

## Utilization of primary health care facilities: Lessons from a rural community in southwest Nigeria.

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### ABSTRACT

**Background:** This study assessed service/organisational factors and clients' perceptions that influenced utilisation of Primary Health Care (PHC) facilities in a rural community in Nigeria.

**Method:** A cross-sectional household survey in the community as well as key-informant interviews of opinion leaders and health care providers and participant observations of health facilities and utilisation pattern was used to collect data.

**Results:** Forty-four percent of respondents to the survey who were ill in the preceding six months visited a PHC facility for treatment, while others relied on self-medication/self-treatment. Education was positively associated with utilisation of PHC services ( $P < 0.05$ ). Maternal and child health (45.4%), prompt attention (23.0%), and appropriate outpatient (20.5%) services attracted respondents to use PHC services. Poor education about when to seek care, poverty, perceived high cost of PHC services, lack of drugs and basic laboratory services, and a regular physician on site at the facility were identified as barriers to utilisation. **Conclusion:** We conclude that community perceptions of poor quality and inadequacy of available services was responsible for low use of PHC services.

**Keywords:** Utilisation, primary, healthcare, services, rural, Nigeria

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### INTRODUCTION

Utilisation of health care services refers to the extent and pattern of use of health services.<sup>1</sup> Poor/under-utilisation of Primary Health Care (PHC) services in rural communities in Nigeria is a major problem militating against the performance of PHC in improving the health of the people.<sup>2,3</sup>

The socio-economic context in which most PHC facilities function has been identified as a significant determinant of their performance, and this affects both their patronage significantly.<sup>4,5</sup> A previous report has argued that "while individual's characteristics such as 'neglectfulness', 'irresponsibility', 'distrust' and 'ignorance' have often been used by policy makers to blame citizens for the under-utilisation of PHC services in rural areas, blaming 'unreachable', 'the indigent', or 'unmotivated clients' does not take one very far, as this will not uncover the root causes of failure".<sup>1</sup>

The forms in which PHC services are actually delivered and the appropriateness of these to the value system and normative behaviour of the population in rural communities has been given little attention. In the almost three decades since the Alma-Ata Declaration<sup>6</sup> the Nigerian health care system has adopted the principles on PHC in name and structure with infrastructures established all over the country and devolution of PHC implementation to the local government system, but there has been little impact on the health status of Nigerians, especially the rural dwellers. For example, "the 2003 NDHS survey estimated infant mortality to be 100 per 1,000 live birth for the 1999-2003 period, which is higher than the 1990 and 1999 NDHS survey estimate".<sup>7</sup> Although, this was attributed to better data quality in the 2003 survey; the situation still suggests that the implementation PHC services have had little effect on the health status indices.

Primary health care should provide general health services of preventive, curative, promotive and rehabilitative nature to the population and should be the entry point to the health care system; it should also provide comprehensive and integrated services through linkage with the other levels of care<sup>6</sup>. However, the scope of this study was limited to outpatient visits for treatment of local endemic conditions like malaria, diarrhoea diseases, respiratory tract infection etc; maternity, and immunization services.

This study examined utilisation of PHC services as well as the barriers to its utilisation in Imesi-Ile, a rural community in southwest Nigeria.

## **MATERIALS AND METHODS**

This study is primarily a descriptive cross-sectional study using both quantitative and qualitative methods. The quantitative method involved a community survey of Imesi-Ile. Qualitative methods included participant observation of use of health services and in-depth interview of key officials of the health facilities and community leaders of Imesi-Ile. The summary result of the qualitative methods is presented as a prose after the quantitative results and is used to corroborate the results of the quantitative methods. This study was conducted between August, 2002 and April, 2003, a period of nine months i.e. 270 days spanning through two major economic periods in Nigeria- Christmas, New Year, Easter celebrations, then period of school resumption.

