



## **Parental Attitude Towards Immunization and Its Implication For Counselling In Rivers State**

**Agi, W. Comfort<sup>1</sup>, Joel, Comfort Jacob<sup>2</sup>**

**Department of Educational Foundations  
Rivers State University, Port Harcourt, Nigeria**

**Email: [comfortagi@gmail.com](mailto:comfortagi@gmail.com),**

**Phone: 08030958193, 08032587420**

### **ABSTRACT**

The study investigated the parental attitude towards immunization and its implication for counseling in Rivers State. Specifically, this work sorts to: investigate if parental age affects their attitude towards immunization, investigate if marital status affects parental attitude towards immunization and to identify if educational qualification affects parental attitude towards immunization. A descriptive survey design guided the study. A population of 3,850 mothers was used for the study. From the population, 10 percent of mothers was sampled using random sampling techniques. Three research questions and three hypotheses were answered and tested at a 0.05 level of significance. The instrument that guided the study was a questionnaire. The instrument was face and content validated by the project supervisor. The reliability of the instrument was established using Pearson Product Moment Correlation. Mean and standard deviation were used to answer the research questions while t-test was used to test the hypotheses. The study found out that most of the parents agree that age do not affect their attitude towards immunization among others. It was recommended that counselors should be posted to every health facility in the state to educate every prospective mothers and mothers on the need for immunization using the rational emotive behavior counseling method amongst others.

**Keywords:** Parents, Attitude, Immunization, Implication, Counselling, Marital, Status.

### **INTRODUCTION**

All over the world, immunization is recognized as the cornerstone for health development in children. The concept of immunization has assumed to be “keep the children in a healthy condition and ensure a bright future for the nations with the effort of their parents” by World Health Organisation (WHO, 2001). Immunization is done to make the body resist invasion of pathogenic microbes like bacteria, protozoa and virus. In immunization, a small quantity of dead parasitic organism is injected into the body of the healthy person (somebody that is free from the parasite organism), the body recognized the antigen as a foreign response by realizing specialized protein called antibodies. These antibodies have specific protective properties and the body becomes immune against the diseases that are caused by micro-organisms. Immunization can be active, passive, natural, or acquired. Acquired immunity is artificial, when there is an epidemic outbreak of small doses, antibodies from an animal are given to people to provide urgent temporary immunity to the body. Active artificial immunity is done by injecting vaccines so as to weaken or kill the bacteria product into the body, the body can have its own antibodies, an example is the smallpox vaccine.

Parents especially the mothers in question do not get their children immunized. The superstitious belief or idea that diseases are caused by witches and wizards are strongly rooted in their mind, some believe that diseases are caused by evil spirit and the only way out for them to avoid it by offering sacrifice and some believe that it is a sin that the parents have committed towards the gods that make the child to be like that and there is no solution to the sickness of the child.

A person should be regarded as healthy provided he can remain socially and economically active, though he may have to suffer some health disability or discomfort. Immunization is among the most effective and successful public interventions. Parental attitude plays an important role in the spread of infectious diseases, and understanding the influence of attitude on the spread of diseases can be a key to improving and control efforts. While attitude responses to the spread of a disease have often been reported, there has been relatively little systematic investigation into how attitude changes can affect diseases dynamics. Mathematical models for the spread of infectious diseases are an important tool for investigating and quantifying such effects, not how least because the spread of a disease among humans is not amenable to direct experimental study. Here, we review recent efforts to incorporate human attitude into disease models and propose that such models can be broadly classified according to the assumed effects of such attitude. We highlight recent advances as well as gaps in our understanding of the interplay between infectious disease dynamics and human attitudes and suggest what kind of step would be helpful in filling these gaps (Royal Society).

