Original Article

Operations and challenges of performance-based financing among health workers at health facilities in Nasarawa State Nigeria

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Abstract

Background
Performance-based financing (PBF) is the transfer of the financial and material goods required for taking measurable actions or achieving a predetermined performance target and is an innovative method targeted at strengthening weak health systems in low- and medium-income countries.

Methods
A descriptive, cross-sectional survey was conducted on a representative sample of health workers in public primary and secondary health facilities that are implementing PBF in Nasarawa State using both qualitative (key informant interviews) and quantitative methods (structured questionnaires). 315 respondents were selected using a multistage sampling technique. In addition, eight key informants (purposively selected from the selected healthcare institutions) were interviewed.

Results
Of the respondents, 159 from the primary health facility submitted that PBF is effective, 41 described the method as poor while 101 saw the method as being good. The interviewed key informants noted that PBF has made a positive impact in the case of infrastructure, staff motivation and, consequently, service quality. Major challenges identified were with implementation of PBF due to poor infrastructure, inadequate manpower, poor funding and delays in the payment of subsidies to health facilities.

Conclusion
Despite the plethora of challenges militating against the effective deployment of PBF, the method has made a significant positive impact on the state of the health care facilities in Nasarawa state. We recommend adequate funding, regular manpower training and development for enhancing the state of the healthcare facilities in the state.
Introduction
Performance is the accomplishment of a given task measured against preset standards of accuracy, completeness, cost and speed. In a contract, performance is deemed to be the fulfillment of an obligation in a manner that releases the performer from liabilities under the contract [1]. The goal of most organizations is to encourage high performance from its workforce without compromising the quality of services being delivered. Healthcare is the maintenance or improvement of health through diagnosis, treatment or prevention of disease, illness, injury or other physical and mental impairments in human beings. Healthcare related services are delivered by healthcare professionals (providers and practitioners) in the field of medicine, dentistry, midwifery, nursing, pharmacy, psychology and other health professions. It includes the work done in providing primary health care, secondary health care and tertiary health care, as well as in the public health services [2]. A good health system delivers quality services to all people, when and where they need them. The exact configuration of services varies from country to country, but in all cases requires a robust financing mechanism; a well-trained and adequately paid workforce; reliable information on which to base decisions and policies; well-maintained facilities and technologies and logistics to deliver quality medical services [2].

Healthcare financing system is a process by which revenues are allocated from primary and secondary sources, such as out-of-pocket payments (OOP), indirect and direct taxes, donor funding, co-payment, voluntary repayments and mandatory repayments, which are accumulated in fund pools so as to share risk across large population groups and using the revenues to purchase goods and services from public and private providers for identified needs of the population, for example, fee for service, capitation, budgeting and salaries etc. [3]. The way a country finances its healthcare system is a critical determinant for reaching universal health coverage [4].

Performance-based financing (PBF) may be defined as “the transfer of money or material goods conditional on taking a measurable action or achieving a predetermined performance target” [5]. It is a health systems approach with an orientation on results defined as quantity and quality of service outputs. This approach entails making health facilities autonomous agencies that work for the benefit of health-related goals. It is also characterized by multiple performance frameworks for the regulatory functions, the performance purchasing agency and community empowerment. PBF applies market forces but seeks to correct market failures to attain health gains, while at the same time aims at cost-containment and a sustainable mix of revenues from cost-recovery, government and international contributions [6]. PBF is a flexible approach that continuously seeks to improve through empirical research and rigorous impact evaluations which lead to best practices.

Health Service Packages: Complementary Package of Activities
PBF health service packages are carefully designed to respond to health problems facing the Nigerian population. The PBF service packages are based on 14 years of incremental
experience gained on purchasing services through PBF. The services have the highest potential to contribute to meeting universal health coverage targets. PBF is an innovative, results-oriented approach that incentivizes providers based on their achievement of agreed-upon, measurable performance targets. Incentives include financial payments of bonuses and public recognition [7]. Similar incentivizes can also be used to motivate people in the community to use services in the health facility. For example, diapers may be given to a mother who gives birth in the health facility or food stuff to patients who have completed a full course of tuberculosis treatment, PBF can thus increase the use and quality of healthcare services, stabilize or decrease the cost of these services, support the effective use of limited resources, encourage community participation and improve staff motivation, morale and retention [8].

