Specialty Sub-Contracting Practice on Procurement Performance in Public Hospitals in Nakuru County

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Abstract: The study sought to assess the influence of specialty sub-contracting practice on procurement performance in public hospitals in Nakuru County. The study was informed by efficiency theory and agency theory. The research design for the study was a descriptive survey design. The study targeted 80 respondents involved in the procurement process in health facilities, they include medical officer in charge of the various targeted health facilities, procurement officers and department heads from user departments in health facilities in Nakuru County. Since the population was small the researcher used census technique to incorporate all the targeted respondents. The questionnaires were used to collect the primary data desirable for the study. A pilot-test was conducted in Nyahururu Hospital, Laikipia County where 8 questionnaires were issued out. The collected data in this study was quantitative in nature which was analyzed by use of Statistical Package for Social Sciences (SPSS) version 24. Descriptive and inferential statistics was used in the study. From the findings the researcher concluded that specialty sub-contractors sometimes tend to interfere with the quality of the contract to fit in the budget of the main contract which enhances procurement performance in the public hospitals. Basing on the conclusions the study recommended that in order for the public hospitals to improve their procurement performance they ought to adopt specialist sub-contracting as this will help them to avoid risk and get a reliable and safe services because of their competency in what they do.

Keywords: specialty sub-contracting practice, procurement performance and public hospitals

1. INTRODUCTION AND BACKGROUND

Subcontracting is particularly common in regions where complex undertakings are the standard, like development and data innovation. Subcontractors are employed by general contractor, who continues to have overall responsibility for project implementation within its stipulated timelines. (McDavid & Clemens, 2017). Subcontractor is a typical term utilized in the health sector because of the uniqueness of every health project, the work power is transient, numerous specialty are included, each project is arranged and worked in brief timeframe edges, and assortment of materials and gear required, one single task is regularly rented to numerous subcontractors, (Benjaoran, 2016).

While conducting a study on sub-contracting health projects in Zimbabwe (Holt, 2018) identified the factors influencing the choice of contractors and subcontractors as contractor/subcontractor organizations, financial considerations, management resource, past experience, past performance, project specific and other specific variables. These seven macro needs were then fragmented into 31 micro variables. These include age, size, health and safety policy, litigation tendency, bank reference, turnover history, qualification of owners, formal training regime, type of projects completed, size of projects, time overruns, cost overruns, experience geographically, plant resource availability, current workload, past relationships, weather condition, form of contract.

The Kenyan Government relies on contractor-subcontractor to take care of many of the logistics necessary to keep the government running smoothly. More so, many large public corporations and institutions in Kenya rely on procurement to access most of their products and services, through purchasing and sourcing as well as tendering and contracting. In order to ensure fairness during the bidding process, the Government through the Public Procurement Oversight Authority (PPOA), Public Procurement and Asset Disposal Act (PPDA) of 2015, and the Procurement Regulations of 2015 entrenched the concept of competitive procurement in all government agencies. Despite these standards, Kenya loses a lot of taxpayers’ money to improper procurement practices (RoK, 2015).
Procurement performance is a measure of identifying the extent to which the procurement function is able to reach the objectives and goals with minimum costs (Van Weele, 2015). The author further noted that there are two main aspects of the procurement performance: effectiveness and efficiency. Procurement effectiveness is the extent to which the previously stated goals and objectives are being met. It refers to the relationship between actual and planned performance of any human activity, (Van Weele, 2015). Additionally, he explains that procurement efficiency is the relationship between planned and actual resources required to realize the established goals and objectives and their related activities, referring to the planned and actual costs. As a result, supplier performance is the most important procurement performance driver.

Measuring procurement performance is important as the purchasing department plays an ever increasingly important role in the supply chain in an economic downturn (Vonderembse & Tracey, 2016). Reduction in the cost of raw materials and services can allow companies to competitively market the price of their finished goods in order to win business. An obvious performance measure of the success of any purchasing department is the amount of money saved by the company (Nyeko, 2014). Procurement department, like all other departments in a company, is an element of the overall organization, which must contribute to the achievement of the corporate goals (Nyeko, 2014). Thus a clear link between the corporate strategy and procurement strategy is crucial to understand, follow and implement in each function and action (Vonderembse & Tracey, 2016).

