

ASSESSING THE KNOWLEDGE AND INFORMATION ON IMMUNIZATION AMONG YOUNG MOTHERS IN IMO STATE.

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Abstract

Childhood immunization has been shown to be the most successful and cost effective public health intervention in the 20th century. Its coverage and timeliness is a very health policy objective in many developing countries. In Nigeria although vaccines are provided relatively free by the government its coverage has remained low. Efforts have focused on the health worker, health system and logistics with little attention being paid to maternal factor like knowledge, perception, beliefs and practice. This paper assessed the knowledge and information on immunization among young mother in Imo State. The theory for the study was anchored on risk communication theory while the survey is the research design used. A sample of 322 mothers was drawn from 29,930 house hold in Owerri, Imo State. A structured questionnaire was employed as instrument of data collection. Findings showed that 72% of the mothers find it necessary to immunize their children as against 8% that seems not to find it necessary. 30% get their immunization information through the radio while 28% get theirs from health officials. Thus the study concluded that mothers should be educated more on immunization while information on it should be disseminated through health official and radio because of its accessibility to them.

Keywords: Immunization, vaccination, young mother and knowledge.

Introduction

Immunization is the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine (WHO 2005). Vaccines stimulate the body's own immune system to protect the person against subsequent infection or disease (WHO, 2005). Immunization is one of modern medicine's greatest success stories and cost effective public health intervention in the 20th century. Though its practice dates back hundreds of years. Edward Jenner is considered the founder of vaccinology in the west in 1776, after he inoculated a thirteen-year-old boy with vaccinia virus (cow pox) and demonstrated immunity to small pox (Fullford & Lee 2000).

In 1778 the first small pox vaccine was developed, over the 18th and 19th centuries, systematic implementation of mass small pox immunization culminated in its global eradication in 1979. Since Jenner's discovery, governments have often invested, albeit unevenly and incompletely in vaccines. Initially vaccines were considered a matter of national pride and prestige. They quickly became integral to utilitarian and public health notions of societal security productivity and protection. In the twentieth century as the standard battery of childhood immunization, including diphtheria, measles, mumps, and

rubella was developed, vaccination was frequently managed or adjudicated by government entities (Lambert & Marked, 2000).

The expanded programme on immunization introduced in 1979 with the aim of providing routine immunization to children less than the age of two years recorded initial but intermittent success. The optimum level was recorded by the early 1990 with the country achieving a universal childhood immunization coverage of 81.5%. (Journal of Applied Pharmaceuticals, 2017). But since that period of success, Nigeria has witnessed gradual but consistent reduction in immunization coverage. By 1996 the national data showed less than 30% coverage of all antigens and this decreased to 12.9% 2003 (Babalola & Olabisi, 2004).

Immunization coverage in Nigeria has remained low although vaccines are provided relatively free by the government. Efforts have focused on the health workers, health system and logistics with little attention being paid to maternal factors like knowledge, information awareness, perception, beliefs etc. Parents especially mothers do not get their children immunized simply because of their superstitious beliefs that disease are caused by witches and wizards. Some mothers know where and how to obtain the immunization but do not take their children to the clinic for immunization while others that made attempts to take their children for immunization may start and not finish, that is completing the required dosage.

To this end Nigeria through partnership with international organizations, and comprehensive multi-year strategy was embarked upon to strengthen the expanded programme on immunization (EPI) Federal ministry of health Nigeria (FMHN 2011). The strategy aimed at truncating the spread of the poliovirus, introducing new vaccines and improving immunization coverage generally, among others. One of the goals of achieving this aim was to ensure that members of the community were aware of significance of completing the immunization schedule (National Primary Health Care Development Agency 2011). In may 2012 Nigeria joined other member states of the World Health Assembly to endorse the Global Vaccine Action plan; in agenda for universal access to immunization by 2020 (Global Vaccine Action Plan, 2020).

Despite government efforts to maintain high immunization rate, so as to eradicate vaccine preventable diseases, it has still remained low. Research points to incomplete vaccination among infants as the likely cause for occasional recurring of our breaks of vaccine preventable diseases in Nigeria (Shen, Fields & McQuestion, 2014). In response, the government has implemented several strategies with mothers to promote immunization coverage. However, wide gap still exists for them to actualize their vision.

Statement of Problem

Mothers are the major players in deciding for or against the health activities that target their children. Despite all the efforts of the government, and the vaccines free there seems to be low coverage, the researcher wants to find out why this so. Is it that the young mothers do not have correct understanding of the benefits of child.

Immunization, the understanding these mothers have on how does it impinge in their acceptance or immunization refusal of it. The government have strategies they are working with the eradicate poor immunization coverage, the researcher wants to find out if these strategies are really working or not.

Research Questions

In other to carry out this study, the following research questions were asked.

