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ORIGINAL ARTICLE

Managerial Capacity of Health Care Managers in Primary Health Care Centres in Ekiti State, Nigeria

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Keywords

Managerial capacity; Healthcare managers; Primary Health Care; Institutional development

ABSTRACT

Background: The performances of Primary Health Care workers play key roles in delivering quality health care thereby leading to health systems' strengthening. This study assessed the managerial capacity of health care managers at Primary Health Care centres in Ekiti State, Nigeria.

Methods: A descriptive cross-sectional study was carried out amongst 188 health care managers in all the Local Government Areas of Ekiti State, Nigeria from August to November 2020. Self-administered questionnaires (google form) were used to obtain data. Analysis of data was done with STATA SE 12. The level of significance (p-value) was set at <0.05.

Results: The mean age of respondents was 45.9 ± 7.0 years with females 161 (85.6%) and males 27 (14.4%). More than one-third 69 (36.7%) of respondents had received formal training in managerial and leadership development. The majority of respondents (94.7%) had good managerial capacity with a mean total score of 279.8 ± 46.9**.** There was a statistically significant difference in the average managerial capacity scores across the level of education and professional experience categories. Respondents who had tertiary education and those with more than 5 years' experience had higher managerial capacity scores compared to others. (p < 0.001)

Conclusion: The findings indicated that majority of the Primary Health Care managers in Ekiti State had a good managerial capacity to run the Primary Health Care systems. It is recommended that individual health workers should continue with personal development and continuous institutional development by the state government is encouraged towards improvement of health services rendered.

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INTRODUCTION

The role of health care managers is pivotal in improving health system performance and the delivery of good health services.[1,2] Health system and service managers are responsible for

programmes, projects, facilities and area health authorities, whether in public or private.[3] In addition, their roles extend to the provision of quality and coverage of services (planning, implementation and evaluation), resources (staff, budgets, drugs, equipment, buildings, information) with external relations and partnerships.[3] However, germane to the performance of these vital roles and responsibilities is the managerial capability of the health care managers and leaders.[4-6] Good management aims to provide services to the community in an appropriate, efficient, equitable, and sustainable manner.[1] Effective managers and leaders must develop the relevant competencies in the coordination of operations, consumer relations, goal/target setting as well as human resources.[7] They need to be sufficiently equipped with the tools, systems and skills to productively assess the health workforce in a facility and provide supportive supervision.[7]

The lack of competent managers in many low-and middle-income countries (LMICs) has been reported as a compounding factor to the health workforce crises and suboptimal functioning of the health system.[8-10] While a study of the managerial capabilities of health care managers and leaders at all levels of healthcare (primary, secondary and tertiary) is important, the focus on the primary level of health care deserves even greater attention. This is obviously because of the centrality of primary level as the main entry point for promotive, preventive, curative and rehabilitative health services.[8] Globally, studies have revealed a positive association between management capacity at this lower-level care of health system performance.[9-15] Consequently, some critical gaps in managers and leaders which limit their effective performance have equally been documented in other climes. These include, the capacity to implement healthcare; improve the utilization of health services; systematically follow-up on the implementtation of policies, guidelines, standards and protocols; implement reforms promptly and enhance the coordination of public-private partnerships.[16]

Similarly, in Nigeria, research has also shown weak management and leadership capability among managers at all levels including the Primary Health Care (PHC) system as hugely

accountable for the underperformance of the health system.[17,18] Therefore, as nations of the world race to achieve the ambitious goals of universal health coverage and health equity set in the 2030 Agenda for Sustainable Development, the need to strengthen all knobs including the all-important management and leadership competencies especially at the primary level of healthcare becomes imperative. This will increase access and utilization of PHC services which is the bedrock for achieving universal health coverage.[19,20]

This study aimed to identify the different dimensions of the management capacity and competencies of the team leaders, and other PHC managers in Ekiti State, South-west, Nigeria. Findings from this study will guide the State Primary Health Care Development Agency and other relevant stakeholders to identify evidence-based management capacity gaps in the primary health care system in the state and develop appropriate interventions to address them.

