Implementation of Kenya quality guidelines for improved health services in Kenya: A case of Kakamega County.

Sarah Winnie Owiti *, Susan Njuguna ** and Musa Oluoch **

*Department of Health Systems Management, Kenya Methodist University & Corresponding Author
**Department of Health Systems Management, Kenya Methodist University

ABSTRACT

Quality is a key principle in health service delivery a pillar in health systems strengthening. The Kenya Quality Model of health was initiated across all health facilities to guide the implementation of quality standards. The use of guidelines in health management system describes the measure that can improve performance in health service delivery. Despite having guidelines there are disparities in the quality of services delivered in health facilities. The study focused on implementation of quality guidelines for improved health services. The objectives of the study were to establish the management practices used in the implementation process of the Kenya Quality Model for health and to explore the Human resources factors that influenced the implementation process of the Kenya quality model of health. A cross-sectional study involving 110 clinical managers in six public health facilities in Kakamega County, Kenya was carried out. Public health facilities were selected using random sampling, Clinical Managers were sampled using stratified and proportionate sampling. Quantitative data analysis yielded descriptive statistics and Chi-square (χ²) tests. The management practices used to implement guidelines was methods of quality improvement with mean 3.8, planning 3.3, continuous quality improvement 3 P-value was 0.04 indicating a significant relationship with improved quality of health services. The human resource for health factors that affected implementation of guidelines were awareness of guideline contents with a mean score 3.7 and motivation 3 and a p-value of 0.03 which indicated a relationship between human resource for health and improved quality of health services. The study recommends formation of quality improvement teams that can be responsible for the implementation process and development of quality monitoring tools. It further recommends Strategies to be put in place to increase the number of health human resources and train all health managers on the quality guidelines to prepare them for the implementation process.

Index Terms: Kenya Quality Model of Health, implementation, guidelines, improved health services,
I. INTRODUCTION

Developing countries including Kenya put more emphasis on measuring changes on mortality, morbidity and coverage but less emphasis has been put on measuring quality of services (WHO, 2010). This has resulted in weakness in implementation of management policies for quality improvement due to inability to monitor quality and discover areas that need improvement or discontinuation. A study done in Thailand and Tanzania established that deficiencies in quality of care was not due to failure of professional compassion or a lack of resources but was associated with gaps in knowledge and inappropriate applications of available technology (Knight, 2014).

In order to fill the knowledge gap, the Kenya quality framework (KQIF) also known as Kenya quality model (KQM) in 2001 was developed with the aim of improving health services in the country. It was later reviewed in 2008 and renamed the Kenya quality model for health (KQMH). Quality improvement gained more prominence in 2011 after promulgation of the constitution in 2010. The citizen’s expectation of improved quality of health service delivery was raised by the chapter on the right to the highest attainable standard of health, as enshrined in the Bill of Rights in the Constitution. Great emphasis on provision of efficient and high-quality healthcare systems in order to improve the overall livelihoods of Kenyans has been emphasized by the social pillar of the Vision 2030. According to MoH (2011), the Kenya quality model for health is a framework for holistic quality management system that integrates evidence based medicine (EBM) through wide dissemination of public health and clinical standards and guidelines with total quality management (TQM) and patient partnership (PP). The process of improving adherence to standards and guidelines of health services can be affected using a Management tool for sustainability and continuity of best practice.

Clinical managers are key implementers of Kenya quality model for health guidelines were interviewed in order to investigate the implementation of Kenya quality guidelines in public health facilities. The objectives of the study were 1) To establish the management practices of Kenya quality guidelines implementation for improved health services at Kakamega County and 2) to explore the human resource factors that influence Kenya quality model of health guidelines implementation for improved health services at Kakamega County.

II. RESEARCH ELABORATIONS

The descriptive cross sectional study was carried out in public health facilities in Kakamega county. It largely focused on management practises used in implementation of quality guidelines and the human resource for health factors that affected implementation of quality guidelines.

Public health facilities were sampled using simple random sampling and the Clinical Managers sampled through stratified and proportionate sampling. Yamane method of sample size determination yielded 127 clinical managers but 110 clinical managers were available to participate in the study.

Primary data was collected between June and July 2014 after obtaining ethical clearance from Kenya Methodist University Institutional Research Board and Kakamega County. Quantitative data was from completed questionnaire that were summarised, coded and tabulated. Statistical program for social sciences (SPSS) version 22 was used to conduct descriptive and inferential statistics. A level of p less than 0.05 was considered significant. Presentation was done using frequency tables, percentage, pie charts and bar graph.

III. RESULTS OR FINDINGS

Table 1: Management Practices Used In Implementing Quality Guidelines

<table>
<thead>
<tr>
<th>Management Practises</th>
<th>Mean score</th>
<th>Standard deviation</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quality improvement planning</td>
<td>3.3</td>
<td>1.3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Team involvement</td>
<td>2.2</td>
<td>0.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Customer focus</td>
<td>2.8</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality improvement methods</td>
<td>3.8</td>
<td>1.6</td>
<td>8.200</td>
<td>0.04</td>
</tr>
<tr>
<td>Use of data</td>
<td>2.2</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuous quality improvement</td>
<td>3.0</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Management Practices used in quality guideline implementation

Implementation of quality improvement guidelines involves various management practices that lead to successful implementation. These practices include quality planning, team involvement, data driven, customer focus, methods used in quality improvement and continuous quality improvement.

The findings in the table 1 above indicate majority of respondents mentioned quality improvement methods with a mean score of 3.8
as the common management practice used to implement guidelines. The second most frequent practice was quality improvement planning with a mean score of 3. This indicated that planning was the second practice used in implementation of quality guidelines. Continuous quality improvement had a mean score of 3 and was the third frequently cited management practice used in implementation of quality guidelines.