We examined Imesi-Ile, a rural community in Osun State, southwest Nigeria, lying approximately 30 miles by road to the closest major urban area, Ilesa. It is largely agrarian and has a relatively elderly population. The projected population is 13,732 based on the 1990 census; the people predominantly speak the Yoruba language. The main health facilities are 1) the rural comprehensive health centre (RCHC), run by the Obafemi Awolowo University Teaching Hospitals Complex, (OAUTHC, located in Ile-Ife); 2) the Maternity Health Centre (MHC), run by the local government authority in Obokun; and 3) a private clinic in Imesi-Ile. There are three on-site medicine shops scattered around the community with several drug hawkers. Historically and interestingly, David Morley, the renowned paediatrician and child health expert published a book 'Paediatric priorities in developing countries'<sup>8</sup> which was based on his MCH work in Imesi-Ile community in the late 1960s and early 1970s.

We conducted a community survey on a sample of 350 persons using 35 percent estimated rural population who use PHC services<sup>9</sup> to estimate the required sample size using the formula for estimating a proportion.<sup>10</sup> We enumerated 90 compounds (households) from the community survey (This is the total number of households in Imesi-Ile). We interviewed all individuals aged 18 years and above and usually resident in Imesi-Ile for at least the last six months in each household.

Adult population of Imesi-Ile who are the target population who were at home at the time of survey were interviewed in person by the lead author or one other trained

interviewer. Three to four members of each of the 90 households were interviewed, although this has implications on clustering effect; this is one of the limitations of this study. About 50 percent of the population live in farm settlements outside the main community that are not easily accessible.

Information sought included respondents' demographic and socio-economic characteristics, and information on, use of, and barriers to utilisation of PHC services. Data collected were scrutinized for data quality and management and were analysed using Epi-Info™.

Participant observation of community members and service provision was conducted in the three health facilities in Imesi-Ile (Rural Comprehensive Health Center (RCHC), Maternity Health Center (MHC) and Fam Hospital [a private clinic]) and other health care providers in the community (e.g., medicine shops, drug hawkers, herbalists, mission homes, etc.). A participant observation checklist was used to structure the observational data. The following variables were observed; i) type of health care facilities and providers, ii) type of infrastructure/equipment in the facilities iii) fees charged, and v) clientele/type of people who patronise them. Pattern of utilisation was also observed.

In-depth interviews were conducted with five key officials of the health facilities (one doctor, two nurses from RCHC, and two Community Health Extension Workers from the maternity health center, one doctor from the private clinic) and with eight community leaders of Imesi-Ile (secretary, Imesi-Ile progressive union, chairman, PHC implementation committee, two traditional, one market and two religious leaders). A detailed interviewer's guide was used for the interview and was aimed at identifying service factors (cost of services, nearness of services, patient's waiting time, avenues for outreach services or home visit, nature of referral services, community participation in management and delivery of services) that might influence utilisation. Selection of subjects for the interviews was purposive and non-random. Detailed content analysis of the participant observation and in-depth interviews was undertaken to identify major themes and most mentioned factors influencing use of health services in the community.

## **ETHICS**

Each of the respondents was given information on the scope of the study and consent obtained before

administering the questionnaire; and the confidentiality of their response was assured. Ethical approval for the study was obtained from the ethical review committee of Obafemi Awolowo University, Ile-Ife.

**RESULTS**

The respondents were predominantly females (76.9%), married (75.1%), had primary education or more (78.5%), and between 20-39 years of age (63.7%) (Table I). Majority of respondents (63.1%) reported using public PHC facilities frequently, while a sizeable (21.1%) proportion also used drug shops/hawkers. About one-third of respondents who utilised PHC services reported utilising the services regularly (Table II).

Respondents reported that cost of health care services was most often borne either by the husband (40.3%) or jointly with the wife (25.1%), while the husband and the wife (40.0%) most often took health care decisions jointly, but it was reported that the husband (23.4%) or wife (21.1%) might take health care decisions independently of each other.

Table II also shows that about 33 % of respondents reported that cost of health care services was a major constraint to the utilisation of PHC services in the community and 30 % of respondents reported 'waiting time' was a constraint to PHC service utilisation. About 45 % of respondents reported that they took ill in the six months preceding the survey, of which more than half (56.3%) of them who reported an illness that required seeking services did not attend any PHC facility. The majority of those taken ill (69.8%) engaged in self-medication/self-treatment.

