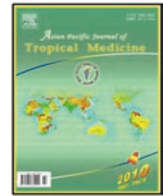
Contents lists available at ScienceDirect

Asian Pacific Journal of Tropical Medicine

journal homepage:www.elsevier.com/locate/apjtm


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Client views, perception and satisfaction with immunisation services at Primary Health Care Facilities in Calabar, South-South Nigeria

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ARTICLE INFO

Article history:
Received 15 January 2010
Received in revised form 15 February 2010
Accepted 15 March 2010
Available online 15 April 2010

Keywords:
Client satisfaction
Immunisation services
Primary health centres

ABSTRACT

Objective: To determine the degree of client satisfaction with immunisation services at Primary Health facilities in Calabar, Cross River State, Nigeria. **Method:** A semi-structured questionnaire was administered on 402 caregivers who were selected using systematic random sampling from four primary health centres. The four centres were randomly selected from the 19 health centres using the table of random numbers. Data obtained were analysed using Epi-Info software version 2002. **Results:** The majority of clients were dissatisfied with most aspects of care given at the Health Care Centres including long waiting time, accessibility of immunisation services, poor respect for clients´ rights, especially to their dignity, health information and counseling on their medical needs. **Conclusions:** The study concludes that client satisfaction with immunization service in Calabar was low due to poor attitude of health care providers, long waiting time and lack of respect for clients´ rights.

1. Introduction

Nigeria constitutes about 20% of the African population and thus contributes significantly to the overall regional burden of vaccine preventable diseases. It thus suffices that the immunisation coverage in Nigeria will have a direct effect on the control of vaccine preventable illness in this region[1,2].

Since the introduction of the Expanded Programme on Immunization (EPI) in 1974 (which later became the National Programme on Immunisation in 1997), Nigeria´s immunisation program has been faced with several challenges resulting in declining national coverage from 50% of fully immunised children in 1986 to 38% two years later[3]. By 1996, less than 30% of eligible children had diphtheria pertusis and tetanus (DPT)[4] while in 2003, only 25% of one-year olds were immunized with three doses of DPT and only 45% of newborns were immunized with Bacillus Calmette-Guerin (BCG)[5]. This progressive decline has continued into the new millennium. In 2006, the national coverage survey based on preliminary results reported DPT coverage of 36% and only 18% children were fully immunized[6]. The progressive decline in immunization coverage in the country despite the fact that the services are offered free is a cause for concern.

Amongst the interventions for child survival tried across the world, the childhood immunizations have been claimed to be the most appropriate and effective technology. Immunization is in fact the"best buys" in public health[7]. It is thus important that qualitative improvement including client satisfaction with immunization services be carefully guided and ensured through periodic audit of the immunization chain.

The most frequent reason provided by caregivers in this area whose children were not immunized during the national immunization coverage survey was lack of vaccines at health facilities (17.9%) followed by vaccination sites that were too far (10.5%) and lack of awareness of need for immunization (9.2%)[8]. The fragile primary health care system in the country, suboptimal service delivery at health facilities, gaps in health workers skills as well as weaknesses in data collection and analysis have been identified as some of the challenges that must be overcome

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to achieve acceptable immunization coverage[9-11].

Determination of the degree of client satisfaction will provide evidence as to whether or not the right immunization services are being provided at the right time, in the right place, in the right way and by the right personnel. This will provide baseline data for assessment of quality improvement strategies which will culminate in an increase in immunization coverage in the country.

This study set out to determine the level of client satisfaction with childhood immunization services and to identify causes of client dissatisfaction in primary health facilities in Calabar, Cross River State of Nigeria.

2. Materials and methods

This was a cross-sectional descriptive study of the quality of immunization services in primary health facility (PHF) in Calabar. The study targeted clients in all the PHF in the city. It involved caregivers whose children utilized immunisation services at the facilities/centres during the study period. Information about the PHFs was obtained from the State Ministry of Health and the Local Government Area (LGA) Health Authorities.

The sample size was calculated using the formula for single proportion $N= Z\times p \times(1-p)/2d$, where Z is the standard normal deviate, usually setting at 1.96, which corresponds to a confidence level of 95%; d is the degree of accuracy desired (0.05 for this study); while p is the proportion of clients that receive quality service. In order to achieve the maximum sample size for this study, a proportion of 50% was assumed. Thus, the sample size was: $N=1.962\times0.5\times(1-0.5)/(0.05\times2)=384$. Allowing for a non-response rate of 10%, the adjusted sample size was 422.4 or approximately 425. This sample size was therefore used in the study.

