Research Article

Immunization, Primary Healthcare System and Efficient Service Delivery in Nigeria

Ajani Mutiu, Assoc. Prof. Adadu Yahaya and Dr. Bello Baban Umar

Email: Mutiuajani5@gmail.com

Received: Oct 19, 2019	Accepted: Nov 25, 2019	Published: Dec 12, 2019
-------------------------------	------------------------	--------------------------------

Abstract: This paper examines Immunization, Primary healthcare system and efficient service delivery in Nigeria with the following objectives, to assess the nature of immunization in Nigeria, to examine the impact of immunization and primary Healthcare Delivery in Nigeria, to investigate the implications of immunization program on National Primary Health Care System in Nigeria and to identify alternative ways for the improvement of Immunization in Nigeria. Findings revealed that immunization have not significantly impacted on Primary Health Care Service delivery in Nigeria, the funds invested are purely capitalist money seeking profit, and other services that needed to be rendered but these PHC are not vaccine oriented, they are not catered for immunization, immunization is only one of the seven services that PHC ought to be rendering to Nigerians. Primary Health Care System in Nigeria has recorded little or no improvement, with its survival largely dependent on International Supports. Loans, grants, technological advancement and other humanitarian supports, most importantly lack government commitment and political will to develop our own scientific approach to our health issues. The paper therefore recommend that for immunization to be beneficial to Nigerians, Government should advocates for total ownership of immunization, The Federal Government should be determined to make available adequate funds through budgetary provision to improved immunization programme in Nigeria. Government should be committed and also inculcate the political will to develop our own scientific approach to our health issues.

Keywords: Immunization, Primary healthcare system, Health issues.

Introduction

Naturally, all over world people fall ill and resources are used to try to make them better (Witter, 2000). The Broad Street Cholera outbreak of 1854 was central to the development of modern epidemiology. The Microorganism responsible for Malaria and tuberculosis were identified in 1880 and 1882, respectively. The Century saw the development of preventive and corrective treatments for many diseases, including the Bacillus Calmette Guerin (BCG) Vaccine (for tuberculosis) and penicillin in the 1920s. The eradication of smallpox, with the last naturally occurring case recorded in 1977 raised hope that other disease could be eradicated as well important steps were taken towards global cooperation in health with the formation of the United Nations (UN) and the World bank in 1945. The cholera outbreak in 1947 in Egypt helped Spur International Community to action. The WHO published its model list of Essential medicines (Alma Ata, 1978) declaration brought the importance of Primary HealthCare (Ajala, 2005).

Global Health places a priority on improving health and achieving equality in health for all people worldwide. Problems that transcend national border or have a global political and economic impact are often emphasized right to protect her citizens against killer disease

especially in the killer diseases tends to be more dangerous to the children and underage five (5) population of the country. The childhood killer diseases are Chicken Pox, Diphtheria, Flu Hepatitis A, B, HIB, HPV, Measles, Meningococcal, Pneumococcal, Rotavirus, Rubella, Shingles, Tetanus, Whopping Cough and last but not the least Poliomyelitis (Alma, 1978).

Immunization is the cost benefit method for effectively nipping in the bud where there are infectious diseases, immunization makes individual's immune system becomes fortified against an agent (immunogenic) when a human system is exposed to molecule that is foreign to the body by exposing an animal to an immunogenic in a controlled way, immunization does not only protect children against deadly diseases but also helps in developing children's immunes system Immunization is one of the public health interventions to reduce child mortality.

Furthermore, quality PHC initiations have been recognized as fundamental to improving health outcome (Fredberg, 2010). The Alma Ata declaration on Primary Health Care (PHC) which was made in 1978 is meant to address the main health problems in communities by providing promotive, preventive, curative and rehabilitative services. Nigeria was among the 134 signatories to this invaluable idea. Subsequently, several re-organisations of the Nigeria health structure to align with new vision were made (Alma, 1978). The implementation of the PHC, primarily through services provider at the primary health centers, varies based on the type of PHC facility in Nigeria. Several other PHC services within the health precinct include community mobilization services integration and selected PHC programmes under the auspices of international collaborators.

Primary Health Care (PHC) is the essential health care based on scientifically sound and socially acceptable methods and technology which make universal health care accessible to all citizen and member of families at the ward level of the society. Therefore, it is the first point of call for the rural dwellers in the village ward, communities in the society. It is through their full participation and at a cost that the community and the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination (WHO, 1978). PHC is an approach to health beyond the traditional health care system that focuses on health equality providing social policy (Starfield, 2009).

Based on the shortcoming being experienced in the process of implementing primary health care system in Nigeria, important services like Immunization service to prevent some childhood killer disease are not reaching the rural children which member is more than those in the urban, among other factors like political will of some LGAs, conflicts between LGA and State, Insecurity, basic problem of lack of Inadequate Insufficient /Misappropriation of funds play a major role. These and others are problems encountered during Immunization services in Nigeria. Immunization is one of the most cost effective public health interventions to reduce infant mortality rate (NPHCDA, 2009) It involves administration of vaccines to persons to confer Immunity or resistance to infection diseases with the strategies that makes it accessible to even the most hard to reach and vulnerable populations, Immunization has been proven to be a mechanism for controlling and removing dangerous infections or communicable diseases. It is recorded to have avert between two and three million fatal childhood killer diseases each year worldwide (WHO, 2013).

In Nigeria, the population is about 200 million women and children under five years old makeup of two fifth of the population (Ojo, 2011). The children under the age five, mortality rate is 138 deaths per 1000 live birth (Wonodi, 2012). Of these, immunization prevented

diseases account for approximately 22% of childhood deaths, amounting to over 200, 000 death per year, (WHO, 2010). Out of the 6 million children in Nigeria born every year in Nigeria, more than one million will not get full Immunization by the time they are one year old (Wonodi, 2012). Immunization is not in the priority sector in the Nigeria Country Support Strategy (CSS) but, Immunization programmes are in line for the Federal government set objective to invest in Primary Health Care (PHC), as a way of fighting poverty, diseases and death.

Routine Immunization Schedule in Nigeria involves administration of six Vaccines to Children to prevent them of the childhood killer diseases. These vaccines are Bacillus Calmette Guerin (BCG), Oral Polio Vaccine (OPV), Diphtheria Pertussis and Tetanus (DPT), Measles, Yellow Fever and Hepatitis B. Also Tetanusfoxoid vaccine is given to women at child-bearing age (usually ante natal clinics) and Meningitis vaccine is given to high-risk groups. But in the year 2012, Nigeria started giving Diphtheria Pertussis and Tetanus (DPT) and Hepatitis B Vaccines with pentavalent vaccine which includes both Diphtheria Pertussis and Tetanus (DPT), Hepatitis B and H. influenza type B Vaccine (WHO, 2012). Pneumococcal Conjugate Vaccine (PCV) was introduced in the Country but that in some selected states, by 2017 these vaccines would be made available to cover all the states of the Federation. The duty and obligation of the Federal Government includes but not limited to providing immunization services and potent vaccines free to all population risk of at Immunization preventable diseases (Alrighi, 2006).

The office saddled with this responsibilities is the National Primary Health Care Development Agency (NPHCDA) tiers of governments and other partners i.e international and privates individuals. The main objectives and goal of Nigeria Immunization policy is to develop and promote immunization program aligned towards reduction of childhood mortality and mobility rates through adequate vaccines preventable coverage of all the people in the country who are at risk of dying from lack of Immunization services in Nigeria (Alrighi, 2006).

The immunization services comprises training, vaccine supply, quality checks to determine the efficiency of the vaccines, logistics, advocacy and communication, evaluation and surveillance plus service delivery. The ever increasing pricing cost of vaccines procurement is sky rocketing as time went by. The cost of vaccines per L.G.A was \$127,831 in 2008 while same cost \$194, 597 in 2012 (NPHCDA, 2012).

This is a 16% increment in cost for the last four 4 years. As time goes on, there will be marginal additional cost on Immunization coverage, couple with ever increasing and rising population, war, famine and other political instability in other parts of Africa that tends to surge the population of Nigeria overtime. The current national international funding/financing for vaccine is not sufficient to sustain the old vaccine procurement and the much needed new vaccines which equally are crucial in main fencing and defending the health of Nigeria.

Immunization services need adequate planning and budgeting which should be encapsulate in a yearly budget. At this juncture, it is pertinent to delve into how Immunization is being finance in Nigeria to promote primary Health care in Nigeria (Alrighi, 2006).

Immunization services in Nigeria is geared towards warden of some childhood killer disease and to prevent Infant mortality rate (IMR) increase. There are six mainly identified childhood killer disease: TB, Poliomylithes, tetanus, measles, fever and small pox. Death of an infant before their first year was rampant, to avoid this scourge, the government adopt, a strategy and methodology. The Immunization service method in use in Nigeria is called House to House sweeping methodology; this makes it very difficult to miss out on any child, if not at home ,then he or she would be likely in school or mosque building within the locality. All building must be visited within the area and during each round of Immunization (Alrighi, 2006).

Objective of the study

i) To assess the nature of immunization in Nigeria

ii) To examine the impact of immunization and primary Healthcare Delivery in Nigeria

iii) To investigate the implications of immunization program on National Primary Health Care System in Nigeria.

iv) To identify alternative ways for the improvement of Immunization in Nigeria

Immunization forms part of active immunity, where the host's (child's) immune system is stimulated by the introduction of components of pathogenic organisms in order to develop immunity to the diseases caused by those organisms (Alrighi, 2006).

