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Risk Management Strategies and Implementation of Healthcare Projects in Low Resources Countries

George Bernard Oluoch & Dr. John Bosco Kisimbii

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 <sup>1\*</sup>George Bernard Oluoch & <sup>2</sup>Dr. JohnBosco Kisimbii
<sup>1\*</sup>PhD Candidate, Graduate School, University of Nairobi
<sup>2</sup>Senior Lecturer, School of Distance Learning Education, University of Nairobi

Email of the Corresponding Author: <a href="mailto:georgeoluochuon@gmail.com">georgeoluochuon@gmail.com</a>

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# **Abstract**

Risk management strategies are weak in the low resource countries (LRCs) as evidenced by low performance of health care provider (HCP). The following review aimed to identify the effectiveness of risk management strategies in the implementation of healthcare projects in the LRCs. A systematic review was conducted on similar literature drawn from five journal articles. The study identified that risk management strategies have a significant positive impact on the performance of healthcare projects in LRCs. It therefore recommended for the strengthening of these strategies for the enhancement of HCP performance which translates to the overall performance of the healthcare setting in the LRCs. The low-income earners often find it hard to access quality healthcare resulting in the proliferation of unqualified or unlicensed doctors who appear pocket-friendly. Projects NHIF undertakes have significantly led to the improvement of medical services across the country. However, risk exposures have derailed successfully implementation of such projects, specifically in terms of their efficiency and scope. Therefore, it was imperative to explore the impact of project risk management methods on NHIF projects in Kenya. The objective of the study relied on the need to identify the extent to which risk prevention, risk control, risk transfer, as well as risk acceptance influence successful implementation of NHIF projects in Kenya. In order to develop and implement a risk management programme, a quantification matrix as well as a risk register form to aid the identification of potential risks, particularly in an operating room. Operating room policies are then created to minimise or eradicate those risks. A consultation mechanism needs to be established and a risk monitoring system developed to reduce risks which the operating room caregivers may be exposed to. There is also need to continuously improve a hospital's operating room risk management capacity. This is done to continue with the provision of quality of care as well as guarantee surgical patients' safety. Stakeholders are critical contributors while implementing complex public healthcare inventions. It is important to have access to probable implementation risks in the development stage of implementation,



coupled with careful development of its components as well as channelling the exploration into a robust multi-stakeholder stroke rehabilitation set up. Systematic stakeholder and risk analyses would act as a guide to the exploration process as well as make it possible for teams engaged in complex interventions to design context-tailored management instruments to facilitate the implementation. As per the knowledge stakeholders provide, 2 context-tailored management instruments for implementation were developed using the top-down approach. The first one being the comprehensive stakeholder-risk atlas which gives individual stakeholder information like role, contribution, access, expectations, power, specific activities of engagement, interest, as well as perceived risks. The second one being the whole project implementation approach focusing on communication, network building, transparency, as well as professionalism. Conclusion is drawn that complex interventions potentially benefits from the assumption of early as well as comprehensive stakeholder besides risk analyses. Early engagement of stakeholders, with informed knowledge enhances the research team's ability to design context-tailored management instruments for implementation. The instruments support teams during the implementation as well as positively influence the intervention's outcome. Knowledge may be gathered by integrating top-down with bottom-up working strategies.

**Keywords:** Risk management strategies, implementation, healthcare projects, low resources countries

#### 1.0 INTRODUCTION

# 1.1 Background

Every year in low resource countries (LRCs), millions of premature deaths are witnessed among adults and children despite the availability of several interventions which can be used to avert such deaths (Hussain *et al.*, 2018). Evidently, low coverage of such intervention has been witnessed as a crucial public health concern and a key deterrent to the realization of Millennium Development Goals (MDGs). It also hinders the achievement of Sustainable Development Goals (SDGs). The principal component of nearly every strategy for mitigating risk and raising the effectiveness of health interventions and risk management strategies comprises health care providers (HCPs) such as health workers within clinics, hospitals, drug retails, pharmacies, as well communities (Silver, Harel, McQuillan et al., 2016). Nonetheless, HCP performance in low resource countries is always inadequate. This is supported by documented literature of child health, mental disorders, diabetes, sexually transmitted diseases, malaria, injuries, medicine utilisation, as well as risk illnesses which are managed in hospitals as well as by private health practitioners.

The global burden of the risk of unsafe medical care within the LRCs is escalating, with approximately 33 million disability-adjusted life years perished yearly. The risk of insufficient care happens despite significant efforts governments put in place such as the implemented programme of Universal Health Care (UHC) (Hussain et al, 2018). Similar programmes have been implemented by non-governmental organisations as well as donors. Raising the level of HCP performance is critical in the management of risks since it incorporates the mitigating errors of omission such as patients exposed to unsafe medical practices as well as those not receiving the required medicines. Risk errors are also evidenced in the failure to prevent harmful practices, which can be contained by



administering sedatives to kids suffering from pneumonia. The risk of unsafe practices are also dominant in the failure to improve patients' experience. Some study proposes that improving the level of performance is likely to mitigate risk factors of unsafe medical practices as well as scale up the utilisation of healthcare services (Cesta, 2016).