**Table I: Distribution of respondents by demographic and socio-economic characteristics.**

N=350

| Age groups (years)                      | Freq. | (%)    |
|---|-------|--------|
| < 19                                    | 34    | (9.7)  |
| 20 - 29                                 | 109   | (31.1) |
| 30 - 39                                 | 114   | (32.6) |
| 40 - 49                                 | 22    | (6.3)  |
| ≥ 50                                    | 49    | (20.3) |
| <b>Sex</b>                              |       |        |
| Female                                  | 269   | (76.9) |
| Male                                    | 81    | (23.1) |
| <b>Marital Status</b>                   |       |        |
| Married                                 | 263   | (75.1) |
| Single                                  | 62    | (17.7) |
| Widowed                                 | 25    | (7.1)  |
| <b>Number of Children</b>               |       |        |
| None                                    | 45    | (12.9) |
| 1 - 4                                   | 203   | (58.0) |
| 5 - 8                                   | 97    | (27.7) |
| ≥ 9                                     | 5     | (1.4)  |
| <b>Educational Attainment</b>           |       |        |
| No formal education                     | 79    | (22.5) |
| Primary education                       | 107   | (30.6) |
| Secondary education                     | 108   | (30.9) |
| Tertiary Education                      | 56    | (16.0) |
| <b>Occupation</b>                       |       |        |
| Civil servant                           | 25    | (7.2)  |
| Trading                                 | 103   | (29.4) |
| Artisan                                 | 77    | (22.0) |
| Farming                                 | 103   | (29.4) |
| Unemployed                              | 42    | (12.0) |
| <b>Respondents access to news media</b> |       |        |
| <b>Own/listen to radio set</b>          |       |        |
| Yes                                     | 299   | (85.4) |
| <b>Own/watch television set</b>         |       |        |
| Yes                                     | 242   | (69.1) |
| <b>Read newspapers</b>                  |       |        |
| Yes                                     | 89    | (25.4) |

**Table II: Illness and health seeking behaviour of respondents**

| Variable   | Freq. | (%)    |
|--|-------|--------|
| <b>Most frequently used healthcare provider</b>                                |       |        |
| Public PHC (RCHC, Maternity Health Centre)                                     | 221   | (63.1) |
| Private PHC (Fam Hospital)   | 31    | (8.9)  |
| Drug hawkers, drug stores/shop   | 74    | (21.1) |
| Church / mission   | 10    | (2.9)  |
| Herbalist  | 14    | (4.0)  |
| <b>Frequency of utilisation of PHC services</b>                                |       |        |
| Very often   | 134   | (38.3) |
| Often  | 130   | (37.1) |
| Rarely/Occasionally  | 86    | (24.6) |
| <b>Who pay for PHC services?</b>   |       |        |
| Children   | 19    | (5.4)  |
| Husband (man)  | 141   | (40.3) |
| Jointly  | 88    | (25.1) |
| Parents  | 42    | (12.0) |
| Wife (women)   | 56    | (16.0) |
| Others   | 4     | (1.1)  |
| <b>Who take decision on health care matter in the household?</b>               |       |        |
| Children   | 18    | (5.2)  |
| Husband (men)  | 82    | (23.4) |
| Jointly  | 140   | (40.0) |
| Parent   | 26    | (7.4)  |
| Wife (women)   | 74    | (21.1) |
| Others   | 10    | (2.9)  |
| <b>Constraints to seeking PHC Services</b>                                     |       |        |
| Cost of services   | 116   | (33.1) |
| Distance of health facility  | 9     | (2.6)  |
| Shortage of supplies/ drugs in health facility                                 | 21    | (6.0)  |
| Lack of transport  | 5     | (1.4)  |
| Others   | 10    | (2.9)  |
| None   | 189   | (54.0) |
| <b>How often have you been ill in last six months?</b>                         |       |        |
| 1-2 times  | 126   | (36.0) |
| 2-3 times  | 24    | (6.9)  |
| 5-6 times  | 8     | (2.3)  |
| None   | 192   | (54.9) |
| <b>How many of those times that you were ill did you visit a PHC facility?</b> |       |        |
| All the time   | 7     | (4.4)  |
| Some of the time   | 89    | (56.3) |
| None   |       |        |
| <b>Reasons for not seeking PHC services</b>                                    |       |        |
| Did not consider illness serious enough  | 5     | (5.6)  |
| Distance from health care facilities   | 6     | (6.7)  |
| Illness happened at night  | 6     | (6.7)  |

Education was strongly associated with the utilisation of PHC services (Respondents who reported using the services of PHC facilities in Imesi-Ife). Nineteen percent of respondents with no formal education reported that they did not utilise PHC services, compared to only 9.3% of respondents with primary education, 4.6% of respondents with secondary education, and 3.6% with tertiary education (p<0.05) (Table III). Occupation was not associated with the utilisation of PHC services (Table IV).

