An Assessment of Organizational Structure on Performance of Public Health Service Providers in Western Kenya

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Abstract
Organizations have for long known that in order to be successful they must develop a strategy then appropriately align important factors such as skills, resources, values and staff among others so as to achieve success. If the organizational structure is not supportive of the organizational strategy then the performance of the Public Health Service Providers would not improve even with all other strategic management practices in place. However between the alignment of these components and the success lie many difficulties. This study was designed to investigate the impact of organizational structure on the performance of Public Health Service providers Western Region of Kenya. This study was intended to generate knowledge that will enable Public Health Service Providers asses the connection between organizational structure, planning process and the actual implementation so as to allow more appropriate strategic planning and desirable results. The study was conducted through a correlational descriptive survey research design covering respondents from the Government owned healthcare facilities targeting specifically, District Hospitals in Western Kenya. Qualitative and quantitative data was collected through the use of structured questionnaires. Reliability of the selected measures was done through the use of Cronbach’s Alpha coefficient due to its ability to determine internal consistency of items in a survey. The researcher tested the questionnaires on pilot group that did not form part of the main study. The pilot study enabled removal of any ambiguities hence focus the questionnaire to collect data relevant to the study. The study collected both secondary and primary using the prescribed data gathering tools to collect both qualitative and quantitative data. Data was analyzed using both descriptive and inferential statistics such as tabulations, measures of central tendency and regression analyses so as to arrive at appropriate conclusions. The study results show that organizational structure had positive and significant effect on performance of Public Health Service Providers in Western Kenya.

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To God alone we give all the praise.

Keywords: Organizational Structure, Performance, Public Health Providers, Western Kenya

1. Background Information
Implementing strategy in not a new concept in business literature or in practice however its role had for long been placed secondary to strategy formulation. According to Thompson et al (2000), good strategy implementation involves creating a strong fit between the way things are done internally and what it will take for the strategy to succeed. It cuts across all facets of an organization and is an ongoing process and not a start and stop event. The task of implementing any a chosen strategy therefore entails assessing what it will take to develop the needed organizational capabilities so as to reach the targeted objectives on schedule. Hurd (2007), suggests that Vision is nothing without execution and argues that effective strategies are never really new in themselves but that what is important is making these ideas work for a given organization and most importantly getting the rest of the organization to agree with you. Sutton as quoted by Syrett (2007), puts it that success can only be accomplished by using old knowledge in new ways. How to use old knowledge in new ways therefore needs an operationalized strategy.

Glennhård and Maina (2007), suggest that making adequate health care services universally available requires striking a delicate balance between a population’s health needs and available resources since the resources for health are scarce, and the disease burden is high in the Kenya. This therefore requires equitable and efficient allocation of resources. Without proper health care financing and management strategies, the government cannot hope to successfully meet the health needs of its citizens. These are all pertinent issues in the implementation of any strategy. It is in cognizance of this fact that in 1989, the Kenyan government introduced cost sharing as a strategy to bridge the growing gap between health sector expenses and available resources this was anticipated to
help the government avail healthcare to citizens from all walks of life. Since then, the government has strived to achieve a mix of health care financing strategies and implementation systems that are aimed at providing its citizens with universal access to adequate basic health services (Health Policy Initiative, 2009). A number of government policy documents and successive national development plans have stated that the provision of health services should meet the basic needs of the population, place health services within easy reach of Kenyans, and emphasize preventive, promotive, rehabilitative and curative services. However despite all these initiatives the health sector is still yet to reach a desirable threshold.

2. Literature Review

2.1 The concept of Organizational

StructureMintzberg (1979) defines Organizational Structure as the sum total of the ways in which it divides labor into distinct tasks and then achieves coordination between them. Schemerhorn et al (1991), define structure as the intended formal framework that shows the general planned configuration of positions, jobs and duties and the lines of authority within an organization. Cofer and Athos (1968), refer to structure as the way interconnection between people the way that people relate and work in an organization so that desired output can be realized. They further advance that organizational structure is necessary because work is divided and people socialize and are separated in this framework. Organizational structure should not be seen as a static and rigid framework but more as a framework through which various elements such as decisions, goods, materials and influence flow through. Organizational structure therefore refers to the way that an organization arranges people and jobs so that its work can be performed and its goals can be achieved effectively and efficiently. McShane and Von Glinow (2005), advance that Organization Structure includes two fundamental elements: The division of labor into distinct tasks its coordination so that employees are able to accomplish common goals. Any type of Organizational Structure should be able to allocate authority and ensure that all employees know whom they have to report to and what tasks they have to perform this makes the division of labor in a firm manageable, Cرانson (1987). It defines the official relationships of people in an organization. According to Greenberg and Baron (2003), they define organization structure as the formal configuration between individuals and groups with respect to the allocation of tasks, responsibilities and authority within organizations. It involves both the division of work into logical tasks and its allocation to staff and the structural arrangement of staff into departments and organizational relationships. It shows the flow of authority from the top management to the support staff official relationship among employees. Organization structure should be designed and deployed to facilitate the development and deployment of organizational strategy. It must be subject to adaptability.