Primary Health Care is essential health care made universally accessible to individuals and families in the community by means acceptable to them and at a cost that the community and country can afford (Gaurav, 2016). It forms an integral part both of the country's health care system, of which it is the nucleus, and of the overall social and economic development of the community. It is the first contact of individuals, family and the community with the national health care system, bringing health care as close as possible to where people live and work, and constitutes the first element of a continuing health care process. PHC addresses the main health problems of the community, providing promotive, preventive, curative, supportive and rehabilitative services accordingly.

Profit Motive: Rational Choice Theory: (RCT) In political economy study, the issue of profit is very salient every capitalist goes into production to reap from his production process. Vaccine production is the most lucrative pharmaceutical products now in the world. Profit motive is the main reason for forms that operates; its agenda is solely to maximize their profits. The ultimate goal of firms is to make even if it is through exploitative means deferment to life and properties of others. Austrian economist (Henry, 2013) explains, "If there is no profit in making an article, it is a sign that the labor and capital devoted to its production are misdirected: the value of the resources that must be used up in making the article is greater than the value of the article itself.

In other words, profits let companies know whether an item is worth producing. The theory of rational choice theory posits that a businessman pursues what it's in their own interest first. The operators of healthcare delivery service would pursue the interest of their shareholders or owner first which is to make money to remain in business. Free market economists argued that profit motivates reduction in competitive price, secondary while some economist said profit motive gives people zeal to discover more drugs that ensure long healthy life, profit motive ensures value added society secure and guarantee continuity of life but that the entrepreneur should minimize profit to consider others in production live and the consumers. They argue that profit motive is a good thing for the economy because it justifies efficiency and innovations but those against profit motive argues that profit motive should not be at the detriments of human health being.

Michael Moore's film Sicko attacks the healthcare services sector for emphasis on profit than actual healing to human. Economist Milton Friedman has argued that greed and self-interest are universal human traits. On a 1979 episode of The Phil Donahue Show, Friedman states, "The world runs on individuals pursuing their separate interests." He demonstrated by explaining that only in capitalist countries, where individuals can pursue their own self-interest, people have been able to escape from "grinding poverty."

Moore further emphasized that; "we should have to talk of profit when it comes to helping people who are sick. Profit motive should be nowhere near people healthcare welfare. And you know what? It's not fair to the insurance companies either because they have a fiduciary responsibility to make as such money as they can for their shareholders...". Most critics of profit motive said that the healthcare service providers throw caution on the wind by disregard morals or public safety in their quest for profit.

Economic Anthropologist is a field of study of reciprocity as an alternative to market exchange. It studies economic anthropology focus on exchange in contrast the Marxian School known as political economy' focuses on production. It raises the most pertinent question ever How come a market economy becomes a gift economy why? What for? how can World bank and the WHO and the UNICEF both of which are strong institutions of the capitalist dominance at the International arena. The thinking that an international capitalist Institutions like WHO and World Bank can be so kind of becoming a charity organization needs to be carefully examined.

Post-World War II, economic anthropology was highly influenced by the work of economic historian (Karl,). Polanyi drew on anthropology studies to restricted number of western, industrial societies. Applying formal economic theory (Formalism) to non-industrial societies was mistaken, he argued, in non-industrial societies exchange was "embedded" in such non-market Institution as Kinship, religion, and politics (an idea he borrowed from mausse). He labelled this approach substantivism. The formalist verse Substantivism debate was highly Influential and defined era. As globalization became a reality. And the division between market and non-market economies between "west and the rest" became untenable, anthropologists began to look at the relationship between a variety of types of exchange within market societies.

Bronislaw (1922) addressed the question "why would men risk life and limb to travel across huge expanses at dangerous ocean to give away what appear to be worthless trinklet? He carefully traced the network of exchange of bracelets and necklace across the Trobn and Island and established that they were part of a system of exchange.

He stated that this exchange system was clearly linked to and nothing but political authority and domination. In the 1920s, Malinowski's study became the subject of debate with the French anthropologist, (Marcel, 1925). Malinowski emphasized the exchange of goods between individuals, and their non-altruistic motives for giving they expected a return of equal or greater value.

In other words, reciprocity is an implicit part of giving, no" free gift" is given without expectation of reciprocity. This why we can write to say those money given as loans grants and aid to buy vaccines for medical intervention are designed to promote political hegemony and domination of Africa countries and also in return serves as market for European finished products and to still remain in the capitalist area or sphere of influence.

Mauss, has emphasized that the gifts were not between individuals, but between representatives of larger collectives (Country to country outlook). These gifts were he argued a total prestation". They are like "Crown Jewel" with high references.

Immunization

Immunization is considered to be the safest and the most effective way to help your child with the diseases. Immunization gives lesser chances of your child to catch the diseases. Small risks of side effects cannot outweigh the fact that your baby will be better protected from diseases. The Immunized community can stand up to many infectious diseases. Therefore, latest scheduled immunization can help to prevent epidemics and pandemics. For example, smallpox was illuminated from the Earth because of immunization and polio is also wiped up from many countries. Vaccine preventable diseases account around 22% of child death in Nigeria. It means that over 200 000 Nigerian children die because of not being immunized in time. Some parents in Nigeria do not realize the importance of current immunization schedule in Nigeria. Hopefully, latest data shows that more children get the vaccination. Thanks to many NGOs, International Organizations, and the Nigerian Government, the vaccination is free (Andrew, 2016). More than 200 000 children in Nigeria die every vear because of preventable diseases, more than 5 million children in the World die every year because of preventable diseases, immunization is the most effective way to help your child to build the immune system. However small chances of side effects due to immunization cannot overweigh the benefits of immunization.

Primary Health Care Development in Nigeria

Primary Health Care (PHC) is the backbone of a health system (Alma, 1978). Nigeria Primary healthcare was adopted in the National Health Policy of 1988 (FMOH, 2004) as the cornerstone of the Nigerian health system as part of efforts to improve equity in access and utilization of basic health services. Since then, primary health care in Nigeria has evolved through various stages of development. In 2005, primary health care facilities were found to make up over 85% of health care facilities in Nigeria (FMOH, 2010). Historically, there were three major attempts at evolving and sustaining a community and people oriented health system in Nigeria. The first attempt occurred between 1975 and 1980.

The fulcrum of this period was the introduction of the Basic Health Services Scheme (BHSS). The Basic Health Services Scheme came into being in 1975 as an integral part of Nigeria's Third National Development Plan (1975–79) (Dungy, 1979, Adeyomo, 2005) and was structured along "basic health units" which consisted of 20 health clinics spread across each LGA, which were backed-up by four (4) primary health care centres and supported by mobile clinics serving an approximate population of 150,000 each. The drawback of this attempt was the non-involvement of local communities who were the beneficiaries of the services. This led to the inability to sustain the Scheme at the close of the third national development plan period.

A second attempt which was led by late Professor Olukoye Ransome-Kuti occurred between 1986 and 1992 (Kuti *et al.*, 1991). This period was characterized by the development of model primary health care in fifty two (52) pilot local government areas all of which were implementing all eight components of primary health care. A key result of this dispensation was the attainment of 80% immunization coverage for fully Journal of Medical and Applied Biosciences Volume 6, Number 2, 2014 37 immunized under-five children. Meticulous application of the principle of active community participation and focus on issues relating to health systems strengthening (HSS) was largely responsible for the success recorded.

Disease and development' or 'the underdevelopment of health': A critical review of Geographical perspectives on African health problems. A published work of Robert Stock (1986). The article examines the legacy in geographical research of the comprehensive review by Hughes and Hunter, "Disease and 'development' in tropical Africa," which was published in 1970. Since then, there has been a fundamental shift away from development theories (modernization and neo-modernization theories) of socio-economic change in the Third World to theories of underdevelopment (dependency theory and Marxist theories of underdevelopment). Under development theorists recognize myriad health problems as being integral to the expansion of capitalism, rather than as unanticipated side-effects of development initiatives (Orenstein, *et al.*, 2000).

The medical geographical literature on health and development/underdevelopment of the past 15 years has only weakly reflected these trends. Many studies of health problems related to development make no reference to these linkages. There is a large body of essentially development literature following in the Hughes and Hunter tradition. There has been relatively little work by geographers relating patterns of ill-health to capitalist underdevelopment. Medical geographers are urged to embrace a historical political economic framework in their studies of African health problems, and to re-orient their policy recommendations in order to support the interests of common people and states attempting to liberate themselves. Primary healthcare (PHC) refers to "essential healthcare" that is based on "scientifically sound and socially acceptable methods and technology, National Primary healthcare Development is the governmental agency saddled with responsibility of immunizing Nigerians among others schedules. The sole vision of this agency is "making Nigerians healthy" (Nphcda, 2016) with enough Immunization as required.

