



Influence of Gemba Kaizen's Principles on the Performance of Maternal Child Healthcare Projects; A Case of the Beyond Zero Campaign Project in Tana River County, Kenya

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Abstract: The influence of Gemba Kaizen's principles on the performance of organisations in both the developing and the less developed countries is a matter that has gained popularity significantly in the 21st century. In fact, the concept of continuous improvement is influencing the performance of organisations greater than the technology spread concept does. The application of the Kaizen strategy and its principles has gained importance in the medical field too. This has been extended to the MCH programmes run by various hospitals across the globe. The purpose of the study was to examine the influence of Gemba Kaizen's principles on the performance of maternal child healthcare projects in Tana River County, Kenya. The objectives of the study were four, to assess the influence of team work on the performance of maternal child healthcare projects in Tana River County, Kenya; to examine the influence of upper management commitment on the performance of maternal child healthcare projects in Tana River County, Kenya; to establish the influence of total quality management on the performance of maternal child healthcare projects in Tana River County, Kenya; to examine the influence of rewards and recognitions on the performance of maternal child healthcare projects in Tana River County, Kenya. This study was guided by the theory of lean management and the theory of constraints. This study adopted a descriptive research design. The total target population was 407 respondents. The study applied simple random sampling to get a sample population of the study from the volunteers and then a population census was done to all the county and BZC permanent employees. The questionnaire was the main instrument of data collection that was used. Questionnaires were sorted and counterchecked for any mistakes or noncompliance. The best fit questionnaires for the study were then be coded and entries made into the SPSS software for analysis. The chi square test was done to test the relationship between the dependent variable and the independent variables (hypothesis). Out of the 407 targeted respondents 214 of them responded representing 52.58% response rate considered adequate to constitute a basis for valid conclusion. From the study's findings, it was concluded that team work concept, upper management commitment, rewards and recognition and TQM concept have significant influence on the performance of maternal child healthcare projects in the county. According to the findings, teamwork brings both the employees and other project implementers together in order to share ideas and knowledge that finally influences the performance of MCH projects. Upper management if it is committed it is able to get resources on time, give direction on activities to be performed, give the priorities in resources allocation and many more that finally influences the performance of projects. Rewards and recognitions perform a great duty of ensuring that every stakeholder of the projects is made to feel part of the projects and thus motivated to participate in each and every activity of implementation. **Key words:** Gemba Kaizen strategy, team work, upper management, rewards and recognition, total quality management

Introduction

According to Ang, Mohd and Nik (2015), Kaizen is relevant in organizational performance in the recent days because it looks at an organization as one entity and recommends for bit by bit improvements that are constant and continuous. They show that, in most cases these are not ideas for major changes in an organization, but Kaizen is based on making little changes on a regular basis: always improving productivity, safety and effectiveness while reducing waste. Suggestions are not limited to a specific area such as production or marketing. Kaizen is based on making changes anywhere where improvements can be made (Rezaeian, 2014). UNICEF (2017) adds that there has been an improvement of the performance of the maternal child healthcare projects in the country due to the adoption of the continuous improvement strategy as proposed by Gemba Kaizen. This report by UNICEF has indicated that, India's maternal mortality rate reduced from 212 deaths per 100,000 live births in 2007 to 178 deaths in 2012 for example due to the application of simple



principles line teamwork, TQM, key government interventions, and improvements in the governance and management of health services at all levels. According to UNICEF (2016) various countries like Nigeria, Cameroun, Gabon, Sierra-Leon and many more have been performing poorly in implementing their maternal child healthcare programmes due to poor strategic planning and implementation despite the fact that their governments, donors and other humanitarian bodies pouring numerous resources. Studies have also indicated that maternal child healthcare projects implementation has been performing better in Ghana, South Africa and partly Libya. In South Africa for example, a number of studies have shown that the maternal child healthcare is slowly gaining momentum since 1994 with much performance being credited between 2012 and 2016 due to the adoption of Gemba Kaizen strategic principles in the implementation of various maternal child healthcare projects. Performance in this case is measured by focusing on the number of infant mortality rates, the number of expectant mothers accessing medication, the patterns of post natal care, the trends of women seeking nutrition advice and the manner in which MCH programme are perceived by the society (WHO, 2017a). Zoe, Sonja and Eliana (2013) found a very strong relationship between the application of Gemba Kaizen strategy and the performance of MCH programmes. The Kaizen strategy is said to have improved the performance of MCH projects in South Africa for example by 26.7% between 2010 and 2012. The Partnership for Maternal Newborn & Child Health (2015) report adds that strategies adopted by the South African government during Thabo Mbeki's times were better and insisted on continuous improvement (Gemba Kaizen's strategy) in services delivered from better to good quality. Imai (2013) argues, if the principals of Kaizen are adopted by organisations, the organisations can benefit by operating at low costs; leading to increased outputs. According to him, some of the principals for example that have informed organisations when adopting Kaizen's views include: the team work principle, upper management commitment principle, total quality management (TQM) principle, and Kaizen's rewards and recognitions principle. According to him, teamwork brings understanding in organizations whereby all the employees look at a problem as a group and come up with innovate ways of addressing the challenge collectively, top management involvement enables the juniors and other employees get the support they need for the job, TQM enables quality delivery through set standards while recognition and reward make employees feel values and increase their morale. All these combined lead to better performance in organizations. Similarly, a report by the WHO, UNICEF, World Bank (2015) that focused on the state of the world's vaccines and immunization has shown that the MCH programme being implemented in Rwanda is getting better with time since 2009 due to a number of reasons that include management involvement, better community participation, teamwork, the concept of continuous improvement and many more. Kisalu (2014) did a study and found out that the strategy has a significant influence on the performance of the public sector. Omondi (2014) also did a study in Bidco Oil Refineries and found out that there is a well-structured implementation of the Gemba Kaizen and this influences the performance of Bidco Company. According to him, data analysis established that the company was a large firm with experienced workforce, having well-articulated goal, mission & policies which have been effectively cascaded to employees (what is known as employees participation). From the construct, it was further established that company profile and structural configuration, leadership, unique organizational competencies, culture, contemporary management systems such as Gemba Kaizen as well as appropriate resource allocation enabled the company to implements its strategies to become market leader. It can therefore be argued that Gemba Kaizen principles are well articulated by the company; influencing positive performance. Goin (2015) indicated that among the counties that have benefited from the Beyond Zero campaign includes the Tana River County. However, studies indicate that the campaign is being run across the 47counties in the country (MOH, 2017a).