1. Do mothers' understanding of the benefits of immunization determine their acceptance of it?
2. What source of information on immunization is more assessable to the mothers?
3. Do mothers' understanding of immunization determine their perception of it?
4. What methods can be used in educating mothers on immunization?

Immunization Framework

Immunization is the process whereby a person is made immune to an infectious disease, typically by the administration of a vaccine (WHO 2018). This vaccine stimulates the body's own immune system to protect the person against subsequent infection or diseases. Immunization is a proven tool for controlling and eliminating life-threatening infectious diseases and it is estimated to avert between 2 to 3 million deaths each year (WHO and UNICEF, 2009). With the help of immunization when your body comes in contact with foreign molecules, the immune system will be able to respond quickly and guard your system. Immunization is carried out using several methods but the most common technique is vaccination. The vaccines keep your body geared up for any future threats, protecting it from almost all infections or diseases.

There are two types of immunization, they are passive and active immunization (WHO, 2007). In passive immunization, the immune system doesn't have to produce any elements to fight disease. This is because external immune boosters are transferred into an individual's body to execute the action of fighting or immunizing against infection. In active immunization the immune system of our body create its own defence mechanism when it comes in contact with a germ.

Vaccination is one of the most important things that helps to boost our immunity. When this is done several infections which leads to various complications and even death can be altered. There is need to review related studies on assessing the knowledge and information on immunization among young mothers to know what previous studies have found out. Vinodkumar, Chandrabhotla, Kaja and Machara (2017) found out that the association between gender and immunization status was found to be statistically significant while association between other demographic variables, like mothers' education, area of residence and birth order was found to be statically not significant. Other related studies like (Mabrouka, 2011) and (Fatima, 2013) found out that uneducated mothers were less conscious about the immunization of their children as compared to the mothers who were highly educated.

For the information about immunization as conducted by (Nath, Singh, Anasthi, Blushari and Kumar 2008) in Lucknow found out that health workers and health personnel were the major source of information regarding immunization. It is heartening to know that doctors are responsible for informing a majority of respondents about immunization but a need exists to work further in this area. This result is contrast to the study conducted by (Al-zahrani 2013) to assess parental knowledge and altitude regarding vaccination and their effects on vaccination practice, in which the media is noted to be strong source for providing

awareness among the respondents about immunization.

Parents' knowledge about immunization and their attitudes towards them are likely influence uptake. In the study conducted by (Theeta and Newell, 2008) revealed misconceptions on parents' knowledge and negative attitude towards childhood immunization. Mothers' knowledge about vaccination was found to be quite low and their education was significantly associated with child's coverage, (Siddigi & Nisar, 2010). According to (Tagbo, Uleanya, Nwokoye, Eze and Omotowo 2012) most mothers had good knowledge, positive perception and practice of immunization. The proportion of mothers with wrong knowledge and poor perception of immunization require policy attention.

Theoretical Framework

The theory under pinning for this research is the Risk communication theory. This theory emanated in the mid-1980s as a necessary component in risk management and community decision making in environmental and occupational health. The National Research Council (NRC) assert that risk communication is an interactive process of exchange of information and opinion among individuals, groups and institutions. Covello 1993 defined risk communication as a two way exchange of information between interested parties about the nature significance and control of risk. It involves discussion about risk types and levels and about methods for managing risks. Specifically, this process is defined by levels of involvement in decisions actions, or policies aimed at managing or controlling health or environmental risk (Oduro 2017). Problems for risk communicators involve how to reach the intended audience to make risk comprehensible and related to other risk, how to pay appropriate respect to the audience's values related to the risk.

The main goal of risk communication is to improve collective and individual decision making. According to National Research Council (NRC) Risk communication process can be considered successful only to the extent that it first improves the base of accurate information that decision makers use, be it government officials, industry manager or individual citizen, and secondly satisfies those involved that are adequately informed within the limits of available knowledge. Crisis and emergency risk communication is the attempt by science or public health professionals to provide information that allows an individual's, stake holders or an entire community to make the best possible decisions during crisis emergency about their wellbeing. Often this communication must be done within early possible time and requires public acceptance of the imperfect nature of the available choices for action (Sandman, 2003).

Methodology

The survey research design was considered appropriate for this study and was therefore adopted. The design was preferred to obtain diverse information about the knowledge and information level on immunization among young mothers in Imo State. The survey method was used in drawing up a set of questions that relate to the issue of study to which selected number of young mothers reacted to. The study had 67,945 women of the reproductive age group 18-49 years in 29, 930 households in Owerri, Imo State. Most women in this region are civil servants and traders. The sample size of 322 was arrived at Taro Yamani's formula. Owing to the fact that the population is known, the researcher adopted the multi-stage and purposive sampling techniques. The instrument used for data collection in this study was the

questionnaire. The questionnaire was made up to two sections section A and B.

