?	To know if participants have any programme they pause to listen to out of their busy schedule	Iri-ri eye (a radio programme on strange issues of life), every Friday evening.	Participants create time to listen to radio as the weekend approaches
How many times in a week do you watch television?	To determine if respondents are exposed to television as a medium of communication	Because there is no electricity supply in our village, we do not watch television regularly except from people that can afford generator and rent films. They use generator to watch films.	It shows that respondents do not have access to television due to electricity problem
Do you read about immunization from the newspaper?	To know if the respondents get childhood immunisation through newspapers	We do not have access to newspaper in our village we see newspapers only when we are opportune to visit towns like Isara.	It shows that respondents do not have access to television.
On which of these channels do you get programmes on immunization from?	To know if the respondents get childhood immunisation through mass media	I do listen to an announcement on radio once in a while when they would say that nurses would go from house to house in our village to drop drugs in children's mouths to keep them save. We always stay at home to make our children receive it.	Respondents do not have access to immunisation programmes in the media except announcements during mop up programmes.
Have you ever been able to contribute to any programme on either your radio or television?	To know if the respondents have been able to participate in any health programme	Not at all. We have not been able to contribute to any programme on either radio or television.	It shows either the health programmes are not participatory or the participants have not been able to participate in the programmes because of their socio-economic problems
Have you been taking your children out for immunization?	To determine if respondents have been taking their children for immunisation	We do not take our children out for immunization regularly because of the fact that we do not have health centre in our village. In fact, I have not been able to complete immunization for my child because Ajana health centre is a bit far and Isan maternity home that is somehow close is not fully equipped and the health workers therein do not attend to us the way they should.	Respondents do not take their children for immunisation regularly due to lack of knowledge on the implications of not immunising their children
What motivates you to take your children for immunization?	To further determine if respondents have been taking their children for immunisation	The health workers normally tell us immunisation is good for our children	Respondents are only familiar with what they get from health workers
Would you like to listen and participate in health related programmes on Radio, especially the program that will be based on how to get all our children immunized?	To know if it is the desire of the respondents to be part of a participatory communication	Yes, we would like to listen and participate in health related programmes on Radio, especially the programme that will be based on how to get all our children immunized.	If a participatory message is packaged, the respondents would like to participate
Do you know the danger involved in not taking your children out for immunization?	To know if respondents have any basic knowledge about childhood immunisation	Death and several diseases are the results.	Participants are not at zero knowledge level concerning childhood immunisation

How do you get your children immunized?	To know if the respondents see immunisation as being so important and would naturally take their children out for immunisation .	Whenever the health workers are going around the villages immunizing the children.	Respondents depend only on general immunisation programmes to get their children immunised
Would you like to watch a video documentary highlighting the importance of childhood immunization?	To determine if the respondents are willing to be exposed to a communication package in form of a video documentary	Yes, if it will be shown to us in our village.	Subjects expressed willingness to be exposed to a communication package in form of a video documentary
What other thing do you think should be done to make more people aware of immunisation?	To make the respondents contribute to the content of the research on how immunisation awareness can be further created	We want to know what vaccine does in the life of a child. Also we want to see the effects of these diseases in the life of a child on television to help us know why it is important to immunise our children.	Subjects expressed willingness to know more about childhood immunisation
What other things do you want to include in the video documentary?	To make the respondents contribute to the content of the research on how immunisation awareness can be further created	-How can we protect our children from measles because we discover that it is very difficult to cure especially with the prescribed medications from nurses. - How can we take good care of our children? Help us ma to tell our government to reconstruct our maternity home and health care facility at Akofa	Subjects expressed willingness to know more about childhood immunisation