METHODOLOGY

Study Area: Ekiti State, one of the thirty-six states in Nigeria was created on October 1st 1996, with a projected population of 3,270,798.[21] It has 16 Local Government Areas (LGAs) with a landmass of 5,435 sq. km.[22] The state is mostly agrarian with small and medium scale enterprises in the urban and semi-urban areas. The PHC system has a total staff capacity of 4261 in the 326 PHC facilities in Ekiti State.[23] There are different categories of health workers in Ekiti PHC centres namely doctors, nurses, community health officers, community health extension workers, laboratory-technicians and pharma-cists,

Study Design: A descriptive cross-sectional study design was used consisting of a self-administered survey that took place from August to November 2020.

Study Population: This included Medical Officers of Health and other managers at the PHC facilities with supervisory, administrative and management responsibilities who had worked at that particular centre for at least six months. The six months was used in order to select staff that would have gained enough technical

knowledge, got used to the community under their jurisdiction, understand the community culture and has some baseline information. The study excluded those working in the health posts because they only provided referrals to other health facilities with identifiable leadership.

Sample Size Determination: The minimum sample size was determined using the formula for calculating outcome (mean): $n = \frac{Z_\alpha^2 \sigma^2}{\delta^2}$ [24]

Where n was the estimated minimum sample size; Z_α is the normal standard deviate for alpha error set at 1.96 which corresponds to 95% confidence level, σ is the standard deviation (variance) of the overall management capacity score from a previous study in Ghana = 0.60,[24] and the δ =level of precision set at 0.05%. The calculated minimum sample size was 553. This sample size was adjusted based on a population of less than 10,000, using the modified Cochran formular for small population $n = \frac{n_0}{1+\frac{(n_0-1)}{N}}$ [25] which equals to 140.4 but all the 188 eligible respondents were recruited.

Sampling Technique: A total population of all the Medical Officers of Health and other health care managers in the PHC facilities in all the sixteen LGAs in Ekiti State who met the inclusion criteria and consented to be part of the study were interviewed. The 188 are the MOHs and the PHC managers at the different LGAs in the State.

Data Collection: This study was conducted using an adapted self-administered questionnaire[24] which consist of 7 sections. Section 1 was the socio-demographic characteristics and section 2 was on the previous management experience and training. Section 3 has the functional support system (16 items) and section 4 measured the general management skills and competencies (10 items). Section 5 was on specific health system management skills and competencies (oversight & coordination, human resource management, resource management, financial management, information management service delivery and community involvement (60 items). In section 6, we have the general management performance (4 items) and section 7 measured being part of the district health management team (22 items). Sections 3 – 7 were scored, summed up and termed as the overall management capacity.

All the respondents were provided with informed consent forms explaining the study aims, objectives and the nature of the study before data collection. A pre-test of the questionnaires was carried out on 20 healthcare workers in a PHC facility in Lagos State before the start of the study. The administration of questionnaires was coordinated by the research assistants of different cadres such as Community Health Extension Workers, who did not have managerial roles at the PHCs and had been trained specifically for this study. Confidentiality of respondents was highly maintained.

Data Management: Data collected from the study was cleaned and coded on Microsoft Excel 2016. The cleaned data was exported to STATA and analysed using STATA SE 12. Numerical data (scores for functional support system, general management, oversight & coordination, capacity for situation analysis, problem analysis, capacity for planning, implementation & monitoring, reporting, capacity for HR management, service delivery management, overall management performance, job motivation/satisfaction and organization commitment) were summarized as mean and standard deviations, median and interquartile range as appropriate. Student's t-test were conducted to assess the difference in the mean managerial capacity scores across different gender, age, and the LGA (location of work area) while analysis of variance tests (ANOVA) was conducted to assess the difference in the mean managerial scores across the professional experience categories. The level of significance (p-value) was set at <0.05. In assessing managerial capacity, the responses in the different domains of managerial capacity assessment were scored. For the "Yes" and "No" questions, positive responses were scored 1 and negative responses scored 0. For the questions on Likert scale, strongly agree, agree, neutral, disagree and strongly disagree were score 5, 4, 3, 2, 1 respectively. The sum of the overall score from the 15 domains came to 396 points. Any respondent that scored 50% or more was graded to have a good managerial capacity while those with less than 50% were graded to have poor managerial capacity.[26]

Ethical Approval: Ethical approval for the study was obtained from Lagos State University Teaching Hospital Ethical Review Committee with

reference number LREC/06/10/1424 and written permission obtained from Ekiti State Primary Health Care Development Agency. Ethical approval obtained from Lagos was because the lead researchers were from Lagos State. All the respondents were provided with written informed consent forms explaining the study objectives, aims and nature of the study. Data collected was treated and respondents' anonymity was maintained.