According to health sector performance report 2013 and 2014 health institutions are ailing from shortage of drugs or holding on expired drugs. Health centers and dispensaries are hardly stocked with the recommended medicines. It indicates that high rate of expired drugs in dispensaries and other public hospitals indicates poor planning and high wastage of public resources in the counties this affects efficient delivery of quality services. Procurement is an important part of efficient management and supply and wastage is critical for all of level care institutions. An effective procurement process ensures the availability of the right Medicals in the right quantities, available at right time for the right patient and at the right prices and at recognizable standards of quality (WHO, 2015).

Most public hospitals in Nakuru County are in bad conditions (Kenya Health Policy, 2018) characterized by dilapidated facilities, obsolete medical equipment, inadequate drugs and low bed capacity in the wards. Patients suffer in grief, due to inadequate care from medical personnel who complain about insufficient medical equipment and low pay among other poor working conditions. These factors can be linked to the procurement practices employed in the respective public health facilities in question (MOH Survey, 2018).

2. STATEMENT OF THE PROBLEM
According to county health infrastructure upgrading report 2018 there are various stalled projects in different health facilities in Nakuru County for example the trauma center in Nakuru County Referral Hospital, maternity ward in Subukia Sub-County Hospital among other stalled projects in other health facilities in the County. With the introduction of county government the procurement procedures in hospitals has greatly changed with majority of contractors opting to sub-contract most of their roles this has been attributed to untimely completion of projects, compromised quality of projects and sometimes cost overruns of the projects. Several studies have been conducted on the Sub-contracting, for instance, Muinde, (2015) conducted a study on impact of contractor-subcontractor relationships on the performance of construction projects: a case study of the Kenyan Construction Industry. Another study by Mutuva (2015) on the impact of public procurement procedures on delivery of maintenance works at Kenyatta National Hospital. The findings indicated that the Public Procurement and Disposal Act affect Public Procurement and tendering in public institutions. However very few studies have been conducted on sub-contracting in the health sector, therefore this study sought to assess the influence of specialty sub-contracting on procurement performance in public hospitals in Nakuru County.

3. LITERATURE REVIEW
3.1. Theoretical Review
The study will be informed by Transaction Cost Theory. The transaction cost theory limits that go onto impact. Grover and Malhotra (2003) derive that transaction cost theory discovers application in
authoritative inventory network the executives in four faces that is: notice issue exertion and favorable
determination to build as well as to maintain relationship with firm suppliers is key. This
helps in resolving problems that may arise in current business associations and suppliers engagement
in an opportunistic behavior. The theory is relevant to the study in explaining the importance of sub-
contracting in reducing all the negotiating costs with a new contractor.

![Figure 1. Conceptual Framework](image)

### 3.3. Specialty Sub-Contracting Practice and Procurement Performance

According to Tommelein and Ballard (2014), specialty contracting refer to constructing performing
work that requires skilled labor from one or at most a few specific trades and for which they have
acquired special purpose tools and equipment as well a process know-how. On the other hand, a
specialist is someone who is capable than the company itself, while others are seen as capacity
subcontractors. This type of subcontracting involves a high degree of specialization that makes it
possible to define functions on the basis of specifications that target a specific need of the client
company. This enables the client company to optimize its internal resources, (Chaillou, 2016).

Hinze and Tracy (2016) define a specialty contractor as a subcontractor who is hired to perform
specific tasks on a project. Specialization of some firms has led to a state whereby contractor performs
less than fifty percent of the work with his own forces. Thus, specialty or trade subcontracting is when
a particular tradesman or specialized services contractor is called to perform part of the main
contractor’s work. Building trades and services such as plumbing, electrical, tiling, painting,
bricklaying, soil testing, lift installation, ceiling installation; window sill, etc. are done mostly by
specialist or tradesmen. Gunderson and Rick (2014) emphasizes that in construction, specialty items
usually more effectively performed by subcontract. Trade and specialty subcontractors make their
own arrangement regarding materials sometimes and are more responsible for their oversight.