**Table III: Educational Attainment and respondents use of PHC services.**

| Variable                      | Utilise service Freq (%) | Do not utilise Freq (%) | Statistical Remarks  |
|-------------------------------|--------------------------|-------------------------|--|
| <b>n = 350</b>                |                          |                         |  |
| <b>Educational attainment</b> |                          |                         |  |
| No formal education           | 64 (81.0)                | 5 (19.0)                | <b>Likelihood-ratio Chi-Square = 13.01 p-value = 0.004 df = 3 Stat. sig.</b> |
| Primary education             | 97 (90.7)                | 10 (9.3)                |  |
| Secondary education           | 103 (95.4)               | 5 (4.6)                 |  |
| Tertiary Education            | 54 (96.4)                | 2 (3.6)                 |  |
| <b>n = 350</b>                |                          |                         |  |

**Table IV: Occupation status and respondents use of PHC services**

| Variable       | Utilise service Freq (%) | Do not utilise Freq (%) | Statistical Remarks   |
|----------------|--------------------------|-------------------------|---|
| Occupation     |                          |                         | Likelihood-ratio<br>Chi-Square = 1.30<br>p-value = 0.72<br>df = 3<br>Not stat. sig. |
| Artisans       | 70 (90.9)                | 7 (9.1)                 |   |
| Farming        | 93 (90.3)                | 10 (9.7)                |   |
| Trading        | 92 (89.3)                | 11 (10.7)               |   |
| Others         | 64 (94.1)                | 4 (5.9)                 |   |
| <i>n</i> = 350 |                          |                         |   |

**Table V: Respondents' children immunisation status**

| Variable  | Freq. (%)  |
|---|------------|
| <b>Proportion of eligible children under 2 years who took specific vaccines.</b>                          |            |
| Vaccinated with BGG & OPV <sub>0</sub><br><i>n</i> = 198  | 187 (94.4) |
| 3 <sup>rd</sup> doses of DPT and OPV<br><i>n</i> = 172  | 119 (69.2) |
| <b>Children under 2 years who completed their immunisation schedule as at when due.</b><br><i>n</i> = 117 | 65 (55.5)  |
| <b>Presence of immunisation/growth monitoring card.</b><br><i>n</i> = 198                                 | 157 (79.3) |

**Table VI: Service/organisational factors influencing pattern of utilisation of services at the RCHC, Imesi-Ile.**

| Variable   | Freq. (%)  |
|--|------------|
| <b>What services/factor that attracts you to use RCHC, Imesi-Ile?</b>          |            |
| Maternal and child health services   | 144 (45.4) |
| Prompt attention/ treatment  | 73 (23.0)  |
| Outpatient services  | 65 (20.5)  |
| Comprehensive nature of services   | 5 (1.6)    |
| Reasonable cost of treatment   | 5 (1.6)    |
| Genuine drugs  | 9 (2.8)    |
| Good care  | 6 (1.9)    |
| Others   | 10 (3.2)   |
| <b>What other factors beside services attracts you to use RCHC, Imesi-Ile?</b> | 121 (38.2) |
| Well trained health personnel  | 72 (22.7)  |
| Positive attitude of staff   | 55 (17.2)  |
| Availability of drugs and vaccines   | 54 (17.0)  |
| Comprehensive services   | 11 (3.5)   |
| Comm. ownership of services/centre   | 20 (6.3)   |
| Continuity of care   | 12 (3.8)   |
| Others   |            |
| <b>Level of satisfaction with services at the RCHC</b>                         |            |
| Strongly satisfied   | 269 (84.9) |
| Satisfied  | 39 (12.3)  |
| Not satisfied  | 9 (2.8)    |