Customer focus was not frequently mentioned with a mean score of 2.8 and standard deviation of 1.4 as a management practice used in implementation of quality guidelines. Team involvement and use of data was the least with a mean score of 2.2 as a management practice used in implementation of quality guidelines. Management practice in summary had a chi-square of 8.200 and a p value=0.04 indicating a significant relationship between management practices used in implementation of guidelines and improved health services.

**Team responsible for monitoring of quality guidelines**

Figure 1 below indicates the teams involved in quality guideline implementation monitoring and evaluation. This include the quality improvement teams, the work improvement team, supervisors and self, n =110.

![Figure 1: Team responsible for monitoring quality guideline implementation.](image)

In view of the above figure respondents were asked the group responsible for monitoring and evaluation of implementation of quality guidelines which is presented in bar graph. Majority of respondent 40(36%) said health workers themselves do monitoring and evaluation with tier four having the majority (17%) self-monitoring respondent followed by tier two (4%) and lastly tier three (3%). This was followed by monitoring by work improvement teams 24(22%) with tier four having the majority (9%) of respondents who said it is done by work improvement team and three97%) had the least of respondents. Then monitoring by supervisors 22(20%) was high in tie four (10%) followed by tier three (8%) and two was the least (4%) and lastly by the quality improvement teams 17(17%) with tier four (20%) having the highest number and tier two the least (5%) number.

**Table II: Human Resource for Health Factors That Affect Guideline Implementation**

<table>
<thead>
<tr>
<th>Human resource for health factors</th>
<th>Mean score</th>
<th>Standard deviation</th>
<th>Chi-square</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awareness of the guideline contents</td>
<td>3.7</td>
<td>1.4</td>
<td>5.586</td>
<td>0.033</td>
</tr>
<tr>
<td>Preparedness of implementers</td>
<td>2.2</td>
<td>0.9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Staffing level if implementer</td>
<td>2.9</td>
<td>0.8</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Motivation of implementer</td>
<td>3</td>
<td>1.4</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Human Resource for Health Factors**

In table II above majority of respondents felt that awareness of the guideline contents affected its implementation with a mean score of 3.7. The second frequently mentioned human resource for health factors that affected implementation of guidelines was the motivation of the people implementing the guidelines. The third factor was staffing level of guideline implementer with a mean score of 2.9 and lastly was the preparedness of the implementers of guidelines with a mean score of 2.2. In summary the human resource for health factors had a chi-square of 5.586 and a p value of 0.033 indicate a significant relationship between the human resource for health factors and improved quality of health services.

**IV. Discussion**

Management practices used in implementation of quality guidelines are significantly related to improved health services. Among these practices, the quality guidelines implementation methods are frequently used to by keenly following the steps described in the quality guideline implementation model. The more the steps laid down in the guideline implementation model the higher the chances that the
Kenya quality guidelines will be implemented. The results agree with the key informant who said “following the methods of quality improvement as stipulated in the guidelines is key in ensuring that guidelines are implemented” and Adolfs (2010) who contended that following the methods and steps ensures successful implementation of quality guidelines as each step follows each other in a sequence resulting in total implementation of guidelines.

The second practice mentioned was planning with a mean score of 3.3, the results points that planning was given the second priority by managers. Before implementation clinical managers need to strategize on the whole process of implementation. These results are in agreement with Frankie et al (2008) who noted the need for the team to plan and allocate responsibilities in order to monitor activities. The third factor in management practices used was continuous quality improvement as significant in improving the quality of health services. Arguably continuous quality improvement helps the team implementing the guidelines to establish the progress being made. These results concur with Donabedian (2011) who argued that continuous quality improvement of the organization and overall performance should be a permanent objective of the organization to ensure that quality guidelines are totally implemented.

Majority of respondents stated that clinical managers themselves monitor quality guidelines implementation. Monitoring by clinical managers themselves can occurs in facilities that are having limited number of staff and in most cases these staff can be found to belong to more than two groups that are concerned with quality improvement monitoring and this might have been the case with most facilities. These results disagree with Beerworth (2011) who emphasises the need for monitoring especially using work improvement teams’ first then quality improvement teams.

The study also sought to find out the human resource for health factors that affect implementation of guidelines. The results indicated a significant relationship between human resource for health factors and improved health services. Participants pointed out awareness of guideline contents as a major factor in guideline implementation. When the end users are aware of the contents embedded within the guidelines it makes it easier to implement them. This is in agreement with Blum (2011) who found that awareness of the guideline contents increases the chances of health managers using the guidelines and boast their confidence.

Motivation of human resource for health was a factor identified. It is also important for leaders to motivate their staff to implement the guidelines in order to achieve excellent results. This result is in agreement with Mwaniki et al (2014) and Kilbourne (2010) who found that motivated staff is essential part for successful implementation of the quality guidelines.

V. Conclusion

Implementation of Kenya model for health has a significant influence on quality of health services. This is largely affected by management practices mainly quality improvement methods, quality improvement planning and continuous quality improvement largely practised by the clinical managers. The human resources for health factors that are statistically significant to improved health services include awareness of guideline contents by the managers overseeing the implementation process and motivation of staff implementing the guidelines.

ACKNOWLEDGEMENT.

We take this opportunity to express our appreciations to all the institutions and individuals who supported this study with ideas, information and technical support. Our appreciation to Kenya Methodist University for granting Winnie the opportunity for graduate study of Master of Science in Health Systems Management. Special thanks to all the respondents for their time, personal information and experiences shared.
References


