

OUTREACH CLINIC SERVICES IN RURAL AREAS: AN IMPORTANT MEANS OF IMPROVING MATERNAL AND CHILD HEALTH SERVICES IN DEVELOPING COUNTRIES

OBI Ihuoma Anthonia

Correspondence address: ladyihuomaobi@gmail.com +2348035980988

Abstract

Outreach Services is a planned and regular visit by health professionals with the objective of bringing health services closer to the people who have no regular access to health care especially obstetric, infant and children cares. This is because access to healthcare in rural areas of developing countries of the world remains challenging especially among the vulnerable groups such as women of child-bearing age and their children, as well as other vulnerable groups that live in hard-to-reach regions. This paper discussed outreach clinic services and the importance in maternal and child health (MCH). The paper looked into the concept of outreach clinics, nature of MCH services in Nigeria and other developing countries and finally the importance of outreach clinic to MCH. Outreach clinic services are well planned and organized health care services rendered to the rural and underserved population who have no regular access to health care. It is seen as a key strategy for the provision of MCH care to the hard-to-reach and vulnerable group in the rural areas. Pregnant women in the rural areas are more in number than their urban counterparts and most of these women do not receive adequate antenatal and postnatal care, hence higher rates of maternal and infant morbidity and mortality are recorded. In Nigeria as an example, there is lack of skilled healthcare workers in rural areas and this is linked with poor maternal and infant health status. Outreach clinic services help in the provision of obstetric care services to mothers and children in the rural areas as well as vitamin A supplementation, family planning education, growth monitoring and immunization. It also helps to reduce costs and travelling inconveniences encountered by these women. If well organized and regularly carried out, outreach clinic programmes will be cost effective, provide active surveillance, and help to reduce maternal and infant morbidity and mortality rates in Nigeria and other developing countries.

Keywords: Outreach Clinic Services, rural areas, maternal and child health

Introduction

Access to healthcare is a function of affordability and convenience to all individuals who desire prevention, diagnosis, treatment and management of diseases, illness, disorders and other health-impacting conditions. This depends largely on the area where an individual lives as cities across the world have greater concentration of health facilities than rural areas. Edmond, Yousufi, Naziri, Higgin-Steele, Qadir (2020) posited that access to care remains challenging, therefore outreach health care is very necessary to reach the most vulnerable women and children in remote areas and conflict-affected regions of developing countries. Scheevers and Jenkins (2015) reported that about half of the world population lives in rural areas while good health facilities and specialized medical services are concentrated in the major urban areas. The Ministry of Public Health, Islamic Republic of Afghanistan in Edmond et al, (2020) stated that about four hundred million (400,000,000) women and children were estimated to live in conflict-affected areas and millions more live in hard-to-reach regions of low- and middle-income countries. Many literatures reported that lack of access to health care is a factor, secondly, health care professionals (qualified health care workers) do not like to work in rural and underserved areas in Nigeria and lastly, there are no good roads and

transport facilities for poor masses to come to the urban places for health care services.

Larsen and Hart (2005) affirm that nurse practitioners, physicians and midwives are lacking in rural areas where women need access to obstetric care. The writer explained that it is pertinent to note that the problem of poor access to health care and lack of skilled health workers are mostly observed among child bearing mothers and their children as they form the most vulnerable population in every society. The specialist health professionals are reluctant to practice in the rural areas because of lack of social amenities in such areas and lack of government support, no allowances and other incentives that could make their stay in the rural areas more meaningful. Provision of Obstetric care in the rural areas by unqualified health care personnel (quacks) makes women and children more vulnerable and leaves them to more harm.

Outreach clinic services remain a key strategy for providing maternal and child health (MCH) care to the underserved and hard-to-reach population. The World Health Organization (WHO), United Nations Children's Fund (UNICEF) and Global Immunization Vision and Strategy (GIVS) all affirm that integrating immunization with other health interventions like

treatment of diarrhoea, growth monitoring during outreach clinic services is a means of improving maternal and child health (Partapuri, Steinglass & Sequeira 2012). An Outreach clinic service is a planned and regular visit by health professionals from their specialized service area, (usually hospital in urban area) to the rural and underserved areas with the intention of bringing health services to the people. Maria Stopes International Organization Nigeria (MSION) (2020) affirms that during outreach clinics, the providers reach women in remote rural locations and urban slums where clinics and hospitals are scarce, too expensive to reach or where there is a shortage of skilled staff and equipment.