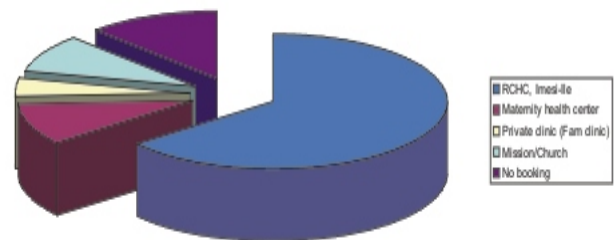
The immunisation status of respondents' children two years and below is shown in Table V (the study was not limited to individual adult illness care seeking only). Almost all (one hundred and ninety-eight) children (94.4%) who were eligible for BCG in Imesi-Ile had received it. Of the 172 children who were eligible for the 3<sup>rd</sup> doses of DPT and OPV only 69% of them had the

vaccines, while 55% of 117 eligible children had completed their immunisations as at when due. '[Insert table V here]'

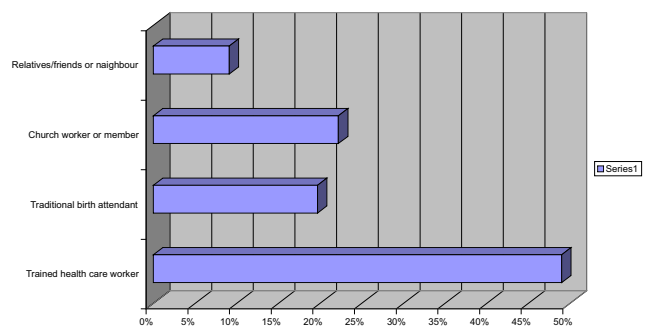
For respondents who utilise the services of the RCHC, Imesi-Ile, about 85% reported that they were satisfied with services provided at the facility. Maternal and child health care services were the most frequently reported service factor that attract respondents (45.4%) (Table VI). Attendance by highly skilled health care worker (doctor or a senior nurse) is the most frequently reported organisational factors that influenced respondents' use of the services at the RCHC (38.2%), while positive attitude of health care worker (22.7%), availability of drugs and vaccines (17.2%), and comprehensiveness of services (17.0%) were other organisational factors reported. '[Insert table VI about here]'

Utilisation of maternity services by respondents (mothers of children aged two years and below who reported these events) is shown in figure I & II. Although the majority of the 198 respondents (mothers who delivered in the last two years) interviewed, 78.7% of them reported that they booked for antenatal care (ANC) at a health care facility, only 49% mothers reported to have delivered under the supervision of a trained health care worker (At RCHC, MHC or FAM clinic).

**Figure I: Respondents' place of booking for ANC during the last pregnancy**



**Figure II: Assistance at respondents' last delivery**





Below we summarise the results of the key informant interview and participant observation regarding factors associated with utilisation of PHC services in Imesi-Ile. The most frequently mentioned factors that influenced utilisation were poor health education, unavailability of drugs, high cost of services, inadequate referral services, and unavailability of providers (particularly a physician) and other services. We have organised this summary by describing the major themes in descending order of the frequency that they were mentioned.

Thirteen of the 14 key informants commented that most people were ignorant about the activities and services provided at PHC facilities in the community. They suggested improving health education through outreach programs about health services available in the community. Respondents agreed with the survey data that the most educated individuals in the community tended to use PHC facilities more than those with lower education who often utilise drug stores or drug hawkers and other non-orthodox health care providers. Eleven key informants also commented that there is need for resuscitation of outreach services and home visits; and where they exist; they suggested increasing the frequencies of such activities. They suggested outreach services in churches, mosques, and market place; during town hall meetings, union meetings and other community based organisations meetings.

Similarly, 13 key informants commented that drugs and supplies need to be made available at all times in PHC facilities. They reported that people saw unavailability of drugs as an indicator that a PHC facility cannot meet their health care needs and is of poor quality. They commented that giving prescriptions for patient to use to buy drugs outside the PHC facility also discouraged PHC utilisation. Indeed, it encouraged people to get their drugs from a drug store in the first place, rather than using the PHC services. This often resulted in self-treatment and abuse of drugs.

Twelve key informants commented that most of the people living in the community are subsistence farmers and are poor; especially during certain seasons related to planting and harvest of food crops. The majority of these farmers cannot afford the cost of services in PHC facilities. For this reason, most of them sought health care by going to drug stores or by patronize drug hawkers to purchase drugs.