Specialist contractor’ is a very broad term that describes a contractor appointed to carry out activities
in the development of a built asset that involve specialist construction knowledge and skills. This is as
opposed to a ‘general contractor’ who will typically have a range of general construction knowledge
and skills (Mark, 2015). Contractors rely heavily upon specialty contractor skills and expertise to cut
costs and increase efficiency on construction projects. Subcontractors are specialty contractors that
normally perform specific tasks that general contractors do not or cannot perform. When these tasks
are reassigned by the subcontractor to another company, the lower tier agreements are called sub-
subcontracts.

Teik-Hua (2015) sought to review of specialty subcontracting practice in construction industry. He
observed that a great numbers of traders from different specialization makes construction industry is a
complicated and unique industry. To overcome the demand on special expertise, advanced equipment,
and huge investment cost, letting out work to subcontractors has been a norm in construction industry.
Nevertheless, large presence of subcontracting poses challenges to contractors, client and their project
management teams to manage such a large, diverse and fragmented group of subcontractors. Success
of a construction project is essentially depending on the ability of general contractor to select the
appropriate subcontractor during bidding process, and the sufficient management of subcontractor
during construction.

### 3.4. Summary of the Reviewed Literature

The study was built on the concept of the efficiency theory and the agency theory. The efficiency
theory posits that parties value assets more or less correctly and that their transacting choices are
motivated solely by wealth maximization goals and the absence of negative externalities. An
externality is an effect that a transaction between one set of parties puts on other parties who were not
a part of the deal. Additionally Agency theory propound that the problem arises where the two parties
have different interests and asymmetric information (the agent having more information), such that the principal cannot directly ensure that the agent is always acting in their (the principal’s) best interest, particularly when activities that are useful to the principal are costly to the agent, and where elements of what the agent does are costly for the principal to observe.

Both theories are relevant to the current study in the way that the control procedures, such as the use of contracts, are necessary to align the actions of the managers (the agent) with those of the residual claimants, the shareholders (the principals). Agency theory stresses that such means of contracting reduce agency costs by coordinating the goals of the principal and the agent. On the other hand efficiency theory is relevant to the study in the manner that contractors assigned to perform certain task, may lack the necessary skills, or even time may be a limiting towards efficiency delivery of services as a result the contractor will be forced to seek a subcontractor to aid the same services.

4. Research Methodology

The study adopted descriptive research design. This kind of design is useful in collecting information about peoples’ attitudes opinions, habit or social issues, Orodho & Kombo, (2002). This design reduces unnecessary answers from the respondents due to its inflexibility which assisted the researcher in arriving at conclusions faster. The target population was medical officer in charge of the various targeted health facilities, procurement officers and department heads from user departments in sub-county hospital and referral hospital in Nakuru County. According to Nakuru County Health Records Department there are 56 health facilities however the study purposively selected sub-county hospitals and referral hospital. According to County Health Records there are 12 sub-county hospitals and two referral hospitals. The referral hospital and sub-county hospitals are the only hospitals mandated to procure medical equipment for themselves and on behalf of other health facilities in the county. Since the population is small the researcher will use census technique to incorporate all the targeted respondents. Therefore the study sample size was 5 procurement officers, 63 head of department from user department and 12 medical officers in charge of the selected hospitals

The questionnaire was used to collect the primary data desirable for the study. The questionnaire contained structured questions which are the questions that the researcher has given the respondents the choices of the answers that the respondents can answer. The design of the questionnaire was based on a multiple-item measurement scale. The data collection process began by getting a formal letter from the university authorizing the field study. The letter together with the consent statement was then presented to the County Government as a means of seeking authority to collect data from the institution. Data was collected using the drop and pick later method which was collected after two weeks.