In other African countries such as South Africa, research documented that 43.6% of the people reside in rural areas and are served by only 12% of medical doctors and 19% of qualified nurses (Scheevers & Jenkins 2015). Almufleh, Tori, Tokaye, Comerford, Ahmed and Kurlansky (2017) stated that care of the underserved remain one of the most compelling challenges to American health care system. This indicates that poor health care service in most rural areas of the world is a well-known factor that causes poor health outcome of the people. This is more pronounced among rural mothers and their children.

Nurse midwives and doctors (skilled health personnel) are not usually available in the rural areas hence, women in such areas lack access to obstetric care while under five children do not receive adequate child welfare services including immunization, growth monitoring and nutrition services. Literatures reveals that Maternal and child health services such as pregnancy, labour, postnatal services, infants and children services (immunization, growth monitoring, nutritional services etc) are lacking in the rural areas because of non-availability, insufficient and mal distribution of qualified health care providers.

Therefore, the importance of maternal and child outreach clinic services cannot be over emphasized. During outreach clinics, health care providers render the services to the rural dwellers directly in their communities. The services are given free of charge or at a very minimal cost, no transportation cost nor travelling inconveniences. The writer observed that outreach services for maternal and child health has been linked with improved pregnancy outcome, reduced maternal and infant morbidity and mortality, hence it should be encouraged.

Outreach Clinics

Outreach clinic service is a type health care service organized to deliver care to the rural dwellers, by primary health care centre, village, private hospitals

and community health posts where there are no resident skilled workers. It can also be defined as health care services sent directly to the people in their remote areas with little or no fees. It offers primary preventive and curative services to the vulnerable group in the rural areas (Almufleh, Tori, Tokayer, Comerford, Ahmed & Kurlansky 2017). They are health care services that are carried out in communities which are geographically inaccessible or cut off from the provision of healthcare services by any of the facilities (National Open University of Nigeria (NOUN) 2017). Not only in the rural areas, outreach clinic can also take place in suburban or urban areas depending on the need of the centre, resources available and the type of services available in such a centre. Outreach clinic can take place in urban areas but the benefit is more observed and needed in the rural areas than in urban. The rural areas are medically underserved and noted for having a high percentage of people living with poverty, having highest rate of unemployment, highest rate of un-insurance and few or no primary care physicians (Whelam 2010). Hart, Larson and Lishner (2005) also observed that America rural women have lower income, higher unemployment rate, higher rates of chronic diseases and infant mortality than their metropolitan counterparts. Almufleh et al, (2017) affirm that outreach services can take place in area of common gathering within the rural community with co-operation of the community leader who will advertise the programme.

Scopes of Services Rendered During Outreach Clinics

Outreach clinic services are among the public health initiatives found very useful to improve maternal and child health. Outreach clinics are designed to provide various maternal and child services such as child survival strategies, antenatal care, postnatal care, infant immunization and family planning services as well as more traditional medical care and comprehensive care for children with chronic diseases. The scopes of the services also include among others, the general outpatients' services, minor surgeries and referral services. Services rendered can also come in form of provision of health check-ups for industries and company staff and health education concerning the innovative technologies like telemedicine used in developed countries including United Kingdom, United States of America and United Arab Emirates (Health Connect 2019).

Provider of Outreach Clinic Services

Usually, it is organized and financed by a group or groups of health professionals such as National Association of Nigeria Nurses and Midwives, Nigeria Medical Association (NMA), Fellows of West African

College of Nursing, Catholic Nurses Guild of Nigeria, West African College of Obstetrician/Gynaecologist etc. It can also be organized by Government and non-governmental organization of non-health related group. In this case it will be carried out in collaboration with health professionals. Outreach clinic services rendered by the various groups mentioned above act as succour to numerous individuals living in rural areas and hard-to-reach centres. The functions of the skilled health workers to aid in the prevention of diseases and complications arising from pregnancy, labour and puerperium cannot be over emphasized. For instance, nurses/midwives ensure that pregnant women are assisted to have access to antenatal care or they conduct health education on importance of antenatal care, birth preparedness, adequate nutrition in pregnancy, signs of labour, exclusive breastfeeding and postnatal visits. Child welfare (immunization, growth monitoring and promoting children's health) in the rural areas is also an important role of the nurse/midwives.