Twelve key informants commented that poor referral services was a major constraint to the use of PHC

services in the community; and that poor quality of services at PHC facilities was responsible for the frequent number of referrals. They further commented that, even at the referral centres, services were also of low quality. Ten key informants commented that people wanted to see a doctor for treatment for their health condition and that, if they did not think they would be seen by a doctor, they would not visit a PHC facility. Unavailability of doctors was seen as an indicator of poor quality of health services and discouraged utilisation. Furthermore, seven key informants commented that the availability of basic laboratory, x-ray and ultrasound services at PHC facilities greatly enhanced the use of PHC services. They saw their availability as a measure of quality of services.

Two-thirds of key informants commented that the community members are not active in the management of PHC services in the community and that the Imesi-Ile PHC management committee needed to be more effective and accountable to the community. They believed that their improved effectiveness would lead to increased community mobilization and health education activities, which in turn, would lead to increase utilisation of the PHC facilities.

One-quarter of key informants commented that prompt attention by health care workers and waiting time is an important factor affecting utilisation of PHC facility. Only one-in-five key informants commented that incessant strike by health workers or the attitudes of health worker in the community were major factor affecting the use of PHC services. There was only one key informant who commented that the location (i.e., proximity) of PHC facility is a factor associated with utilisation of PHC services, reflecting the fact that the community served by the PHC facilities is geographically compact.

## DISCUSSION

We have found that while many people utilise PHC services in the Imesi-Ile community, a large proportion do not. Those non-users patronise alternative health care providers or engage in self-treatment/medication. This is in support of other reports on utilisation of PHC in Nigeria.<sup>9, 11</sup> From the result of this study, this appears to be largely the result of illiteracy, as there is a positive association between education and utilisation of PHC services in this study. As has been shown in other locales, persons with lower level of education tend to utilise PHC services less often compared to those with higher education.<sup>12-15</sup>

Lack of health awareness and lack of, or poor, outreach services by PHC services providers might also be factors having direct bearing for this observation in this study. For example, in a study done in South Africa, it was observed that rural women have less information about the services on which to base their choice.<sup>16</sup>

In this study, unavailability of drugs, a physician, and basic laboratory services in a PHC facility was perceived by potential users as an indicator of poor quality health services. Furthermore, as found in other study,<sup>17</sup> this often necessitated to frequent referrals, which, as indicated by some of the key informants also discouraged utilisation of PHC services. People viewed going to a PHC facility as going to consult a doctor and getting drugs; if for any reason, any of these two factors are not available or limited, the people saw it as a waste of time seeking health care services in that health facility. Unfortunately, many PHC facilities in Nigeria are characterized by absence of these two vital inputs in the delivery of PHC services.<sup>11,18</sup> It has been argued by some policy makers that PHC services in Nigeria can be operated effectively without a doctor (physician), but the findings of this study strongly suggest that people still attach a lot of significance to seeing a doctor in the course of getting treatment for their ailment.<sup>19</sup> This finding should challenge health care policy makers to revisit their thinking about the human resource needs for PHC services.

Cost of services and availability of drugs are very important factor that influence the utilisation of PHC services, particularly in rural areas.<sup>20-22</sup> Our survey results showed that about one-third of respondents reported cost as a constraint to utilisation of PHC services; and this was corroborated by the key informants' interview.

There was a consensus about the fact that reducing cost of services and subsidizing the prices of drugs will greatly improve utilisation of health services. Studies have suggested that majority of people in rural areas will use public health facilities, particular PHC facilities if hindrance of economic and organizational access is removed.<sup>11,23</sup> However, in contrast, in a study on health care utilisation pattern in developing countries, it was observed that 'in the choice of adult outpatient care, case price does not have a significant effect on the decision to use modern health care services'. Realistically, however, for other socio-economic reasons, individuals are still likely to patronize non-orthodox health care providers.<sup>24</sup> In this study, over 80 percent of pregnant mothers reported booking for antenatal care, but less 50 percent

delivered with the assistance of trained health care professionals; others delivered either at home or in a mission homes (delivery homes set-up by churches). This is in agreement with a recent government commissioned study that reported that sizeable proportion of pregnant mothers who book for antenatal care in healthcare facilities in Nigeria end up delivering without the supervision of a trained health professional.<sup>25</sup>