1.2 Statement of the Problem

UNICEF (2016) has carried out a study in a number of countries like Nigeria, Cameroun, Gabon, Sierra-Leon and many more and has shown that MCH projects are performing poorly despite the fact that governments are pouring a lot of resources (human and financial resources). This therefore means that there is a need for a study to examine why these projects fail despite the fact that there exist heavy investments. Scholars have advocated and done research on a number of strategies that have been adopted to monitor and enhance the performance of MCH projects but the Gemba Kaizen is for a long time ignore; creating room for such a study. A study by the MOH (2016) has shown a positive move of maternal child healthcare project run in many more counties due to the increased budgetary allocations towards the programme since 2005. However, there seems to be little study that focuses on this continuous improvement and the future of this programme; forming fertile grounds for this study. The MOH (2017a) has shown that there has been a lot of teamwork, community participation, open communication, management and government commitment, rewards and recognition to both the employees and communities who are doing better in what is always seen as strategic principles of Gemba Kaizen. However, there seems to be no evidence of a study that has been documented to examine the influence of these principles as proposed by Gemba Kaizen on the performance of the MCH programmes in Tana Delta;



leaving a gap for this research. Also, since Tana River is one of the counties in the country that have poor coverage of both public and private hospitals offering quality MCH to the marginalized population, such a study is necessary to give better information on why such initiatives like the BZC (Beyond Zero Campaign) project should adopt strategies that can see their sustainable operations. Also, due to the high number of infant mortality rates in the County, there needs to be a study to focus on strategies that can be adopted by the project for its survival. Despite the fact that the Beyond Zero Campaign programme having attracted a great number of funds (over 355million Kenyan shillings during its inception) and has been showing constant improvement, there seems be little research focusing on this programme. In this realization, this study was carried out with the aim of examining the influence of Gemba Kaizen's strategic principles on the performance of maternal child healthcare projects; a case of the beyond zero campaign project in Tana river county, Kenya.

Purpose of the study

The purpose of the study was to examine the influence of Gemba Kaizen's principles on the performance of maternal child healthcare projects in Tana River County.

Objectives of the study

The study was guided by the following objectives that included:

- To assess the influence of team work on the performance of maternal child healthcare projects in Tana River County.
- To examine the influence of upper management commitment on the performance of maternal child healthcare projects in Tana River County.
- To establish the influence of total quality management on the performance of maternal child healthcare projects in Tana River County.
- To examine the influence of rewards and recognitions on the performance of maternal child healthcare projects in Tana River County.

Research Questions

The study was guided by the following questions:

- What are the influences of team work on the performance of maternal child healthcare projects in Tana River County?
- What are the influences of upper management commitment on the performance of maternal child healthcare projects in Tana River County?
- What are the influences of total quality management on the performance of maternal child healthcare projects in Tana River County?
- What are the influences of rewards and recognitions on the performance of pr maternal child healthcare projects in Tana River County?

Research Hypothesis

The study tested the following hypothesis at the 95% level of significance:

i. H₁ Kaizen's team work has an influence on the performance of maternal child healthcare projects in Tana Rive County.

H₀ Kaizen's team work has no influence on the performance of maternal child healthcare projects in Tana Rive County.

ii. H₁ Kaizen's upper management commitment has an influence on the performance of projects in maternal child healthcare in Tana River County.

H₀ Kaizen's upper management commitment has no influence on the performance of projects in maternal child healthcare in Tana River County.

iii. H₁ Kaizen's total quality management has an influence on the performance of project maternal child healthcare in Tana River County.

H₀ Kaizen's total quality management has no influence on the performance of project maternal child healthcare in Tana River County.

iv. H₁ Kaizen's rewards and recognitions have an influence on the performance of project maternal child healthcare in Tana River County.

H₀ Kaizen's rewards and recognitions have no influence on the performance of project maternal child healthcare in Tana River County.

Delimitation of the Study



The study was conducted spatially on the influence of Gemba Kaizen's principles on the performance of maternal child healthcare project in Tana River County. The study was constrained to examine influence of Gemba Kaizen's principles on the performance of maternal child healthcare project but this was only considered in terms of team work, upper management commitment, Total quality management, rewards and recognition. The study also focused on the four objectives only and used a questionnaire as the only tool for data collection.