After the adjustments made on the research instrument following the FGD, copies of the questionnaire were administered to the respondents both in the experimental and control groups to obtain their baseline knowledge, attitude and perception about childhood immunization. Results of this pre-intervention study revealed a low level of knowledge, attitude and perception among the respondents in the two groups. Findings in this research showed that participatory communication is highly effective in passing health information to citizens, especially the rural dwellers and illiterates. It is more effective than the mass media form of communication which excludes the receivers from active participation and simply limits them to passive receivers. The efforts of the mass media programme producers at getting feedback from the audience through phone-ins cannot match the effectiveness of a participatory communication where audience needs are put in perspective and the audience are involved in the communication processes right from the planning stage to execution and evaluation. Communication with motivation is also very effective as findings from this study have shown that when health messages are packaged and taken to the doorsteps of the respondents, they are more effective as evidenced by the change in the knowledge, attitude and perception of the respondents in this study. This research work has also confirmed that an experimental research design can be a veritable tool in the hands of health and other developmental programme planners. Therefore rather than sticking to the conventional survey research method which most times seeks information about the respondents, experimental design works better at finding out the current awareness level of the respondents and gradually walks them through a process that brings improved positive change in their knowledge, attitude and perception. The study also concludes that different programme formats can be used to make the audience identify with the programme content and want to try out the suggestions in the programmes. The study particularly found that video documentaries, though requiring much resources for funding, planning and execution; are still very effective in the dissemination of health and developmental messages. If properly planned and packaged, video documentaries, with the ability to present real life situations could guarantee more believability of the health message and thus make more impact on audience knowledge, attitude and perception. Findings from this study also suggest that given time and proper planning, communication interventions can make the audience shift their

traditional and cultural beliefs. With the change seen in the attitude and perception of the respondents, it is evident that audience exposure to a communication package over an extended period could alter their cultural and traditional beliefs. This is often not easy with messages transmitted via the traditional media because deep rooted traditional beliefs take time and consistent persuasion to change.

Table 2: Baseline Results For Experimental and Control Groups

Variable	Maximum point on scale of measure	Mean value for control group	Mean value for expt group	t-value	Sig value (2-tail)
Knowledge	75	43.84±6.04	44.46±7.44	1.124	0.267
Attitude	6	14.26± 3.48	14.16± 3.67	-.336	.738
Perception	7	16.10 ± 3.56	15.92 ± 3.72	-.588	.559

Source: Computed from field survey

The mean of the variable knowledge for the control group at baseline as shown in table 4.7.1 was (43.84 ± 6.04) which is 58.45% of the maximum point of scale or lower than the point of scale (75). The result of the t-test shows that there is no significant difference in the mean value for knowledge between the two groups at 5% level of significance. This follows prior expectation since the descriptive results of both groups are similar, establishing homogeneity in the characteristics of the two groups. This is also expected for a study of this nature where two groups are being compared. Homogeneity in the characteristics of the two groups is therefore a necessity so that the effects of the intervention can be easily measured. There is also no significant difference between the attitude and perception of the two groups and the reasons for this are as explained under the knowledge variable.

Table 3: Result for Comparison between Baseline and End line for Experimental Group

Variable	Maximum point on scale of measure	Mean value for baseline Exp group	Mean value for endline expt group	t-value	Sig value (2-tail)
Knowledge	75	44.46±7.44	49.34±6.47	-3.45	.001
Attitude	6	14.16 ± 3.67	12.76± 1.96	2.400	.020
Perception	7	15.92± 3.72	14.70± 1.32	2.195	.033

Source: Computed from field survey

At post intervention, the mean value for the knowledge variable for the experimental group as results in table 4.7.2 indicate was (49.34±6.47) which is significantly higher than the mean value for the group at baseline (44.46±7.44) (p=0.001). However, the increase in knowledge is still lower than the maximum point on scale of measure (75). This could be due to the fact that their knowledge was very low, which also could have stemmed from their internal constraints of being poor, illiterate, and traditionally driven. Their external constraints, which include poor access to good roads, health care centres, facilities and personnel, could also be responsible for their very low knowledge. This result shows that the intervention had significantly and positively impacted the knowledge of the experimental group and further exposure of the respondents to this type of intervention is expected to show further increase in their knowledge. Also, at post intervention, the mean value for the attitude variable was (12.76 ± 1.96) which is significantly lower than the mean value for the group at baseline (14.16 ± 3.67), p=0.020. This shows an increase in the attitude of the respondents towards immunization as the respondents were measured at baseline based on their poor attitude towards immunization, indicating that respondents that scored high at the baseline are high on

