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Awareness And Adherence To Immunization Services Among Nursing Mothers Attending Egbeta Primary Health Care, Ovia North East, Edo-State, Nigeria.

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ABSTRACT
Immunization is one of the safest and most effective interventions to prevent disease and early child death. Although, about three quarters of the world's child population is reached with the required vaccines, only half of the children in Sub-Saharan Africa get access to basic immunization.The purpose of this study was to investigate.Awareness AndAdherence to Immunization Among Nursing Mothers attending EgbetaPrimary Health Care, Edo-State.Descriptive survey designwas adopted for the study. A stratified random sample of three hundred (300) women of child bearing age, who had children of five years old and below was drawn from Egbeta Community. A validated questionnaire constructed by the researcher was used to collect data. Data derived from the study was subjected to simple descriptive statistics. The major findings of this study indicated that, there is good knowledge of immunization services. Most of the respondents received information about the immunization services but lack proper understanding and clarity of some diseases..A good number of the respondents mentioned lack of health centers in their villages. The findings also show that the higher the level of knowledge, the greater the perceived efficacy of immunization. Based on the findings of this study, the researcherrecommended that health care providers, especially at the primary health carelevel should embark on clearly stated and well explained health education program on preventive care services of the six deadly diseases.

Key words; factors, utilization .immunization, children.

I. BACKGROUND OF THE STUDY.

Immunization is one of the safest and most effective interventions to prevent disease and early child death.Globally, immunization the World Health Organization (WHO 2013) has defined immunization as the process whereby a person is made immune or resistant to an infectious disease, typically by the administration of a vaccine. These vaccines help to stimulate the body's own immune system to protect the person against subsequent infection or disease (WHO, 2013). Immunization therefore depicts the ability to develop immunity. The antibodies produced in response to the pathogen's antigen are an important part of the immune system(WHO, 2020). Immunity is the state of having sufficient biological defenses to avoid infection, disease, or other unwanted biological invasion (Gherardi,2011, WHO 2020). Immunity also depicts the capability of the body to resist harmful microbes from gaining access into it. Immunization is one of the most successful and cost effective public health interventions in the constant effort of human beings against diseases that affect our wellbeing.

Immunization has prevented more deaths in the past years than any other health intervention globally (Awosika, 2012). WHO (2016) also stated that immunization is a proven tool for controlling and eliminating life-threatening infectious disease and has been estimated to alleviate 2 to 3 million deaths each year.. Although, about three quarters of the world's child population is reached with the required vaccines, only half of the children in Sub-Saharan Africa get access to basic immunization (WHO, 2020).In spite of the effort been made by the government and other organizations such as WHO, UN1CEF, USAID, (2015) to prevent