Nature of Maternal and Child Health Services in Rural Areas of Developing Countries

The most vulnerable population in every society are the childbearing mothers and their children, yet they are the major group that have poor access to health care services and this problem is more pronounced in the rural areas of sub-Saharan West Africa of which Nigeria is one. Acoster (2001) affirms that pregnant women living in rural areas are much larger in number compared with their urban counterparts. The writer explained that rural women who are younger in age have less perinatal care with higher maternal mortality and morbidity rates. The rural areas are medically underserved and, in most cases, linked with poverty.

Mother and child being in optimum well-being is imperative in every society worldwide. Evidence has shown that outcome of pregnancy and child survival depends largely on prenatal care and labour services rendered to the mothers. Poor antenatal care and labour services of rural women are the major determinants of maternal and child mortality. National Primary Health Care Development Agency (NPHCDA) (2010) reported that about 3.2 million out of 136 million births that occur annually worldwide, end up in still births, while good number up to 4 million babies die within the first month of delivery. This points to the fact that new-born survival is directly linked to quality antenatal care. It is not far from the truth that majority of this new-born deaths occur in the rural areas of developing countries.

In Nigeria more than 44% of new-born deaths occur between 0-1 days of life showing that new born

deaths are mainly due to unsupervised delivery which is an important factor in the rural areas. There is lack of Integrated Maternal New-born and Child Health (IMNCH) services in various rural areas in Nigeria. Ashok and Karger (2014) report the poor state of health care facilities and services in the rural areas of the India, where 80% of the specialist health care providers live in urban areas and only 13% of rural dwellers have access to primary health care centres; 52% of all mothers in India receive up to 3 ANC throughout the period.

Millennium Development Goals (MDG) as well as universal health care programmes have not made enough impact on health of the rural dwellers of developing countries, conflict-affected areas and thickly populated countries. Limited access to health for marginalized groups such as women and children still exists and this is coupled with the problem of non-utilization of the available health care facilities and services. Again, while the peripheral health centres are underutilized, tertiary and secondary health facilities are over-loaded with the work that could have been done at the primary centres and this eventually results to low quality health care services to the people.

Lack of access to emergency obstetric care (EOC) by nurse/midwives and obstetricians is linked with increase rate of maternal and new-born deaths. Many a time woman in the rural areas develop complications in labour and due to distance, no access road, no skilled health workers and lack of transport facilities, they lose their babies or even both mother and baby. Major causes of maternal deaths are recorded as haemorrhage 23%, infection 17%, toxemia/eclampsia 11%, unsafe abortion 11%, obstructed labour 11%, malaria 11% and anaemia 11% (National Primary Health Care Development Agency) (NPHCDA) (2010). Rural women and their children depend much on public health programmes such as outreach programme for their accessibility to care. Infact, there is well known disparity in access to maternal and child care services between rural women and their urban counterparts. Many pregnant women do not receive tetanus toxoid all through the period of gestation while the infants do not receive or complete their immunization against preventable diseases such as poliomyelitis, hepatitis B vaccine, measles vaccine and others. This is because there are few numbers of health facilities in the rural areas and the available ones are poorly equipped. Again, there is lack of skilled health workers and the few available are irregularly distributed. There is clear evidence that rural communities in Nigeria are faced with challenge of inadequate and inequitable distributions of skilled health workers (HERFON, 2006).