PBF is a form of results-based financing pioneered in countries such as Cambodia, Rwanda and Burundi to extremely good effect. Several other countries have begun to experiment with this approach including Zambia, Cameroon, Zimbabwe and now, Nigeria. PBF is helping to create better, more inclusive and more accessible healthcare services and it is an important component of achieving universal health coverage [9]. There are three broad areas where PBF and universal health coverage intercept. These areas are; defining the basic, complementary and delivering these packages; expanding the coverage of health services in the general population, especially for the poorest and improving access to quality health services.

The study seeks to assess and compare the practices of PBF among healthcare workers in primary and secondary healthcare facilities in Nasarawa State, Nigeria. The study aimed to contribute to the body of knowledge on health care financing and to stimulate intellectual discussion by public health experts and policy makers on its long-term viability and sustainability, and possible nationwide adoption of PBF as an alternative to healthcare financing in Sub-Saharan Africa.

**Methodology**

This study was carried out in Nasarawa State, North Central Nigeria. Nasarawa State was carved out of the old Plateau State on October 1, 1996, with Lafia as the capital. It is located at coordinates 8°32’N 8°18’E/8.3000°N 8.533°E and has 13 local government areas. It has a population of 2,040,112 (2006 Census) and a total area of 27,117Km². The State is bounded in the north by Kaduna State, in the west by Abuja Federal Capital Territory, in the south by Kogi and Benue States and in the east by Taraba and Plateau States. Due to its proximity to the Federal Capital Territory, Abuja, there are varied ethnic groups from all over the country. Major ethnic groups are Eggon, Alago, Gwari, Mada and Hausa-Fulani. The state is reputed to have large deposits of solid minerals (salt, barite, bauxite) mined largely in a small scale,
often illegally. Agriculture is the mainstay of the economy as the population is involved largely in subsistence farming.

It has two tertiary care hospitals (Dalhatu Araf Specialist Hospital, Lafia and Federal Medical Center, Keffi), 17 General Hospitals (twelve of which are operating PBF), 728 Primary Health Centres (PHCs) (235 are PBF sites) and tens of private hospitals, maternities and clinics (there 14 PBF private sites). All General Hospitals in Nasarawa State are implementing some form of PBF as one of the three pilot states. In the same vein, at least one primary health care centre per ward in each Local Government Area (LGA) implements the same program.

The study design was a descriptive, cross-sectional survey using both qualitative and quantitative data. The quantitative data was collected using structured questionnaires while a key informant interview was adopted for the qualitative component. The study population were all categories and cadres of health care workers in public primary and secondary health facilities that are implementing PBF in Nasarawa State. Healthcare workers in tertiary or private healthcare and public health workers not implementing the PBF program were excluded.

A multistage sampling technique was used to select 315 respondents from the study population. At the first stage, two local governments were randomly selected from each of the three senatorial districts in the state. At the second, one secondary healthcare institution was randomly selected from each of the selected LGA. In the third stage, two wards were randomly selected from each local government as every ward has one primary healthcare centre implementing PBF. It is at the fourth stage that a simple random technique was used to select respondents from the eighteen primary and secondary healthcare institutions adopted for the study. In addition, eight key informants (purposely selected from the adopted healthcare institutions) were interviewed.

Two instruments were used for data collection in this study: An interview guide with 6 item questions and a structured questionnaire containing 37 items. The questionnaires were administered to the 315 selected respondents while Key Informant Interviews (KIs) were conducted with the head of the facility or at least a management staff member. Two research assistants handled the questionnaire and the interview. The interview was conducted in English, and three were done face to face while five were conducted through telephone. The KII were recorded using a phone with recording capability and transcribed. The structured questionnaires were administered to selected healthcare workers in the selected primary and secondary healthcare facilities in Nasarawa State, North Central Nigeria. The instrument was validated by pretesting it at a general hospital and a primary health centre.

The questionnaires were retrieved and checked for completeness while the harvested data was analyzed using the Statistical Package for Social Sciences Version 20 (SPSS) software. For the key informant interview, the audio recordings were transcribed and classified into
relevant main and sub-themes. Frequency tables, simple percentages, bar and pie charts were used to present descriptive statistics. Cross tabulation of important variables was done. A Chi square test was used to determine the significance of differences or associations of variables of interest at p-value >0.05.

