

**PARENTS' AWARENESS AND PERCEPTION OF THE POLIO  
ERADICATION PROGRAMME IN GOMBE LOCAL  
GOVERNMENT AREA, GOMBE STATE.**

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**ABSTRACT**

Four hundred and twenty-two parents from the community took part in survey while purposively selected 24 parents participated in focus group discussions. Results showed that two hundred and thirty-five (55.7%) of the respondents did not know the mode of poliovirus transmission while majority 353(83.6%) believed that polio is a serious disease Half 216(50.7%) believed that their children are not susceptible. The major reasons cited for reluctance in releasing children for polio immunization were high frequency of National Immunisation Days 172 (40.8%), polio vaccine overdose 165(39.6%), mixture of vaccine with harmful pathogens 31(7.3%) and too much attention been given to polio at the detriment of other childhood killer diseases. Based on the findings, there is the need for strong advocacy, enlightenment campaign with emphasis on transmission route, need for immunization and social mobilization to dispel negative rumors and improve acceptance of polio vaccine.

**Introduction**

Poliomyelitis remains a serious problem in a large part of the developing world where the disease presents a constant threat to childhood populations with important consequences for social and economic development, (Lucas and Gilles 1990). It is known to be the most important cause of physical disability world wide, hence the need for its eradication. The disease is of great public health importance worldwide especially among young children under 5 years of age. The set date for polio eradication globally was the year 2000. Eradication was however not achieved as about 3,500 cases of Wild Poliovirus, (WPV) were reported worldwide (Executive Board Room, 2001) with Nigeria contributing 27 cases (WHO Nigeria, 2001). Assessment of immunization services in Nigeria revealed that immunization coverage is still low. Several factors such as lack of proper planning at State and LGA levels, decreasing motivation of health workers, poor quality of immunization services and low demand for services from the community were evident (FMOH/NPI, 2001).

Parents are very important in the determination of the success or failure of polio eradication. This is stemmed from the fact that their level of awareness and perception with respect to the susceptibility of their children to polio disease, severity of the disease and beliefs about the oral polio vaccine would influence their willingness or other wise to release their children for polio immunization. The study therefore set out to determine the level of awareness of parents about the polio disease, document the perception by parents of the susceptibility of their children to the disease and determine the attitude of parents toward polio eradication initiative.

## **Materials and Methods**

The study is a community based descriptive study aimed at determining the level of parents' awareness and perception of the polio eradication programme in Gombe Local Government Area (LGA) of Gombe state, Nigeria. Gombe LGA was selected by simple random sampling from the four LGAs with 2 reported cases of wild polio virus each.

The study targets are Parents/Guardians who have children 0-59 months and are residing in the LGA. The parents' sample was drawn using the multistage sampling system such that all the health districts were covered. The LGA was divided into the existing 6 health districts after which all the settlements in each district were listed and 7 settlements were selected per district by balloting. In each of the selected settlements, 10 houses were assessed after selection using the Expanded Programme on Immunization (EPI) cluster sampling system. Data was collected using pretested qualitative and quantitative data collection methods. Questionnaires were administered to parents in the selected houses by trained interviewers in Hausa and English languages. A total of 3 focus group discussions of 8 participants each were carried out.

The quantitative data were analysed using EPI INFO statistical software while that of the qualitative data was done using content analysis.

## **Results**

### Socio demographic characteristics of respondents

Results indicated that the age of respondents ranged from 15-84 years with a mean of 39.4 years (SD± 12.7). The four hundred and twenty two respondents constituted 258 (61.1%) fathers, 131 (21.0%) mothers and very few 33 (7.8%) grand parents. Most of the respondents 381 (90.3%) were married, 16(3.8%) were single parents, while 23 (5.4%) were in the divorced, widowed and separated status. Less than half of the respondents 136 (31%) had one child, 162 (38.4%) had two children while 144 (27%) had more than two children. With respect to the sex of respondents, there were more males 281 (66%) compared to the number of females, which were 141 (33.4). Educational level of respondents showed that less than half 145 (34.4%) had tertiary education followed by 118 (28%) with secondary education. Respondents with primary and non-formal education were 39 (9.2%) and 80 (19.0%) respectively. About the occupation of respondents, about half 199 (42.2%) were civil servants, while 77 (18.2%) engaged in trading, 69 (16.4%) were farmers and few others 77 (18.2%) were house wives, teachers and security men.

