

Physical access and utilization of primary health care services in rural Nigeria.

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Abstract

Background: Universal coverage of the population and people's access vis-à-vis utilization pattern of healthcare services and facilities constitute some of the cardinal principles of Primary Health Care (PHC). These indicators are also extremely important in the planning of PHC and health policies in general. In rural developing countries, physical access and particularly road distances and travel time are recognized as primary constraints in the delivery of PHC services. Studies that incorporate data inputs from road networks and transport systems are used to assess physical access to healthcare centers in developed countries, these measures are however mute in most studies on developing countries. This study examines the relationship between different measures of physical access and the impact of these measures on family planning and vaccination of children in rural Urhobo region of Delta State, Nigeria. The study also assesses how healthcare services are utilized by beneficiaries in the region.

Methods: Measurement of distance from three villages to the health facilities was done with the use of odometer of a vehicle driven from the participants' homes to the nearest health centre. Stop-watch was used to measure driving time. Data on utilization of family planning services were collected using structured interview schedule containing questions on respondents' personal characteristics. Questions relating to family planning information sources, utilization, etc were also asked. Data on vaccination of children were collected by personal interview of children care-givers and verified by inspection of vaccination cards. A descriptive cross-sectional study was conducted in the three villages with ninety-six households selected randomly from August 1, to September 30, 2010.

Results: Preliminary scan of the results show that accessible distance and utilization of health facilities decreased as the distance increased. After adjusting for socio-economic indicators, each measure of physical accessibility showed strong average association the vaccination of children ($\phi = 89\%$, $\rho < 0.001$) and utilization of family planning services ($\phi = 0.86$, $\rho < 0.001$). Results also report that participants in Village 1 (Ododegho) had availed approximately (28% < 6km) of trained manpower for family planning services, Village 2 (Oguname, 31%, < 5km) and Village 3 (Otogor, 22%, < 7.5km).

Conclusion: Distance from the health services are strongly linked and associated with utilization of family planning services and vaccination of children. The health services are underutilized by the rural people, however, the quality of services were satisfactory. The implications of the findings suggest the need to strengthen and target children who live away from health facilities; reduce accessible distance for seeking healthcare by establishing more sub-healthcare centers that are closer to the people. The 5km distance accepted by the World Health Organisation as a satisfactory distance may no longer be tenable as social and economic conditions worsen.

Keywords: Rural Nigeria, Health facility, Utilization, Access, Vaccination, Family planning