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Healthcare Workers' Perceptions of Hospitals' Institutional Structure

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ABSTRACT

Objective: To analyse the perception of healthcare professionals and managers of the institutional structure of four hospitals in Nigeria to successfully implement the health sector reform (HSR) programme in the country.
Study design: A cross-sectional survey of 507 healthcare professionals and managers in four hospitals located in four cities in southwest Nigeria conducted between December 2007 and March 2008.
Methods: A self-administered questionnaire was used as the instrument for the assessment of staff perception of institutional structure of the hospitals to successfully implement the HSR programme. The questionnaire had questions ranked on a 5-point Likert scale that explored the respondents' perceptions of institutional structure and closed-ended questions of socio-demographic nature.
Results: The overall perception of institutional structure was 52.5%. The perception of the four dimensions of institutional structure was design 60.7%, human resources 54.7%, financial resources 50.9% and infrastructure 39.4%. Out of the seventeen items on institutional structure, the qualification and competence of staff had the highest perception (78.3%) and adequacy of staff the lowest perception (28.9%).
Conclusion: The rather low perception of infrastructure may be a direct reflection of the poor state of the infrastructure available in major hospitals in Nigeria to support the health sector reform programme in the country. The major infrastructural issues were inadequacy and poor maintenance of facilities and equipment, the lack of adequate staff, poor compensation and lack of resources to meet major recurrent and capital expenditures in the hospitals.

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1. INTRODUCTION

Health sector reform (HSR) is one of the topical issues on the policy agenda of many developed and developing countries worldwide (Collins et al., 1999; Horsburgh et al., 2006). For example, the United States is currently reforming its health service. The Federal Government of Nigeria (FGN) initiated the process of reforming its health sector including the country's hospitals some years ago (Aniekwu, 2006; National Planning Commission, 2004; Oloriegbe, 2006). The reform is necessary due to the low quality and inadequacies of the national health system in Nigeria, ranked as 187th out of 191 countries in the world by the World Health Organisation (Antia and Bertin, 2004; Federal Ministry of Health, 2005; Ogunbekun et al., 1999). This implies that despite the abundance of the human and natural resources that Nigeria has, her national health system ranks below most of the countries in Africa that are less endowed (Aniekwu, 2006).

Institutional structure, also called institutional formation is defined as the components and resources that an institution has to deliver its services and generate external support (UNDP, 1994). It is the embodiment of purpose of an institution (Hoogervorst et al., 2004). It is important because it should reflect and support the vision, mission, values, goals and strategy of the institution (Hoogervorst et al., 2004; Kaplan, 1999). It clearly defines and differentiates roles and functions in the institution, untangles lines of communication and accountability, and ensures that decision-making procedures are transparent and functional. The institutional structure is put in place to protect, support and enable the chosen vision, strategy and culture of the institution (Kaplan, 1999; Lusthaus et al., 1999, 2002). According to Zey-Ferrell (1979), there are many ways to structure an institution. The structure adopted in any institution will depend on the objectives of the institution, its environment and context, including technology and size (Zey-Ferrell, 1979). There are four dimensions of institutional structure identified for this study. These dimensions are infrastructure, human resources, financial resources and design (UNDP, 1994; Lusthaus et al., 2002).

The goal of the HSR in Nigeria is the improvement of the health status of the people of the country by strengthening the national health system and enhancing the delivery of effective, efficient, quality and affordable health services (Olukoga et al., 2010a). The strategies for achieving this goal include the rehabilitation, refurbishment and upgrading of the equipment in these tertiary hospitals in the country to international standards (Olukoga et al., 2010a, 2010b).

An understanding of the perceptions of healthcare professionals and managers of the institutional structure of their respective hospitals and its ability to facilitate the fulfillment of the HSR objectives is important due to the central roles played by the staff members in promoting and sustaining the changes associated with a health sector reform (HSR). There were reports of failed HSR even in developed countries such as the United States of America during the Bill Clinton administration due to the opposition of major stakeholders like the medical professionals (Feder, 2004; Oberlander, 2003).

The adoption and implementation of a health sector reform programme in Nigeria and many countries worldwide is based on a number of fundamental assumptions (Maheshwari et al., 2005). A crucial one that is relevant to this study is that there already exists within the national health system the institutional structure to implement the reform programme. This study will therefore attempt to answer the question: Do the selected hospitals as major healthcare providers in Nigeria have the institutional structure to

achieve the objectives of the health sector reform programme? The objective of this study was to analyse the perception of healthcare professionals and managers of the institutional structure of four hospitals in Nigeria to successfully implement the health sector reform (HSR) programme in the country.