Results

Table 1 shows the age group distribution of the respondents. Majority of the respondents 70(23.9%) were in the 30-34 age group while the age group of 55-60 had the least number of respondents 6(2%). A significant number of respondents 178(60.8%) were permanently employed by the relevant government healthcare centre while 115(39.2%) were volunteers (that is engaged on an ad-hoc basis by the health facilities). Table 1 also shows the distribution of respondents according to years of experience with PBF. Those respondents with 2 and 3-years’ experience were each 81(27.6%), those with 4 years were 78(26.6%) while those with under one year were least 12(4.4%). Of the proportion of respondents on permanent government employment n=112, most 53(29.3%) were within grade level 9-11 while the least 4(2.2%) were in grade 16; others were thus: 3-4 were 10(5.5%), 5-6 were 12(6.6%), 3-8 were 51(28.2%), 12-13 were 30(16.6%) and 12-15 were 21(11.6%).

Table 1: Socio-demographic characteristics of respondents

| Variable               | Frequency (%) |
|------------------------|---------------|
| **Age Group**          |               |
| 18-24                  | 24(8.2)       |
| 25-29                  | 49(16.7)      |
| 30-34                  | 70(23.9)      |
| 35-39                  | 58(19.8)      |
| 40-44                  | 35(11.9)      |
| 45-49                  | 29(9.9)       |
| 50-54                  | 22(7.5)       |
| 55-60                  | 6(2.0)        |
| **Gender**             |               |
| Male                   | 154(52.6)     |
| Female                 | 139(47.4)     |
| **Type of Employment** |               |
| Permanent              | 178(60.8)     |
| Volunteer              | 115(39.2)     |
| **Category of Staff**  |               |
| Management             | 90(30.7)      |
| Non-Management         | 203(69.3)     |
Years of Experience with PBF

| Years of Experience with PBF | Under 1 Year | 1 Year | 2 Years | 3 Years | 4 Years | 5 Years and above |
|-----------------------------|--------------|--------|---------|---------|---------|------------------|
|                             | 12(4.1)      | 23(7.8)| 81(27.6)| 81(27.6)| 78(26.6)| 18(6.1)          |

Grade Level (N = 112)

| Grade Level | 3-4 | 5-6 | 7-8 | 9-11 | 12-13 | 14-15 | 16 |
|-------------|-----|-----|-----|------|-------|-------|----|
| Primary     | 10(5.5) | 12(6.6) | 51(28.2) | 53(29.3) | 30(16.6) | 21(11.6) | 4(2.2) |
| Secondary   |

Table 2: Operation of PBF by the Respondents at Both Primary and Secondary Health Facilities

| Variables                        | Type of facility | \(\chi^2\) | \(p\) |
|----------------------------------|------------------|------------|-------|
|                                  | Primary (%)      | Secondary (%) |       |
| Duties completely explained      | 199 (99.5)       | 175 (87.5) | 23.694 | < 0.001 |
| Provision of tools to carry out duty | 191 (95.5) | 159 (79.5) | 23.406 | < 0.001 |
| Close supervision                | 192 (96.0)       | 200 (100.0) | 8.163 | 0.004 |
| Free access to information       | 169 (84.5)       | 94 (47.0)  | 62.446 | < 0.001 |
| Access to how money is managed   | 104 (52.0)       | 54 (27.0)  | 26.153 | < 0.001 |
| Precise quality related goals    | 198 (99.0)       | 171 (85.5) | 25.492 | < 0.001 |
| Periodic quality audit           | 200 (100.0)      | 180 (90.0) | 21.053 | < 0.001 |
| Audit report documented          | 123 (61.5)       | 116 (58.0) | 0.509 | 0.475 |
| Financially rewarded             | 190 (95.0)       | 170 (85.0) | 11.111 | 0.001 |
| Penalized for poor quality service | 185 (92.5) | 172 (86.0) | 4.404 | 0.036 |
| Infrastructural improvement      | 185 (92.5)       | 178 (89.0) | 1.459 | 0.227 |

Respondents in the primary health facilities 199(99.5%) claimed that all duties required of them were completely explained \((p\ \text{value}<0.001)\) and a majority 192(96%) noted that there is close supervision by their immediate superiors which is a good practice. They 169(84.5%) indicated that they had access to all pertinent information of the operations of PBF.
compared to 94 (47.0%) in secondary health facilities (p value < 0.001). In a like manner, respondents in primary health facilities 104(52.0%) indicated they know or have access to information on how finances at their facilities are spent compared to 54(27.0%) respondents in the secondary facilities (p value < 0.001).