In addition, emphasis should be laid on world health of infants as a veritable tool to help children develop and grow well to become future of tomorrow. Thus promotion of immunization in various countries entails a determination to improve the quality of life in infants. In accordance with its mandate to provide guidance to member states on health policy matters, World Health Organisation (WHO) is issuing a series of regularly update position papers on vaccines and combination of vaccines that are used against diseases that have an international public health impact. These papers, which are concerned primarily with the use of vaccines in large-scale immunization programmes, summarize essential background information on the diseases and conclude with World Health Organisation (WHO's) current position on their use in the global context. The position papers have been reviewed by a number of experts within and outside World Health Organisation (WHO) and since April 2006, they are reviewed and endorsed by World Health Organisation (WHO's) strategic Advisory Group of Experts on immunization programmes.

1. Immunization protects your child from eight diseases that disable or kill. There are measles, tetanus, tuberculosis, whooping cough, diphtheria, hepatitis B, yellow fever and poliomyelitis.
2. Vaccines are safe, free and protect your child from the diseases, you should go to your nearest health care centre to immunize all children under five years.
3. Immunize all children, even a child with minor illnesses, disability or who is malnourished. Vaccines will not make them more ill. Only five visits to a health centre is required to fully immunize a child against the eight childhood killer diseases. Four visits are not enough, vaccines can only protect your child if given on time according to the routine immunization schedule.
4. A baby must receive the first vaccines soon after birth. If born at home, take your child to the nearest health centre as soon as possible.
5. Diseases like polio, measles, diphtheria are not caused by witchcraft and evil spirits. The only way to prevent them is to immunize your child before his/her first birthday.
6. The small sore on the child's arm after taking the BCG vaccine is a good sign and shows the vaccine is taking effect. Please keep the sore dry, clean and do not apply any herbs or medicine to it.
7. The slight fever the child gets after the measles or another vaccination is normal and will go away within a day. If fever is high, wash the child with cold water. Do not apply oil or wrap the child in warm clothes.
8. Always bring the child's vaccination card with you during visits to the health centre. The cards are important in helping you take care of your child. Keep them safe.
9. A new syringe and needle must be used for every vaccination administered to each child. Please check that a new syringe and needle are being used.

10. Tetanus can kill young children. All women of child bearing age should be immunized against tetanus. Every pregnant woman should make sure she immunized at least twice before delivery. This will protect mother and baby.

Immunization and child health, before being eradicated in 1979, smallpox killed some 300 million people in the 20<sup>th</sup> century alone. Prior to widespread of immunization, measles accounted for 2.6 million deaths each year, polio, one of the most dreaded diseases in the United States as recently as 60 years ago, is closer than ever before to being eradicated worldwide – 2015 saw only 74 cases, down from 350,000 in 1988, preventing more than 10 million cases of childhood paralysis. Vaccines convey a lifetime of protection to individuals and societies and contribute to healthy, productive populations. But vaccines don't always reach the children who need them, and millions die as a result. In richer countries, vaccination is a scripted part of life for young children; immunization in some poorer countries is still far from routine.

Measles is one of the most contagious diseases known. Although a safe, effective and inexpensive vaccine has been available since the 1960s, an estimated 410,000 child under age five died from measles in 2004, often from complications related to severe diarrhoea and pneumonia. Many who survive are left with lifelong disabilities including blindness and brain damage. Weak immunization systems that are unable to deliver measles vaccine to young children remain the primary reason for countries still experiencing high measles deaths.

Measles remains a major killer of children in the developing world, but it doesn't have to be. "UNICEF Executive Director Ann. Veneman said, "just two doses of an inexpensive, safe and available measles vaccine can prevent most, if not all measles death". World Health Organisation (WHO and UNICEF) have concentrated measles mortality reduction activities in 47 countries that account for about 98% of global measles deaths, working primarily to improve routine immunization as well as providing treatment to children with measles and strengthening disease surveillance. Supplementary immunization activities (SIAS) have also proven to be especially effective from 1999 to 2004 nearly 500 million children were immunized against measles.

While African countries have made great improvements in reducing measles deaths, however progress in the South Asia region has been slow. The challenge now is to increase measles immunization coverage in the region to at least 90%. And it must be ensured that all children receive a first dose of measles vaccine at nine months of age through routine immunization services, and a second dose either through routine immunization services supplementary immunization activities (SIAS).