2. MATERIALS AND METHODS

The study population and focus of this study were the members of staff of the hospitals. This is supported by the assertion of Imperial (1999) that "institutions are some measure of the people who work and operate within them". He argued further that although it is possible to examine the performance of an institutional arrangement as a whole, "institutional performance can also be examined from the perspective of individual actors located within" the institution (Imperial, 1999).

The study was conducted in four hospitals in southwest Nigeria in 2008 using a cross-sectional design. The hospitals were a Mission Hospital, National General Hospital, State Teaching Hospital and National Teaching Hospital. Each hospital represent a level of health care service delivery as defined by the national health care delivery structure namely, primary, secondary and tertiary health care service delivery.

The questionnaire that was used as the instrument for the assessment of staff perception of institutional structure of the hospitals to successfully implement the HSR programme had two sections. Section 1 had questions on the four dimensions of institutional structure identified for this study i.e., infrastructure, human resources, financial resources and design. These questions were answered on a 5-point Likert scale i.e., 1 = Strongly Disagree, 2 = Disagree, 3 = Undecided, 4 = Agree and 5 = Strongly Agree. These questions explored the respondents' perceptions of institutional structure in each of the hospitals. Section 2 had some closed-ended questions of socio-demographic nature relating to the professional and work experience of the respondents.

3. RESULTS

3.1 Basic characteristics of the respondents

A total of 507 healthcare professionals and managers agreed to participate in the study out of 610 giving a response rate of 83%. Table 1 shows the age, sex, marital status and education of the respondents. About 70% of the respondents were between 20 and 39 years. There were more males (55%) than females (45%). More than 60% of the respondents were married. About 37% of the respondents had Master's, Medical, Dental or PhD degrees; 35% had HND (Higher National Diploma) or Bachelor's degrees and about 29% had National or Professional diplomas such as Nursing.

3.2 Percentage rating of the perception of institutional structure for health sector reform in Nigeria

The percentage ratings of the healthcare workers' responses to the statements on the four dimensions of institutional structure for health sector reform in Nigeria are indicated in the tables below.

Table 2 shows the percentage rating for infrastructure. A majority (58%) of the respondents perceived that their hospitals had "needed technological resources for health sector reform" (mean=3.28, SD=1.33). More than 60% of the respondents perceived that their hospitals did not have adequate facilities and equipment available to support operations for health sector reform (mean=2.56, SD=1.19). About 58% of the

respondents perceived that their hospitals did not have needed facilities and equipment that are well maintained (mean=2.59, SD=1.14).

Table 1. Basic demographics of the respondents

Age (years)	Freq.	Percent
20-29	125	25
30-39	224	45
40-49	106	21
>/50	44	9
Total	499	100
Sex		
Male	275	55
Female	223	45
Total	498	100
Marital status		
Single	168	34
Married	314	63
Divorced / Widowed	15	3
Total	497	100
Education		
National / Professional Diploma (e.g. Nursing)	143	29
HND / Bachelor's degree	172	35
Master's degree	42	8
Medical/ Dental/ PhD Degree	142	28
Total	499	100

Table 3 shows the percentage rating for human resources. About 64% of the respondents disagreed or strongly disagreed that their hospitals had "adequate staff in all key positions for health sector reform" (mean=2.48, SD=1.22). Almost 80% of the respondents agreed or strongly agreed that "staff are qualified and considered competent" (mean=3.83, SD=0.96). About 53% of the respondents disagreed or strongly disagreed that "compensation is adequate for attracting and keeping key staff". But about 37% of the respondents agreed or strongly agreed with the statement (mean=2.73, SD=1.28). About 57% of the respondents agreed or strongly agreed that "opportunities exist for staff professional development and on-the-job training" (mean=3.25, SD=1.16).

Table 4 shows the percentage rating for financial resources. About 46% of the respondents disagreed or strongly disagreed that "the institution has resources to meet major recurrent and capital expenditures". But about 35% agreed or strongly agreed with this statement and about 20% were undecided (mean=2.84, SD=1.14). A majority of the respondents (61.7%) agreed or strongly agreed that "the institution has awareness of its future resource needs" (mean=3.46, SD=1.00). About 44% of the respondents agreed or strongly agreed that "effective financial management and accounting procedures are in place". But about 34% disagreed or strongly disagreed with this statement and 21% were undecided (mean=3.06, SD=1.14). Also, a majority of the respondents (63%) agreed or strongly agreed that "budgets are used as planning and monitoring tools" (mean=3.48, SD=1.07).

Table 5 shows the percentage rating for design. About 47% of the respondents agreed or strongly agreed that "the institutional structure meets needs of efficiency and control". But about 35% disagreed or strongly disagreed with this statement (mean=3.07, SD=1.12).