Literature Review

The Concept of Gemba Kaizen Strategic Principles

Gemba Kaizen is a strategic management approach that emphasizes on continuous improvement of the process (Thessaloniki, 2012). It is a strategy that has heavily invested in the ideas of gradually improving the performance of a process over time but there must be improvements. The concept was developed by Japanese strategists who argued that for a process or a project to achieve its objectives, there should be continuous improvement over time no matter how small this may look (World Bank, 2016).

Actually, according to Womack (2011), Gemba Kaizen promotes discipline and standardization, and believes the continuous processes in place for solving problems are more valuable than the solutions themselves. Although many lean practitioners have Kaizen in their toolbox, those who strive to live it each day are the people who are making a difference in people's lives

Kaizen's Team Work Principle on the performance of MCH projects

According to Thessaloniki (2012), Kaizen teamwork activities have a great influence on the implementation of various projects and performance of organisations include: the availability of well structure contact work groups, the availability of problem solving groups and the presence of cross functional groups in an organisation that carry out numerous activities. The importance of teamwork as spelt by Kaizen is bringing together energies, skills, creativity and resources, leading to improved results in an organisation. This can be measured by the policies in an organisation that allocate budgets for the various teams, train and create specialized sub-group with departments of an organisation (Fujioka, Masachika and Andre, 2015).

For MCH projects to be successful, they must borrow the team work principle within their environments and outside the internal environments (USAID, 2014 indicated that, there are a number of team structures and characteristics that when adopted positively influence the implementation of RMNCH projects in Geneva. These interventions include: intact work groups, problem-solving, cross-functional, proactive or implementation teams have adopted the Gemba Kaizen strategy of management.

IDRC (2016) in its initiative in Africa has emphasized on influence of teamwork on the implementation of MCH projects. CRDI (2016) noted that teamwork is one of the best ideas of handling MCH projects. In this study, it was found out that partnerships between various MCH projects advocacy groups and workers led to much increased services delivery and improved reach to the disadvantaged pregnant mothers and infants in the country. The report indicates that in its quest to implement the initiative better, the program is expected to strengthen collaborations between Canadian and African researchers, working in partnership with African decision-makers, to implement and scale up high-quality and effective medicines, services, and technologies that improve maternal and child health outcomes.

Birungi and Obare (2014) noted that team work is a key determinant of RH and Maternal Health programmes implementation. Their study that focused on improving access to ARVs and Maternal Healthcare Services for Adolescents Girls Living with HIV in Kisumu and Homabay they note that, cross-functional teams are very vital component in the success of the maternal health programmes in the region. In this study, they also argue that, intact work groups, problem-solving teams, Cross-functional groups, and Proactive or implementation teams are very vital in an organization's performance and the implementation of the MCH projects. According to Mwangi (2017) in his study that focused on, home-based post natal care, including family planning through community midwifery in Kenya, team work is very crucial in implementing community based projects. Mentioning the beyond zero campaign and its MCH projects in various hospitals in Kiambu, Nairobi and Laikipia counties, Mwangi (2017) argues that the success of the programme has been due to management team's ability to align to development partner strategies, continued improvement of better services and increasing stakeholder involvement and coordination.

Upper Management Commitment and the Implementation of MCH projects

A report by IDRC (2016) sows that the aim of Maternal, Newborn, and Child Health projects in Africa is improving services for pregnant women, adolescent mothers, newborns, and children under five years of age. This report has shown that for this to be achieved there must be better commitment of the people who spear



head and lead these projects. A study report on the impact of Kaizen implementation on performance of manufacturing companies' staff and revealed that the role of upper management commitment is very important in allocating resources, giving direction of leadership, sourcing for resources and mobilize resources that can help an organisation perform better. If management makes positive use of the process-oriented way of thinking to support innovation and further reinforces it with a Kaizen approach, it will find that the company's overall competitiveness will be improved in the long run (Rezaeian, 2014).

According to AMREF (2016), leadership in implementing child healthcare projects in Busia and Seme in Migori play an important role. It is leadership that makes decisions on which projects to be implemented first, the goal to be achieved, the objectives to be met first, the resources to be allocated, the source of resources, the places of projects implementation and the community members to benefit from such projects. It is reported that the project has been praised to be completed in time due to the commitment of the various leaders from the implementing body and other partners like the donors and employees. Some of the roles played by these leaders included the sourcing of sufficient resources, negotiating with the Kenyan government, involving the target groups and allocating resources effectively.

Hosono (2012) argues that organisational increase their outputs in the top management is committed by: communicating to the organization the importance of meeting customer as well as statutory and regulatory requirements; establishing the quality policy ;ensuring that quality objectives are established; conducting management reviews; and ensuring the availability of resources. Supporting this is Ouma (2016) who did a study on factors determining project implementation of health projects in Gedo Region, Somalia. This research adopted descriptive research design and its target population was 55 employees of World Vision working under health projects in Gedo region of Somalia. It found out that the upper management is crucial in project implementation since the management sources and allocates resources that range from financial to human resources.

According to Kirimania (2014) there needs to be good relationship between the various parties implementing projects for general success. For better understanding in among the project implementers, there must be good leadership that has the perfect sense of communication. In this study that focused on project performance in Kenya, he has also indicated that success of any activity relies on the teamwork or leadership of the group. This is because in a team, individuals share knowledge and skills and members complement each other as need arose. At the end of it all, high quality work is produced through combined effort. The team leaders should be exemplary to the team members which will eventually result in success of the project.