Distance, travel time to urban facilities and cost of essential drugs are also peculiar problems that impede maternal and child services in rural communities of Nigeria. These factors are among the major causes of poor maternal and child health indices in rural areas. Hart et al (2005) discussed that in some rural communities' distance is a factor as mothers travel for many hours in order to access antenatal and infant care services. This is because citing of health facilities in Nigeria is often based on political expediency rather than perceived needs of the people. It is observed that government officials and politicians in Nigeria locate health facilities and other infrastructure in their hometown instead of where it will benefit the general public. Rural dwellers also have the challenge of using fake, expired and substandard drugs which may equally be unaffordable despite the fact that they are "essential drugs". People spend much money buying the drugs without getting the required effect, hence they continue to be sick and continue to spend more and more. This negates the all-important Bamako initiatives of 1987 during which assembly of African Health Ministers adopted strategies to increase the availability of essential drugs and other health care services for Sub-Saharan Africa. In Nigeria health financing through national health insurance scheme (NHIS) is not effective especially among the rural dwellers (only seen in papers and heard on televisions). The World Health Organisation states that the type of health care financing adopted by any country should not be the type that will prevent people from seeking and using services. It will not be the type that will demand instant payment by the people unless in a situation where the patient is able to pay (HERFON 2006). The situation is different in Nigeria especially in the rural areas, as there is little or no form of health insurance services in the rural areas of Nigeria.

National Health Insurance Scheme was established and launched in Nigeria in 2005 with the aim of providing comprehensive health care services at affordable cost. It was planned to cover government employees, self-employed, rural dwellers, the less privileged and vulnerable groups in the community and to protect families from financial hardship and huge medical bills. It is appalling to note that the parading of universal health coverage (UHC) of NHIS is only on paper not in practice as it has not implemented any community-based health insurance (CBHI) within the communities of the federation. Majority of Nigerians especially the rural dwellers and vulnerable groups such as pregnant mothers, children, the aged, the physically challenged and less privileged still depend on out-of-pocket expenses for their health care. According to Gustafsson-Wright and Skellkens (2013), Nigeria has the highest out of pocket health expenditure and poorest health

indicator in the world, hence embarking on other forms of healthcare delivery such as outreach clinics to help the rural dwellers/vulnerable groups is very necessary. They further posited that rural women and their infants have higher rate of chronic diseases and mortality; the women have higher rate of unemployment than their metropolitan counterparts. Maternal and infant immunization services in the rural areas are nothing to write home about

Types of Outreach Clinic Services

Outreach clinic services can be categorized according to the site of service delivery and the group targeted. In this paper, four (4) types are highlighted:

- a. **Domiciliary Outreach Service:** Here the service delivery is undertaken at individual homes.
- b. **Detached Type:** This one is undertaken at a public environment, targeting services to individuals in a particular community.
- c. **Peripatetic Type:** Here the services are provided at a public or private environment while targeting organization rather than individuals.
- d. **Satellite Type:** The outreach services can take place in any community gathering place such as church premises, school, health centre, market place as far as the site is close to the residence of the people that need the services.

Importance of Outreach Clinic Services to Maternal and Child Health

Outreach clinic services have a tremendous positive impact to health of mothers and children in the rural areas both nationally and internationally. The writer believed that these services act like a channel through which various maternal and child services are rendered to the rural dwellers. Such health services include antenatal, labour and postnatal services. This paper reviews numerous benefits of outreach clinic service to maternal and child health which include but not limited to the following:

1. **Provision of obstetric care:** Most literature pointed out that outreach clinic services provide antenatal care, nutritional care of the pregnant women, vitamin A supplementation, family planning education and sensitization, maternal and infant immunizations, growth monitoring and supply of insecticide treated nets (ITN). Other services include deworming of children, new-born care as well as Integrated Management of Childhood Illness (IMCI) (Partapuri, Robert and Sequeira 2012). Roozbeh, Nahidi & Hajjyan (2016) reported that barrier to obtaining prenatal care among rural women was linked with transportation/inconveniences of bad roads; and outreach clinics to such areas can solve the problem, in which case mothers would receive quick and

adequate care in their natural environment without going through all the inconveniences.