Immunization and Primary Healthcare Development in Nigeria

When a system is exposed to molecules that are foreign to the body, called non-self, it will orchestrate an immune response, and it will also develop the ability to quickly respond to a subsequent encounter because of immunological memory. This is a function of the adaptive immune system. Therefore, by exposing an animal to an immunogenic in a controlled way, its body can learn to protect itself: this is called active Immunization. Immunizations are often widely stated as less risky and an easier way to become immune to a particular disease than risking a milder form of the disease itself. They are important for both adults and children in that they can protect us from the many diseases out there. Immunization not only protects children against deadly diseases but also helps in developing children's immune systems. (NPHCDA, 2004) Through the use of immunizations, some infections and diseases have almost completely been eradicated throughout the United States and the World. One example is polio. Thanks to dedicated health care professionals and the parents of children who vaccinated on schedule, polio has been eliminated in the U.S. since 1979. Polio is still found in other parts of the world so certain people could still be at risk of getting it. This includes those people who have never had the vaccine, those who didn't receive all doses of the vaccine, or those traveling to areas of the world where polio is still prevalent. Active immunization or vaccination has been named one of the Ten Great Public Health Achievements in the 20th Century.

The NPC data has always been disputed by Nigeria who always accused the organization of biased in favor of one region against another region but still they remain the official source of verified government white paper concerning population. The Expanded Programme on Immunization (EPI), introduced in 1978 with the aim of providing routine immunization to children less than the age of two years, recorded initial but intermittent successes. The

optimum level was recorded by the early 1990s with the country achieving a universal childhood immunization coverage of 81.5%. 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 for all antigens, and this decreased to 12.9% 2003 (Babalola, 2004). A reviewed of the report on Community And Systemic Factors Affecting The Uptake Of Immunization In Nigeria: A Quantitative Study In Five States. Nigeria; Abuja; Sponsored By Department Of International Development (Dfid);2004 shows figure which is consistent with the 2003 national immunization coverage survey figures is among the lowest in the world and explains the poor health status of children in the country. It is the worst in the West African sub region, only better than Sierra Leone though this report was not well circulated by DFID. For instance, the polio epidemic in Nigeria is the worst in the African region and constitutes threat to other nations this according to paper reviewed on, Demand for Immunization and IMCI in Nigeria.

Obioha (2010), in their Analysis of the performance of expanded programme on immunization (EPI) four killer diseases under military and civilian regimes in Nigeria 1995-1999; 2000-2005, published by Ethno Med 2010; 4 (1); pages -52 reported that the vision of EPI in Nigeria is to improve the health of Nigerian children by eradicating all the six killer diseases, which are polio, measles, diphtheria, whooping cough, tuberculosis, and yellow fever. Between 1985 and 1990, as outlined in the national health plan for that period, the objectives of EPI were to strengthen immunization, accelerate disease control and introduce new vaccines, relevant technologies and tools.

In1995 in line with the above, Nigeria became a signatory to the World Health Assembly, adopted the World Health Assembly Resolution (WHAR) and United Nations General Assembly Special Session (UNGASS) goals for all countries to achieve by 2005 (i) polio eradication, (ii) measles mortality reduction and (iii) maternal and neonatal tetanus elimination (MNTE). Nigeria also adopted the millennium development goals (MDGs) calling for a two-third reduction in child mortality, as compared to 1990, the year 2005. In addition to the above, the country ratified the United Nations General Assembly Special Session (UNGASS) goals urging Nigeria to achieve by 2010 (i) ensure full immunization of children under one year of age at 90% coverage nationally with at least 80% coverage in every district or equivalent administrative unit, and (ii) vitamin A deficiency elimination.

In 1998 following from the above, Nigeria laid out the core activities of EPI policies which included the following:

i) Monitoring of the performance, quality and safety of the immunization system through indicators;

ii) Assessment of the current burden of vaccine-preventable diseases as well as the "future" burden of vaccine preventable diseases in terms of sickness, death and disability, as well as the economic burden;

iii) Assessment of the impact of vaccination strategies, through on-going epidemiological surveillance and reliable laboratory confirmation, as well as impact assessments in Nigeria;

iv) Monitoring of the national immunization policies, particularly the vaccines used in the country and the target population for these vaccines (immunization schedules); and

v) Monitoring of the overall proportion of children and women who are vaccinated (immunization coverage) and ensuring that all districts of the country are well covered with vaccination.

In 2000, following the African Regional Summit on EPI held in Harare in November 1999, the Federal Ministry of Health specifically stated its policies on the country's initial visions for EPI as follows:

i) Immunization System Strengthening: By the year 2004, Nigeria should achieve the EPI district-focused plan and attain 80% DPT3 coverage in all the states of the federation. The specific policy also stated that the government should ensure increased funding for EPI.

ii) Accelerated Disease Control: By the year 2004, there should be no cases of acute flaccid paralysis associated with wild poliovirus in Nigeria. As for measles, by the year 2004 the country should have reduced measles morbidity by 90% and measles mortality by 95%; while the coverage for yellow fever is expected to increase to at least 80%.

iii) Innovations: By the year 2004, Nigeria should include vitamin A and hepatitis B (HB) in its National Immunization Programmes; and the vaccination coverage should not be less than 80% as with other antigens. Under the new technology drive, the country should adopt the multi-dose vial policy (MDVP) and vaccine vial monitor (VVM) and also introduce new methods for monitoring its use Obioha, (2010).

Immunization against childhood diseases such as diphtheria, pertussis, tetanus, polio and measles is one of the most important means of preventing childhood morbidity and mortality. Achieving and maintaining high levels of immunization coverage must therefore be a priority for all health systems. In order to monitor progress in achieving this objective, immunization coverage data can serve as an indicator of a health system's capacity to deliver essential services to the most vulnerable segment of a population Edward and Amie, (2000).

In recent times, vaccination has had a major impact on measles deaths. From 2000 to 2005, more than 360 million children globally received measles vaccine through supplementary immunization activities. Moreover, improvements have been made in routine immunization over this period.

These accelerated activities have resulted in a significant reduction in estimated global measles deaths. Overall, global measles mortality decreased by 60% between 1999 and 2005. The largest gains occurred in Africa where measles cases and deaths decreased by nearly 75% Measles. (WHO; 2007). Thus, there is a lot of pressure on health facilities in different countries in controlling the disease through vaccination. Indeed, measles is targeted by the WHO in its expanded programme of immunization (EPI).

Immunization Coverage in Nigeria

Immunization coverage is a health output, the ultimate effect of which is a reduction in disease incidence. Disease surveillance systems currently lag behind coverage assessments, and reported cases of vaccine-preventable diseases in most countries are only a small, and unknown, fraction of the actual number of cases occurring. Disease surveillance systems are essential tools for effective health systems: they provide early warning of disease outbreaks and provide information essential to the management of immunization programs (Green, 2004).

Strengthening surveillance systems as part of improvement of immunization programs is therefore of vital importance. Achieving high levels of coverage is, by itself, not a sufficient indication of the effectiveness of a health care system, as deficiencies in other areas could be widespread. However, lack of progress in moving towards high levels of coverage is a strong indication of failure to provide essential services to protect the health of the most vulnerable segment of a population. For diphtheria, pertussis, tetanus (DPT), a minimal coverage goal of 80 percent (three doses) by 2005 has been proposed by the Global Alliance for Vaccines and Immunization (GAVI), to be achieved in all districts in all countries. Countries across the world, at different levels of income, have shown that this is achievable with sustained efforts (Edward B, and Amie B, 2000).

Immunization rates in northern Nigeria are some of the lowest in the world. According to the 2003 National Immunization Schedule the percentage of fully immunized infants in the targeted states was less than 1% in Jigawa, 1.5% in Yobe, 1.6% in Zamfara and 8.3% in Katsina. As a result, thousands of children are victims of vaccine-preventable diseases.

There are several reasons for these low rates. Firstly, primary health care services are highly ineffective and have deteriorated due to the lack of investment in personnel, facilities and drugs, as well as poor management of existing resources. There is also a lack of confidence and trust by the public in the health services resulting from the poor state of facilities and low standards of delivery (Hannah, 2003). These problems have been exacerbated by "vertical" interventions undertaken by outside agencies which undermined the capacity of the local service providers to implement sustainable programmes. At the family/community level there is a low demand for immunization due to a lack of understanding of its value. Some of these problems are briefly discussed below;

Immunization and Disease Eradication in Nigeria

The month of July was a very auspicious month for Nigeria in 2014. Two health related occurrences took place in that month. On Sunday July 20 2014, Patrick Sawyer flew into Lagos airport, a sick man with Ebola Virus Disease. He died five days later, but not before infecting other people his primary contacts-health workers who took care of him and who subsequently infected other people.

By the time Nigeria was finally declared free of the disease, 20 people had been infected with eight of them dying from the disease, and spent three months tracing nearly 900 contacts (Henry, 2013). The second health issue occurred far away from Lagos. On July 24, 2014, a day before Patrick Sawyer died, a one year old child in Sumaila LGA of Kano State had an onset of a disease later confirmed to be polio. In last case of polio, this has been the last polio case confirmed in Nigeria for the past one year. Never has Nigeria gone on for so many months (12 months) without reporting at least one case of polio(Andrew 2016).

The last time we went free of polio was for only 3 months between May and July 2014. If we get our acts together and maintain zero polio case until the end of July 2015, the Nigeria will be removed from the list of polio endemic countries, that is, countries that have never interrupted polio transmission (Kerksie, 2009). Do not expect WHO to remove out country from the ignoble list of polio endemic countries, until another late August or early September 2015, by which time all of the samples collected on or before 24 July this year, would have been tested and found negative for polio. Delisting from polio endemic countries is only a step towards Nigeria being declared a polio free nation. This will only happen if we report no polio case for another two years, that is, after July 2017. So let us not bring out the drums and the palm wine tumblers in premature celebrations.