Arindam (2015) did a study on the importance of management and performance of organisations and notes that the top management is very vital in the performance of manufacturing firms in developing countries. According to him, the top management is charged with the responsibilities of establishing the quality policy, communicating in the organization, establishing quality objectives, conducting management reviews, providing resources and many more. UNICEF (2014) postulates that top management is very vital in setting out policies, mobilizing resources, allocating resources and giving general direction on the expected performance of the organisation. Zoe, Sonja and Eliana (2013) conclude that, senior managers play a crucial role in the success of continual improvement programmes. Without the leadership, commitment and involvement of senior management, a continual improvement programme is unlikely to be successful.

Kaizen's Total Quality Management (TQM) Principle on the Implementation of MCH Projects

Total quality management (TQM) is a firm-wide management philosophy of continuously improving the quality of the products/services/processes by focusing on the customers' needs and expectations to enhance customer satisfaction and firm performance (Esin and Hilal, 2014). There are mixed results about the relationship between total quality management practices and performance of various projects or firms. However, most of the previous studies report that overall TQM practices have positively been related to productivity and manufacturing performance, quality performance (Chenhall, 2016), employee satisfaction/performance (Mann and Kehoe, 2014), innovation performance (Curkovic, Vickery and Dröge, 2013), customer satisfaction/results (Chenhall, 2016), competitive advantage (Curkovic, Vickery and Dröge, 2013), market share (Chenhall, 2016), financial performance (Esin and Hilal, 2014), and aggregate firm performance (Curkovic, Vickery and Dröge, 2013).

Akaligaung (2015) in his study that touched on improving the quality of maternal and child health service delivery in resource-poor settings confirmed that Total Quality Management (TQM) as a management



tool has a significant influence in improving the implementation of MCH projects and their total performance in the country. Similarly, CRDI (2016)'s study that focused on innovative solutions to tackle difficult challenges in MCH Projects implementation in Ethiopia has shown that TQM influences the implementation of MCH projects and its general performance. The study adds that, TQM achieves organisational performance by organizing activities involving everyone in a company – managers and workers – in a totally systemic and integrated effort at every level.

According to Brandrud et al (2014) touched on the three success factors for continual improvement in healthcare, application of TQM principle is very vital in the performance of healthcare projects since it looks at the organisation as a single unit that needs to be improved by ensuring quality is given at the output level and this should be improved from time to time by avoiding wastes. They further postulates that TQM uses strategy, data, and effective communication to integrate the quality principles into the culture and activities of the organization; leading to improved performance. UNICEF (2015) adds that maternal child health projects in Kenya; particularly in the informal settlements of Nairobi has gained some credit of late due to collaborations, partnerships and perceived strategies like the Gemba Kaizen that emphasized on waste elimination through continuous improvement. The World Bank (2017) reports that through the adoption of the TQM principle as proposed by Gemba Kaizen, and adoption of a client-centered model to the delivery of services has helped teams to identify the felt needs of clients, resulting in perceived increased uptake of MCH services. The report also indicates that key contributory factors to successes of MCH projects in other parts of the country include: availability and accessibility of midwives, training of QI teams, incentive packages for providers and clients, community support groups, and PFA partners.

Karani (2011) in his study found out that, total quality management is a concept meant that in any situation, there should be the best outcome as much as there is room for improvement which is centered on quality, based on the participation of all its members and aiming at long term success. This is achieved through customer satisfaction and benefits to all members of the organization and the stakeholders. Dale, Zairi, Van der Wiele, & Williams (2000) cited in Karani (2011) argue that, according to a survey of manufacturing firms in Georgia, the benefits of TQM are improved quality, employee participation, teamwork, working relationship, customer satisfaction, employee satisfaction, productivity, communication, profitability, and market share.

Kaizen's Rewards and Recognitions and the Performance of MCH Projects

Knight (2012) found out that Kaizen's rewards and recognitions principle affects the performance of manufacturing firms in developing countries. Reward and recognition if well-structured in a company's philosophy, it reinforces employee commitment to corporate values and to the corporate culture; leading to better performance. Garbers & Konradt (2013) note that, the employees of an organisation will strive and put more efforts in their daily chores to achieve a particular stipulated reward in organisations where R&R is well outlined. This will go further to cultivate the culture of motivation among the employees leading to improved performance of an organisation.

Imran (2011) did a study and found out that reward and recognition (R&R) have various functions and can be valuable tools to organizations on their road to quality improvement and performance. He adds that all rewards should: motivate and reward a high performance culture; promote a close link between performance, reward and recognition; reward significant and outstanding performance that advances management's goals and values; provide timely recognition for individual and team achievement; provide rewards that are valued and meaningful to staff; be fair, applied consistently and transparent; be simple to understand and apply; and be clearly communicated to staff.

Hogan et al (2014) postulates R&R can increase the rates at which MCH projects in Asia and Africa achieve the goals and objectives. Through R&R, projects stakeholders like the donors, employees and community players/community leaders will feel part and parcel of the projects being implemented. This way, the projects gain by getting timely financial resources, well trained labour force that is motivated, community supporting resources like land for the erection of MCH hospitals among other benefits. Brandrud et al (2014) observed that R&R in implementing MCH programmes in Asia for example has been able to motivate employees/ individuals and groups to continue their active participation in their undertakings so as to achieve the objectives that are aimed at achieving the sustainable development goal 6. Rewards and recognition has also been credited for having created a positive environment for various teams to compete against each other leading to a 'win-win' situation between the organization and employees; leading to improved MCH projects implementation and performance in Asian countries like China.