### Parents' awareness about polio disease

Many of the respondents 253 (60%) were aware of the local name for polio and were able to give the local name. Majority 344 (81.5%) have also seen polio victims before. Most of them 379 (89.8%) were aware that poliovirus could cause paralysis of the leg and hand. Large majority, 385(91.2%) were aware of polio eradication initiative. However, while 88 (20.9%) heard through NIDs campaign, 81 (19.2%) heard from routine immunization visits, 70 (16.6%) heard from health workers and 117 (27.7%) heard from the three sources. Many of the respondents 235 (55.7%) did not know the route for poliovirus transmission.

Findings from focus group discussions support the above results as majority of the participants were also aware of the disease and gave the local name. Awareness that polio can cause paralysis of the leg and hand was very high among the participants. It

was agreed by many that NIDs campaign was the main channel through which their level of awareness concerning polio disease was enhanced. There was a low knowledge of the route of poliovirus transmission.

#### Parents' perception of the polio disease

Majority of the respondents 353 (83.6%) believed that polio is a serious disease, less than half 206 (48.8%) also believed that their children were susceptible to poliomyelitis. However, more than half 21 (50.7%) believed that their children were not susceptible to the disease. Most of the respondents 309 (73.2%) opined that too much attention was given to polio immunization to the detriment of other childhood killer diseases. A small proportion 31 (7.3%) believed that oral polio vaccine (OPV) contained harmful pathogens, however a large majority 391 (92.7%) did not respond to the question. These results are in consonance with findings from focus group discussion, which showed that a high percentage of the participants perceived polio to be a serious disease. It was also said that attention given to polio campaign was too much. Majority had heard rumors and misconceptions that polio vaccine contained contraceptives, HIV and other harmful pathogens.

#### Parents' attitude towards house-to-house polio immunization

On the attitude of parents towards the house-to-house polio immunization, about half 172(40.8%) believed that national immunization days (NIDs) were too frequent and that discouraged 96(22.7%) from taking polio immunization. Some of the respondents 100(23.7%) did not respond to the question, however 226(53.6%) said that they were not discouraged. An appreciable number of respondents 165(39.6%) believed that there could be polio vaccine overdose due to repeated immunization, nevertheless, 245(8.1%) believed that there was no polio vaccine overdose due to repeated NIDs. The findings from focus group discussion are in support of these results as many of the participants believed that NIDs rounds were too frequent while vaccination against other childhood killer diseases was neglected. This was said to be responsible for most of the negative rumors about polio vaccine.

### **Discussion**

#### Awareness about polio disease

The high level of awareness about polio disease in this study was due mainly to the campaign efforts by the Federal, State and Local governments in Nigeria and the international community. This is supported by Rasania and Sachdev (2000) who reported that predominant source of information about polio was electronic media (55.8%) followed by health workers (20.9%). More than half of the respondents 235 (55.7) did not know that faecal-oral route was the main route for poliovirus transmission, However, there was low knowledge of route of poliovirus transmission.

#### Perception of the polio disease.

The perception that too much attention is given to polio immunization is due to the fact that many did not know that NIDs are for polio eradication. This is in agreement with the findings by Harmanci, Gurbuz, Torun, Tumerden and Erturk (2003) who reported that there was increased risk of non-vaccination in people who do not know the purpose of NIDs. Also, some respondents 31 (7.3%) believed that the vaccine contained harmful pathogen. Majority also said that they have heard rumors and misconceptions that polio

vaccine contained Human Immuno-Deficiency virus (HIV), contraceptives and other pathogens which were the major reasons for reluctance in releasing children for polio immunization. This is supported by the findings of Manjunath and Pareek, (2003) which stated that misconceptions/beliefs among the mothers of partially immunized children were the main reasons for non-immunization.

#### Attitude towards house-to-house polio immunization.

On the attitude of parents towards the polio immunization campaign, 96 (22.7%) were discouraged from accepting polio vaccine because half of them believed that the rounds of national immunization days were too many not knowing that the many rounds of NIDs are as a result of the global efforts for polio eradication. This is supported by Gloyd, Suarez and Mercer, (2003) who said that NIDs are currently in vogue and are prominent in the world wide polio eradication efforts.

#### **Conclusion**

This study aimed at assessing parents' awareness and perception of the polio eradication programme in Gombe local government area, Gombe State. It was found that there was a high level of awareness about polio disease and a low level of knowledge of route of poliovirus transmission. Reluctance in the release of children for polio immunization was found to be due to many rounds of national immunization days, fear of polio vaccine over dose and polio vaccine contamination with harmful pathogens. These results suggest the need for public enlightenment to create greater awareness about the safety of the vaccine and the goal of polio eradication initiative, which is polio eradication.

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