A pilot-test was conducted in Nyahururu Hospital, Laikipia County where 8 questionnaires were issued out. Data collected from the pilot study was not incorporated in the main study. Reliability in this study was enhanced by pre-testing the questionnaire with a selected sample which was not included in the main study. An internal consistency technique was applied by use of Cronbach’s Alpha. Internal consistency reliability is a measure of reliability used to evaluate the degree to which different test items that probe the same construct produce similar results. Higher values of alpha are more desirable. Kothari (2004) indicated that as a rule of the thumb, a reliability of 0.70 or higher (obtained on a substantial sample) is acceptable.

The data that was collected in this study was quantitative in nature. Quantitative data was analysed by use of Statistical Package for Social Sciences (SPSS) version 24. Descriptive and inferential statistics was used in the study. Descriptive statistics involved the use of percentages, frequencies, measures of central tendencies (mean) and measures of dispersion (standard deviation). Inferential statistic will involve the use of correlation analysis and multiple regression analyses. Correlation analysis was used to determine the nature of the relationship between variables at a generally accepted conventional significant level of P < 0.05 (Gall & Borg, 2003).

5. Research Findings and Discussion

5.1. Response Rate

The study administered 80 questionnaires for data collection. However, 62 questionnaires were properly filled and returned. This represented 78 percent overall successful response rates.
Respondents were also assured of confidentiality of the information provided. Babbie (1990) suggested that a response rate of 50% is adequate, 60% is good, and 70% and above very good for analysis. This implies that 78 percent response rate was very appropriate for data analysis.

**Table 1. Response Rate**

<table>
<thead>
<tr>
<th>Target No. of Respondents</th>
<th>No. of Questionnaires Returned</th>
<th>Response Rate (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>80</td>
<td>62</td>
<td>78%</td>
</tr>
</tbody>
</table>

5.2. Duration Worked in the Current Organization

The respondents were also asked to indicate the duration they had been working in their current organization. The findings were presented in Table 2.

**Table 2. Duration Worked in the Current Organization**

<table>
<thead>
<tr>
<th>Duration of Service</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 Years</td>
<td>13</td>
<td>21%</td>
</tr>
<tr>
<td>3-9 Years</td>
<td>30</td>
<td>49%</td>
</tr>
<tr>
<td>9-12 Years</td>
<td>14</td>
<td>23%</td>
</tr>
<tr>
<td>More than 12 years</td>
<td>5</td>
<td>7%</td>
</tr>
<tr>
<td>Total</td>
<td>62</td>
<td>100%</td>
</tr>
</tbody>
</table>

According to the findings, 49% of the respondents indicated that they had been working in their current organization for 3-9 years, 23% stated they had been working in their current organization for 9-12 years, 21% stated they had been working in their current organization for less than 3 years, while 7% stated they had been working in their current organization for more than 12 years. This shows that majority of the respondents had been working in their current organization for more than 3 years.

The duration of service an individual has worked determines his/her capacity. Employees who have longer working experience tend to have better skills. In this study majority of the respondents have worked for more than 3 years indicating they were more conversant with contracting aspects under study.

5.3. Specialty Sub-Contracting on Procurement Performance

The respondents were asked to indicate their level of agreement on the influence of specialty sub-contracting on procurement performance in public hospitals. The findings were as indicated in Table 3.