Similarly, Zoe, Sonja and Eliana (2013) did a study that sought to answer the question, 'Do Gemba Kaizen principles influence the performance and implementation of Maternal and Child Health Care in Lower and Middle Income Countries Lead to Improved Outcomes?' This study focused on some countries in Africa where Kenya's MCH initiatives in the informal settlements were looked at. The study indicated that the adoption of Gemba Kaizen strategy influenced positively the implementation of MCH projects; although this was a bit slow and needed much commitment. Some of the commitments here included the role of the management and other stakeholders in appreciating everything in the process. They have shown that the best way of appreciating individuals is through coming up with well outlined policies for rewards and recognition.

Mwangi (2017) noted that community based prenatal and post natal care projects like that run by the 1st lady Margaret Kenyatta are gaining much success recently due to the fact that much recognition, rewarding and some form of positive stimuli is attached to them. For example, donors to these programmes are appreciated, they are recognized and various campaigns are carried out targeting local communities and those who respond positively are recognized through gifts or sharing moments with various leaders or the first lady herself. This makes a number of stakeholders feel part and lot of the programme leading to improved performance.

Kisalu (2014) did a study on the Utility of Gemba Kaizen strategic principle on Public Sector Service Delivery in Nakuru County, Kenya. He found out that Kaizen strategic principles like rewards and recognition have an influence on the performance of the public health sector in Nakuru. He add that, the R&R system will increase the awareness among 'workers that management is prepared to reward them if they are serious in applying critical values, such as quality, customer satisfaction, and continuous improvement in an organisation. Such standards lead to increase organisational performance. Jadhav, Jamadar, and Gajghate (2014) note that employees normally tend to have higher motivation if they work in organizations that are consistent in their R&R process and the workers always perceive management initiative as a fair effort by management. This normally extends the feeling of trust, creates a strong sense of belonging in the organization; leading to improved performance. Bwemelo (2014) did a study and found out that, recognition highlights employees and teams who make a definite contribution to the performance of an organisation. Such recognition stimulates additional effort in employees and leads to better performance in an organisation.

Theoretical Framework

This study was guided by two theories; firstly, the theory of lean management developed by John Krafcik in (1988) focuses on improving processes. According to Krafcik (1988), in lean management model, every step a project takes from initial stages to final stage is reviewed in what is called continuous improvement or TQM be Gemba Kaizen. Waste or duplication of effort is identified and eliminated to the maximum extent possible. A system of "continuous improvement" is established to monitor the results on an ongoing basis. This theory is relevant in this study since one major aim of the BZC programme was to implement MCH projects that give better services to the unfortunate Kenyans across the country. The beyond zero campaign has implemented continuously its MCH projects across the county with continuous improvement from time to time and from county to county.

Secondly, the Theory of Constraints developed is a methodology for identifying the most important limiting factor (i.e. constraint) that stands in the way of achieving a goal and then systematically improving that constraint until it is no longer the limiting factor. The theory of constraints takes a scientific approach to continuous improvement of the system as advanced by Gemba Kaizen strategy principles. It hypothesizes that every complex system, including strategy implementation processes, consists of multiple linked activities, one of which acts as a constraint upon the entire system (i.e. the constraint activity is the weakest link in the chain). So, the ultimate goal of most Kaizen principles implementation in the BZC programme is to enable the programme to make maximum services delivery and maximum outputs to the less fortunate women who cannot afford basic maternal care levies. The Theory of Constraints provides a powerful set of tools for helping to achieve that goal.

Conceptual Framework

The conceptual framework has outlined relationship between the dependent variables and the independent variable of the study together with their indicators. The study has also outlined the moderating variables that have an influence on the implementation of MCH projects but their literature has not been made due to time and length of the study.