RESULTS

One hundred and eighty-eight respondents participated in the study with mean age being 45.9 ± 7.0 years and majority 161 (85.6%) females. More than half 113 (60.1%) of them had a post-secondary level of education and 100 (53.2%) had more than 5 years prior management experience (Table 1). Table 2 reveals that slightly more than a third 69 (36.7%) of respondents had received formal training in management/ leadership and almost all 176 (93.6%) of them had been provided with a job description. Number of days of training over the last 12 months was majorly 2 to 5 days amongst respondents 82 (69.5%). Eighty-eight (50.0%) took on additional roles and responsibilities besides what was stated in the job description to a moderate extent.

Table 3 shows that half 94 (50.0%) of the respondents always had access to relevant national and/or regional guidelines within their work area. Occasionally 56 (34.6%) of the respondents had regular team meetings. Fifty-three (28.2%) of the respondents always had adequate funds to carry out planned activities and only one-third 62 (33.0%) always had adequate logistics and infrastructure to carry out planned activities. More than half 105 (55.9%) always got support in data management. In Table 4, the mean score for respondents' capacity for HR management was 45.2 ± 11.2, their capacity for planning was 27.4 ± 6.5 while the service delivery management was 12.6 ± 4.7. The least scores were in the overall management performance 5.7 ± 1.1 and oversight with coordination 5.0 ± 3.0. In addition, the mean score for the overall managerial capacity of the respondents was 279.8 ± 46.5. Overall, 178 (94.7%) of respondents had good managerial capacity.

Table 5 demonstrates a statistically significant difference in the mean overall managerial capacity score

between respondents who had previously worked in another local government area and those who had not. Those who had previously worked in another local government area had a higher mean score (287.6 ± 36.6) for the overall managerial capacity score compared to those who had not 271.0 (54.5%), (p= 0.014). In addition, the mean score of those with tertiary level of education was higher (288.3 ± 34.0) compared to those with post-secondary (274.2 ± 52.6), (p= 0.020). Respondents with more than 5 years' professional experience had a higher mean score (289.4 ± 39.5) for the overall managerial score compared to those with lesser years' experiences, (p< 0.001).

DISCUSSION

The strengthening of the health system has been recognized as an international priority to meet the current health challenges in some developing countries.[24,27] The majority of the respondents (70.7%) in this study were above 40 years of age. This finding differs from what was found in a study done in Abuja where only one-third of the study population were above 45 years (33.7 %) with more males (63.5%).[28] This study on the contrary has more females 161 (85.6%), this is suggestive of the fact that gender at work-place varies among health care workers at different organisations.[29,30] Only a third of the healthcare managers in this study received formal training in management or leadership even though most had more than five years of experience as managers. Similarly, in a study among district health managers in the Eastern Region of Ghana, about forty percent had received formal management training.[24] However in this study, thirty-six percent had received formal training aimed at strengthening their management skills which is similar to what was obtained in a study done among health managers in hospitals in Abuja, Northern Nigeria, where just 27.9% obtained formal training in management.[28] These findings suggest that there is little investment in management training at the level of Primary Health Care. Primary Health Care may require that their managers have formal training as a pre-requisite for the job and a continuous in-service training which is not often mandatory in Primary Health Care settings.

A job description is a document intended to provide workers with an outline of their main duties and

responsibilities.[31] There are many benefits to an effective job description which include: to provide the employee with the expectations that are required of them in the role, help set goals and targets, aiding in the evaluation of job performance, and helping formulate training and development plans.[31,32] In this study, almost all the health managers had been provided with a job description, this will help in increase of the performances of this group of workers. To a moderate extent, half took up roles outside their job description to improve their productivity and provide positive contributory factors to their various assigned duties while one-third took up the roles within their job description.