**Table 3. Specialty Sub-Contracting Practice on Procurement Performance in Public Hospitals**

<table>
<thead>
<tr>
<th>Specialty Sub-Contracting Practice</th>
<th>SA %</th>
<th>A %</th>
<th>U %</th>
<th>D %</th>
<th>SD %</th>
<th>Mean</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specialty sub-contracting is mostly applicable when the execution of contract demand a specialist</td>
<td>26</td>
<td>47</td>
<td>17</td>
<td>10</td>
<td>0</td>
<td>3.887</td>
<td>0.907</td>
</tr>
<tr>
<td>to meet client expectation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialty sub-contracting is mostly used when the main contractor has inadequate professional and</td>
<td>37</td>
<td>45</td>
<td>13</td>
<td>5</td>
<td>0</td>
<td>4.113</td>
<td>0.870</td>
</tr>
<tr>
<td>technical skills to meet the requirement of the contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Specialty sub-contractors sometimes tend to interfere with the quality of the contract to fit in</td>
<td>55</td>
<td>42</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>4.516</td>
<td>0.565</td>
</tr>
<tr>
<td>the budget of the main contract</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In a labour-only sub-contracting the sub-contractor must possess a unique technical skills</td>
<td>57</td>
<td>37</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>4.500</td>
<td>0.621</td>
</tr>
<tr>
<td>Labour-only sub-contracting is applicable when the contract demand special consultancy services</td>
<td>39</td>
<td>44</td>
<td>11</td>
<td>6</td>
<td>0</td>
<td>4.145</td>
<td>0.866</td>
</tr>
</tbody>
</table>

According to the findings, majority of the respondents (73%) agreed that the specialty sub-contracting is mostly applicable when the execution of contract demand a specialist to meet client expectation with a mean of 3.887. The findings further indicated that majority of the respondents (82%) agreed that specialty sub-contracting is mostly used when the main contractor has inadequate professional and technical skills to meet the requirement of the contract with a mean of 4.113. In addition majority of the respondents (97%) agreed that specialty sub-contractors sometimes tend to interfere with the quality of the contract to fit in the budget of the main contract with a mean of 4.516.
The findings further indicated that majority of the respondents (94%) agreed that in a labor-only subcontracting the sub-contractor must possess a unique technical skills with a mean of 4.500. In addition majority of the respondents (83%) agreed that labor-only sub-contracting is applicable when contract demand special consultancy services with a mean of 4.145. The standard deviation ranged between 0.565 to 0.907 indicating that the dispersion of the respondents from the mean was minimal. The study is in line with Chaillou, (2016) study which noted that contractors rely heavily upon specialty contractor skills and expertise to cut costs and increase efficiency of the services in procurement functions. Subcontractors are specialty contractors that normally perform specific tasks that general contractors do not or cannot perform.

5.4. Procurement Performance of the Public Hospitals

The respondents were asked to indicate their level of agreement on procurement performance in public hospitals. The findings were as indicated in Table 4

Table 4. Procurement Performance of the Public Hospitals

<table>
<thead>
<tr>
<th>Service Provided</th>
<th>S A</th>
<th>A</th>
<th>U</th>
<th>D</th>
<th>SD</th>
<th>Mean</th>
<th>Std</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services procured meet the specified quality</td>
<td>37</td>
<td>34</td>
<td>10</td>
<td>16</td>
<td>3</td>
<td>3.855</td>
<td>1.185</td>
</tr>
<tr>
<td>Services offered are worthy the cost</td>
<td>55</td>
<td>34</td>
<td>8</td>
<td>3</td>
<td>0</td>
<td>4.403</td>
<td>0.778</td>
</tr>
<tr>
<td>Services are delivered within the stipulated timelines</td>
<td>44</td>
<td>46</td>
<td>7</td>
<td>3</td>
<td>0</td>
<td>4.307</td>
<td>0.738</td>
</tr>
<tr>
<td>Customers are satisfied with the service provided</td>
<td>37</td>
<td>44</td>
<td>16</td>
<td>3</td>
<td>0</td>
<td>4.145</td>
<td>0.807</td>
</tr>
<tr>
<td>General patient satisfaction surveys are conducted</td>
<td>55</td>
<td>33</td>
<td>7</td>
<td>5</td>
<td>0</td>
<td>4.387</td>
<td>0.869</td>
</tr>
</tbody>
</table>

According to the findings majority of the respondents (71%) agreed that services procured meet the specified quality with a mean of 3.855. Majority of the respondents (89%) also agreed that services offered are worth the cost with a mean of 4.403. They further agreed (90%) that services are delivered within the stipulated timelines indicated with a mean of 4.307.

In addition majority of the respondents (81%) agreed that customers are satisfied with the service provided with a mean of 4.145. Majority of the respondents (88%) also agreed that general patient satisfaction surveys are conducted with a mean 4.387. The standard deviation ranged between 0.607 to 1.185 indicating that majority of the respondents agreed with the issues raised.