Questions: This leads us to three questions. First, why did it take us so long to get to this stage, making us one of the last three polio endemic countries in the world? Second, what did we suddenly do to achieve the current status, and third and more important, what must we

continue to do to ensure that we finally reach polio free status in 2017 and forever? During the five-year period between 2005 and 2009, the total number of reported polio cases in Africa was 4,039 and Nigeria alone accounted for 3,729 (92 percent) of the African cases. This number is far above our contribution to Africa's population- I think we boast that there is a Nigerian for every five Africans; this time Nigeria was contributing more than nine out of every 10 polio cases in Africa.

In addition to the sub-optimal performance of the national Immunization programme and the poor routine Immunization coverage, the main stimulus for our poor performance was the call in 2003, for the boycott of anti-polio vaccination in northern states because of suspected contamination of the polio vaccine with anti-fertility steroids (Andrew 2016). The call was made by a front line medical practitioner and a prominent member of the Supreme Council for Sharia in Nigeria (SCSN). The resulting boycott brought a wobbling national polio eradication programme to a total collapse as the average annual number of reported polio cases increased from 400 (between 1998 and 2002) to 750 cases after the call.

Frantic national and international efforts were made to end the boycott. This included the adoption of a resolution in 2008 at the 61st WHA, calling on Nigeria to reduce the risk of international spread of poliovirus by ensuring that all children in the north of the country are vaccinated against polio. Polio eradication this special mention of Nigeria – a naming and shaming- at a global level, appears to have moved Nigeria in the right direction for achieving polio eradication. A series of activities, including a change in the leadership of the agency charged with polio eradication in Nigeria, engagement of traditional and community leaders, civil society organizations, women groups, and encouraging the community to "own" the eradication initiative began to yield positive results (Klein, 2008).

These activities were further strengthened by ensuring adequate and efficient implementation of detailed Immunization micro plans, improved monitoring of staff and their activities through the use of modern communication gadgets and systems. Input: Another input that enhanced the performance on the field included the institution of an accountability frame work for all stakeholders and partners (Federal and state governments, LGAs, international development partners, NGOs, and members of the community). Individuals, not the system or the organization were held responsible and accountable for their performance–commending good performance and sanctioning poor performance at each and every level.

Of note was the intervention of the Bill and Melinda Gates Foundation (BMGF) which sponsored a leadership challenge for State Governors to encourage, assure and improve their leadership and "ownership" of, as well as commitment to eradicating polio and improving routine immunization services at State and LGA levels (Andrew, 2016).

The initiative was supported by the NPHCDA, Federal Ministry of Health, and the WHO, and managed by the Secretariat of the Nigerian Governors' Forum (NGF). The establishment of Emergency Operations Centres (EOCs) at Abuja and in six Northern states contributed significantly to the success recorded in the last 2-3 years. The EOCs were designed to serve as central command and control facilities for government and non-governmental agencies to be able to respond in real-time to a polio outbreak in key endemic states and coordinate prevention activities, provide modern technology to health workers, and offer a common place for agencies and organizations to pool resources and participate on projects together. Deployment of EOC system One positive outcome of the establishment of the EOC was the deployment and use of the EOC system to control the 2014 Ebola outbreak (Andrew, 2016).

Funding for the EOCs were provided by the BMGF and supported by the Dangote Foundation Apart from the 2003 setback arising from the boycott call, Nigeria was never really serious about polio eradication. Until we had special "negative" mention at the WHA, polio eradication was conducted in typical laissez affaire fashion. The attitude of the government was at best nonchalant, often taking external stimulus and "push" from external agencies -, WHA, BMGF, UN Rotary for our government to act. It is inconceivable to think that State governors needed a BMGF sponsored initiative to challenge them to politically commit to, and provide necessary funds for eradicating polio and improving immunization services in their states (Manica, 2015). The BMGF Governors leadership challenge ran for two years from 2013 and 2014. While it lasted polio eradication and routine immunization featured prominently in the discussion of the Governors' Forum.

The fracture in the forum led to a drop in political and financial commitment to polio and a premature declaration of Nigeria's polio free status at election campaign rallies. Sustained commitment unless we get sustained and real commitment for polio eradication and routine immunization at all levels of government, there is no guarantee that we can keep polio out of Nigeria in the next 2 years to attain the polio free status (Gaurav, (2016). Stopping polio is a massive operation that requires meticulous coordination from top to bottom to succeed. Our progress against polio over the last few years has been a combination of this grand coordination and small-scale detail. Achieving polio free status in 2017 and maintaining the status require more massive efforts. We still have some distance to go to polio free status.

Nigeria must continue to stress that the end of polio is only in sight, and at the end of a two year tunnel. Twice in 2007 and 2011 when we shifted our focus from polio eradication to eradication our political opponents during electioneering campaigns, polio resurged. Insecurity in the northeast part of the country has left many settlements in the area inaccessible to health workers. A recent case of circulating vaccine-derived poliovirus (cVDPV)–a very rare form of the virus mutated from the vaccine that emerges in under-immunized populations–shows that polio vaccination rates in Nigeria are still not high enough. Therefore we cannot afford to be complacent. We must build on the achievement of the past government, so that Nigerian can be declared polio free during the watch of the current government (Henry, 2013). Therefore the Buhari government must sustain political commitment to eradicating not only polio, but also controlling other infectious diseases that still plague our country- Lassa fever, Yellow Fever, Avian flu and many other yet unknown diseases. Adequate funding must be provided to sustain and expand the operations of Emergency.

Research Design

Research design simply entails the plan for a research work. It is an outline or a scheme that serves as useful guide to the researcher in his effort to generate data for his study.

Therefore, the research design of this study is informed by the very nature of the study; the study used survey research design. The field research design entails the collection of information from a cross section of the population and defined subject matter within a given period of time. The reason for making this choice is because the field research design provide an effective way of collecting information from a large pool of information that are available in the area of this study. This study employ both primary and secondary sources of data collections, the effort to acquire primary materials involved collecting information through the use of questionnaire and interview to assess thoughts, opinions and feelings about the subject of discussion, (Nnamdi 1990).

Population, Sample and Sampling Techniques

Adopting survey research design means some characteristics of the population are carefully selected for generating data for analysis. The population of this study include all stakeholders involve in the Immunization Services Delivery in Nigeria.

These groups are:

- i) The staff of Ministry of Health (Staffers who are on Immunization desk in the Ministry)
- ii) National Primary Healthcare Development Agency (Technical Staff Only)
- iii) International Donor Staff (WHO, UNICEF, WORLD BANK)
- iv) Federal Ministry of Finance staff (International Economic Support)
- v) States and Local Governments Health Workers(Immunization desk officers)
- vi) Community and Religious Leaders, (Female and Male)
- vii) Independents Monitors i.e. NGOs, Red cross, Rotary
- viii) Public (Parents of already Immunized Child/Children)

However, to be specific, the population in respect to coverage was limited to Abuja and two (2) individuals from three (3) states from six (6) geopolitical zones for the public, for fairer outreach coverage of the country. Cluster and simple random techniques is used to select the sample.

Targeted stakeholders	Population
Federal Ministry Of Health Staff	200 Public Health Staff in the Federal Ministry of Health Abuja
National Primary	464 Technical Staff strength of National Primary Health Care
Healthcare Staff	Development Agency in Abuja.
Community and Religious	36 (2 parents from each 3 most prevailing states from the six
Leaders	geographical zones for fairer national coverage)
States and LGAs	36(2 staff from each 3 most prevailing states from the six
	geographical zones for fairer national coverage)
International Donor Staff	204 Total number of Staff of World Bank, UNICEF and WHO
(UNICEF, World Bank & WHO)	in Abuja
Federal Ministry of Finance Staff	10 The desk officers of international funding department at the
	Ministry of Finance
Public (Parents)	36 (2 parents from each 3 Most Prevailing States from the six
	geopolitical zones) for fairer national coverage (Kano, Bauchi,
	Lagos, Abuja, Rivers and Imo States. These cities were choosen
	for security reasons and for their potentials of providing the
	required information for this work
TOTAL	986
Source: Field Survey July, 2018	

Table 1. Sample population

It is not possible to cover all the area selected for study. In order to determine the sample size of the participants was drawn from the population from Federal Ministry Of Health, National Primary Healthcare, Community and Religious Leaders, States and LGAs, UNICEF, World Bank, World Health Organization, Federal Ministry of Finance, Public and Parents. This study adopted Taro Yamane (1969) formula to get the size for the study. The researcher used simple random sampling method to get these participants. In simple random sampling, there are specific elements, which satisfy some predetermined criteria are selected. Although the criteria to be used are usually a matter of the researcher's judgment in relation to what he thinks constitute a representative sample with respect to the research purpose.