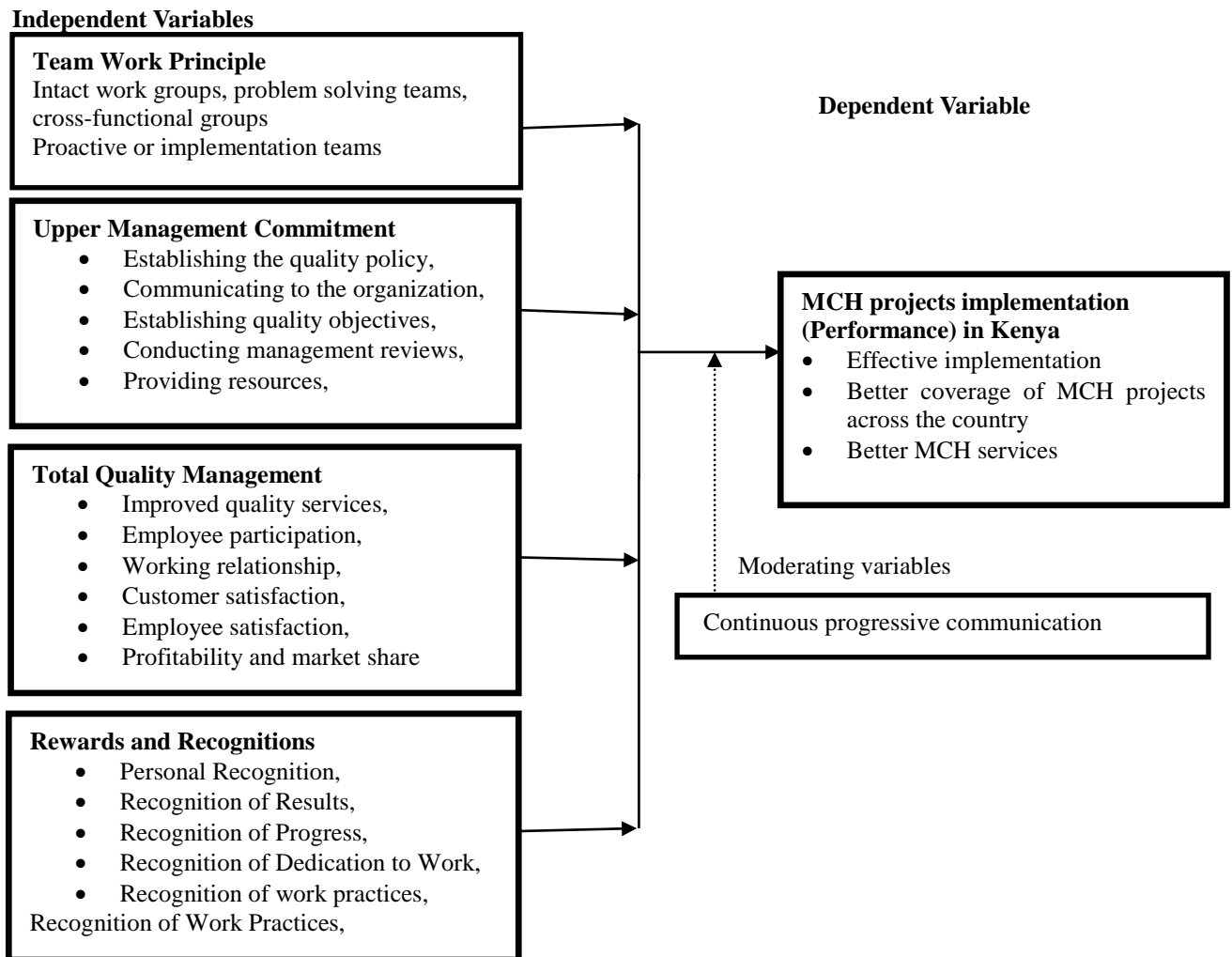


Figure 1: Conceptual Framework

Research Methodology

The research design study adopted a descriptive research design. Descriptive research involves gathering data that describe events and then organizes, tabulates, depicts, and describes the data collection (Glass & Hopkins, 1984). This design was preferred for this study and seen as the most suitable as it brought out information on attitudes that could be difficult to measure using observational techniques. Additionally, from the various literature documented, this design has the advantages that includes: effective to analyse quantified topics and issues; the possibility to observe the phenomenon in a completely natural and unchanged natural environment; the opportunity to integrate the qualitative and quantitative methods of data collection. The total target population was 407 respondents. The population targeted the employees of the MCH department at Hola and the 370 volunteers championing the beyond zero campaign, 13 county staff that has been coordinating the MCH programme in collaboration with the BZC across the county as proposed by the county government department of health and 24 permanent employees spearheading the MCH program in the county. The study applied simple random sampling to get a sample population of the study from the volunteers and then a population census was done to the entire county and beyond zero campaign permanent employees. The questionnaire was the main instrument of data collection that was used. The questionnaire helped the researcher to collect data on knowledge, opinions as well as attitudes of respondents towards Gemba Kaizen's principles and their implementation of the MCH projects run by the BZC programme. The questionnaire was suited for



this study because it was practical and was used to collect data from a large number of people within a short time and in a relatively cost effective manner. The questionnaire contained both closed and open ended questions covering the themes in line with research objectives. Content validity was used in this study. This content validity was achieved by having experts exposed to the questionnaire and they assessed the relevance of the contents in the questionnaires and gave their opinions and suggestions that were incorporated to improve validity of the data collection instrument. To ensure a reasonable degree of construct reliability of the indices constructed, the research examined the internal consistency of data. Questionnaires were sorted and counterchecked for any mistakes or noncompliance. The best fit questionnaires for the study were then coded and entries made into the SPSS software for analysis. The chi square test was done to test the relationship between the dependent variable and the independent variables (hypothesis).

Data Analysis, Interpretation and Presentation

In the study, 407 questionnaires were allocated to respondents in various strata. Out of the issued 407 questionnaires, only 214 responded representing 52.58% of the total questionnaire. Majority of the people are not literate and the time for data collection was a bit limited, making response rate low. However, Kothari (2004) argues that in a social sciences and descriptive studies, when the target population is less than 10,000 a response rate of 30% can give a trend of facts that are under investigation. Male respondents, 130 (60.74%), registered the most as compared to their female counterparts, 84 (39.26%). This picture is indeed the true indication in the Tana River County where men are more empowered than the women. Majority for the respondents in this study 45.8% had ages ranging between 18-30 years, followed by 20.1% who had 41 - 50 years. Those who had ages between 31 - 40 years and 51- 60 years made 16.4% and 17.8% respectively. Majority of the respondents indicated having attained diploma education (46.3%) and Bachelors' degree education level (30.4%). This was followed by those employees with other levels of education (19.2%) while the remaining had master degree education qualification (4.1%). This is a clear observation that was made during the field study since most of the employees seemed not to have very high education qualification since the literacy rates are very low in this county. Majority of the respondents (39.3%) who participated in the study had worked in the projects for 1-2 years, followed by those who have interacted with the projects for less than 1 year at (34.6%). Those who had the knowledge of maternal child healthcare for 2-4 years made 20.1% while those who had worked for over 5 years made 6.1%.