2. **Improvement on Continuity of Care and Monitoring Services:** Outreach clinic provides closer surveillance of the population and this improves the continuum of care and makes collecting, retrieving and disseminating of health information more efficient and comprehensive. Outreach care providers work closely with the Primary Health care centers.
3. **Benefits to Adolescents:** Outreach clinic services for mothers and children can also be of benefits to adolescents because during this period of life it is pertinent to introduce knowledge of family planning to the adolescents. This helps to prepare them for future family roles. Outreach clinic also provides information about sexual abuse, mental health/other health services and other health information that will be of benefit to the adolescent as he/she grows to assume family roles. Outreach clinic services to this group helps to curb unintended pregnancy, sexually transmitted diseases, substance abuse as well as injury.
4. **Provision of health care in natural environment:** Outreach services provided in the rural community provides the avenue for reaching the women and their husbands in the natural environment. By so doing, it becomes easy to get the men and involve them in the discussion of issues concerning their wives and children. For instance, if a child is found to have kwashiorkor, the father will be encouraged to assist in bringing money for feeding the child with protein-rich diets.
5. **Reduces disparity of care between urban and rural dwellers:** the disparity in access to care between the rural and urban women (Hart et al 2005) is reduced through outreach programmes organized in the rural communities. The rural women are known to have lower income, higher rate of unemployment and higher rate of maternal and infant mortality than their metropolitan counterparts. Through outreach clinics services provided by health related and non-health related care providers, these rural women get reasonable health benefits.
6. **Other benefits of outreach services as identified by Nxumalo, Goudge and Thomas (2013)** INCLUDE in their research found that outreach clinic services in the rural area have numerous benefits to mothers and children such as Improving access to health care, reduces poor maternal indices, improving quality of care to mothers and children, also, reducing cost and reduces pressures on hospitals in the urban areas. They also found that rural outreach clinic services encourage negotiations with the service providers for further treatment and supports training of the primary care givers so that they can further teach MCH clients. The experience gained by the primary healthcare nurses during outreach clinic services in the rural areas helps to equip them with the knowledge of caring for the mothers during antenatal, labour and puerperium which reduces maternal and infant mortality rates among the rural dwellers. It also helps in the care of the infants as well as in careful assessment and regular monitoring of the clients in the rural communities.
7. **Reduces cost and transport inconveniences:** Poor utilization of health care services is not always as a result of poor maternal knowledge and awareness but also due to high cost and travelling logistics. Thus, outreach clinic services help to bridge the gaps created by these problems. This goes to support the statement by Wallingford (2013) which affirms that outreach clinic services by nurses and other health care providers bring about cost reduction and containment, hence the importance of outreach clinic services to MCH.
8. **Provides preventive care, minor surgeries and dental services:** Mothers and children usually receive primary healthcare services, general outpatient care, minor surgeries, preventive services, dental and referral services during outreach clinic (Yu, Hills, Ricks, Bennet and Oriol 2017; Jinadu in NOUN 2017).
9. **Provides the model of mobile health map:** Outreach clinics also helps to provide a model of mobile health maps for these mothers and their children, that is, a programme that helps to monitor the trends and characteristics of their disease conditions.
10. **Provision of specialist health service:** Specialist health services are also offered to these women together with other rural dwellers.
11. **Reduction of infant morbidity and mortality:** Chinyama (2012) confirmed that outreach clinic service plays a tremendous role in lowering maternal and infant mortality rates.
12. **Impact by text messages:** The use of text messages via cell phones in outreach clinics is use to get laboratory test results which has immensely reduced the time the processing and getting of response takes, considering the distance from rural to urban areas where equipped hospital laboratories are located. Again, outreach nurses can use mobile phones to send a child's nutritional data to a national

monitoring service area. In this case analysis can quickly be done and result sent back to the rural health workers who will now give adequate care to the child using the result.

13. **Provision of training:** Researches have revealed that outreach health workers provide training for rural health staff on integrated management of childhood illness (**IMCI**) so that they will be able to diagnose and treat the most common childhood illness in the localities. Chinyama (2012) affirms that the outreach care providers can diagnose and treat even severe form of malnutrition all to help reduce infant mortality rates.