A semi-structured questionnaire was administered on the 425 caregivers who agreed to respond to the questionnaire, using systemic random sampling method. The questionnaire items focused on reception given to caregivers, attitude of staff at the centres, waiting time before service was provided, length of time spent by the staff with child, cleanliness of the environment and additional services like treatment for malaria. Other areas included respect of caregivers´ rights to information, access, safety, confidentiality, dignity, comfort and freedom of speech/self expression. The data were entered into and analysed using Epi-Info software version 2002. Comparisons and associations were determined using relevant statistical tests, such as Chi-square tests for group proportions.

3. Results

Four hundred and two caregivers responded to the questionnaire giving a response rate of 94.6%. It showed that 331 (82.4%) caregivers who participated in this study were parents of the children with immunisation. 69 (17.1%) were siblings of the children while two of the respondents (0.5%) were guardians. Only 47 (11.7%) caregivers were males while the remaining 355 (88.3%) were females. Sixty (14.9%) of the caregivers were housewives, 55 (13.8%) were farmers, 112 (27.9%) were traders, 70 (17.7%) were civil servants while 38 (9.6%) were self-employed and 67 (16.7%) were applicants.

Concerning educational attainment, 61 (15.2%) of the respondents had no formal education, 96 (23.9%) had only primary school education, 212 (52.7%) had secondary school education while 33 (8.2%) had tertiary education.

The result showed that 105 (26.1%) clients were very satisfied with the reception by the health care providers, 92 (22.9%) were satisfied, while 205 (51%) were not satisfied. Concerning the attitude of staff, 50 (12.4%) clients were very satisfied, 102 (25.4%) were satisfied, while 250 (62.2%) were not satisfied.

Seventy-four (18.4%) clients were very satisfied with the waiting time, 123 (30.6%) were satisfied while 205 (51%) were not satisfied. Seven (1.7%) clients were very satisfied with the length of time the health care provider spent with the child during service delivery, 143 (35.6%) were satisfied, while 252 (62.7%) were not satisfied.

One hundred and ten (27.4%) clients were very satisfied with the cleanliness of the facility environment, 124 (30.8%) were satisfied, while 168 (41.8%) were not satisfied. One hundred and eighty two (45.3%) clients were very satisfied with additional services like treatment for malaria while 88 (21.9%) were satisfied and 132 (32.8%) were not satisfied. Two hundred and forty six (61.2%) clients were not aware of their rights while at the healthcare centre, while 156 (38.8%) were aware of their rights as clients in the health facility. Only 26 (16.6%) respondents were very satisfied with the way their right to information was respected, 38 (24.4%) were satisfied, while 92 (59.0%) were not satisfied. Sixty eight (43.6%) of respondents were very satisfied that their right to access services was respected, 59 (37.8%) were satisified while 18.6% were not satisfied. 76 (48.7%) were very satisfied with their right to safety, 42 (26.9%) were satisfied and 38(24.4%) were insatisified. In terms of respect for their right to dignity, only 52 (33.3%) of respondents were satisfied and the rest (63.7%) were not satisfied. One hundred and four (60.9%) of respondents were not satisfied with the comfort of the service delivery environment, 40 (25.6%) were satisfied, while 21(13.5%) of respondents were very satisfied. Only 10 (6.4%) respondents felt very satisfied with that their right to freedom of speech/self expression were respected by caregivers, while 102 (65.4%) were not. Sixty (38.5%) clients were very satisfied that their right to confidentiality was respected while 55 (35.3%) were satisfied and 41 (26.2%) were not satisfied.

In 79% of the facilities, the average waiting time was longer than 30 minutes while it was shorter than 30 minutes in only 21% of facilities. Clients spent more time waiting for services than the time spent receiving services. In 68.4% of the facilities clients spent less than 30 minutes with the health care provider, while in 31.6% facilities the reverse

was the case.

4. Discussion

In this study less than half of the clients (43.6%) were very satisfied with access to services. This proportion is low compared to that found in a study in Egypt where 83% to 94% of clients were satisfied with access to vaccination services provided in the Primary Health Care system[12]. One explanation for this figure may be related to the nature of the occupation of caregivers in this locality. Majority of the caregivers (27.9%) were traders which require of them to leave their houses early in the morning and return late in the evening, by which time the facilities would have been closed. Most of the facilities also do not provide immunisation services over the weekends during which time some of the caregivers who are civil servants would have been free to avail their children of vaccination services. It may be necessary to adjust the working time in each locality to suit their peculiarity.