The Influence of Team Work on the performance of maternal child healthcare Projects

H₁ Kaizen's team work has an influence on the performance of maternal child healthcare projects in Tana Rive County, Kenya.

H₀ Kaizen's team work has no influence on the performance of maternal child healthcare projects in Tana Rive County, Kenya.

Since the calculated chi-square value of 108.93 is greater than the critical chi-square value at 5% level of confidence, we accept the alternative hypothesis. Consequently, Kaizen's team work has an influence on the performance of maternal child healthcare projects in Tana Rive County, Kenya.

Majority of the respondents (70.1%) agreed with the idea that the Gemba Kaizen strategic principle of team work had been adopted by the BZC projects implementers while the remaining 29.9% did not agree with this statement.

Majority of the respondents (72%) supported the idea that Gemba Kaizen strategic principle of team work influenced the implementation of MCH projects at the county. However, 28% of the respondents had a different opinion that Gemba Kaizen strategic principle of team work doesn't influence the implementation of MCH projects at the county.

A greater percentage of the respondents (46.3%) supported the idea that, intact work groups influence the implementation of MCH projects in the county. This was followed by the idea that, problem-solving teams have helped boost performance and implementation of MCH projects in the county run under the beyond zero campaign that attracted over 43% who supported the idea. Majority (over 61%) of the respondents also supported the idea that cross-functional groups have helped in boosting the performance and implementation of MCH projects while the idea that proactive or implementation teams have been effective in influencing performance and implementation of MCH projects attracted over 53.3% of the respondents who supported it.

Upper Management Commitment on the Performance of maternal child healthcare projects

H₁ Kaizen's upper management commitment has an influence on the performance of projects in maternal child healthcare in Tana River County, Kenya.

H₀ Kaizen's upper management commitment has no influence on the performance of projects in maternal child healthcare in Tana River County, Kenya.



Since the calculated chi-square value of 139.02 is greater than the critical chi-square value at 5% level of confidence, we accept the alternative hypothesis. Consequently, Kaizen's upper management commitment has an influence on the performance of projects in maternal child healthcare in Tana River County, Kenya.

Majority of the respondents (over 53%) fairly supported the idea that top management of the MCH centres across the county has been involved in establishing the quality policy thus influencing MCH projects positively. This was followed by the idea that top management has been involved in effective communication of the organization's goals and plans which attracted over 40.2% of the respondents who supported it. Also, majority of the respondents supported idea that: Top management has been involved in establishing quality objectives (over 40.2%); Top management has been involved in conducting management reviews (over 50.5%); and Cross-functional groups have helped in boosting the performance and implementation of MCH projects (over 61.7%).

Total Quality Management on the Performance of maternal child healthcare Projects

H₁ Kaizen's total quality management has an influence on the performance of project maternal child healthcare in Tana River County, Kenya.

H₀ Kaizen's total quality management has no influence on the performance of project maternal child healthcare in Tana River County, Kenya.

Since the calculated chi-square value of 78.84 is greater than the critical chi-square value at 5% level of confidence, we accept the alternative hypothesis. Consequently, Kaizen's total quality management has an influence on the performance of project maternal child healthcare in Tana River County, Kenya.

Majority of the respondents (70.1%) strongly supported the idea that TQM Principle has been effectively adopted at the county in relation to MCH projects implementation that is run under the Beyond Zero Campaign headed by Mama Margaret Kenyatta. However, 29.9% of the respondents did not support the idea.

On a rating scale, majority of the respondents (over 38.3%) supported the idea that TQM has led to improved quality MCH projects implementation followed by the idea that TQM has led to better employee participation in projects implementation that attracted over 48.6% of the respondents. The idea that TQM has led to working relationship improvement between projects implementers attracted over 43.9% who supported it. Also, majority of the respondents supported idea like: TQM has led to customer satisfaction seeking MCH services at the county (46.7%); TQM has led to employee satisfaction attached to the MCH projects (78%); and TQM has led to increased number of MCH clinics implemented (64.9%).

Rewards and Recognitions on the Performance of maternal child healthcare Projects

H₁ Kaizen's rewards and recognitions have an influence on the performance of project maternal child healthcare in Tana River County, Kenya.

H₀ Kaizen's rewards and recognitions have no influence on the performance of project maternal child healthcare in Tana River County, Kenya.

Since the calculated chi-square value of 150.75 is greater than the critical chi-square value at 5% level of confidence, we accept the alternative hypothesis. Consequently, Kaizen's rewards and recognitions have an influence on the performance of project maternal child healthcare in Tana River County, Kenya.

Majority of the respondents (72%) supported the idea that rewards and recognitions have an influence on the implementation of MCH projects run under the beyond zero campaign.