Nursing Implications to Outreach Clinic Services to the Rural Dwellers

To improve access to health among the rural dwellers, nurses have been and still need to remain in the forefront. The writer believed that professional nurses in Nigeria are embracing the current knowledge explosion and improvement in science and technology. Many nurses are improving their educational background up to acquiring Msc and PhD in areas like maternal and child health, community health nursing, health education and others to be able to give adequate and up to date care to the general public. The knowledge of these courses and experiences so acquired would equip them to take active part in organizing and implementing specialized services including outreach clinic services to the rural dwellers especially mothers and children. The nurses, midwives and Public Health Nurses played important roles in outreach services such as: providing both medical and health services to mothers, their infants and even to the entire family members; gives health education by motivating the expectant mother to observe the rules of health and to utilize the various resources provided by the government; provide assistance in programmes and at improving the general health and social welfare of the community; participates in the control of communicable diseases; organizes and participates in the maternal and child health care e.g., antenatal, deliveries, family planning, post abortion counselling and care etc.; organizes and participates infant welfare clinic including immunization, oral rehydration therapy, and other child survival programmes; organizes and participate in school health programme; ensures services for geriatric and the handicapped; promote accessibility and affordability of family food including proper nutrition to prevent morbidity and mortality especially in children. They administer food supplementation such as iron and folic acid fortification/supplementation to prevent deficiencies in pregnant women; promotes quality of life for those who no longer have the ability to care for themselves

alone; provide humanizing practices, this includes the physical, social, psychological and spiritual perspectives in search of wellbeing and quality of life through an integrative care; Wallingford (2013) affirms to this when he said that outreach clinic services by nurses and other health practitioners brings about cost reduction and containment for the hard-to-reach people. There is therefore a clarion call for all nurses and midwives, no matter the level, to join and take active part in the organization and provision of such services as this helps in reducing maternal and child morbidity and mortality as well as development and growth of healthcare system in Nigeria.

Challenges of Outreaches

These include:

- i. Only few personnel are willing to participate,
- ii. Few equipment are available and difficulty in getting transportation for the workers, Drugs.
- iii. Equipment to get to the masses in the community
- iv. Poor roads,
- v. Few available vehicles
- vi. Lack of fund.

Conclusion

This paper discussed the concept of outreach clinic services and its importance to maternal and child health (MCH). Outreach Services is a planned and regular visit by health professional from their specialized service areas to the rural and underserved areas. It aims at bringing health services to the people who have no regular access to health care especially obstetric and infant and children cares. Most literature reviewed confirmed that outreach clinic services remain a key strategy for providing MCH care to the underserved and hard-to-reach population who have little or no access to basic health services. Outreach clinic services have been found to be an important MCH intervention for most deprived mothers and children hence it is an essential service not just an optional extra. Regular and well-organized outreach clinics help the mothers to access obstetric care and this takes part in the reduction of poor maternal and infant indices. Outreach clinic services helps to improve access to health care by mothers and children. It serves as a medium through which obstetric care is rendered to the rural and hard-to-reach women. Infact, outreach clinic services are conceptualized as an important aspect of health care services, hence it needs on-going support and commitment by the government, non-governmental organization as well as health professionals and concerned Individuals.

Recommendations

Government and non-governmental organizations should see the need in outreach clinic services and give a maximum support to the organizers by providing drugs, hygiene materials and healthcare equipment needed to deliver the services. Government and other founders and organizers of health programmes in various developing countries of the world need to invest in implementation and evaluation of outreach services as it is important in the reduction of maternal and child morbidity and mortality rates. Different healthcare organizations including Society for Obstetrics and Gynaecologist, Nigerian Medical Association (NMA), National Association of Nigerian Nurses and Midwives, West African College of Nursing, Medical Laboratory and Pharmacy Associations etc should see it as a point of duty and free will assistance to help deliver health services to the hard-to-reach people by means of outreach clinic services. Specialist, federal and general hospitals located in the urban areas should from time to time organize and deliver outreach clinic services to rural areas within their states and location. They should not concentrate their services only in the urban areas where only the affluent live.