#### **Statement of the Problem**

Immunization all around the world is recognized as the cornerstone for health development in children. The rising cases of child mortality, paralysis, deafness and dumbness have been a serious concern to parents, health workers, government, non-governmental organisation and the society at large. This prevailing incidence has led many deformed children to the streets begging, destines thwarted and hopes of parents dashed. Government and non-governmental organisation has shown immense concern on how to curb the situation. Through this concern immunization was discovered as a good agent to curb the incident of child mortality and deformation. Immunization in Nigeria is offered free to reduce this worrisome incident.

The issue now is why are parents shying away from this freebie? Most parents see immunization as a threat as it can lead to rise in temperature, a sore formation on the sight of administration of Bacillus Calmette Guerin (BCG) vaccine only, a formation of lump node which can later develop to abscess, uncomfotability of the child, mothers feeling pity on their children and deformity of children. To avoid contending with these issues they regarded the option of shielding their children away from such dangerous "saviour" government tagged "immunization". This attitude has neither helped the efforts of government or non-governmental organisations towards eliminating these communicable diseases that can be arrested by immunization. Traditional beliefs, culture, religious beliefs and traditional have also helped to ignite such attitude in parents and frustrated every meaningful effort towards immunization.

Therefore, the researcher decided to embark on the topic 'parental attitude towards immunization in Rivers State and its implication for counselling and inform the public about the importance of immunization to protect individual against communicable diseases. Attitude is a great influence of behaviour, if parents are counseled and re-oriented towards immunization, there will be a positive response to the call to immunization. It is against this background that the researcher conceived this idea.

### **Purpose of the Study**

The purpose of this study is to investigate parental attitude towards immunization in Rivers State and its implication for counselling. Specifically, the study is to achieve the following objectives:

- (1) To investigate if parental age affects their attitude towards immunization.
- (2) To investigate if marital status affect parental attitude towards immunization.
- (3) To identify if educational qualification affects parental attitude towards immunization.

### **Research Questions**

The researcher developed the following research questions to guide the study:

- (1) To what extent does the age of parents affect their attitude toward immunization?
- (2) To what extent does marital status of parents affect their attitude towards child immunization?
- (3) To what extent does educational qualification of parents affect their attitude towards immunization?

### **Hypotheses**

The following are the hypotheses formulated for this study:

- Ho<sub>1</sub>: There is no significant difference in the mean response between the young and the aged respondents on the influence of parental age on attitude towards immunization.
- Ho<sub>2</sub>: There is no significant difference in the mean responses between married and single respondents on the influence of marital status on their attitude towards immunization
- Ho<sub>3</sub>: There is no significant difference in the mean responses between educated and illiterate respondents on the influence of educational qualifications of parents towards immunization.

## **REVIEW OF RELATED LITERATURE**

Parental attitude play an important role in the development of a child. The social norms strongly influence parents from exempting their children to be immunized. Ojoko (2002) defined norm as a pattern methods of doing things by a group of people which are more or less inherited. These norms might be cultural belief, religious beliefs, laggard parents and also ignorance, evil eyes, witches & wizards. Response to parents' pressure about immunization has direct effect on the spread of pediatric infectious diseases in area where immunization is not mandatory (Royal Society B). Incorporating social norms into predicative mathematical modeling a research team from, "University of Waterloo" found that they can foresee the observed patterns of population behaviour and diseases spread when immunization does not take place. If immunization is not mandatory and diseases are rare, then a few parents will not be tempted to stop immunizing their children (Bauch, 2014). "More parents adopt this behaviour to social norms being to change and it becomes increasingly acceptable to avoid immunization obviously when enough parents are no longer immunizing, the diseases will come back". In most North America, pediatric immunization is mandatory for infants' enrolment in public education. Parents are not cold, clinical rationalists who base their decision only on data. They are strongly influenced by other parents and what they read "said Bauch".