poor attitude. Reduction in the mean value therefore signifies a deviation from the poor attitude to a more positive attitude towards immunization which further shows that the intervention significantly and positively influenced the respondents' attitude to immunization. However, as seen under the knowledge variable, the increase in attitude of the respondents, though statistically significant, is also lower than the maximum point on scale which can be attributed to the reasons earlier explained for knowledge. Post intervention results of the respondents' perception of immunization showed the mean value of (14.70 ± 1.32) which is significantly lower than the mean value for the group at baseline (15.92 ± 3.72), p=0.033. As shown under the attitude variable, the significant reduction in the mean value signifies an increase in the perception of the respondents; as the respondents were measured on high poor perception at baseline. Furthermore, as seen in the results of the two previous variables discussed, the increase in the perception of the respondents about childhood immunization, though statistically significant, is lower than the maximum point on scale. Again, the same reasons given under the knowledge variable apply here.

Table 4: Results for Comparison between Baseline and Endline for Control Group

Variable	Maximum point on scale of measure	Mean value for control group (pre intervention)	Mean value for control group (post intervention)	t-value	Sig value (2-tail)
Knowledge	75	43.84±6.04	43.58±5.98	.223	.824
Attitude	6	14.26 ± 3.48	14.16 ± 3.67	.336	.738
Perception	7	16.10 ± 3.56	16.00 ± 3.53	.269	.789

Source: Computed from field survey

The mean value for variable knowledge of the control group at baseline as shown in Table 4.7.3 was (43.84 ± 6.04) which is 54.45% of the maximum point of scale (75). The result of the t-test showed a slight difference in the mean value of the endline result of this same group. (43.58 ± 5.98), p=0.824. Also, the endline value of the results for variable attitude (14.16 ± 3.67), p=0.738 showed a slight reduction in the result at the baseline which also signifies an increase in the positive attitude of the respondents towards childhood immunization. Similar results were obtained for perception as slight reduction was also noticed in the perception of the respondents (16.10 ± 3.56), p=0.789 which also signified a progression of the respondents' perception of childhood immunization. Although slight differences were noticed in each of the variables, the differences were not statistically significant. The slight difference could however be responsible for other variables which the respondents in the group might have been exposed to, or natural human inconsistency as evidenced in the reduction of knowledge level of the respondents at endline while attitude and perception slightly increased.

Table 5 : Results for Comparison between Endline Results for Experimental and Control Groups

Variable	Maximum point on scale of measure	Mean value for control grp	Mean value for exptgrp	t-value	Sig value (2-tail)
Knowledge	75	43.58±5.98	49.34±6.47	4.496	0.001
Attitude	6	14.16 ± 3.67	12.76 ± 1.96	-2.400	.020
Perception	7	16.00 ± 3.53	14.70 ± 1.32	-.588	.559

Source: Computed from field survey

At post intervention, the mean value for the knowledge variable for the experimental group as shown in table 4.7.4 was (49.34 ± 6.47) , which is significantly higher than the mean value for the group at baseline (44.46 ± 7.44) , $p=0.001$. However, the mean value for the control group at baseline was (43.84 ± 5.98) , which is slightly lower than the results at endline. The difference however was not statistically significant as compared to the difference between the results of the experimental group before (44.46 ± 7.44) , $p=0.001$ and after the intervention (49.34 ± 6.47) . On attitude, a significant decrease from the increased poor attitude towards childhood immunization was noticed in the endline results with (12.76 ± 1.96) compared with (14.16 ± 3.67) at the baseline of the experimental group. For the control group however, even though there was a slight difference in the figures at baseline (14.26 ± 3.48) and endline (14.16 ± 3.67) , the difference became insignificant when subjected to statistical tests. Post intervention results for the perception variable showed the mean value of (14.70 ± 1.32) compared with (15.92 ± 3.72) results at baseline. This result however is not in consonance with the result found at the endline of the control group with (16.00 ± 3.53) , and (16.10 ± 3.56) at the baseline. The slight reduction noticed in the poor perception of the respondents in the control group towards childhood immunization became insignificant when statistically tested. It was therefore concluded that the research intervention (Video Documentary) positively impacted the knowledge, attitude and perception of the respondents in the experimental group towards childhood immunization. It was also obvious considering the homogeneity that exists between the control and experimental groups that if respondents in the control group were also exposed to the same instrument (VD), there would be a change in their knowledge, attitude and perception towards immunization. Thus, access to the video documentary (VD) had significant influence on the perception of childhood immunization among members of Orile-Oko community, Remo north local government, Ogun state, Nigeria.