Table 2. Percentage rating of the perception of infrastructure for health sector reform in Nigeria

Infrastructure item	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean (SD)*	Median (IQR)	N
The institution has needed technological resources for health sector reform	10.3	28.0	4.2	38.6	18.9	3.28 (1.33)	4 (2-4)	503
Adequate facilities and equipment are available to support operations for health sector reform	17.8	44.7	6.9	25.7	4.9	2.56 (1.19)	2 (2-4)	506
Facilities and equipment are well maintained	16.8	41.1	12.1	26.9	3.2	2.59 (1.14)	2 (2-4)	506

Table 3. Percentage rating of the perception of human resources for health sector reform in Nigeria

Human Resources item	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean (SD)*	Median (IQR)	N
The institution has adequate staff in all key positions for health sector reform	22.7	41.0	7.6	23.5	5.4	2.48 (1.22)	2 (2-4)	503
Staff are qualified and considered competent	3.0	9.5	9.1	58.3	20.0	3.83 (0.96)	4 (4-4)	504
Compensation is adequate for attracting and keeping key staff	19.0	33.9	10.5	28.3	8.3	2.73 (1.28)	2 (2-4)	505
Opportunities exist for staff professional development and on-the-job training	8.1	24.2	11.1	47.6	8.9	3.25 (1.16)	4 (2-4)	504
Staff are held accountable for getting work done according to clear performance standards	4.2	16.2	11.7	58.0	9.9	3.53 (1.01)	4 (3-4)	505
Recruitment and promotion policies provide for staff development	4.2	20.8	15.3	50.2	9.5	3.40 (1.05)	4 (2.5-4)	504

Table 4. Percentage rating of the perception of financial resources for health sector reform in Nigeria

Financial Resources item	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean (SD)*	Median (IQR)	N
The institution has resources to meet major recurrent and capital expenditures	10.7	35.1	19.6	28.2	6.3	2.84 (1.14)	3 (2-4)	504
The institution has awareness of its future resource needs	4.8	14.7	18.8	52.8	8.9	3.46 (1.00)	4 (3-4)	504
Effective financial management and accounting procedures are in place	10.7	23.6	21.4	37.7	6.5	3.06 (1.14)	3 (2-4)	504
Budgets are used as planning and monitoring tools	7.4	11.5	18.1	51.9	11.1	3.48 (1.07)	4 (3-4)	503

Table 5. Percentage rating of the perception of design for health sector reform in Nigeria

Design item	Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree	Mean (SD)*	Median (IQR)	N
The institutional structure meets needs of efficiency and control	9.5	25.4	18.5	41.5	5.2	3.07 (1.12)	3 (2-4)	504
Lines of reporting and authority are clear	3.4	17.6	18.6	53.3	7.2	3.43 (0.97)	4 (3-4)	501
Span of control and supervision is reasonable	3.6	16.3	13.7	59.8	6.6	3.49 (0.96)	4 (3-4)	502
Staff can clearly describe their roles and responsibilities	4.4	17.1	9.5	56.5	12.5	3.56 (1.05)	4 (3-4)	503

A majority of the respondents (60.5%) agreed or strongly agreed that "lines of reporting and authority are clear" (mean=3.43, SD=0.97). Also, a majority of the respondents (66.4%) agreed or strongly agreed that the "span of control and supervision is reasonable" (mean=3.49, SD=0.96). Most of the respondents (69%) agreed or strongly agreed that "staff can clearly describe their roles and responsibilities" (mean=3.56, SD=1.05).

4. DISCUSSION

The overall perception of institutional structure for health sector reform in Nigeria using the four hospitals in this study was 52.5%. The perception of institutional structure had four dimensions i.e., infrastructure, human resources, financial resources and design. Out of these four dimensions, design had the highest perception (60.7%) and infrastructure had the lowest perception (39.4%). The perception of human resources was 54.7% and that of financial resources was 50.9%.

There were seventeen (17) items on the perception of institutional structure. The items with the highest perception and the lowest perception were both listed under the human resources dimension. The qualification and competence of staff had the highest perception (78.3%) and adequacy of staff the lowest perception (28.9%).