Parental belief much on superstitious belief; this is the cause of disease/poor health in Nigeria. Some said is ancestors – forefathers, elders who died many decades ago are now regarded as ancestors. Some parents believe that if the living annoys the ancestors in one form or the other, injuries, disease or poor health status could afflict the offender, and could result to death. The beliefs of other parents include; evil spirit, demons, satan, devils mermaid etc. Parents also believe that all these existing norms can cause sickness, poor health status or even death so that there is no need for immunization. In this range of evil eyes, enmity, envy, hatred, jealousy and its feelings against one another, in most cases, such acts could bring about death of a child.

Some Nigerian parents believe that witches and wizards are responsible in poisoning somebody or keeping someone in unpleasant condition. Another belief is that unreligious and antisocial people could cause disease, poor health status and death of their children and adult by invoking applying witchcraft on people. Act of God is another belief of some Nigeria parents, when you offend God, he can punish you in any form of health status, although it is also said in the Bible that the wages of sin is death. The act of God can befall any sinner as it happened to Pharaoh and his people who drowned in the red sea.

They had plague, water turned to blood, frogs, locust in abundance and famine and so these acts affected their health status. The behaviour of parents during illness, actually, when any of these beliefs is responsible for the causation of disease behaviour differs from normal causes of disease like organisms. The signs and symptoms of illness suspected to be caused by any of these cultural beliefs are strange and quite unbelievable. Infact, the negative attitude of parents make many children to exempt their right of immunization, and the disease rate is high especially in Nigeria. Even with the effort of World Health Organisation (WHO) Nigeria could not kick out polio.

In some cases, some of these problems can be prevented by incision of the skin with blade and some herbs, and roots put into it as a form of protection. That is why you find some children blade marks on their faces, chest and bodies, while others however tie charms on their waist, neck and ankles. They are laggard parents; these are the very last parents to adopt innovation about immunization. Usually, they are isolated and very suspicious of others; they don't have opinion of immunization. These groups hold their custom and tradition tied watching whether immunization can result good (Ojoko, 2000). They are parents who are ignorance about anything happening. The parents don't have knowledge or information and these are uneducated parents. For them to understand it goes with awareness and health education.

### **Concept of Immunization**

By the modern era, the childhood immunization, parents would have surprised at the thought future generation would be able to protect their children from many of the most serious childhood diseases. There was a time when diphtheria claimed about 10,000 lives in a year in United States during the 1920s. In the 1940s and 1950s, polio paralysed and even killed children by the thousands. At one point in time, the measles affected nearly a half - million US children every year. Almost everyone got it at childhood and sometimes causes complications such as pneumonia and ancephalitis. In 1796, Edward Jenner conducted an experiment, scratching the arm of an 8 years old boy name James Phipps using material from a cowpox sore in one of dairymaids. Then he repeated the same experiment, but this time he added a small amount of smallpox into the same child. He hoped that the procedure would immunize the child against the deadly smallpox infection. Infact, it did Jenner's experiment began the immunization.

The next major advance occurred almost 100 years later, Louis Pasteur, M.D. showed that disease could be prevented by infecting humans with weakened germs. In 1885, Dr. Pasteur used vaccine to successfully prevent rabies in a boy named Joseph Meister who has been bitten by a rabid dog. By the mid 20<sup>th</sup> century, regular progress in immunization was made, Jonas Salk, MD and Albert Sabin, MD, made what are perhaps the best known advances – they developed the inactivated polio vaccine and live polio, a disease that often left youngsters dependent on wheelchairs or crutches for life. Today, most children in the United States lead much healthiest lives and parents live with much less anxiety and worry over infectious diseases during childhood. Today, immunization is one of the success stories of modern medicine (Copyright 2016 American Academy of Pediatrics).

Immunization is among the most cost-effective and successful public health interventions. High immunization levels therefore permit some individuals unvaccinated individual to reap benefits of immunization without facing risks. The current success of immunization programs in achieving record - high level of coverage and record - low vaccine - preventable diseases (VPD) result in many parents being unfamiliar with (VPDs). As a result, the desire of some parents to claim exemptions for their children may increase when vaccine coverage is high since the actual

impact of exemptors on diseases occurrence has not been well studied, the analysed risk of exemptors to themselves and the communities in which they live.