In order to determine the sample size of participants, were drawn from the 986 of the targeted stakeholders; Taro Yamane formula (1969) was used to get the sample size. n= $N/1+N(e)^2$

Where S=sample size to be determine N=population of selected from the targeted stakeholder (986) I=constant E=Margin of tolerable error=5% was converted to a whole number of 0.05 for conformity substituting in to the formula $S = N/1+N(e)^2$

From the equation $n = N/1+N(e)^2$ $n = 986/1+986(.05)^2$ n = 986/2.4675 n = 399 sample size n=400

Methods of Data Collection

The research brings to the fore the processes and procedures to be employed in this research work to collect, gather, analyze and present data for effective understanding of the narratives figuratively. The data collection was both primary and secondary methods.

Primary sources

The primary source of data collections entails the distribution of questionnaires which give an objectives explanation of the phenomenon under study. The primary source of data collections are be gotten from the structured questionnaires, in administering the questionnaires on some categories of people and also; the questionnaire was designed to reveal the true position of things happening in Immunization service delivery in Nigeria among these targeted group of a clustered and simple randomly picked from the population as listed above.

The question that are vital to the research problem and a connecting thread should run through successive questions. Ideally, the question sequence should conform to the respondents' way of thinking. A structuralized sequence question for predetermined information.

This questionnaire was sent through post and electronics source. The questionnaire bring to fore respondents' characteristics information on classification, behavior and attitudinal regarding awareness, usage and thinking about immunization services funding and primary health care services.

Interview

Personal interview between the researcher and respondents conducted among the targeted population. The interview nature is to find out about the true position of Immunization service delivery in Nigeria. A purposive sampling techniques of not more than ten (10) respondent's among these targeted group mostly senior staff The method of collecting information was through a structured interview, a set of predetermined questions, mostly of Financials which are somehow discreet.

i) Senior Staff of Federal Ministry of Health (2) Director and Programme Officer

ii) Team Lead of WHO UNICEF and Rotary (2) Chief of Party and Programme Coordinator iii) Senior Staff of NPHCDA(2) Director and Programme Officer

iv) Senior Staff of State and Local Government Finance Officers (2) South-Bayelsa and North-Kano

v) Senior Staff of Federal ministry of finance (1) director or schedule officer

Secondary source:

The research sourced information from secondary data to compliments the primary data, such secondary data included among other both quantitative and qualitative data; For quantitative data, Time Series data on Immunization Funding, Immunization Coverage, Primary Healthcare Budgetary Allocation, International Agencies Funding. Also, qualitative data were also collected on the politics of immunization such as controversies surrounding immunization why International Agencies Fund Immunization, the impact and challenges of Immunization in Nigeria.

Techniques for Data Analysis

Historical descriptive and simple percentage data analysis is employed to drive home more meaningfully the objectives of this research, while the simple percentage is used to analysed the data from primary source (questionnaires) Historical descriptive analysis enables the researcher to analysed the data obtained from secondary source in an explicit understanding, which allows for simpler interpretation of data. The descriptive analysis allows the use of tables, charts and summary statistics. The choice of this technique is that it is easy to use and also because it has come to be the most cherished form of data analysis in political science discipline.

Data Presentation

This section also highlights the socio demographic characteristics of the participants as they relate to the subject of the study. In this regard, the study highlighted and analyzed the distribution of the case file on the basis of their sex, age, marital status, educational qualification and occupation.

Stakeholders	Number of Questionnaires Administered	Number of Questionnaires filled and Returned	Number of Questionnaires not Return
Federal Ministry Of Health Staff	85	83	2
National Primary Healthcare Staff	103	98	5
Community and Religious Leaders	55	51	4
States and LGAs	36	32	4
International Donor Staff (UNICEF, World Bank & WHO)	75	72	3
Federal Ministry of Finance Staff	10	9	1
Public (Parents)	36	33	3
Total	400	378	22
Source: field survey July, 2017			

Table 2. Showing Questionnaires Administered, Returned and not Return

From the table above it is clearly indicated that 400 questionnaire were administered and 378 questionnaire were filled and returned while 22 questionnaire were not return.

Table 3. Nature of Immunization in Nigeria?		
Response	No of respondents	Percentage
Agreed	89	23.5%
Strongly Agreed	57	15.1%
Disagreed	21	5.6%
Strongly Disagreed	208	55.1%
Undecided	3	0.7
Total	378	100
Source: field survey July, 2017		

Table 3 above shows that 23.5% agreed with the nature of Immunization in Nigeria, 15.1% strongly greed, while 5.6% disagreed, 55.1% and 17% were undecided. From the table above, it is revealed that nature of Immunization in Nigeria. Today the vaccine market is worth close to \$24 billion. The report titled 'Global Human Vaccines Market 2016-2020' gives an "indepth analysis" of the possible revenues and "emerging market trends" globally. According to the Press Release:

This is in line with the view of Yahya M (2007) who states that Merck is the only pharmaceutical giant licensed to produce and sell the measles vaccine called *Prod quad* and them MMR U (also used for the measles, mumps and rubella) and Varivax, a. vaccine for the chicken pox. According to Lam, all three vaccines combined amounted to more than \$1.4 billion in sales profits. In a single quarter of 2016, for example, in which Merck posted a profit of \$2.2 billion, the company saw a 38%jump in sales of HPV vaccines (due to "increased pricing and demand").

Similar trends have been evident for merck's other vaccines, with a 27% increase in MMRV vaccine sales in the same quarter of 201 6 after the CDC added the vaccine to its pediatric stockpile. Growing global vaccine sales, including in China, helped Merck continue to "beat Wall Street expectations" in 2018.

Tuble if The Tibing cost of Aucomes procurement			
Response	No of respondents	Percentage %	
Strongly Agreed	188	53.9%	
Agreed	130	31.2%	
Disagreed	45	11.9%	
Strongly Disagreed	9	2.4%	
Undecided	6	1.6%	
Total	378	100	
Source: field survey July, 2017			

Table 4. The rising cost of vaccines procurement

Table 4 above shows that 52.9% of the respondents strongly agreed that the cost of vaccines procurement has risen, 31.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that the cost of vaccines procurement is risen. Immunization vaccines costs around N4,000 per child. Introduction of new vaccines including rotavirus, pneumococcal conjugate vaccine human papilloma vaccine and meningitis A, will push the cost to N14,000 per child, an increasing from current \$274 million to \$435 million a year. Nigeria pays only 25% of the cost, the rest of it sourced from international partners and donors (FMOH, Nigeria, 2010).

The agency has also projected Nigeria will need \$210 million to fund polio campaign to lead declaration of Nigeria as polio-free after going three years without the virus by July 24 next year. NPHCDA executive director Dr Muhammad Ado says Nigeria has secured funding for polio campaign this year but needs \$284 million for 2017.

Response	No of respondents	Percentage %
Strongly Agreed	189	53.9%
Agreed	129	30.2%
Disagreed	45	11.9%
Strongly Disagreed	9	2.4%
Undecided	6	1.6%
Total	378	100
Source: field survey July, 2017		

Table 5. Production of Vaccines Should be Done Locally to Save Cost

Table 5 above shows that 53.9% of the respondents strongly agreed that production of vaccines should be done locally to save cost, 30.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that Production of Vaccines should be made locally to save cost.

Oluwadare, (2009) states that Vaccines are big business for revenues by the vaccine manufacturer and generate billions of dollars from vaccines sales and a total more than \$1 billion in the United States and 3 billion worldwide for vaccine procurement. This figure will increase in the next few years.

To ensure continuing profits, vaccine manufacturers conduct their own research, pay for ad campaigns encouraging parents to get the shots, and foot the bill. for state legislation to mandate each vaccine for every child in America.

Drug companies enjoy a guaranteed market for their product, and in many states, parents are threatened with imprisonment or removal of their child from their home if they refuse to vaccinate (Kuti, et al, 1991). Doctors employed by drug companies also advise government recommendation panels, and the same physicians who write position papers for the American Academy of Pediatrics are also paid consultants for vaccine manufacturers.

Your pediatrician is not allowed to question vaccine utilization. Liability issues, boards of medical examiners and the policies of HMO's govern the doctor's recommendations. Step outside this set of rules and they risk their jobs or licensing (Kuti, *et al.*, 1991).

Table 0. Infinumzation is the solution to hearth chanenges of Nigerians			
Response	No of respondents	Percentage %	
Strongly Agreed	181	47.9%	
Agreed	137	36.2%	
Disagreed	45	11.9%	
Strongly Disagreed	9	2.4%	
Undecided	6	1.6%	
Total	378	100	
Source: field survey July, 2017			

Table 6. Immunization is the solution to health challenges of Nigerians

Table above shows that 47.9% of the respondents strongly agreed that Immunization is the solution to health challenges of Nigerians, 36.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that Funds Immunization is the solution to health challenges of Nigerians.

Immunization benefit arise from a lower incidence of disease and less frequent visits to the hospital. In 2004, parents in both Lagos and Enugu states stated that immunization reduces mortality and morbidity, helps to minimise the anxiety associated with rearing children, and helps to maximise use of time and money (Adeyomo DO, 2005).

There is widespread agreement that the time period since the common vaccines were introduced which has been seen as a makeable decline in the incidence and severity of the natural diseases corresponding to them. But the facile assumption that the decline is also attributable to them remains unproven and continues to be questioned by eminent authorities in the field.