In primary health facilities, 198(99.0%) claimed that they are aware that their facilities have precise quality related goals compared to 171(85.5%) in the secondary health facilities (p value <0.001). All respondents 200(100.0%) in primary healthcare facilities indicated that their facilities undergo periodic quality audit by an independent body, compared to 180(90.0%) respondents in secondary health facilities (p value < 0.001). There was no significant difference in the responses from primary and secondary health facilities in terms of documentation of audit report. Most respondents in both primary and secondary health facilities, 190(95.0%) and 170(85.0%) respectively, indicated they are incentivized (financial reward in form of bonus) for delivering quality services to clients. In a similar manner, most respondents, 185(92.5%) and 172(86.0%) in primary and secondary health facilities respectively, believed their facilities are penalized (by withholding bonuses and deduction in total accruable money to the facility) when the quality of service to clients is poor. In addition, most respondents 159(79.5%) in the primary health facilities practiced PBF well, with only 41(20.5%) with poor practice of PBF whereas in secondary health facilities, just 101(50.5%) of the respondents had good practice of PBF.

Table 3 shows the association between socio-demographic characteristics and operation of PBF by respondents at primary and secondary health facilities. There was a significant difference with regard to gender and level of education of the respondents as more literate respondents had good practice of PBF in both groups while males had better performance than females only in secondary health facilities. There was no difference in performance between age groups or type of employment.

**Table 3: Association between socio-demographic characteristics and operation of PBF by respondents at primary and secondary health facilities**

| Variables | Primary Practice | Secondary Practice | \( \chi^2/p \) |
|-----------|------------------|-------------------|-----------------|
|           | Poor N(%)        | Good N(%)         | Primary N(%)    | Good N(%)     | 11.825/0.106 |
| Age Groups|                  |                   | 37.161/<0.001   |                |               |
| ≤ 24      | 17 (42.5)        | 23 (57.5)         | 1 (50.0)        | 1 (50.0)      |               |
| 25 – 29   | 8 (14.5)         | 47 (85.5)         | 10 (52.6)       | 9 (47.4)      |               |
| 30 – 34   | 13 (23.6)        | 42 (76.4)         | 23 (60.5)       | 15 (39.5)     |               |
| 35 – 39   | 0 (0.0)          | 40 (100.0)        | 14 (40.0)       | 21 (60.0)     |               |
| 40 – 44   | 0 (0.0)          | 2 (100.0)         | 19 (45.2)       | 23 (54.8)     |               |
| 45 – 49   | 0 (0.0)          | 5 (100.0)         | 13 (43.3)       | 17 (56.7)     |               |
| 50 – 54   | 0 (0.0)          | 0 (0.0)           | 0 (0.0)         | 0 (0.0)       |               |
Figure 1 illustrates the overall operation of PBF by health workers.
Table 4 shows the distribution of key informants used in KII.

### Table 4: Distribution of key informants

| Respondent | Primary | Secondary | Total |
|------------|---------|-----------|-------|
| Male       | 2       | 1         | 3     |
| Female     | 2       | 3         | 5     |
| Total      | 4       | 4         | 8     |

All the respondents had positive attitudes towards the PBF in helping and motivating them to improve the quantity and quality of healthcare services. They indicated that the PBF positively influenced their work in many ways.

The major themes that emerged from the thematic analysis were as follows:

- Health Quality Indicators
- Performance Evaluation Mechanism
- Motivation of Health Workers
- Infrastructural Development
- Manpower Shortages
- Challenges

**Health Quality Indicators**

A significant proportion (62.5%) were of the opinion that the healthcare quality indicators were based on best international practices which their facility should emulate to offer for best quality service to their clients. One head of a secondary health facility said: ‘For many reasons, we as health workers forgot, or at least ignored, what health quality indicators are. PBF simply awakened us to their existence. It was difficult at the beginning, but its program is gradually becoming a second nature.’

However, it was noted that, some indicators of quality care are out of line with current developments in the dynamic field of medical practice. The example given was tracer drugs for essential drugs. They suggested this needed to be reviewed in line with current thinking.

**Motivation of health workers**

All interviewees agreed that health workers had become more motivated in carrying out their respective duties since the commencement of the performance-based program. The carrot-stick approach in PBF was a real motivator. The carrot is the bonus given to personnel for
high quality service. The stick is bonus (incentive) withholding and reduction in total finance that comes to the facility for poor quality services. Some workers stayed later than their closing time to ensure that the jobs/duties were adequately executed.