In Massachusetts State, immunization laws permit certain exemptors. As of January 1998 all states, all medical exemptors (e.g. for individual who are immunocompromised, have allergic reactions to vaccine constituents, or have moderate or severe illness). To qualify for medical exemptions, parents or guardians must provide a letter or other documentation from physician. Forty-eight states permit religious exemptions and 15 states allow philosophical or personal exemptions. Such exemptions are defined differently by each state. Texas requires that individual claiming religious exemptions be a member of a recognized religious group that opposes all immunization and submit a letter from a faith leader. By contrast offers personal beliefs exemptions, which require only a parental affidavit. Persons who claim exemptions from immunization for any reason may be at increased risk of contacting a vaccine - preventable disease (VPD) compared with immunized child.

Immunization may now be undervalued because vaccines have eliminated threat of serious infectious diseases in childhood. As the incidence of vaccine - preventable diseases has declined concern about vaccine safety has increased. Significant erosion of public confidence in vaccine safety could lead to reduced immunization rates and a resurgence of vaccine - preventable diseases.

To assess parents, understanding of vaccine - preventable diseases, vaccines, immunization practices and policies, were conducted a telephone survey in United States with a nationally representative sample (n = 1600) of parents with children 6 years of age, and expectant parents in April and May 1999. As a result, eighty - seven percent of respondents deemed immunization as an extremely important action that parents can take to keep their children well. Although respondent's overall rating of immunization safety was high, a substantial minority help important misconceptions. For example, 25 % believed that their child's immune system could become weakened as a result of too many immunization and 23 % believed that children get more immunization that are good for them. Children healthcare providers were cited as the most important source of information on immunization.

World Health Organisation (WHO) noted that the use of pneumococcal protein conjugate vaccine among children reduced the total number of invasive pneumococcal disease (IPD) cases had resulted in a 38 % decrease in the rate of invasive pneumococcal disease (IPD) among non - vaccinated elderly adults through herd immunization. Immunization could be routine or supplemental (immunization campaign). Routine immunization refers to the nationally scheduled regular administration of vaccine dosage to infants at specific ages. Children are usually taken to health facility by their parents or care givers to receive age - appropriate dose of antigens.

In most developing countries, this is only done on specific days of the week to reduce vaccine wastage since the vaccines are supplied in multi - dose vials to reduce cost. The main aim of routine immunization is to deliver a complete number of doses to potent vaccines in a timely, safe and effective way to all children and women. Ultimately inducing immunity against targeted diseases if implemented, the result is a drastic reduction in the burden of childhood vaccine preventable diseases. On the other hand, supplemental immunization also known as immunization campaign is organized occasionally by government for the purposes of catch - up immunization, diseases eradication / elimination and to avert epidemics. Outreach is also conducted to find out mothers who are defaulter in immunization. Immunization campaigns become more frequent in the last two decades when World Health Organisation (WHO) launched the polio eradication program. Apart from operational factors related to policies, vaccine funding, vaccine availability and health workers related factors, some authors have identified awareness, attitude and perception of parent / care givers as major obstacles to high immunization coverage. McCormick *et al.* (2010) noted that programmes to increase immunization rate have developed and implemented base on untested hypothesis about why parents do not immunize

their children. They are of the view that such implementers ignore the knowledge, awareness, attitude, beliefs and circumstances of underimmunized populations .

No study known to the authors has examined these maternal factors in this part of the country. In spite of efforts directed at solving operation problems, immunization coverage in Nigeria has persistently remained unacceptably low. It has therefore become necessary to examine these maternal issues in relation to immunization (routine and campaign) as well as associated factors. The aim of the current study is therefore to assess mother's knowledge , perception and practice of childhood immunization in Rivers State. The perception of parents towards vaccine is very poor and low because of a lot of factors that are responsible. Another descriptive survey on a target population of studies was carried out in four health centres in Rivers State. The data show that 30 % of parents have negative attitude towards immunization.