5.5. Correlation Analysis

The study sought to establish the correlation between specialty sub-contracting on procurement performance in public hospitals. The findings of the study are as shown in Table 5

Table 5. Specialty Sub-Contracting Practice on Procurement Performance in Public Hospitals

<table>
<thead>
<tr>
<th>Specialty Sub-Contracting</th>
<th>Procurement Performance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson Correlation</td>
<td>.443</td>
</tr>
<tr>
<td>Sig. (2-tailed)</td>
<td>.000</td>
</tr>
<tr>
<td>N</td>
<td>62</td>
</tr>
</tbody>
</table>

** Correlation is significant at the 0.05 level (2-tailed).

As indicated in Table 4.9, the study indicates that there was a moderate positive and statistically significant correlation between specialty sub-contracting on procurement performance. \( r = 0.443; p < 0.05 \). This implies that improved specialty sub-contracting enhance procurement performance. The p-value was less than 0.05 therefore according to the results, the hypothesis that: specialty sub-contracting have no significant effect on procurement performance in the public hospitals in Nakuru County Kenya was rejected. The study agreed with Oluoch (2015) who stated that specialty sub-contracting programs have a positive effect on procurement performance. Specialty sub-contracting if managed effectively have a positive impact on procurement performance. Thus specialty subcontracting have a positive and significant correlation to procurement performance.
Table 6. Regression Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Beta</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>.038</td>
<td>.145</td>
<td></td>
<td>.260</td>
</tr>
<tr>
<td>Specialty contracting</td>
<td>.233</td>
<td>.081</td>
<td>.245</td>
<td>2.877</td>
</tr>
</tbody>
</table>


Holding all the other independent variables constant, a unit increase in speciality sub-contracting would lead to a 0.233 improvement in procurement performance in the public hospital in Nakuru County. The relationship was significant as shown by a p-value of 0.006. Therefore, based on rule of significance, the study rejects the null hypothesis ($H_0$) and concluded that speciality sub-contracting have a significant influence on procurement performance in the public hospitals in Nakuru County Kenya.

$$Y = 0.038 + 0.233X_1 + \epsilon$$

The study sought to test the hypothesis that: $H_0$: Specialty sub-contracting has no significant influence on procurement performance in public hospitals in Nakuru County. From the findings the p-value was 0.006 which was less the 0.05 significant level. Therefore, based on the rule of significance, the study rejects the null hypothesis ($H_0$) and concluded that specialty sub-contracting have a significant influence on procurement performance in the public hospitals in Nakuru County Kenya.

6. CONCLUSIONS AND RECOMMENDATIONS

From the findings the researcher concluded that specialty sub-contractors sometimes tend to interfere with the quality of the contract to fit in the budget of the main contract which enhances procurement performance in the public hospitals. The researcher also concluded that in a labour-only subcontracting the sub-contractor must possess a unique technical skills and this enhances procurement performance in the public hospitals. Lastly the researcher concluded that labour-only sub-contracting is applicable when contract demand special consultancy services

Basing on the conclusions the study recommended that in order for the public hospitals to improve their procurement performance they ought to adopt specialist sub-contracting as this will help them to avoid risk and get a reliable and safe services because of their competency in what they do. Since specialty contractors have the most practice and experience in one specified area of construction, this will help the public hospitals to maximize their budget and receive the best quality of work for their money.

REFERENCES


**AUTHOR’S BIOGRAPHY**

**Esther Wangari Ngigi**, is a Supplies Practitioner and a part time Lecturer in Jomo Kenyatta University of Agriculture and Technology. I hold a Master of Science in Procurement and Contract Management, Bachelor of Purchasing and Supplies Management both from Jomo Kenyatta University of Agriculture and Technology. In addition I have a Diploma in Supplies Management from Kenya National Examinations Council and an Advanced Diploma in Technical Teacher Education from Kenya Technical Trainers College. My interest is in Supply Chain Management.