A number of service and organisational factors were found to attract respondents to use PHC services. The most important ones are the availability of maternal and child health services, drugs, well trained and competent health care personnel, and positive attitude of staff. Others included the perception of comprehensive of services and prompt attention. The report of a study done in Egypt also identified many of these factors as encouraging utilisation of PHC services.<sup>26</sup> It is interesting that only 30 percent of respondents in the survey result and one-quarter (25%) of key informants reported prolong waiting time as a constraint to utilisation of PHC services. This might suggest that people are willing to wait to get health services, if they think they can get quality services in a PHC facility.

The identified consequences of not using PHC services appear to be self-medication/treatment and patronage of alternative health care providers as shown from the findings of this study, since over two-third of respondents reported taking self medication as a reason for not seeking PHC services. This can be explained by the fact that people perceive these alternative health care providers as no worse than going to where there are no services. Self medication/treatment reported in this study was observed to be a cost-saving strategy and/or a way of avoiding other problems of accessing PHC services. Several studies have shown that inability to pay for health services is a major factor hindering the utilisation of PHC services.<sup>27-31</sup> The local population found it easier and cheaper to walk to a drug store and purchase drugs, rather than visit a PHC facility that will require payment for registration before being attended to and later pay for drug treatment, which often raise the cost of treatment significantly. This may be viewed as not appropriate or safe, but several studies<sup>26,30,32</sup> have found it as a motivating factor in patronising this type of health care providers. Consequently, in a course of a minor ailment, if appropriate treatment is not sought, this can lead to severe morbid or life threatening conditions contributing to the high morbidity and mortality in this environment.

Perceived quality was assessed through the in-depth interviews, although not quantitatively measured in this study; this may be one of the principal determining factors of utilisation of PHC services.<sup>33-36</sup> Several studies have found an association between a general perceived lack of quality and non-utilisation of health services.<sup>37-39</sup> Furthermore, the literature documents that utilisation is linked to people's perception of a facility's reputation<sup>24</sup>, availability of drugs,<sup>33,35</sup> payment procedure<sup>40</sup>, waiting time,<sup>41,42</sup> and technical competence of health professionals.<sup>38, 43-45</sup> These were variously supported by findings from this study. In a study on community perception of primary health care services in Guinea, Haddad, Fournier et al<sup>35</sup> observed that 'some of the dimensions of quality highlighted above are also congruent with those that health professionals consider, implicitly or explicitly, when they are called upon to judge the quality of PHC services'.

Although this paper applied primarily to Imesi-Ile and its environs, however, same issues are likely to be relevant to other PHC facilities throughout Nigeria<sup>46-49</sup> and, indeed, other developing countries.<sup>50-52</sup> The implications is that if PHC services are inadequate, people will avoid them, then they will not be utilised and consequently government may tend not to support improvement in quality of services they provide and this will lead to further lower utilisation. Government must infuse resources 'prime the pump' to improve services provided by PHC facilities to enhance their utilisation. The consequences of not doing this are likely to be that health systems will deteriorate further, leading to further deterioration of the population health status.

Finally, there is a need to do further research, to see if this cycle can be reversed by government support. Furthermore, effective delivery of health care services in any community, either rural or urban, needs objective and systematic evaluation taking into account the local cultural and demographic characteristics, health problems and community resource use patterns.

## CONCLUSION

We conclude that community perceptions of the poor quality and inadequacy of available services which were in part based on actual experience was responsible for low use of PHC services. Poor utilisation in turn generates a downward cycle of government disinterest, poor quality of care, and loss of community support, which further causes, declining utilisation, thus perpetuating the cycle. Infusion of resources, including staff physicians, adequate supplies of drugs, and basic laboratory services, may arrest and reverse this cycle. Increased utilisation of PHC services is likely to have a direct effect on the health status of rural residents and may provide community resources for health and preventive educational interventions. We recommend that further studies will be needed that is broader in scope and extent and will involve comparison of rural and urban communities as well as to compare perceived and actuality quality of PHC services in terms of availability of appropriate complements of health care workforce, medicine and equipments among others.

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