childhood diseases, yet infant and child mortality rate in the communities of developing countries still remain very high when compared with that of developed countries.WHO (2015)In recent years, many countries have employed a growing range of strategies to increase both the provision and utilization of immunization services. These experiences are in consonant with the Global Immunization Vision and Strategy (GIVS) of—using a combination of approaches to reach everyone targeted for immunization (WHO, 2014). This initiative brings about the introduction of National Program on Immunization (NPI).In Nigeria, only 10% of children in the North West geographical region are fully immunized compared to 52% in the South East and South West regions. Immunity gap created by this low immunization coverage in Northern Nigeria favors the emergence and transmission of some vaccine preventable diseases (VPDs) especially measles and polio. Knowledge and perception of mothers/caregivers regarding VPDs favour demand and utilization of immunization services. Thisstudy utilized the Health Belief model to establish the existing relationship.Nigeria started immunization activities in 1956 prior to the goal of providing immunization services to all children 0-23 months of age against the following childhood killer's diseases,Measles chicken pox, poliomyelitis, tetanus tuberculosis etc.But it was fully introduced and implemented in 1978. Nigeria took over Theseresponsibilities from the United Nations Children Fund (UNICEF) in 1990 when it was re-launched and it became Expanded Program on Immunization (EPI). The Nation Program on Immunization began with social mobilization and communication programs, expandedpartnerships about routine immunization was fully introduced and implemented in 1978. As part of the program of the National Program on Immunization, National Immunization Days (NID) was launched, which are special day set aside nationwide to immunize all children aged 0-5 years with two drops of polio vaccine, irrespective of their immunization status. (W.H.O. 2009) types of vaccines that prevent child killer diseases are **BCG (Bacilli Calmatte Guerin**) vaccine: this is a life attenuated vaccine given at birth and it help to protect the child against tuberculosis. **OPV (oral polio vaccine):-** Oral Polio vaccine gives protection against the types of viruses that causes polio.OPV should be given at birth, 6th week, 10th week, and 14th week of life. It is dropped in the mouth with the dropper that comes with the vaccine and it has no side effects.**DPT (Diphtheria, Pertusis and Tetanus) vaccine:-**It is known as triple vaccine because it helps to protect the body against three different diseases. It is given in the 6th week of life and then four weekly intervals till 10th week of life and it must be given intramuscularly at the upper thigh.**Measles Vaccine:-** This is a vaccine that helps in preventing measles. It is given at 9 months and as soon as possible after 9months regardless whether the child had measles or not. Maternal antibodies against measles last longer than the other antibodies..**Yellow fever vaccine:** is recommended for the control of yellow fever, as part of routine immunization schedule in countries where the disease is endemic like Nigeria. It should not be given to children under 6 months of age or those clinically tested to have AIDS. The vaccine is given subcutaneously in the upper right arm.**Hepatitis B vaccine:-**The vaccine is a cloudy liquid that comes in a vial or prefilled syringe and it must be shaken before use. The recommended schedule for hepatitis is at birth, 6 weeks and 14 weeks. It is injected in the muscle of the upper thigh.

The National program on immunization aims at meeting the WHO target of immunizing all children from the ages 0-5years, by giving tetanus toxoid to all pregnant women and reducing the morbidity rate resulting from the six childhood killer disease which includes diphtheria, tetanus, tuberculosis, poliomyelitis, measles and whooping cough. Others are Hepatitis B virus, yellow fever, meningitis and typhoid fever. NPI also focuses on decreasing the incidence of an infectious disease in the general population and to create adequate public health awareness through Radio, television, Local and National Newspaper, Primary Schools, Churches, Mosques and Market place (WHO, 2016). There should be Provision of mobile clinic and vehicles to ensure proper monitoring of disease. The most major aim of immunization is to eradicating child killer diseases and using the opportunity to detect all cases of flaccid paralysis (AFP). **Statement of problem**Immunization of children has becomes a serious problem to Africa, especially Nigerians because people's cultural and religious believe against the act of immunization has influenced utilization of the exercise. Immunization is a process by which resistance to an infectious disease is produce or augmented. It is the act of creating immunity by artificial means. Therefore, the World Health Organization (WHO) through the implementation of various World Health Assemble and Regional Committee Resolutions, has consistently encouraged countries, including Nigeria to improve and intensify efforts to address the goal of routine immunization program. Nigeria like many countries in the

African region is making effort to strengthen its health system in general and routine immunization service in particular to reduce disease problem from vaccine preventable diseases (W.H.O, 2015).Inspite of all these support to eradication of polio, measles and reduction in neonatal tetanus, Nigeria is still facing problem with nursing mothersadhering to immunization schedule to eradicate the six killer diseases in the country.It was against this background that the researcher wants to know the awareness andadherence to immunization among the nursing mothers attending Egbeta PHC in Ovia North East, Edo-State Nigeria.

The general objective of the study is to determine the knowledge of immunization among nursing mothers attending PHC in EgbetaOvia North East LGA, Edo state.**The Specific Objectives**:To assess the level of awareness of nursing mothers on immunization in EgbetaOvia North East. To find out nursing mothers adherence to immunization services in EgbetaOvia North East LGA in Edo State..**RESEAREH QUESTIONS;**What is the level of awareness of nursing mothers towards immunization services in EgbetaOvia North East? What is the adherence of nursing mothers to immunization services in EgbetaOvia North East LGA in Edo State?**RESEAREH HYPOTHESES**; There will be no statistically significant relationship between the awareness level of nursing mothers and their adherence to immunization services in EgbetaOvia North East, PHC, Edo State.There will be no statistically significant relationship between the adherence level of nursing mothers and their immunization adherence in EgbetaOvia North East LGA, Phc, Edo-State

SIGNIFICANCE OF THE STUDY Findingswill help in modifying immunization policy.The finding will help to provide information about the problem and develop approach for solving the problem. It will also serve as reference materials for other researchers in their research work. The finding will also be relevant for planning immunization health programs in the state.

