Determinants of uptake of third doses of oral polio and diphtheria-pertussis-tetanus vaccines in Ibadan north local government area, Nigeria

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High drop-out rates in the uptake of full doses of Oral Polio Vaccine (OPV) and Diphtheria-Pertussis-Tetanus (DPT) vaccine have been reported, despite efforts to improve immunisation coverage. This study identified determinants of uptake of third doses of OPV(3) and DPT(3) among infants who received first doses of either/both vaccines at ten immunization centres located in Ibadan North Local Government Area (IBNLAGA), Nigeria. Using a cohort study design, 400 mother-child pairs were assessed (from February - September 2012). A semi-structured interviewer-administered questionnaire was used to collect data, and each child was followed up for 90 days (at 30-day intervals), to record dates of second and third doses of the vaccines. Multi-variable analysis was performed using log-rank test and Cox’s regression to identify predictive factors. Only 43.5% and 24.8% of the recruited children completed OPV3 and DPT3 respectively. Factors predictive of uptake of OPV3 were; being a first birth (HR = 1.66, 95% CI = 1.11-2.48) and attending a tertiary health facility (HR = 2.27, 95% CI = 1.41-3.65), while attending a secondary health facility was significant for uptake of DPT-3 (HR = 2.43, 95% CI = 1.30-4.61). Determinants of uptake of third doses of the vaccines were type of health facility attended and child’s birth order. Hence, efforts to improve vaccination coverage should take into consideration sustaining awareness on the importance of completing immunisation schedule for children of higher birth orders and improved service delivery among health facilities.

Biography

Emem Emmanuel Etukiren is an MPH (Field Epidemiology) student at the faculty of Public Health, University of Ibadan. She has participated in several research activities, and is currently working on some. Such of which include: Environmental Assessment of Cholera outbreak in Ibadan North LGA, Nigeria; Missed opportunity for immunisation among infant in Ibadan North LGA, Health hazards associated with poor housing in Port Harcourt, Nigeria.

She has also gained core field experience in public health issues like; HIV prevention, immunisation program, epidemic preparedness and malaria prevention. Emem is also a member of International Epidemiology Association (IEA) and Epidemiological Society of Nigeria (EPISON).

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