Method of Data Presentation and Analysis

A total of 322 copies of the questionnaire were administered to young mothers who had under five children. After the distribution, the respondents were guided by the researcher for them to fill it. However out of the 322 copies of the questionnaires distributed 295 copies were retrieved and used for this study, 27 copies were discarded because of wrong filling and mistakes.

The demographic features of the mothers used for this study shows that the age of the mothers are 18-21 years are 20%, 22-25 years are 31% 26-30 years are 49%. The educational attainment of the mothers are as follows; primary qualification 7%, secondary qualification 58% and tertiary qualification is 35%.

Table 1: I believe its important for my child to receive all the necessary immunization.

Response	Frequency	Percentage
Strongly agree	212	72%
Agree	50	17%
Not sure	18	6%
Disagree	15	5%
Strongly disagree	0	0%
Total	295	100%

From the above table, the respondents that believe it is important for their child to receive immunization is 72% as against 5% that say they don't know.

Table 2: my children have received the complete dosage of immunized

Response	Frequency	Percentage
Strongly agree	148	50%
Agree	62	29%
Not sure	41	14%
Disagree	27	9%
Strongly disagree	17	6%
Total	295	100%

From the above table 50% of the respondent have completed their child's immunization while 6% have no completed it.

Table 3: How do you get information on immunization?

Source	Frequency	Percentage
Radio	89	30
TV	32	11
Friends	27	9
Health professionals	82	28
Social media	62	21
Others	3	1
Total	295	100

The above table shows that 89% of the respondents which is the majority get their immunization information through the radio, while 82% get the information through health professionals, 32% get the information through television, 62% get the information through social media while 27% get their through their friends, Only 3% of the respondents get their information through other means.

Table 4: News media exaggerate report about the changer of not immunizing children.

Response	Frequency	Percentage
Strongly agree	35	12%
Agree	56	19%
Not sure	44	15%
Disagree	86	29%
Strongly disagree	74	25%
Total	295	100%

From the above table 12% of the respondents strongly agree that the media exaggerate news in the dangers associated with immunization, 19% Agree, 15% into the category of not sure, 29% disagree while 25% strongly disagree, that the media exaggerate news on dangers of immunization.

Table 5: Immunization prevents childhood diseases

Response	Frequency	Percentage
Strongly agree	174	59%
Agree	71	24%
Not sure	27	9%
Disagree	17	6%
Strongly disagree	6	2%
Total	295	100%

In the table 7 above, 59% strongly agree that immunization prevents childhood disease 24% Agree, 9% are not sure, whether immunization prevents childhood disease or not, and only 2%

strongly disagree on this.

Table 6: I did not complete my child's immunization because:

Response	Frequency	Percentage
I was too busy	118	40%
Health center is too far	56	19%
Vaccine was not available	74	25%
Other	47	16%
Total	295	100%

In the above table 40% of the respondents said they were too busy to complete the immunization of their child, 19% said the health center is too far from where they are, 25% said, the vaccine was not available when they went and 16% had other reason why they couldn't complete their child's immunization.

Table 7: Immunization has negative side effects

Response	Frequency	Percentage
Strongly agree	44	15%
Agree	65	22%
Not sure	35	12%
Disagree	65	22%
Strongly disagree	86	29%
Total	295	100%

From the above table 15% of the respondents strongly agree that immunization has negative side effects, 22% agree, 12% are not sure whether there is any negative side caused by immunization 22% disagree, and 29% strongly disagree on this.

Discussion of Findings

The analysis of data in the study revealed that majority of the mothers know how important it is for their child to receive all the necessary immunization, this was deduced from the high percentage of 72% as against 8% that doesn't find it necessary for their child to receive all their immunization. This is actually in order with the study carried out by (Roodpeyma, Kamali, Babai & Tajik, 2007) where a significant relationship was observed between level of education and awareness of immunization and between age and attitude to immunization.

On their source of information on immunization, it was revealed that 30% get their information from the radio, while 28% from health professionals. This means that the campaign and awareness being carried out on radio has positive effects on the mothers and they are more accessible to radio and health officials than other means of information dissemination.

The researcher also found out that 15% of the respondents believe that the news media exaggerate report on the dangers of not immunizing children, while 33% disagree on this. It

can be deduced here that some of them do not fully understand immunization that is why they have the perception that the media report about its danger is exaggerated.

Conclusion and Recommendations

Immunization as we all know is an act of being inoculated against vaccine preventable disease especially in children. Which goes a long way to prevent morbidity and mortality rate in children. The young mothers especially the literate ones know the danger of not inoculating their children, they try as much as possible to immunize them. The researcher recommends that:

Mother should be continuously educated on the dangers associated with not immunizing their children. They should be made to know why it is necessary to ensure that their children receive all the necessary immunization dosage and at when due.

More seminars should be carried out by the health workers and also the radio used to discriminate information about immunization, since it found out that the mothers are more accessible to it.

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