METHODOLOGYThe descriptive research design was employed in this study to achieve the researcher objectives. As the name implies, descriptive research design are used when the researcher wants to describe specific behavior as it occurs in the environment.**STUDY SETTING**The area of is Egbeta a rural community in Ovia North East of Edo state.It is primary health care center under the control of state ministry of health. Egbeta is one of the Senatorial Zones in Edo state. **TARGET POPULATION**The target population for this study was 120 Nursing mothers attending EgbetaPHC, Ovia North East LGA, Edo state, at the time of this report..The **inclusion criteria** were: Willingness to participate in the study.Emotional, physical and mental well-being of pregnant mothers at the time of study must be sound. Women aged between 18-35 years.**Instrument for Data Collection**was self-developed questionnaire which was divided into 3 sections:**Section A:**Demographicdata**Section B, awareness** of immunization services. **Section C;**adherence to immunization services. It was constructed in English and was interpreted in three languages; Benin,Yoruba and Ibolocal Languages.The researcher recruited local language interpreters to explain the questionnaire in local languages.The aim was for translation of English Language to ensure proper understanding of questions asked.**Validity of Instrument** Face to faceContent validity of the instrument was used for this study. **Reliability of the Instrument**The questionnaire was pilot tested among 5 mothers in PHC Okhianeighboring community PHC, who were not part of the study population. Some modifications were made and some of the test items were re-framed prior to final administration for clarity. The pilot result was tested at 0.05 **level** of the significance. **Method of Data Collection**Letter of introduction gotten from the head of Nursing Department, Igbinedion University Okada, which was presented to the director of Primary health care at Ovia LGA Unit for permission.The questionnaire was later distributed to selected participant after approval has been given; **Method of Data Analysis**The data from the questionnaire was analyzed using Statistical Package for Social Sciences (SPSS) version 17.Frequency distribution table and percentage were used to represent data. Hypothesis - was tested using Chi-Square method at 0.05 level of significance. **Ethnical Permission** wasobtained from the Director of PHC Ovia North East of Edo State. Finally verbal informed consent from the respondents was obtained.

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II. DATA ANALYSIS.

Table 1:Awareness of immunization services among nursing mothers attending Egbeta PHC in Ovia North East, Edo State, Nigeria

VARIABLE	FREQUENCY	PERCENTAGE (%)
Are you aware of immunization services at Egbeta PHC? Yes No	 100 -	 100% -
How many types of vaccines are you aware of? 1-2 3-4 4-6	 8 40 52	 8% 40% 52%
Does immunization help in preventing the spread of some infection? Yes No	 84 72	 84% 72%
Can immunization be given at any time? Yes No	 28 72	 28% 72%
Can immunization reduce the risk of acquiring childhood disease? Yes No	 100 NIL	 100% NIL
High Level	100	100%

The table revealed that 100% is aware of immunization services before. 8% of the respondents is aware of 1-2 type of vaccines while 40% is aware of 3-4 types and 52% is aware of 4-6 types of vaccines. 84% is aware that immunization help in preventing the spread of some disease while 16% did not aware. 28% is aware that immunization can be given at any time ,while 72% is aware that it cannot be given at any time. 100% of the respondents believe that immunization can reduce the risk of acquiring childhood diseases.

From the table above, 100 (100%)of the respondents have a good awareness of immunization services.

Note: high awareness-Any respondent that answered yes to four or all five questions asked under awareness.