Only half of the respondents always had access to relevant national or regional guidelines within their work area and this is in contrast to over ninety percent of health managers who had access in a study done in Ghana.[24] The importance of these guidelines is to support individuals in their day-to-day activities at work and make work more effective. The availability of these guidelines serves as an encouragement in the promotion of health system. This positive support gotten from the study in Ghana[24] can be replicated in the Nigerian health system for better healthcare performances. These studies found that one-third of the managers occasionally do have meetings regularly. Meetings should be part of every organizational program. It is a way for employees to gather, exchange ideas, share feedback, and learn from each other.[33] Engaging in early, prompt and beneficial meetings provide programme managers with regular and progressive feedbacks combined with adequate accountability of the resources.[33] Meetings are also an important tool of control and regular meetings should be encouraged in Primary Health Care settings. More than two-thirds (69.7%) of the health managers in this study always had adequate funds to carry out planned activeties. Funding of health programmes is essential to a successful programme. Despite the low budgetary allocation to health in some studies.[34, 35] most of the health managers in this study had adequate funds to carry out planned activities.

Only thirty-eight percent of managers in this study always have supportive supervision, feedback and mentoring

from their supervisor. Supervision is another key important area in management at the workplace. This has been demonstrated in helping staff to improve their work performance, helps in monitoring performance towards goals, and uses information gained for decision-making.[36] However, the majority of respondents in this study only had supervision and mentoring occasionally. A study has shown that supportive supervision is linked to positive outcomes such as job motivation, retention, satisfaction and better performance.[37] On the contrary; however, some studies demonstrated no positive effect and were found that there was no statistically significant difference between health workers job satisfaction scores pre-supportive and post-supportive supervision.[37, 38] In this study, more than half of the managers always had their activities planned and well costed while the others did occasionally. This finding of planned activities is being corroborated by what was obtained from other studies stating the importance of planning in selecting goals, objectives and determining how best to achieve them.[35, 36] Also, planning is the most basic and precedes all management functions while budgeting can be described as the process of creating a plan to spend monetary resources to ensure efficiency and effectiveness.[36] Regular planning and budgeting should be encouraged among all health managers.

The managerial capacity scores were higher for respondents who had previously worked in another LGA, and among those who had more than five years' experience. Managerial capacity scores were also higher for respondents who had formal training in management and/or leadership. These years of experiences brought about greater performances among the workers.[24, 26] However, this finding was in contrast to a study on competencies of managers in PHCs of Belgrade who had insufficient education in the field of management and the managerial capacity has no relationship with the formal training received.[39] A statistically significant difference was found in the overall managerial capacity mean score across respondents' level of education and their professional experience. This is in line with what was found in a study amongst health workers in Nigeria with an improved technical competency brought in by their higher education. The level of education has

been established as a plausible influence on job performance which was backed up by a study revealing that the higher the educational level attainment, the more are the use of advanced technology with the level of their education posits and their managerial capacity.[40,41] This research has contributed to the existing worldwide efforts for improving the managerial capacities of health professionals. It also addressed an interest in methods for assessing the managerial potential in PHC. The assessment of the clinical capacities of health professionals; however, doctors, nurses, and other health professionals also had a great role to play in health care management.[40]

Limitations of the study: The results from this study may not be applicable to the MOHs and PHC managers beyond Ekiti State. The information given was self-reported; there may be some responses with social responsibility bias.

Conclusion: The PHC managers in Ekiti generally had good managerial capacity which was mostly by individual personal developments. Formal management training organized by the state for all healthcare managers in Primary Health Care facilities is recommended. Supportive Supervision should also be provided by the State Ministry of Health and other relevant agencies with relevant guidelines and job aids readily made available to health managers in PHC facilities.