2.2 Performance in the Public Health Sector

In this context Webster’s comprehensive English Dictionary defines performance as the act of doing something to completion, achievement. It is the activity of a unit (be it individual, team, department, or division) of an organization intended to accomplish some desired result. The business dictionary defines performance as the accomplishment of a given task measured against preset known standards of accuracy, completeness, cost, and speed. In this study and with specific regard to Public Health Service providers in Kenya performance can be understood by looking at the results on two fronts namely Outcome (the changes in the health status of individuals and communities) and Output (the deliverables of a service provider or program as directly influenced by managers and health service providers), Kenya Quality Model (2006). The Master Checklist uses the term performance to cover both the output and outcome deliverables of the Public Health Service Providers as well as the interaction with other sectors and the effects on the health status of the Kenyan population. The Kenya Quality Model (2006), has outlined twelve performance parameters that are to be used to assess the performance of the Public Health Service Providers. This study will adopt four out of these twelve namely Patient/Client Satisfaction, Statistical Performance of the Public Health Service Providers, Progress of the Primary Health Care Programs and Staff Satisfaction.

Patient /client satisfaction refers to the patients or clients views based on the service delivery as measured in terms of time taken, cost and the resultant income all encompassed in the manner or delivery often resultant from the fact that an expectation has either been met or exceeded Kenya Quality Model,(2006). Client satisfaction is a fundamental indicator of success in any form of service delivery and is therefore a key component of performance measurement. A study by Bio Medical Central Health Services Research in 2010, study showed that interpersonal processes including perceived empathy, perceived technical competency, non-verbal communication and patient enablement significantly influence patient satisfaction. Therefore, health care providers should work towards improving the communication skill of their professionals along with having technically competent workers which could possibly affect the perception of the patient about all of the variables identified as independent predictors of patient satisfaction in this study. Organizations in general need to conduct all aspects of their businesses to satisfy customers as this will have a dramatic positive effect on their performance, Harrell and Frazier (1998). Statistical performance of Public Health Service Providers is defined and measured using the several predetermined indicators set by the Ministry of Health calculated on a monthly basis.
basis. The indicators are; Expenditure/Revenue ratio, Total financial resources in relation to number of beds, Bed occupancy rate, Average length of patient stay for all conditions as well as for Caesarean sections, Overall death rates/admissions, number of maternal deaths, number of deliveries, fraction of normal deliveries and Nosocomial infection rates. Primary Health Care (PHC) is defined as essential health care based on practical, scientifically sound and socially acceptable methods and technology, made universally accessible to individuals and families in the community through their full participation, and at a cost that the community and country can afford to maintain at every stage of their development in the spirit of self reliance and self-determination, Obimbo (2003). Progress of PHC Programs is measured by looking at the Primary Health Care programs that have been given key attention by the Government with a view to change the health status and reduce the disease burden of The Kenyan population as well as inculcate modern practices. It involves a deliberate effort by the government to combat and eradicate specific diseases through collaboration between Public Health Service Providers and the community. These diseases include, EPI, Malaria, IMCI, HIV/AIDS/TB, FP/RH and all Communicable diseases.

3.0 Methodology
3.1 Research Design
A research design is the arrangement of conditions for collection, measurement and analysis of data in that aims to combine relevance to the research purpose Kothari (2010). This study used descriptive correlational survey design as it sought to describe and establish the relationships among the study variables namely organizational structure and competitiveness. Descriptive correlational survey design allows the researcher to describe and evaluate the relationship between the study variables which are associated with the problem. Correlational survey design also allows a researcher to measure the research variables by asking questions to the respondents and then examining their relationship (O'Connor, 2011).

This study was conducted in the Western Region of Kenya. This is the area that was formerly known as Western Province. It covers four counties namely Bungoma, Vihiga, Kakamega and Busia. Western Kenya is specifically targeted because according to the last Population Census Results its considered to be one of the most populated areas in Kenya with a population of 4,334,282 against a geographical area of 8361 km$^2$ giving it a population density of 518.4/km2 which is second only to that of the area formerly Nairobi Province (KNBS,2009). It is thought that the findings from this study will be representative of most if not all scenarios in the entire Country. The target population of the study was the 21 District Hospitals in Western Kenya that deliver service to the general public. All these Public Health Service Providers will be used by the study as unit of analysis. However, in each of the 21 District Hospitals, the targeted respondents were the management staff such as Medical superintendents, Hospital administrators, nursing officers in charge among others for the reason that they were better placed to provide the most informed data on the subject matter given their scope of work and responsibility accorded to them. Management staffs were also easier to approach and this greatly enhanced the response rate of the study. These staff total to approximately 294 as per the records from the Provincial Medical Officer.