Although the majority of parents understood the benefits of immunization and support its use, many parents have important misconception that could erode their confidence in vaccines. A systematic education effort addressing common misconception is needed to ensure informed immunization decision making. Physicians , health workers and other providers of primary health care have a unique opportunity to educate parents because parents see them as the most important source of information about immunization especially the benefit part of it.

### **Concept of Family Health**

Campbell D.W. Nurse Practices (1991) pointed that family paradigm theory explains variations in families that are based on their shared beliefs about social world and their family's place within its key concepts of the theory and some of the supporting research are presented, family rituals, wisdom for viewing the family's efforts to maintain the shared concepts of family identity. Suggestion for evaluating ritual use in families during times of stress and/or transition are provided . Ritual evaluation may give clues to difficulties families face in maintaining a shared identity during challenging periods of change or conflict. The resiliency model family stress, adjustment and adaptation explain variations in how families respond to stressful situation and crisis, and key concepts of the model and supporting research are presented.

Suggestions for way to use the resiliency model in practice are provided. This article demonstrates the value of theory - based nurse practitioner practiced by describing how assessment and intervention based on the resiliency model can assist the family, nurse, health workers and practitioners in supporting and giving a family crisis. For Akinade (2005 ) see family as a group of two or more persons related by birth, marriage or adoption and residing together in a household. Family constellation, social and psychological structure, the family system includes; parental relationship, birth order, the individual's perception of self, sibling characteristics and ratings. Since they can be crisis in the family, the family system therapy; counselling strategies designed for treating problems with family relations, which is viewed as a dynamic system. They emphasize positive changes in family roles (children, siblings, parents or extended family members) and in particular , the line and style of communication that maintain behaviour. In this regard, family therapy form the group therapy that takes the family as at least party responsible for the individuals problems and that seek to change all family members' behaviour to the benefit of the family unity , as well as the troubled individual. One of the parents is a father, male aspect parenting which is also fathering; it involves how father's involvement affects children's well - being, upbringing, care and relationship with others as they undergo general development. Good quality of father - child relationship with their father, especially if the latter assumed a significant amount of the childcare.

Influentially positive father often serve as economic providers, friends, playmates, caregivers, teachers, role model, monitor, disciplinarians, protectors, advocates and resource person to their children. According to Ven Cranfield, the following represents "the seven" "cups" of cool, refreshing: collaborating with the mother of your child. Commitment to your child, connecting your child, caring for your child, communicating with your child consistency in your fathering, and counselling your child.

Mothers care for their infants, love, advice and it is designed to show intimacy and training. Immunization is done by mothers, in order to keep their children healthy.

**METHODOLOGY**

This section presents the procedures used in conducting the study. The research design used in this study is a descriptive survey. The aim of this design is to collect or elicit information from the parents on “parental attitude towards immunization and its implications”. Survey research design is an appropriate design for assessing parental attitude towards immunization program services and the findings from such study have made valuable contributions to the parental literature. Happner, Kivlinghan and Wainpold (2012), also explained that the basic aim of survey research is to document the nature of the frequency of a particular variable. The population of this study comprised of all the mothers who came for immunization in all the health centres in Rivers State numbering 3,850 within the period under review. This is referred to as the target population of the study. Presently, there are three hundred and eighty-five (385) health centres in Rivers State as obtained from the primary health board Rivers State chapter, 2017/2018 edition. Sometimes, it is difficult to study the entire target population, especially when the population is large. The random sampling technique was employed to draw one hundred mothers for the study representing 10% of mothers in 10 health centres in Rivers State. Ten health centres were randomly selected through the use of random numbers out of the 385 health centres. The instrument for data collection in this study is a questionnaire titled “Parental Attitude towards Immunization Questionnaire (PATIQ)”. It has 2 sections, Section A elicits data such as age, educational background and marital status while Section B comprises of twenty-one items in relation to parental attitude towards immunization. The data collected was analysed using mean ( $\bar{X}$ ) and standard deviation (SD) to answer the research questions while the null hypotheses were tested using independent t-test statistics with the aid of statistical package for social sciences version 1.5 (SPSS).