References

- Acosta, D.C (2001). Obstetric Care in Geyman and Colleagues (eds), Rural Medicine: 103-121.
- Adesokan, F.O.O. (2010). Reproductive Health for all Ages. Ado-Ekiti; Faxwell Nigeria Ltd.
- Almufleh A, Tori G, Tokayer L, Comerford M, Ahmed A & Kurlansky P. (2017). Role of Community Health Outreach Programme in Improving Access to Federally Qualified Health Centers in Miami-Dade Florida: A cross sectional study.
- Ashok, Panagariya and Karger, (2014). The Challenges and Innovative Solutions to Rural Health Dilemma. Retrieved June 2018 from www.ncbi.nlm.nih.gov Doi:10.524/ans.0972.
- Chinyama, V. (2012), Outreach Programmes in Malawi Brings Health Care Closer to community. Retrieved August 2018 from UNICEF/ www.unicef.org/malawi-665834.
- Edmond, K, Yousufi, K, Naziri, M, Higgins-Steele, A, Qadir, Q.A, Sadat, M.S, Alexandra, L.B and Smith, E. (2020). Mobile outreach health services for mothers and children in conflict-affected and remote areas: a population-based study from Afghanistan. *BMJ Journal* 105, issue 1.
- Gustafsson-Wright, E & Schelleken, O. (2013). Achieving Universal Health Coverage in Nigeria; One State at a Time. Washington D.C. Global Economy and Development Brook Shearer; Working Paper Series.
- Hart, L.G, Larson, E.H, & Lishner, D.M (2005). Rural Definitions for Health Policy and Research. Health Services Block Grant. AMCHP fact sheet I
- Health Connect, (2019). Health connect 24*7 embarks on medical outreach efforts across Nigeria. Retrieved July 2020 via [https:// www.healthconnect 247.com/blog/healthconnect-24*7-medical outreach/](https://www.healthconnect247.com/blog/healthconnect-24*7-medical-outreach/)
- Health Reforms Foundation of Nigeria (HERFON) (2006). Nigerian Health Review. Abuja: HERFON.
- Kateri Medical Services (2019). Medical outreach. Retrieved July 6th 2020 from <https://www.katerclinic.org/medicaloutreach.html>
- Marie Stopes International Organization, Nigeria (MSION) (2020). Delivering services to hard-to-reach and the underserved. Retrieved July 10th 2020 from <https://www.mariestopes-org-ng/who-we-are/mobile-outreach/>
- National Open University of Nigeria (NOUN) (2017). Outreach Mobile Health Services. retrieved 5th July 2020, via <https://www.nou.edu.ng/sites/ddddefault/file/2017-03PHS507pdf>.
- National Primary Health Care Development Agency (NPHCDA)(2010). MDG-DRG Founded Midwives Service Scheme; Concept, Process and Progress. Abuja: MPP Limited.
- Nxumalo N, Goudge, J & Thomas L. (2013) Outreach Services to Improve Access to Healthcare in South Africa: Lesson from three Community Health Workers Programme Journal-Global Health Action V6, issue Retrieved July 2018 from www.ncbi.nlm.gov/article.com
- Partapuri, T, Stein Glass R, & Sequeira J. (2012). Integrated Delivery of Health Services During Outreach visit: a Literature Review of Programme Experiences Through a Routine Immunization Lens. *The Journal of Infectious Disease* www.ncbi.nlm.nih.gov/pmc/article.
- Roosbeh, N., Nahidi, F, & Hajiyan, S, (2016). Barriers related to prenatal care Utilization Among Rural Women (Saudi J). Retrieved August 2018 from <http://www.ncbi.nlm.nih.gov>articles>
- Scheevers, J & Jenkins, L. (2015). Factors Influencing Outreach Clinics & Support Services to Rural Population. In the Eden & Central Karoo District of Western Cape.
- Wallingford, S. (2013). How Nurses Can Help to Contain Healthcare Costs. Retrieved 2017 from www.kelvinmd.com
- Whelam, E. (2010). Importance of Community Health Centers
- Yu, S.W., Hills, C, Ricks,M.L., Bennet J, & Oriol N,E (2017). The Scope and Impact of Mobile Health Clinic in the United States: a Literature Review. Retrieved 2018 August from www.ncbi.nlm.nih.gov; International.