1150114			
Response	No of respondents	Percentage %	
Strongly Agreed	180	46.9%	
Agreed	136	37.2%	
Disagreed	45	11.9%	
Strongly Disagreed	9	2.4%	
Undecided	6	1.6%	
Total	378	100	
Sourc	e: field survey July, 2017		

Fable 7. Immunization has impacted and also improve primary health care system in
Nigeria

Table 7 above shows that 46.9% of the respondents strongly agreed that Immunization has impacted and also improve primary health care system in Nigeria, 37.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that Immunization has impacted and also improve primary health care system in Nigeria.

According to Jayasree (2015) Routine Immunization (RI) is being effected through the development of required policies and tools provision of bundled vaccines and cold chain equipment and active participation in the entire immunization process. The fusion of the National Programme on Immunization (NPI) with National Primary Healthcare Development Agency (NPHCDA) in 2007 marked a major stride in the delivery of integrated PHC services in Nigeria. Nigeria has recently developed a National Routine Immunization Strategic Plan (2013-2015) which highlights the Reaching Every Ward with RI services (REW); Accountability Framework for RI in Nigeria (AFRIN) and Back to the Basics: Health System Strengthening, as its pivot strategies.

In keeping with the determination of the nation to interrupt the transmission of the wild polio virus (WPV) by December, 2014, the NPHCDA stepped up its polio eradication drive with the establishment of the Polio Emergency Operation Centres; strengthening of the national and sub-national immunization plus days in addition to community sensitizations and various stakeholder meetings as strategies to overcome socio-cultural and other barriers to achieving this target.

Response	No of respondents	Percentage %
Politics (Insurgency)	101	27%
Capital (poorly paid	45	12%
immunization field workers)		
Religious belief (Christians	51	13%
and Muslims)		
All of the above	181	48%
Total	378	100
Source: field survey July, 2017		

 Table 8. Challenges of Immunization on the Primary HealthCare Delivery in Nigeria?

Table 8 above shows that 27% of the respondents think the Challenges of Immunization on the Primary HealthCare Delivery in Nigeria, 12% attributed the capital, 13% believe is religion, while 48% believe that all of the above factors are responsible for the Challenges of Immunization Funding on the Primary HealthCare Delivery in Nigeria. From the above, it is revealed that the Challenges of Immunization on the Primary HealthCare Delivery in Nigeria is political factors.

Obioha (2010) in his analysis of the performance of expanded programme on immunization (EPI) four killer diseases under military and civilian regimes in Nigeria 1995-1999;2000-2005, published by Ethno Med (2010), says Some positions offer potential for patronage due to the large payments for NID activities. This has led to political appointments and frequent changes in personnel as some LGA chairmen wish to bestow or repay political favors. Even at the state government level, increased political interference has been reported to be in the appointment of civil servants, also resulting in frequent changes of staff and the appointment of inappropriately qualified staff according to Babalola (2008), hence, factors influencing immunization up take in Nigeria.

According to Babalola (2005) Lack of confidence and trust in routine immunization as effective health interventions appears to be relatively common in many parts of Nigeria.

A 2003 study in Kano State found that 9.2% of respondents (mothers aged 15–49) evinced 'no faith in immunization', while 6.7% expressed 'fear of side effects'. For many, immunization is seen to provide at best only partial immunity, e.g. in Kano and Enugu as per report of Feilden Batters by Analysts. The widespread misconception that immunization can prevent all childhood illnesses reduces trust because when, as it must, immunization fails to give such protection, faith is lost in immunization as an intervention, for any and all diseases.

Nigeria?			
Response	No of respondents	Percentage %	
Increased budgetary	224	59.3%	
allocation			
International Agency funding	93	24.6%	
Partnership with some	42	11.1%	
selected develop countries			
All of the above	19	5%	
Total	378	100	
Source:	field survey July, 2017		

Table 9. The alternative ways for the improvement on Immunization funding in	l
Nigeria?	

Table 9 shows that 59.3% of the respondents are of the view that there should be increased budgetary provision for the improvement of Immunization funding in Nigeria, 24.6% through international agency, 11.1% suggested that can be improvement through Partnership with some selected develop country, while 5% believe that all of the above factors can be the solution to alternative ways for the improvement on Immunization funding in Nigeria. From the above, it is revealed that be increased budgetary provision is the only antidote and best way of improvement on Immunization funding in Nigeria. In the same vein Soyibo, Olaniyan & Lawanson (2009), the Nigerian public health care sector is faced with a lot of challenges ranging from inadequate funding, financing policies and inadequate management of the scarce resources. It is therefore recommended that government should massively increase investment and funding to at least 15% of its annual budget on public health. From 2000 to date the Federal Ministry of Health Budget has been less that 6% as against 12% agreed at Abuja declaration 2012.

Bolton (2007) argues that humanitarian aid and developmental aid (international aid) developmental aid this type of aid is to give assistance to people in desperate need of life saving help while developmental aid according to Lucas N, cited in Bolton (2007) is to help Africans make a lasting break run-of-the-mill poverty. Development aid tries to create the opportunity for African to pull themselves out of poverty for long time. However when it comes to health it cut across both. Development aid makes you ready for disasters of humanitarian proportion. The point here is that all the money for aid has not or never impact rightly for the recipient.

Considering all these above explanation it is evident that Nigeria and immunization services are avoidable. Immunization is not do or die phenomenon.

Response	No of respondents	Percentage %
Strongly Agreed	181	47.9%
Agreed	137	36.2%
Disagreed	45	11.9%
Strongly Disagreed	9	2.4%
Undecided	6	1.6%
Total	378	100
Source: field survey July, 2017		

Table 10. Impact of Immunization on the Primary HealthCare Delivery in Nigeria?

Table 10 above shows that 47.9% of the respondents strongly agreed that Immunization have impacted on the Primary HealthCare Delivery in Nigeria, 32.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that Immunization have impacted on the Primary HealthCare Delivery in Nigeria.

Babalola (2004) argues that Immunizations are often less risky and an easier way to become immune to a particular disease than risking a milder form of the disease itself. They are important for both adults and children in that they can protect us from the many diseases out there. Immunization not only protects children against deadly diseases but also helps in developing children's immune systems. NPHCDA (2004) Through the use of immunizations, some infections and diseases have almost completely been eradicated throughout the United States and the World. One example is polio. Thanks to dedicated health care professionals and the parents of children who vaccinated on schedule, polio has been eliminated in the U.S. since 1979. Polio is still found in other parts of the world so certain people could still be at

risk of getting it. This includes those people who have never had the vaccine, those who didn't receive all doses of the vaccine, or those traveling to areas of the world where polio is still prevalent.

Obioha, (2010) argues that performance of expanded programme on immunization (EPI) has eradicate four killer diseases under military and civilian regimes in Nigeria 1995-1999; 2000-2005, all the six killer diseases, which are polio, measles, diphtheria, whooping cough, tuberculosis, and yellow fever.

Immunization against childhood diseases such as diphtheria, pertussis, tetanus, polio and measles is one of the most important means of preventing childhood morbidity and mortality. Achieving and maintaining high levels of immunization coverage must therefore be a priority for all health systems. In order to monitor progress in achieving this objective, immunization coverage data can serve as an indicator of a health system's capacity to deliver essential services to the most vulnerable segment of a population Edward and Amie, (2000).

In recent times, vaccination has had a major impact on measles deaths. From 2000 to 2005, more than 360 million children globally received measles vaccine through supplementary immunization activities. Moreover, improvements have been made in routine immunization over this period.

Discussion of Finding

This paper examines Immunization, Primary healthcare system and efficient service delivery in Nigeria, the paper ultilized primary sources of information to be able to justify the nature of immunization in Nigeria. As stated earlier, a total of 400 questionnaire were administered out of which a total of 378 were filled and retuned and analyzed.

The paper covers major research areas embarked as designated population of the study. They include respondents from Federal Ministry of Health, National Primary Healthcare Development Agency, Community and Religious Leaders, States and LGAs, International donor, UNICEF, WHO, World Bank, Federal Ministry of Finance and Parents. The responses elicited have guided this study in an immeasurable way.

During the investigation in the field, a number of questions have been posed by the researcher while corresponding responses were also given by the respondents. The responses derived during the investigation are quite revealing, and out of which some of the findings have been equally derived.

Thus from the field exercise, and in line with the first objective, to assess the nature of immunization and Primary Healthcare delivery in Nigeria, shows that 23.5% agreed with the nature of Immunization and Primary Healthcare delivery in Nigeria, 15.1% strongly greed, while 5.6% disagreed, 55.1% and 17% were undecided. From the table above, it is revealed that nature of Immunization and Primary Healthcare delivery in Nigeria has implications on Nigerians that out weight its immediate benefits as shown in table 3.

More so, from the field exercise, and in line with the second objective, shows that 47.9% of the respondents strongly agreed that Immunization have impacted on the Primary HealthCare Delivery in Nigeria, 32.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that Immunization has impacted on the Primary HealthCare Delivery in Nigeria as clearly shown in table 10.

However, from the field exercise, and in line with the third objective it was revealed that 52.9% of the respondents strongly agreed that the cost of vaccines procurement has risen, 31.2% agreed to the fact, while 11.9% disagreed, 9% strongly disagrees and 1.6% were undecided. From the above, it is revealed that the cost of vaccines procurement has risen, in 2015, the total expenditure on immunizations in Nigeria was US\$302,100,133 with the federal government contributing US\$120,829,723 (40% of the total) leaving a potent funding coverage gap of 60%.