**RESULTS**

**Research Questions 1:** *To what extent does the age of parents affect their attitude towards immunization?*

**Table 4.1: Mean Responses on the Age of Parents as it affects their Attitude towards Immunization in Rivers State**

S/N	Items	12-30yrs			Above		
		M	SD	Decision	M	SD	Decision
1.	Young parents are more disposed to the immunization of their children.	3.15	0.38	Accept	3.10	0.40	Accept
2.	Older parents appear more superstitious and do not tend to embrace immunization.	3.20	0.97	Accept	2.99	0.88	Accept
3.	The younger the parents, the more knowledgeable they are about immunization.	3.25	0.76	Accept	3.26	0.80	Accept
4.	Middle aged women are more sensitive to the immunization of their children.	2.20	0.83	Reject	2.35	0.91	Reject
<b>Grand Mean</b>		<b>2.95</b>	<b>0.73</b>	<b>Accept</b>	<b>2.93</b>	<b>0.75</b>	<b>Accept</b>

**Source:** Field Survey, 2018



Result in Table 4.1 showed that most of the respondents agreed that the age of parents affect their attitude towards immunization in Rivers State. Younger parents that are more disposed to the immunization of their children had a mean value of (3.15&3.10), older parents appear more superstitious and do not tend to embrace immunization (3.20&2.99), the younger the parents, the more knowledgeable they are about immunization (3.25&3.26), middle aged women are more sensitive to the immunization of their children (2.20&2.35). Most of the mean values were accepted based on the fact that they were equal to or more than 2.50 which is the acceptable mean. In order words, the acceptance of majority of the variables listed above showed that the age of parents positively affect their attitude towards immunization in Rivers State.

**Research Question 2:** *To what extent does marital status of parents affect their attitude towards child immunization?*

**Table 4.2: Mean Responses on the Marital Status of Parents as it affects their Attitude towards Child Immunization in Rivers State**

S/N	Items	Married			Single		
		M	SD	Decision	M	SD	Decision
1.	Married women agree that vaccines are necessary and safe.	3.25	0.76	Accept	3.20	0.70	Accept
2.	When parents live together, the tendency to question immunization reduces.	3.15	0.38	Accept	2.95	0.40	Accept
3.	Single parents may lack the support necessary for effective immunization of their children.	2.50	0.68	Accept	2.70	0.70	Accept
4.	Divorce and separation of marriage could affect immunization of children.	2.95	0.97	Accept	2.80	0.75	Accept
<b>Grand Mean</b>		<b>2.96</b>	<b>0.69</b>	<b>Accept</b>	<b>2.91</b>	<b>0.75</b>	<b>Accept</b>

**Source:** Field Survey, 2018

Result in Table 4.2 revealed how marital status of parents affects their attitude towards immunization. Married women agree that vaccines are necessary and safe had a mean value of (3.25&3.20), when parents live together the tendency to question immunization reduces (3.15&2.95), single parents may lack the support necessary for effective immunization of their children (2.50&2.70), divorce and separation of marriage could affect immunization of children (2.95&2.0).

**Research Question 3:** *To what extent does educational qualification of parents affect their attitude towards immunization?*

**Table 4.3: Mean Responses on the Educational Qualification of Parents as it affects their Attitude towards Immunization**

S/N	Items	Illiterate			Educated		
		M	SD	Decision	M	SD	Decision
1.	Illiterate parents have less knowledge about the immunization of their children.	2.20	0.83	Reject	2.10	0.80	Reject
2.	Education of parents makes the understanding of the need for immunization easy.	3.25	0.76	Accept	3.20	0.74	Accept
3.	Education of parente makes access to information in immunization easy.	3.15	0.38	Accept	2.90	0.32	Accept
4.	The more educated parents are, the more they are empowered to immunize their children.	3.20	0.97	Accept	3.10	0.95	Accept
<b>Grand Mean</b>		<b>2.95</b>	<b>0.73</b>	<b>Accept</b>	<b>2.82</b>	<b>0.70</b>	<b>Accept</b>

**Source:** Field Survey, 2018

Table 4.3 showed how educational qualification of parents affects their attitude towards immunization. Illiterate parents have less knowledge about the immunization of their children had a mean value of (2.20&2.10), educated parents agree that vaccines are necessary and safe for children had a mean value of (3.25&3.20), education of parents makes access to information on immunization (3.15&2.90) and the more educated parents are, the more they are empowered to immunize their children (3.20&3.10).

