

Immunization Trend in Nigeria

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INTRODUCTION

Vaccine-preventable diseases contribute significantly to childhood morbidity and mortality in sub-Saharan Africa¹. One out of five children die before their fifth birthday in Nigeria². Vaccine preventable diseases include diphtheria, pertusis, measles, poliomyelitis, tuberculosis, cerebro-spinal meningitis, hepatitis and yellow fever³. These diseases accounted for approximately 872,000 deaths in 2002 which represented 22% of under-five mortality.² It is estimated that over 200,000 children die yearly from vaccine preventable diseases².

Nigeria recorded a high incidence of wild poliomyelitis virus with 798,388, cases reported in 2008 and 2009 respectively, which is the highest in the world⁴. Interruption of indigenous transmission of the wild polio virus has been interrupted in all countries except Nigeria, India, Pakistan and Afghanistan⁵.

It is worthy of note that despite the availability of vaccines to tackle childhood mortality, vaccine preventable deaths remain endemic in the sub-Saharan region¹.

IMMUNIZATION COVERAGE AND CHALLENGE

Immunization is co-ordinated by the National Programme on Immunization (NPI), a parastatal of the Federal Ministry of Health in collaboration with the State Ministries of Health and local government health centres, UNICEF and WHO². It was established by the Federal Government of Nigeria in 1997². Nigeria has 774 local government areas subdivided into 5,450 districts, within which there are villages and 9,555 wards. These vast areas are expected to be covered for immunization programmes.

Previously, the programme was co-ordinated by Expanded Programme on Immunization with multi-national donor agencies.

Immunization coverage in Nigeria has become a major challenge in the context of child survival strategy². The Nigerian immunization coverage is far below some countries in conflict.² The DPT3 immunization coverage varied from 5% in 1984 to 29% in 2000 with peak coverage of 57% attained in 1990^{2,3}. A dramatic decline to 28% was observed in 2001². World Health Organization argues that drop-out rate of more than 10% is not acceptable and is dangerous for any country².

The national immunization coverage reported in 2003 was 12.7% indicating further decline from 28% reported in 2001.² Sources of immunization in 2003 were as follows: government 75.6%, private 8.4%, non-governmental agencies 1.7%. Reasons for non-immunization were non-availability of vaccines, distant and unknown immunization sites, fear of adverse reactions from vaccines, rumours, lack of trust in immunization and mother not having time for immunization.²

About 23% of children were fully immunized in 2008, while those without any immunization was 29%.⁶ Fully immunized children were highest in south-eastern zone (43%) and least in north-western zone (6%). Significant variations were noted between urban and rural areas, with more coverage observed among urban population (38% versus 16% respectively)⁶. UNICEF reported a coverage of 69% for DPT3 in 2010 but insisted Nigeria must intensify her campaign, as some states had poor coverage³.

NPI has been faced with the challenge of storage, distribution of vaccines, monitoring and evaluation of immunization activities, along with the submission of its annual report on immunization coverage to WHO. NPI budget in 2005 was \$226 per fully immunized child which is the most expensive of all developing countries of the world. Yet failure of service delivery is implicated for poor immunization coverage.²

Logistics, ranging from personnel and infrastructure, appear to limit the efficiency of the parastatal². It was reported that cold chain facilities at the state levels were

poorly equipped and managed, with over half of the refrigerators being worn-out in 2005². Collaboration of staff at different levels has also been a major challenge.

Migration was implicated as a risk factor for non-immunization in affected children¹. Outbreaks of poliomyelitis were reported in Europe and were linked to importation from endemic countries⁵.

CONCLUSION

Urgent measures are needed to address these constraints for optimal childhood survival. A better strategic plan to reach every region of the country will improve our immunization coverage.

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