Nigeria's government immunization budget needs to increase from its current \$145m to \$315m in 2020. For vaccine alone in 2020, the government must raise \$265m. By the year 2020, Nigeria will be ineligible for any more Gavi grants and will be facing an annual vaccine bill of around US\$426.3m. as clearly shown in table 4.

From the field exercise, and in line with the fourth objective, to examine alternative ways for the improvement of Immunization in Nigeria, shows that 59.3% of the respondents are of the view that there should be increased budgetary provision for the improvement of Immunization in Nigeria,24.6% through international agency, 11.1% suggested that can be improvement through Partnership with some selected develop country, while 5% believe that all of the above factors can be the solution to alternative ways for the improvement of Immunization in Nigeria. From the above, it is revealed that increased budgetary provision is the only antidote and best way of improvement of Immunization in Nigeria as shown in table 9.

Conclusion

In this paper Immunization, Primary healthcare system and efficient service delivery in Nigeria" after critical assessment of the Immunization and Primary Healthcare Development in Nigeria, findings revealed that the politics of immunization have not significantly impacted on Primary Health Care delivery in Nigeria. As the funds invested are purely capitalist money seeking profit, and other services that needed to be rendered but these PHC but are not of vaccine oriented are not catered for, immunization is only one of the seven services that PHC ought to be given to Nigerians.

Primary health Care Development in Nigeria has recorded little or no improvement, even with the availability of local and international funding for Immunization in Nigeria and also Primary Health Care delivery in Nigeria survival is largely dependent on International Supports. Loans, grants, technological advancement and other humanitarian supports, most importantly lack government funding and political will to develop our own scientific approach to our health issues.

Recommendations

The findings obtained from the analysis of the study make it necessary to point out a number of recommendations. They are presented below;

i) For immunization funding and immunization services to be beneficial to Nigeria and Nigerians as a whole, Government should advocates for total ownership of immunization funding and services deliveries to Nigerians. Immunization programme should be politically free from encroachment from foreign powers, the capital flight via buying of vaccines should be encouraged internally, this will severage work and produce able bodied men for an army of labour force. The Federal Government of Nigeria should through immunization funding, revamp the poor PHCs practice and ethics of both healthcare workers and rights of the public,

more so, government should be made to build PHCs in all 120,000 political ward across the nation to promote positive impact and approach of Nigerians' to seek health care , To promote nearness to health centers , for Nigerians to have easy access to Primary Healthcare where ever they may resides. Advocacy and sensitization for community ownership be encouraged and other PHC activities as part from immunization should be enforced.

ii) The Federal Government should be determined to make available adequate funds through budgetary provision to improved immunization programme. The 15% AU/WHO African countries agreed budgetary allocation to health should be enforced by the National Assembly for public interest. This will enable funding portion for immunization and lessen dependent on need for international funding for our country

iii) We are a sovereign country, any support for Nigeria should be scrutinized by the National Assembly should ensure the executives and the legislatives investigate, sign, ratify and deliver on every aids, loans and grants for the benefits of Nigerians.

iv) The federal government should look much into the National Immunization Trust Funds (NITF) i.e just like Education Tax Fund (ETF) the members of the committee should report directly to Minister of Health enroute to the President. Waivers for vaccines related goods should be encouraged; these will provide more money to government to self-fund immunization services without dictates of the foreign powers. So also alternative trado medical useage be encouraged by the government to remove pressure from western form of medication.

Conflicts of interest: There is no conflict of interest of any kind.

References

- 1. Abraham, B.H. 2010. Addressing parent concerns about childhood immunizations: A tutorial for primary care providers. Pediatrics, 120 (1) July: 18-26.
- 2. Agba, O.I. 2010. Default among Mothers Attending Childhood Immunization Clinics in Ilorin, Nigeria. Nigerian Medical Practitioner, 43(5): 104-105.
- 3. Alma, A. 1978. Measles Vaccination in Africa: Washington D.C. Pan-American health Organization; PAHO scientific publication, 47-48.
- 4. Alrighi, M.P. 2006. Immunization of children in Goa. Indian Pediatrics, 42 April 17, 401-402.
- 5. Andrew, M. 2016. National Immunization Task Team (Nift) Anglophone Africa Peer Review Workshop on Sustainable Immunization Financing, April.
- 6. Ankrah, J.C. and Nwaigwe, F. 2005. Pediatrics and child health in the Tropical Region; first edition, Otuson Nigeria Ltd Enugu: 64-66.
- 7. Ankrah, V. and Nwaigwe, F. 2015. Immunization system review and training needs assessment in Ekiti State. February. Ado–Ekiti Ministry of Health. PATHS;
- 8. Babalola, S. and Adewuyi, A. 2005. Factors Influencing Immunization Uptake in Nigeria: A Theory-based Research in Six States. Abuja: PATHS.
- 9. Babalola, S. and Olabisi, A. 2004. Community and Systematic Factors Affecting the Uptake of Immunization in Nigeria: A Quantitative Study in Five States. Nigeria; Abuja: Department of International Development (DFID);

- 10. Ben, A. 2016. National Immunization Task Team (Nift) Anglophone Africa Peer Review Workshop On Sustainable Immunization Financing, April.
- 11. Bolton, G. 2007. Africa Doesn't Matter, First Edition, Arcade Publishing, New York.
- 12. Borinislaw, A.B. 1992. Childhood immunization, the Nigeria experience, Nigeria medical practitioner, supplementation. No 3: 5-6.
- 13. Brieger, W.R. 2004. Catchment Area Planning and Action: Documentation of the Community-based Approach in Nigeria. Arlington: Va.: BASICS II for USAID;
- 14. Carrin, O., Evans, J.F. and Xu, F. 2007. Short-time evaluation of rural immunization program in Nigeria, Journal of Nigerian Medical Association, 95(2): 175-9.
- 15. Central Bank of Nigeria (CBN). 1991. Annual Reports and Statement of Accounts. Lagos: Central Bank of Nigeria.
- 16. Central Bank of Nigeria (CBN). 1993. Annual Reports and Statement of Accounts. Lagos: Central Bank of Nigeria.
- 17. Centre for Global Development, 2005. Making Markets for vaccines: from ideas to actions. Washington DC: Centre for Global Development.
- 18. Chandon, F.D. 2004. Personal, Financial and Structure Burdens to immunization in socioeconomically Disadvantaged Urban Children, Pediatrics, 101(4): 591-596.
- 19. Charmeil, S. 2015. Community and systemic factors affecting the uptake of immunization in Nigeria: A qualitative study in five states, National report, September.
- 20. Child Health in Ilobu, Nigeria. West African Journal of Archaeology 2002; 32: 98–109.
- 21. Danbisa, C. 2009. National Immunization Days; Africa Health, IPC Middle East publishing, Nov: 11-20.
- 22. David, H. 2008. The Case for Childhood Immunization 2002, Children's vaccine program at PATH, Seattle, WA.
- 23. Developing countries: vaccine market share and trends 15 | EPI SEMINAR APRIL 2008
- 24. Diplomacy and the polio immunization boycott in Northern Nigeria. Health and FBA 2009.
- 25. Doctor, H.V. 2011. Northern Nigeria maternal, newborn and child health programme: selected analyses from population-based baseline survey. The Open Demography Journal, 4:11–21.
- 26. Duncan, M. 2008. Knowledge, Perception and Beliefs of Mothers on Routine Childhood Immunization in a Northern Nigeria village, Annals of Nigerian Medicine, l(1): 21-26.
- 27. Edward, B. and Amie B. 2000. Using immunization coverage rates for monitoring health sector performance: measurement and interpretation issues. Washington, D.C.: The international bank for reconstruction and development/the World Bank;
- 28. Edward, B. and Amie, B. 2000. Immunization of Infants in Kargil. Indian Pediatrics vol.42:Aug. 17: 841-842.
- 29. Epstein, J.E. 2011. Live attenuated malaria vaccines designated to protect through hepatic CD8⁺ T cell immunity. Science; 334(6055): 475–480.
- 30. FBA, 2005. Reviving routine immunization in Nigeria design team trip report. March,