50.9% who made the majority respondents agreed with the idea that personal recognition of MCH projects stakeholders has an influence on the implementation and performance of MCH projects in the Tana River County. Also, majority of the respondents (36% and 28%) agreed and strongly agreed with the idea that recognition of results has been used effectively to boost the performance and implementation of MCH projects respectively. Recognition of employees result by management has influences the implementation of MCH projects idea had a majority of the respondents (over 40.7%) supporting it. It was also found out that most of the respondents (over 46.3%) supported the idea that Recognition of employee dedication to work by management has influences on the implementation of MCH projects. Finally most of the respondents supported the idea that recognition of employees' work practice by management has influences on the implementation of MCH projects with 48.6% of the respondents agreeing and 29.4% strongly agreeing.



Summary of Findings, Conclusions and Recommendations

From the field data obtained, data analyzed and presented, a number of issues were as follows:

In relation to objective one that sought to assess the effects of Kaizen's team work principle on the performance of MCH projects in Tana River County, majority of the respondents (100 who equated to 70.1%) agreed with the idea that the Gemba Kaizen principle of team work influenced the implementation of MCH projects at the county. On a rating scale, a greater percentage of the respondents (46.3%) supported the idea that, intact work groups influence the implementation of MCH projects in the county followed by the idea that problem-solving teams have helped boost performance and implementation of MCH projects in the county run under the beyond zero campaign. When the hypothesis was tested, the alternative hypothesis was favored due to the fact that the calculated chi-square value (108.93) was greater than the critical chi-square value at value at 5% level of confidence. In relation to the second objective that sought to examine the effects of Kaizen's upper management commitment principle on the performance of MCH projects in Tana River County, majority of the respondents (81.3%) supported the idea that top management has an influence in the implementation and performance of MCH projects run by the BZC programme in Tana River County. On a rating scale, majority of the respondents supported idea that: Top management has been involved in establishing quality objectives (over 40.2%); Top management has been involved in conducting management reviews (over 50.5%); and Cross-functional groups have helped in boosting the performance and implementation of MCH projects (over 61.7%). When the hypothesis was tested, the calculated chi-square value of 139.02 was greater than the value at the critical chi-square 5% level of confidence, hence the researcher accept the alternative hypothesis. In relation to the third objective that sought to establish the effects of Kaizen's total quality management (TQM) principle on the performance of MCH projects in Tana River County, majority of the respondents (70.1%) strongly supported the idea that TQM Principle has been effectively adopted at the county in relation to MCH projects implementation that is run under the Beyond Zero Campaign. Also, when the respondents were asked whether they thought that TQM principle adopted by the BZC at Tana River County has an influence on various MCH projects implementation, majority of them (701%) supported the idea. On the same issue, , majority of the respondents supported idea like: TQM has led to customer satisfaction seeking MCH services at the county (46.7%); TQM has led to employee satisfaction attached to the MCH projects (78%); and TQM has led to increased number of MCH clinics implemented (64.9%). Since the calculated chi-square value of 78.84 was found to be greater than the critical chi-square value at 5% level of confidence during the hypothesis calculation, the alternative hypothesis was accepted. In relation to the fourth objective that sought to examine the effects of Kaizen's rewards and recognitions principle on the performance of MCH projects in Tana River County and the results indicated that, majority of the respondents (73.3%) supported the idea that there is a clear policy that recommends rewards and recognitions to be availed at various levels at the various MCH centres. Also, majority of the respondents (72%) supported the idea that rewards and recognitions have an influence on the implementation of MCH projects run under the beyond zero campaign. On a rating scale 50.9% who made the majority respondents agreed with the idea that personal recognition of MCH projects stakeholders has an influence on the implementation and performance of MCH projects. Since the calculated chi-square value of 150.75 was greater than the critical chi-square value at 5% level of confidence, we accepted the alternative hypothesis.

Conclusions

The conclusion of this study is guided by the study's objectives, results obtained from the field and the literature reviewed. Based on the findings the researcher concludes that:

Team work concepts that include intact work groups and problem solving teams have an influence on the implementation of MCH projects in the county. According to the findings, teamwork brings both the employees and other project implementers together in order to share ideas and knowledge that finally influences the performance of MCH projects.

Upper management commitment has an influence on the implementation of MCH projects in the county. Upper management if it is committed it is able to get resources on time, give direction on activities to be performed, give the priorities in resources allocation and many more that finally influences the performance of projects.

Total quality management concept has significant influence on the implementation of MCH projects in the county. The continuous improvement of the activities and deliverables of the projects can be said to be the



chore measure of projects implementation and final performance.

Rewards and recognition have an influence on the implementation of MCH projects in the county. Rewards and recognitions perform a great duty of ensuring that every stakeholder of the projects is made to feel part of the projects and thus motivated to participate in each and every activity of implementation.

Recommendations

Based on the findings, the researcher recommends that:

1. MCH projects to adopt and integrate all the Gemba Kaizen principles since they are very crucial in the implementation of these projects in all the departments.
2. The team work concept should be embraced along and across the departments and this should be extended to include other stakeholders like the community that consumes the services of MCH projects to ensure their success.
3. The upper management should be committed towards ensuring that the internal business process (policies and resources) is strengthened. Also policies and straight forward rules for rewards and recognition must be laid down.
4. For a better learning and growth among the employees at handling the MCH projects, better and constant implementation of the projects by the County government calls for them to understand the concept of continuous and gradual development to be made public to all the stakeholders.

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