Infrastructural development
All respondents (n=8) believed that PBF has made a positive impact on the infrastructural development of their facility. Basic equipment were procured for the laboratory, theatre, labor room and other service points that required attention.
One head of a secondary health facility stated that:
‘Before the coming of PBF, waste disposal was unorganized without a proper place for their disposal. Now there is a well-constructed and maintained incinerator for waste disposal. And for the first time, there is running water in the facility among many other essential infrastructures.’

Another head of a primary healthcare center said:
‘Before PBF the facility was in dire need of a face-lift. There were few and bad waiting chairs, the roofs were leaking, the painting peeled off. But now all these have been fixed. I feel good coming to work every day.’

Solving manpower shortages
The majority of respondents believed that there were rampart manpower shortages in their facilities. PBF is, therefore, seen as both a threat and an opportunity. The threat arises when there are glaring quality lapses occasioned by shortages of personnel to do the needful. On the flip side opportunity comes in the autonomy granted to facilities to employ volunteer personnel on an ad-hoc basis according to need and the capacity to pay such personnel.
One head of a primary health facility said:
‘For more than 3 years there were no laboratory personnel in the facility which impeded our ability to offer a good and comprehensive service to our clients. But when the PBF program started in this facility 3 years ago we were able to employ 2 laboratory technicians; there are similar instances in other units.’
Another one said:
‘This facility was almost non-functional with a staff strength of two; myself and a health attendant. Today there are eight of us.’

Challenges of PBF
The three major challenges identified by respondents were shortage of manpower, poor infrastructure and inability to pay subsidy for the services verified and purchased by the facilities.
The number of clients has increased because of the increased quality and range of services but the increase in manpower still falls short of demand.
One head of a secondary health facility said:
‘I am the only permanent physician in the facility; one is a National Youth Service Corp member and the other a volunteer whose stipend is paid by the facility. There is a limit to what the facility can do.’

Another challenge identified was poor infrastructure and utilities like deteriorating physical structure, poor equipment and the lack of or poor power and water supply. All key informants lamented that National Strategic Health Implement Plan (NSHIP) was unable to pay subsidy for the services rendered and purchased.

One head of a primary health facility said:

‘We have not received any finance from the PBF program since the last quarter of 2017. I have 4 volunteer staff that we have not been able to pay their stipend. Imagine the number of moody faces I had had to endure daily at work. The difficult part is that, there is no much information coming through. We can scarcely afford even cleaning materials to keep the facility running now. Our superior kept coming for assessment, how can we do without money?’

**Discussion**

Most health workers in this study had direct responsibility for delivering quality healthcare services regardless of whether or not they are directly involved in patient care. A significant proportion of respondents indicated that carrying out their duties effectively was essential for the overall attainment of the quality healthcare.

A large number of the respondents demonstrated good cumulative knowledge in PBF which is in tandem with another study carried out in Burundi [11]. More than half of the respondents believed PBF does not increase their workload. This finding implies that healthcare workers do not see the PBF program as a different entity but as merely refocusing their daily duties to more directed goals for quality improvement and maintenance. Most of the respondents indicated that community participation ensured quality of service and did not consider the involvement of the community as meddling in the professional affairs of the health facilities. This finding shows that respondents saw the community as a partner in the provision of a good healthcare service, not as a meddling outsider. This finding is in line with the goals and objectives of the Alma Ata declaration [10] which advocated for the full participation of the community in the planning, implementation and evaluation of all health activities, projects and programs in their communities for the attainment of sound health for individuals and families in their communities.

Majority of the respondents signified that the PBF program had made a positive difference to the quality of their daily work output. This finding is consistent with other studies [12,13,13]. A very high proportion of respondents answered that they want the PBF program to continue in their facilities. This shows that the PBF program is widely accepted at primary and secondary healthcare delivery facilities and, therefore, there is a good chance of its long-term success.
In this study, a significant proportion of the respondents indicated that they knew exactly what to do at any time as they have their duties explained to them by their superiors. This leaves no room for ambiguity as to the duties to be carried out for overall improvement in the quality of service. Also, a good proportion of respondents signified that they have the basic tools to carry out assigned duties. This is an acknowledgement that no duties can be carried out effectively without requisite tools. Most respondents also indicated that their immediate superiors (internal supervision) supervised their work closely. Supervision in healthcare is a context-dependent practice with multiple definitions and is generally regarded a core part of assuring and improving quality of patient care. Most respondents also indicated superiors from the local government health authority for primary health facilities and State Ministry of Health for secondary provide regular support while on supervisory visits to their facilities (external supervision). Supervision is primarily oriented at ensuring performance, and often applies normative or administrative functions including inspective, support-based supervisory approach and to a lesser extent, the formative and restorative, such as joint problem solving and constructive feedback [12]. A Cochrane review was unable to determine the effect of managerial supervision in developing countries and graded the quality of evidence as low or very low [12].