Limitations

The entire process of this study was exciting to both the researchers and respondents for the expectation that its outcome might add some value to the general wellbeing of rural folks. But it was not without some limitations. The first limitation was that the methodology employed is not commonly used among communication and general social science scholars in Nigeria. This positions the work to some measure of controversy. It is consoling however that the results of the study have justified its methodology. The work also had the limitation of the entire research process being misconstrued by the respondents, because some women who had been warned by their husbands not to take their babies for immunization could not participate in the research because they assumed the researchers would be immunizing their babies during the experiment. The researchers were somewhat confused when every participant at the first meeting came with their children aged 0-5 years to the venue.

Conclusion

This study has shown that participatory communication is effective for passing health information to target audience especially rural dwellers with little or no formal education. Again, communication with motivation is more effective as findings from this study showed that when health messages are taken to the doorsteps of the respondents, chances of understanding and adopting the messages are greater as evidenced by the change in the knowledge, attitude and perception of the study respondents about childhood immunization. One benefit of participatory communication that has been revealed in this study is the opportunity for members of a target population to interact with the message source to clear their doubts on the message. This way they are able to avoid miscommunication, which could lead to counter-productive outcomes that could leave the recipients in a worse state.

Recommendation

To support government immunizations programmes and reduce global vaccine hesitancy and misinformation; the study recommends that awareness creation should be an important part of government immunization programmes with Video Documentary as a medium for disseminating health messages.

Funding

This research work was largely self-sponsored. Small financial support was however received from Babcock University through the office of Research, Innovation & International Cooperation (RIIC)

Conflict of Interest

There is no known conflict of interest in this study.

Ethics Approval

Approval for the conduct of this study among residents of Orile-Okoko community, Remo North Local Government Area, Ogun State, Nigeria, was sought and obtained from the Office of Research, Innovation & International Cooperation (RIIC), and Babcock University.

Approval Reference Number – BUHREC091/14

Approval Date – January 28, 2015

References

Vallera, S. Mortality rate of infants under one year old in Nigeria as of 2021, by gender [cited January, 2022]. Available from: <https://www.statista.com/statistics/1203486/infant-mortality-rate-in-nigeria-by-gender/>.

Chiejina A. (2014). MDG: Nigeria racing to meet Goals 4 & 5 target by 2015 [cited May, 2018]. <http://businessdayonline.com/2014/09/mdg-nigeria-racing-to-meet-goals-4-5-target-by-2015/#.VAm7oRYdgbY/>.

Nigeria Demographic and Health Survey (2018) [cited March, 2020]. <https://www.dhsprogram.com/pubs/pdf/FR359/FR359.pdf>

Looper, M.S. How Kinedu Uses Video for Child Development. [cited December, 2019]. <http://wistia.com/blog/kinedu-video-for-child-development>.

Isiaka B.T. (2002). Video as a Channel for Development Communication (pp 135-151) in Communication and Development – A Reader. Oso L. (ed). Nigeria: Jedidah Publishers (Chapter Nine).

FAO participatory communication strategy design [cited August, 2018]. <http://www.fao.org/docrep/008/y5794e/y5794E06.htm>.

Rutter D & Quine L (2002) Changing Drivers' Attitude to Speeding: Using the Theory of Planned Behaviour in Changing Health Behaviour: Intervention and Research with Social Cognition Models. Rutter D. & Quine L. (Eds) Philadelphia. Open University Press;