Almost two thirds of the respondents were dissatisfied with the level of information given to them by health care workers including information on Adverse Events following Immunization (AEFI). It is generally thought by many lower cadre health care providers in Nigeria that if clients are told so much about AEFI, they would be discouraged and would no longer avail their children of the vaccination services. Although this fear may be genuine, it is necessary for clients to have this information so that if any adverse events occur, they would know what to do or where to seek help. It has been documented that clients were more satisfied with immunization services when the health care providers informed them about adverse events following immunization[13]. It is also important that the working environment of health care workers be streamlined to make for easier flow of clients thus saving time and consequently creating more time for client health education and interaction with heath care givers[7].

Close to two thirds of the respondents felt that health care providers did not treat them with dignity while at the immunization centre, they were not comfortable or allowed to express themselves and generally not satisfied with the attitude of the health care workers. This is similar to findings in an Indian study where many mothers complained that during the vaccination visits, health workers did or said something that made them feel uncomfortable and this caused them to discontinue utilizing immunisation services[14]. This is also worsened by poor comfort measures at the centre including absence or failure of power supply for the fans, inadequate seats for the clients in the waiting room as well as staff poor interpersonal relationship with the clients. Some of these may be attributable to the general decay in public utilities, pressure of work on the staff due to shortage of qualified health workers, overcrowding of the clinics due to inadequate waiting space[7].

The intra–cluster correlation within the different aspects of clients right was 0.473 (95% CI= 0.378, 0.512) and P<0.05 showing that there was statistically significant difference in client satisfaction with the extent to which their rights were respected by health care providers at the different PHF.

In this study, less than half (38.8%) of the caregivers were aware that as clients utilizing immunization services they had rights and privileges. This percentage was low compared with the 56% recorded in a study in Lithuania and the 86% found by the Scottish Consumer Council[15,16].

This may be attributable to low literacy level and poor public civic awareness that is general in Nigeria. It may also be due to the attitude of health care providers as suggested by the respondents when in their response to a question.

Long waiting time is a known major impediment to client satisfaction and consequently utilization of immunization services. The study found that most clients spent longer time waiting for service, while spending a brief moment with the health care providers. The average waiting time was greater than 30 minute in most centres (χ^2 =5.45, P=0.002 6), and this difference was statistically significant. A study in India found that waiting time of more than 30 minutes significantly lowered patient satisfaction[18]. This is similar to findings in a study in the Dominican Republic where 69% of mothers gave long waiting time as the reason for not immunizing their children[18]. In a depressed economy like Nigeria´s, caregivers are likely to become impatient if they have to wait for long before they access health care, this taking them away from their economic pursuit. In two facilities, some caregivers were actually seen leaving in frustration after waiting for over an hour for vaccines to be brought from the local government (LG) cold store.

Another aspect of care that clients were dissatisfied with was length of time spent with the children by service providers. This was the pattern seen in this study which showed that 62.2% of them were dissatisfied with the attitude of staff. This is low compared with the 77% of clients in Burkina Faso who were satisfied with the attitude of health care providers[19]. Medical workers must be trained to understand the right of clients to information, their dignity and quality care including time to discuss their concerns with the health care provider. These have been found to have effect on client satisfaction and subsequent use of such services including recommending them to other potential users[20]. This is also clearly seen in a quality of care study in Zambia, where it was found that lack of time to discuss clients´ health problems constituted a major cause of dissatisfaction[21]. Similarly, a study in Taiwan found that clients would recommend a clinic to other clients because the health care providers made out enough time to discuss client´s health problems with them[22].

In this study, as many as 41.8% of clients expressed dissatisfaction with the level of cleanliness of the facilities. Environmental cleanliness is known to contribute to quality service delivery and consequently clients´ satisfaction. This was found to be true in an Indian study where the workings of an Immunization Clinic were streamlined with consequent improvement in cleanliness and client satisfactionp[7]. The

intra-cluster correlation within the different aspects of immunization services was 0.539 (95% CI=0.498, 0.637) (P<0.05) showing a statistically significant difference in client satisfaction with aspects of immunization services.

This study concludes that client satisfaction with immunisation service provision in Calabar is low due to factors like poor attitude of health care providers, long waiting time and inadequate respect for the rights of clients. It is recommended that training and retraining of immunization service providers should be undertaken regularly which must include attitudinal change along with evaluation of services through feedback questionnaires. More health staff should be employed to reduce the pressure on the few and improvements be made to current infrastructure to ensure patient comfort while at the immunization centres. Public health education must be intensified through Information, Education and Communication (IEC) materials, mass media, awareness campaigns. Traditional rulers who are the custodians of the customs and beliefs of communities must also be brought onboard for the desired results to be achieved with immunization services.

There is need for a study focusing on those who do not utilize immunization services. This will give a better insight into how the Nigerian population views, perceives and are satisfied with immunization services at the primary healthcare level and consequently the Nigerian immunization programme.

Conflict of interest statement

We declare that we have no conflict of interest.

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