The mean values that were accepted were based on the fact that they were equal to or more than 2.50 which is the acceptable mean. In order words, the acceptance of most of the variables listed above revealed that educational qualification of parents affect their attitude towards immunization.

**Hypothesis 1:** There is no significant difference in the mean responses between the young and the aged respondents on the influence of parental age on the attitude towards immunization.

**Table 4.4: t-test Analysis of Parental Age on Attitude towards Immunization of their Children**

Variable Age	N	$\bar{X}$	Sd	Df	t-cal	t-crit	Sig.	Decision
12-30	28	2.95	0.73	98	1.20	1.96	0.05	Accept Ho
31 and above	72	2.93	0.75					
<b>Total</b>	<b>100</b>							

Table 4.4 clearly shows that t-cal of 1.20 is lesser than the t-crit of 1.96 at 0.05 level of significance. This is an indication that the opinions of the younger parents is in agreement with those of the older parents in relation to influence of parental age on immunization of children hence the hypotheses of no significance was accepted. The implication is that the age of parents does not affect the immunization of their children.

**Null Hypothesis 2:** There is no significant difference in the mean responses between married and single respondents on the influence of marital status on their attitude towards immunization.

**Table 4.5: t-test Analysis on Marital Status and Attitude towards Immunization**

Variable	N	$\bar{X}$	Sd	Df	t-cal	t-crit	Sig.	Decision
<b>marital status</b>								
Married	83	2.96	0.69		1.18	1.96	0.05	Accept Ho
Single	17	2.91	0.63	98				
<b>Total</b>	<b>100</b>							

Table 4.5 clearly shows that t-cal of 1.18 is lesser than the t-crit of 1.96 at 0.05 level of significance. This is an indication that the opinions of the married parents is in agreement with those of the single parents in relation to influence of parental age on immunization of children, hence, the hypotheses of no significance was accepted. The implication is that been married or single does not affect the immunization of their children.

**Null Hypothesis 3:** There is no significant difference in the mean responses between educated and illiterate respondents on the influence of educational qualification of parents towards immunization.

**Table 4.6: Independent t-test on Educational Qualification of Parental Attitude towards Immunization**

Variable	N	$\bar{X}$	Sd	Df	t-cal	t-crit	Sig.	Decision
<b>educational level</b>								
Educated	88	2.82	0.70					Rejected Ho
Illiterate	12	2.95	0.73	98	1.15	1.96	0.05	
<b>Total</b>	<b>100</b>							

Table 4.6 revealed that t-cal of 1.15 is lesser than the t-crit of 1.96 at 0.05 level of significance. This is an indication that the opinions of the illiterate respondents is in agreement with those of the educated respondents in relation to educational qualification of parents and their attitudes towards immunization of their children, hence, the hypotheses of no significance was accepted. The implication is that educational qualification of parents does not affect the immunization of their children.

## FINDINGS

The findings of the study are presented as follows:

- Most of the parents agree that age do not affect their attitude towards immunization. Also, the result revealed that there was no significant difference between parental age and their attitude towards immunization.
- According to the findings, it was revealed that marital status of parents does not affect their attitude towards immunization. Similarly, the result showed that there was no significant difference between marital status and parental attitude towards immunization.
- Based on the findings, it was deduced that educational qualification of parents does not affects their attitude towards immunization as indicated in table 4.3 above. Also, the result indicated that there was no significant difference between educational level of parents and their attitude towards immunization.

## RECOMMENDATIONS

Based on the findings, the following recommendations were made:

1. More awareness programmes should be created by Government through Ministry of Health on the need for immunization.
2. Health workers should be subjected to periodic trainings on immunization so they can educate mothers when they come for anti-natal or post-natal.

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