The study used simple random sampling technique to come up with a sample of 50% of the 21 Public Health Service Providers in Western Kenya. Random sampling technique was appropriate as it accords each member of the target population an equal chance of being included in the study being that the target population is homogenous in nature. Within the chosen sample, of 11 the researcher carried purposive sampling amongst the chosen categories of staff. These are the respondents to whom the questionnaires was administered. The criteria for picking the above respondents was based on their knowledge of the strategic directions and policy issues that comprise the competitive strategies implemented by their public health institution. As regards the customers who were approached to take part in the study, simple random sampling was used to come up with at least 1 respondent from every service point in the institution and thus bring the total of customers to 10 for every institution. The service points that was taken into account in this study were the registry/records office, the billing office/cashiers, the casualty area (for emergency cases),the outpatient clinic, the maternity clinics, dentistry clinic, child welfare clinics, physiotherapy clinics, male wards, female wards, This brought the total number of customers who were interviewed to 110.
Table 1: Sample Size

<table>
<thead>
<tr>
<th>Category of staff</th>
<th>Number of officers in total</th>
<th>50% of the group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Superintendents</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Overall Nursing Officer in charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Hospital Administrators</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>District Clinical Officer in charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Pharmacist in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Radiologist in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Lab Technologist in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Public Health Officer</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Medical Social Worker in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Medical Engineering Technologist in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Nutrition Officer in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Dentist in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Physiotherapist in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Health Records and Information officer in Charge</td>
<td>21</td>
<td>11</td>
</tr>
<tr>
<td>Customers/Patients</td>
<td></td>
<td>110</td>
</tr>
<tr>
<td>TOTAL</td>
<td>294</td>
<td>264</td>
</tr>
</tbody>
</table>

Source: Author

Both descriptive and inferential statistics were used in the analysis then presented using frequency and contingency tables. Descriptive statistics were used to deduce any patterns, averages and dispersions in the variables. They include measure of locations (mean) and measure of dispersions (standard error mean). These measures were used to describe the characteristics of the collected data. Inferential statistics were used to determine the relationship between the study variables and these inferential statistics included correlation and regression analysis. The primary association among the study variables were assessed using correlation which was tested at 95 percent confidence level (level of significance, $\alpha = 0.05$) and 99 percent confidence level and the hypothesis tested at 95 percent confidence level (level of significance, $\alpha = 0.05$).

4. Findings

Summary and Key Findings

This study on the effect of organizational structure on performance of public health service providers in Kenya had a specific objective of establishing the effect of organizational structure on public health service providers which was latter developed into null hypothesis and statistically tested. The discussions in the following sections highlight the key findings of the study based on the hypothesis.

The study was based on the premise that organizational structure influence Performance of Public Health Service Providers. In order to assess the influence of organizational structure on performance, the study had set the following null hypothesis: $H_0$: Organizational structure does not have significance effect on performance of Public Health Service Providers. The researcher used regression coefficient (beta $\beta$) to test the hypothesis with the test criteria set that the study should reject the null hypothesis $H_{01}$ if $\beta \neq 0$ and p-value $\leq \alpha$, otherwise fail to reject $H_0$ if p-value $> \alpha$. In order to test the hypothesis, the aggregate mean score of firm Performance measures were regressed against the mean score of measures of organizational structure and results are shown in the table 2 below.

From the Table 2, the regression results reveal that organizational structure had overall significant positive relationship with the performance of Public Health Service Providers ($\beta = 0.464$, p-value = 0.004). Hence the study therefore rejects the null hypothesis since $\beta \neq 0$ and p-value $\leq \alpha$. The regression results also shows that 46.4 percent of the Public Health Service Providers performance can be explained by organizational structure (R square = 0.464).
Table 2: Regression results of Organizational Structure against Performance

<table>
<thead>
<tr>
<th>Goodness Fit Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample size</td>
</tr>
<tr>
<td>18</td>
</tr>
</tbody>
</table>

Dependent Variable: Performance

<table>
<thead>
<tr>
<th>Overall significance, ANOVA (F-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sum of Squares</td>
</tr>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>Residual</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

Predictors: (Constant), Organizational structure.

<table>
<thead>
<tr>
<th>Individual significance (T-test)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unstandardized Coefficients</td>
</tr>
<tr>
<td>(Constant)</td>
</tr>
<tr>
<td>Organizational structure</td>
</tr>
</tbody>
</table>

Dependent Variable: Performance.

- Level of significance, \( \alpha = 0.05 \)

Source: Research data

Arising from the research results in Table 2, a simple regression equation that may be used to estimate Public Health Service Providers performance given its existing organizational structure is stated as follows; 

\[ P = 2.681 + 0.464 \text{OS} + \varepsilon \]

Where:

- 2.681 is the y-intercept constant,
- \( P \) is the Performance,
- 0.464 is the beta or the slope coefficient or an estimate of the expected increase in Public Health Service Providers performance corresponding to an increase in use of organizational structure.
- \( \text{OS} \) is Organizational structure
- \( \varepsilon \) is the error term- random variation due to other unmeasured factors.

4.5 Conclusion

The study was based on the premise that organizational structure influence public health service providers. The study results supported this premise in that organizational structure was found to influence the performance of public health service providers in Kenya.

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