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Table 1: Socio-demographic characteristics of study respondents

Socio-demographic characteristics.	Frequency (%)
Age-group (years)	
≤40	55 (29.3)
>40	133 (70.7)
Sex	
Female	161 (85.6)
Male	27 (14.4)
Highest qualification	
Post–Secondary (Diploma)	113 (60.1)
Tertiary (University degrees)	75 (39.9)
Duration of management experience in the LGA	
5+ years of experience	100 (53.2)
1-5years of experience	47 (25.0)
Less than 1 year of experience	27 (14.4)
No experience	14 (7.5)
Previously worked in another LGA	100 (53.2)
Yes	
No	88 (46.8)

n=188, Mean age ± SD=45.9 ± 7.0 years

Table 2: Management training experience of respondents

Management Training Experience	Frequency (%)
Had received informal training over formal training in management and/or leadership generally.	69 (36.7)
Had received informal training aimed specifically at strengthening management skills.	118 (63.0)
No of days of training the past 12 months (n=118)	
1	15 (12.7)
2-5	82 (69.5)
6-10	10 (8.5)
> 10	11 (9.3)
Had been provided with a job description	176 (93.6)
Take on additional roles and responsibilities beside what is stated in the job description(n=176)	
Yes, to a large extent	49 (27.8)
Moderate extent	88 (50.0)
No, not at all	39 (22.2)

n=188

Table 3: Availability of functional support systems for the respondents

Availability of Functional Support Systems	Frequency (%)
Access to relevant national and/or regional guidelines within your work area	
Occasionally	94 (50.0)
Always	94 (50.0)
Conduct regular team meetings	
Occasionally	65 (34.6)
Always	123 (65.4)
Availability of minutes of team meetings	
Occasionally	69 (36.7)
Always	119 (63.3)
Adequate funds to carry out planned activities	
Occasionally	135 (71.8)
Always	53 (28.2)
Adequate logistics and infrastructure to carry out planned activities	
Occasionally	126 (67.0)
Always	62 (33.0)
Supportive supervision, feedback and mentoring from your supervisor	
Occasionally	69 (36.7)
Always	119 (63.3)
Planning and budgeting	114 (60.6)
Occasionally	
Always	74 (39.4)
Procurement of drugs and other commodities	
Occasionally	87 (46.3)
Always	101 (53.7)
Support in data management	83 (44.1)
Occasionally	
Always	105 (55.9)
Support in HR Management	88 (46.8)
Occasionally	
Always	100 (53.2)
Community-level structures or groups that enable community involvement	83 (44.1)
Occasionally	
Always	105 (55.9)

n=188

Table 4: Management capacity score of respondents

Management capacity	Mean ± SD	Median (IQR)
Capacity for HR management	45.2 ± 11.2	47 (39-52)
General management capacity	43.1 ± 7.5	44 (40-49)
Capacity for planning	27.4 ± 6.5	28 (27-31)
Job motivation / satisfaction	26.7 ± 3.1	30 (28-32)
Problem analysis	23.6 ± 5.4	24 (24-27)
Resource management	16.8 ± 7.6	20 (12-22)
Capacity for situation analysis	15.0± 4.3	16 (13-18)
Financial management	12.9 ± 7.2	15 (9-18)
Information management	12.9 ± 4.7	14 (12-15)
Service delivery management	12.6 ± 4.7	14 (12-15)
Implementation and monitoring	11.5 ± 2.9	12 (12-12)
Reporting	7.8 ± 2.2	8 (8-9)
Organisation commitment	5.8 ± 0.8	6 (6-6)
Overall management performance	5.7 ± 1.1	6 (5-6)
Oversight & coordination	5.0 ± 3.0	7 (1-7)
Total mean score	279.8 ± 46.5	288 (262-307)
Overall managerial capacity		
Good n (%)	178 (94.7)	
Poor n (%)	10 (5.3)	

n=188

Table 5: Mean managerial capacity scores by respondents' sociodemographic characteristics

Variable	Mean (SD)	t-test/ F-ratio**	p-value
Sex			
Female	279.2 (48.2)	0.57	0.571
Male	284.5 (34.5)		
Age in years			
≤40	275.5 (38.9)	0.82	0.415
>40	281.6 (49.3)		
Previously worked in another LGA			
Yes	287.6 (36.6)	2.49	**0.014***
No	271.0 (54.5)		
Training in management and/or leadership			
Yes	287.6 (43.6)	1.75	0.082
No	275.3 (47.7)		
Highest level of Education			
Post-Secondary (Diploma)	274.2 (52.6)	2.07	**0.020***
Tertiary (University degrees)	288.3 (34.0)		
Professional experience			
5+ years	289.4(39.5)	8.96**	**<0.001***
1-5 years	281.5(41.9)		
<1 year	254.5(57.7)		

*n=188 *Statistically significant **F-ratio*

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