Almost half of respondents indicated that they do not know the exact amount of money that comes to their facilities, and more than half claimed they do not know or have access to information on the expenditure of their health facilities. This finding is at variance with the policy of the PBF program, where all information pertaining to financing and expenditures of activities and projects are done with utmost transparency with the full knowledge of all facility personnel. The findings may have been an expression of resentment of personnel towards the management because no funds had come to the facilities in the last six months prior to the study on the PBF program. Most respondents indicated that there is some form of periodic quality audit of the health facilities. This audit measured the outcome or process against well-defined standards, established using the principles of evidence-based practice. The aim of the audit is to highlight the discrepancies between actual practice and the standard in order to identify the changes needed to improve the quality of healthcare.

Significant proportion of the respondents claimed to engage in good operational practice in PBF and there is a significant association between the level of operation practice and practice of respondents (p< 0.05). This finding shows that although a significant proportion of respondents engaged in good operation in both the primary and secondary facilities, there is a significant association between the level of the health facility and practice. Therefore, there is a need for reorientation of healthcare workers at all level to adopt international best operation practices for the overall improvement and maintenance of healthcare services.

Most of the key informants interviewed in this study said that PBF positively influenced delivery of healthcare. This finding is consistent with other studies [13,13]. The study also showed that healthcare workers are motivated to deliver more quality service to clients as a
consequence of the carrot and stick motivation approach of PBF programs. In PBF, personnel are rewarded with payment of a bonus (monetary incentive for high quality of service); a positive reinforcement but when it is low the staff are negatively rewarded (by withholding bonus), a negative reinforcement, both of which are known to motivate.

All key informants were of the opinion that poor health infrastructure and utilities in their facilities hampered their ability to deliver good quality service to clients. This finding is consistent with another study [14]. Electricity supply from the national grid is epileptic, where it exists. Alternative power sources like solar panels or diesel-powered generating sets had to be provided to supplement. This creates other problems: finance and manpower, to maintain this equipment. Only few respondents said they are connected to a public water supply while the other respondents said they had to find alternative sources of water like wells and boreholes; the quality of which cannot be guaranteed. The respondents also said they lack some basic equipment/machines required for quality service for their level. Some the respondents observed that physical structure is inadequate or needed a facelift that was beyond the financial capacity of the facilities to handle. They conceded that infrastructural improvement and provision of utilities are embedded in the PBF program but that some of these infrastructural challenges were beyond the financial capacity of the facilities to cope. A previous study confirms these observations showing how health facilities, with good functional infrastructure and personnel demonstrate a better capacity to respond well to PBF schemes than those with little investment and poor health facility management [15]. All key informants (n=8) lamented that the NSHIP did not pay their facilities for services verified and validly purchased in last six months. As a result, planned activities and projects were not carried since the last quarter of 2017. The delay in PBF payment is felt mostly by voluntary personnel, where their stipends were not paid. The delays in PBF pay were a source of frustration and may ultimately lead to demotivation of healthcare workers and may have negative impacts on the quality of service they provide. This finding is consistent with findings in the Cameroon [16].

All respondents identified human resources for health as a major challenge for carrying out the efficient health services required in PBF although cases of manpower shortages are somewhat addressed at facility level within the limit of the resources available to them as they have the autonomy to employ essential voluntary. The remuneration of core clinical staff like physicians, pharmacists, nurses and laboratory scientists is beyond the financial capacities of health facilities. This is in line with a World Health Organization report that Nigeria has the highest stock of human resource for health (HRH) but, like other 57HRH crisis countries, has densities that are still too low to effectively deliver essential health services [17]. Often this shortage is a result of poorly planned need based distribution of personnel [14] and unwillingness of some healthcare workers to work in semi-urban and rural areas.
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