The overall perception of institutional structure in this study was 52.5%. This poor perception of institutional structure is similar to the situation in Ghana where the structure of the public health system was described as weak, fragmented and embedded in a 'colonial organizational structure'. This resulted in problems in the coordination and implementation of the HSR programme in Ghana at the district, regional and national levels (Sakyi, 2008)

4.1 Infrastructure

Out of the four dimensions of institutional structure in this study, infrastructure had the lowest perception (39.4%). This rather low perception of infrastructure was the only one that was less than 50% out of the four dimensions of institutional structure analysed in this study. A majority of the healthcare workers and managers (69.9%) perceived that there were inadequate facilities and equipment in their hospitals and a similar proportion (69.4%) perceived that the available facilities and equipment were poorly maintained. In a study of 551 health care workers in Ghana in January 2002, Agyepong et al. reported that 75% mentioned lack of essential equipment, tools and supplies as a workplace issue affecting staff performance (Agyepong et al., 2004)

The rather low perception of infrastructure may be a reflection of the poor state of the infrastructure available to deliver health care services in Nigeria. In the 1980s and 1990s, the parlous state of the health infrastructure in Nigeria was one of the excuses used by the Nigerian military for their unconstitutional incursions into politics. Whenever they overthrew a sitting government during that period, the leaders of the coup plotters cited the decayed state of the infrastructure available to deliver health services as one of the justifications for their actions. The soldiers in describing the poor state of infrastructure within the public health sector in Nigeria often stated that "our hospitals have become mere consulting clinics" (Nigerian Tribune, 2005).

The problem of dilapidated health infrastructure was also experienced by Vietnam in her national network of primary health care clinics as a result of its transition to a market economy. But, despite the country's substantial supply-side investments in infrastructure,

only marginal increases were recorded in the utilisation and quality of preventive health services offered by these primary health care clinics (Fritzen, 2007). This is similar to the findings from Peru and Uganda where improvements in health infrastructure access and availability in less endowed districts led to only small equity enhancing effects (Valdivia, 2002).

4.2 Human Resources

The overall perception of human resources (54.7%) in this study was lower than the perception of design. Amongst the items that make up the human resources dimension, 71.1% of the respondents perceived that their hospitals did not have adequate staff in all key positions to enable them implement the HSR programme.

This is similar to the report from a study of 614 health care workers in Ghana in August 2003. Agyepong et al. reported that 63% mentioned inadequate staffing as a workplace obstacle affecting staff performance (Agyepong et al., 2004). Another 73.4% of the respondents in this current study also see poor compensation as an issue hindering the recruitment and retention of staff. In two separate surveys in Ghana by Agyepong et al. (2004), low salary was the most frequently reported workplace obstacle affecting staff performance. In the study by Agyepong and others in Ghana, in January 2002, 94% out of 551 healthcare workers and 95% out of 614 in August 2003 mentioned low salary as a workplace obstacle affecting staff performance (Agyepong et al., 2004).

The lack of adequate human resources is also an issue in other African countries such as South Africa and Ghana. This could be due to insufficient numbers of health care professionals trained, the internal loss of health care workers to the more lucrative private sector and their migration to ‘greener pastures’ overseas (Dovlo and Nyonator, 1999).

4.3 Financial Resources

The overall perception of financial resources in this study was 50.9%. Most (46%) of the respondents perceived that their hospitals did not have adequate financial resources to meet major recurrent and capital expenditures. But, only about 35% of the respondents perceived that their hospitals had adequate financial resources to meet major recurrent and capital expenditures and the other respondents were undecided. About 56% of the respondents perceived that there were no effective financial management and accounting procedures in place in their respective hospitals.

The funding of healthcare services is also a problem in other countries such as Croatia and Ghana (Sakyi, 2008; Voncina et al., 2006). In Croatia, the problems facing the funding of healthcare include high expenditure, inadequate financial resources and continuous deficits of the state insurance fund (Voncina et al., 2006). A lack of financial resources was also identified as a factor impeding the effective implementation of the HSR programme in Ghana (Sakyi, 2008).

4.4 Design

Design had the highest perception (60.7%) out of the four dimensions of institutional structure. In this study, only 33.6% of the respondents perceived that the span of control and supervision was not reasonable. A high proportion of respondents perceived that the institutional framework or design of their respective hospitals will enhance the effective

implementation of the HSR programme in Nigeria. The only exception to this overall positive picture of design is that the institutional structure is perceived as unable to meet the needs for efficiency and control by 53.3% of the respondents.

This is in contrast to Ghana where Sakyi (2008) pointed out the negative impact of weak institutional framework or design on the effective implementation of the HSR programme in Ghana. He went further to mention that "the inherited colonial administrative structure of the Ghanaian health system had constrained the implementation of health service reform" (Sakyi, 2008).

5. CONCLUSION

This study found that there is a low perception of the infrastructure available in major hospitals in Nigeria to support the health sector reform programme in the country. The major infrastructural issues that need to be addressed are inadequacy and poor maintenance of facilities and equipment in the hospitals. In addition, the perception of the human and financial resources available to the hospitals was average. The key human and financial resources issues were the lack of adequate staff, poor compensation and lack of resources to meet major recurrent and capital expenditures.

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