TABLE 2.Adherence of Nursing mother to immunization services in Egbeta PHC, Ovia North East, Edo State,

QUESTION	SA	A	U	D	SD
Health workers' behavior discourage mother's adherence to immunization services.	17	19	30	9	5
Does Cost of immunization scary to nursing mother?	51	10	0	12	4
Immunization highly effective in stopping disease spread?	70	26	0	4	0
Mothers' work prevent participation adherence to immunization services.	70	23	0	7	0
Vaccination centers are Far from abodes can hinder adherence to immunization services.	81	11	0	7	3
Long Time spent can hinder adherence to immunization.	51	10	0	12	4

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Payment of some items discourages adherence to immunization.	70	26	0	4	0

Table 2 show ten factors that were explored as influencing mother's adherence with immunization regime. Majority of 60% agreed with the factor that health workers' behavior discouraged adherence. About 81% of the respondents cited the cost of obtaining immunization as barrier to adherence. Some 7% of the mothers agreed that immunization is highly effective for the disease and this encourages them to comply. 70% of the respondents disagreed with the notion that mothers' occupations constituted obstacle to their participation and adherence. 55% of them agreed that time spent for immunization was too long. While 51% of respondent cited child illness as a factor discouraging adherence with vaccines. About 70% of them agreed with contact period as a factor discouraging adherence.

III. DISCUSSION OF FINDINGS

To assess the level of awareness of Nursing Mothers towards immunization services in the study location. Table2 showed that 100(100%) of the respondent have high level of awareness about immunization, and this is as a result of their educational status because majority of the respondents had tertiary education and they were well informed by the health workers. This finding agreed with the finding of Eziekwe (2009) whose work on knowledge of immunization among nursing mothers in a community at Enugu state, revealed that majority of the respondents who were educated (86%)had good knowledge of immunization services. It also stated that immunization can prevent the six killer disease that affect children. It also agreed with the Statistical findings from NP1, Agbor, Delta state [2013]which revealed that in the recent years immunization coverage has risen to 94% due to increase awareness unlike in the past 2013 when the coverage was low as a result of low level of knowledge. This was attributed to the increase in knowledge of the mothers who got to know immunization services through health workers and mass media. This finding also corresponds with the report of Disu (2008) on Lagos State immunization services which revealed that there is a high coverage. The Public is educated on the importance of immunization and the consequences of not immunizing their children. Awareness is always associated with self -improvement and carefulness.

To find out how their adherence influence their immunization services. Majority of the respondents 60% agreed with the fact that health workers' behavior discouraged their adherence to immunization services in Egbeta PHC, ovia north East Edo state Nigeria. This finding agreed with the finding of Omole&Owoduni (2008) on compliance with immunization in Oni Memorial Children Hospital, Ibadan, Oyo State, Nigeria on Jan 5th, 2005.71.4% mothers had good compliance to immunization regimen. Good knowledge of education plays a big role in adherence to treatment and lifestyle changes. Ignorance is a big disease that hinders adherence to health changes. Good awareness always chase ignorance away. 28.6% mothers without enough knowledge of education did not comply to immunization adherence.

3.1 NURSING IMPLICATION

In spite of the effort being made by the government and other organizations such as W.H.O, UNICEF and others, infant and child mortality rate in the community still remains very high when compared with that of developed country thus mothers should be told the importance of bringing their children early for immunization after delivery. Nurses should also health educate the general public on the need for early immunization of mother and child.

3.2 SUMMARY AND CONCLUSION

Findings from this study suggest that the awareness and adherence to immunization among the respondents (nursing mothers) was influenced by their educational status, therefore mothers need to be encouraged to adhere to immunization schedules and seminars. Those nursing mothers with low level of awareness need to be enlightened on the benefit of immunization.Immunization of children should be with easy as to make mothers adhere to immunization services. This will help to prevent the deadly diseases in children.

3.3 RECOMMENDATION

1. Health education campaigns about vaccination for mothers especially those in rural areas. slums, and villages emphasis on the less educated mothers.
2. Immunization sessions should be held for mothers with children less than one year as well as social group meetings between mothers with children in the same age to exchange information at maternal and child health centers .
3. Provide mothers with vaccination booklets explain the importance of vaccination and how

to manage its side effects also continuous educational programs for mothers about the types and availability of others vaccination are not included in obligatory ministry of health vaccination schedule.

3.4 LIMITATIONS OF THE STUDY

Time: The time for administration and filling the questionnaire may not be convenient for the respondents, therefore the researcher found out the time convenient for them (break tune) in order to administer the questionnaire and also for proper filling. Impatience and Uncooperative attitude of some respondents to answer the questionnaires or give out correct information. The respondents were persuaded to fill the questionnaire by telling them that the information will only be used for the study.

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