- 31. Feilden Batters bym Analysts, 2005. Design of Routine Immunization Initiative—Trip Report for DFID. Bath UK:
- 32. Franklin, A. 1938. Factors Influencing Immunization Uptake in Nigeria. Theory-based research in a status: PATH Report July.
- 33. Fredberg, J. 2010. Allegy and Clinical Immunology, Melody, Sussex, New Jersey.
- 34. Finn, A., Clarke, E. and Mytton, J. 2011. Adolescent Immunization: The next big thing? Archives of Diseases in Childhood and Adolescence, 96(6): 497-499.
- 35. Gaurav, N. 2016. Does Community Access Affect the use of Health and Family Welfare services in Rural India? National Family Health Survey subject Reports. Number 18; May; Indian Institute of Population on Sciences, Mumbai India, 21-27.
- 36. Global Alliance for Vaccine and Immunization, GAVI, February 2000: 2-15.
- 37. Global Polio Eradication Initiative (GPEI). 2011.
- 38. Global Vaccine Market λ Main Features Of The Vaccine Market ?New Trends Since 2000 Implications ? 2
- 39. Global Vaccine Market Features and Trends Miloud Kaddar Senior Adviser, Health Economist 1WHO, IVB, Geneva
- 40. Green, C. 2004. Demandfor Immunization and IMCI in Nigeria: An issues paper. Background paper prepared for the PATHS Immunization and IMCI roundtable. Final Version. Abuja: Partnership for Transforming Health Systems (PATHS); Kaufmann, J.R., Feldbaum, H. Diplomacy and the polio immunization boycott in Northern Nigeria.
- 41. Hannah, J. 2003. The Provision of Pharmaceutical advice improves patient vaccination status. Pharmacy Practice, 4(4): 163-167
- 42. Henry, H. 2013. Immunization a chance for every child. WHA Bulletin, 1987, 1(1).
- Ichoku, A. and Fonta, 2009. Vaccines and immunization: the past present and future in Nigeria, University of Ilorin Teaching Hospital. Nigerian Journal of Pediatrics, 38(4): 186-189.
- 44. Jayasree, O.I. 2015. Default among Mothers Attending Childhood Immunization Clinics in Ilorin, Nigeria. Nigerian Medical Practitioner, 43(5): 104-105.
- 45. Kerksie, 2009. Vaccine fatigue: the danger of measles. <u>http://www.infection_research.de/perspectives/detail/pressrelease/vaccine_fatigue_the_danger_f_measles/March</u>
- 46. Klein, N. P. 2008. Update: recommendations from the Advisory Committee on Immunization Practices (ACIP) regarding administration of combination MMRV vaccine. CDC: MWR; 57(10): 258–260.
- 47. Krasner, M. 1982. Immunization coverage among children below two years of age in Fanshekara, Kano, Nigeria. Nigerian Journal of Basic and Clinical Sciences, 1: 10-13.
- 48. Loening, W.E. and Coovadia H.M. 1983. Age-specific occurrence rates of measles in urban, periurban, and rural environments: implications for time of vaccination. Lancet; 2: 324–326

- 49. Manica, B. 2015. A study on determinants of immunization coverage among 12-23 months old children in urban slums of Lucknow district, India. Indian Journal of Medical Sciences, 61(11): 508-605.
- 50. Marcel, A.O.O. 1925. National immunization days towards universal childhood immunization, University Press Ltd, Ibadan, 1990: 7.
- 51. Mastny, L. 1999. Eradicating polio: A model for International Cooperation. Worldwatch Institute.
- 52. Meissner, H.C. 2004. Measles Vaccines and the Potential for Worldwide Eradication of Measles. Pediatrics; 114(4): 1065–1069.
- 53. Mergers and Acquisitions 2002-2007: Illustration 8 MNC: Key strategies for developing countries Emerging economies UN markets 3 main (UNICEF/GAVI and PAHO) targets: Private sector, middle income group markets 17
- 54. Namdi, S. 1990. Baker TD. The impact of the national polio immunization campaign on levels and equity in immunization coverage: Evidence from rural North India. Soc.Sci.Med.2003; 57:1807-19.
- 55. National Population Commission (NPC). 2009. [Nigeria] and ICF Macro. Nigeria Demographic and Health Survey 2008. Abuja, Nigeria: National Population Commission and ICF Macro; NEW TRENDS ? 32 | EPI SEMINAR APRIL 2008
- 56. Nphcda, 2004. RI Programme On Nigeria Vaccine Audit Report-J
- 57. Nphcda, 2009. RI Programme On Nigeria Vaccine Audit Report-J
- 58. Nphcda, 2012. RI Programme On Nigeria Vaccine Audit Report-J
- 59. Nphcda, 2016. RI Programme On Nigeria Vaccine Audit Report-J
- 60. NPI/UNICEF, 2003. Assuring vaccine security in Nigeria. Report of NPI/UNICE vaccine security mission.
- 61. O'Donnell V. *et al.*, 2005. Awareness and knowledge of mothers of under five children regarding immunization in Ahmedabad. Health Line; 1(1): 12- 15.
- 62. Obioha, E.E, et al., 2010. Analysis of the performance of expanded programme on immunization (EPI) for four killer diseases under the military and civilian regimes in Nigeria, 1995–1999; 2000–2005. Ethno Med; 4(1): 43–52.
- 63. Odusanya, O.O., et al., 2008. Determinants of vaccination coverage in rural Nigeria. BMC. Public Health; 8: 381.
- 64. Ogunbekun, O. 1991. Sample size determination. In: Aroaye, (Ed), A research methodology with statistic for health and social science. Ist Edition, Saw Mill Publishers, Ilorin, 115- 129.
- 65. Ojo, K. 2011. Cost Of Routine Immunizationin Nigeria Centre For Health Economics Andpartnership For Transforming Health System II, Abuja, *Nigeria*. AdedoyinSoyibo, Health Policy Training and Research Programme Department Of. Economics.
- 66. Okonkwo, I.O. et al., 2009. The role of vaccine in elimination and global eradication of measles: a review of literature. African Journal of Pharmacy and Pharmacology; 3(9): 413–425

- 67. Olaniyi, J.A. and Lawanson, C.H. 2010. Global eradication of measles: A highly contagious and vaccine preventable disease- what went wrong in Africa? Journal of Cell and Animal Biology, 3(8): 119- 140.
- 68. Oluwadare, C. 2009. The Social determinant of routine immunization in Ekiti State of Nigeria.
- 69. Ethno-Med; 3(1): 49–56
- 70. Onwujekwe, G., Uzochukwu, D.A., Obikeze N.C. et al., 2010. Assessment of Knowledge, Attitudes and Practices of Mothers in Jos North Regarding Immunization. IOSR Journal of Pharmacy, 5(6): 34-45
- 71. Orenstein, W.A.S. et al., 2000. Measles eradication: is it in our future? Am J Public Health; 90: 1521–1525.
- 72. Orubuloye, D. and Onu, C. 1996. Access to immunization and other public health interventions through the Pharmacists. West African Journal of Pharmacy, 23(1): 3–11.
- 73. Osuola, P. 1982. The impact of resource inflows on child health: evidence from Kwazulu– Natal, South Africa, 1993-98 J. Dev Stud, 2004: 78-114
- 74. Paul, K. 1970. Immunization issues for the 21st century, 90(6): Suppl 3:45-52.
- 75. Perkins, P.N. 2008. Immunization status of children on school entry: Area Analysis and recommendations 1991, Clinical Pediatrics, 35(5): 237-242.
- 76. Political Primary Healthcare and Health, Epidermal Common Health 2011; 65; 653-655. Pomatto, V.E. et al., 2010. Formulation of a Health Project For Nigeria For The 10th European Dev. Fund (Final Repot) For The Union.
- 77. Primary Health Care: Report Of the International Corp on Primary Health Care, General: WHO. Rao, O., Selvaraju A. and Nagpal, K. *et al.*, 2009. Strengthening Primary Health Care at Local Government Level: The Nigerian Experience. Academy Press Ltd, Lagos.
- 78. Report of FBA Reviving routine immunization in Nigeria design team trip report, March, 2005.
- 79. Reviving routine immunization in Nigeria design team trip report. March, 2005.
- 80. Robert S. 1986. Immunization Health Reform, making reforms worth prepared for WHO/GPV/EPI, 19.
- 81. Rosa, S. 1913. Primary Health Care Issues, American Public Health Association, series 1 number2, "Immunizations" October, 4-36.
- 82. Samir, A. 1974. Accumulation on a World Scale: Critique of the Theory of Underdevelopment <u>Social Science and Medicine</u>, 23(7): 689-700.
- 83. Sayibo, O., Olaniyan, A. and Lawanson M. 2009. Chapter, 3, short textbook of public health medicine for the tropics, 4th edition, Book power, Malta: 17-43.
- Soyibo, R. 2004. Opportunistic Immunization in hospital, Archivist of Disease in Childhood: The Journal of the Royal College of pediatrics and Child Health, Nov. 1999, 81(5): 422-425.
- 85. Soyibo, R., Olaniyi, J.A., Lawanson, C.H. and Johnson, C.D. 2009. Immunization status and sociodemographic characteristics: the mediating role of beliefs, attitudes and perceived control. American J. Public Health, December, 88(12): 1821-1826.

- 86. Starfield, B. 2009); New Paradigms for Quality in Primary Care. British Journal Of General Practice, 51: 303–9.
- 87. The PAHO Revolving Fund Update: 2012 60 products 28 antigens 39 countries & territories Expected Purchases: US\$ 405 million Capital Fund: US\$ 100 million PAHO 30
- 88. The UNICEF 2012: buying 50% of the global volume of vaccine doses, mainly EPI vaccines, but representing only 5% of total market value Global Volume of Doses Global Value of Doses 50% 5% 25 | Sources. UNICEF SD
- 89. Thomas, B. 2015. Immunization of Infants in Kargil. Indian Pediatrics vol.42:Aug. 17, 841-842.
- 90. Times online, 2009. MMR Fact Sheet, from the United Kingdom National Health Service. http://www.timesonline.co.uk/tol/life

Citation: Ajani Mutiu, Adadu Yahaya and Bello Baban Umar. 2019. Immunization, Primary Healthcare System and Efficient Service Delivery in Nigeria. International Journal of Recent Innovations in Academic Research, 3(12): 11-38.

Copyright: ©2019 Ajani Mutiu, et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.