# 1.2 Justification of the Study Problem

Most studies within LRCs have examined a variety of risk management strategies and implementation of healthcare projects aimed towards improving HCP performance. Notably, systematic reviews which investigate the evidence regarding effectiveness, risk factors, as well cost may be valuable when it comes to guiding policy to mitigate the risk of medical errors (Aduma & Kimutai, 2018). The reviews pay attention to programmatic efforts concerning strategies which have relatively more significant effectiveness as well as avoiding strategies which appear relatively less effective.

Most systematic reviews have paid much attention to particular strategies such as essential drug programmes, supervision, self-assessment, telemedicine, and lay health workers (Weiss *et al.*, 2015). Some of these systematic reviews concentrate exclusively on LRCs as others comprise researches from LRCs as well as high resource countries (HRCs). Nevertheless, a major drawback of single-strategy reviews is that they tend to superficially address the key programmatic question: What are the most effective risk management strategies and implementation of healthcare projects in low resource countries which improve health care providers' (HCP) performance? To conclusively respond to this wider question for the LRCs context, every risk management strategies implemented in healthcare projects in LRCs must be thoroughly investigated and compared.

Most systematic reviews in this area have incorporated multiple strategies, but only to a limited extent. The biggest portion of these reviews have only covered few studies from LRCs (Cesta, 2016). Four of the reviews showed only semi-quantitative or descriptive summaries. One of these reviews that was severally updated, concentrated on strategies to mitigate risk factors to improve medicine utilisation in LRCs (Gitonga & Keiyoro, 2017). More than three systematic reviews of single risk management strategies have been concluded.

Current reviews often portray some other critical limitations. Firstly, they hardly summarise economic data on risk mitigation strategy or cost-effectiveness strategy. Secondly, some of these reviews rarely utilise approaches which have become standards in the domains of systematic reviews (Ali, 2016). Thirdly, findings of strategy versus strategy comparisons are hardly integrated with findings of risk strategy versus mitigation comparisons, which does not fully engage a wider percentage of evidence base. Fourthly, the existing databases upon which the systematic reviews are derived are rarely availed in the public domain or are presented in a static table that limits their utilisation. Further, the current reviews apply heterogeneous methods which render it hard to synthesise their findings. For example, measures of risk management strategy effectiveness have incorporated relative risks, risk differences, adjusted relative risks, adjusted risk differences, as well as non-quantitative attributes (Guo, 2015).

A more updated or accurate systematic review regarding multiple risk management strategies and implementation of healthcare projects is required that involves all strategies.



This should focus on all the attributes of HCP performance, published database in a dynamic form, economic data, application of a mono analytic framework, as well as robust methods used for systematic reviews. In order to fill the above gaps, the study suggests the application of Health Care Performance Review (HCPPR) as one of the effective systematic reviews developed. To mitigate the risk factors in the implementation process, the main concern would be to examine individually the effectiveness as well as costs of every strategy designed to promote HCP performance outcomes in LRCs.

#### 1.3 Introduction of the Journal Articles

The methods and results of this systematic review were presented in five journal articles, which when taken together incorporate every element that Preferred Reporting Items for Systematic Reviews and Meta-analyses (PRISMA) guidelines recommends (Cesta, 2016). The journal articles provide the reviews of conceptualization of the problem, methodology, and findings. The journal preparation provided results on the effectiveness of risk management strategies and implementation of health care projects.

#### **Section One**

#### 1.3.1 Journal one

Implementation of a risk management plan in a hospital operating room by Guo (2015). The journal article conceptualized a risk management programme on the basis of AS/NZS4360 risk management standards created as well as implemented within Perking University Third Hospital operating room. The study achieved its objective by developing a risk quantification matrix as well as a risk register form to help in the establishment of potential risks within the operating room. It then implemented certain operating room policies to eliminate or monitor the identified risks. The author used the variables of communication, monitoring, consultation, and review mechanisms to ascertain their effect on risk prevention and risk management improvement.

Risk communication as well as consultation have been identified as critical methods for risk management. Effective communication as well as consulting systems forms the foundation for identifying risk, analyzing, eliminating, and receiving employee feedback (Guo, 2015). Communication in the operating room is a wider process that does not only entails communication between different sections and departments, but also involves internal employees. The journal article emphasizes that risk management demands everyone's participation in the process. Therefore, it is imperative to continually improve staff members' training concerning their knowledge and understanding of risk as well as seek their opinion on risk management. Further, it is important to communicate with some higher-level sections or departments and seek to evaluate and eliminate risk factors which are faced in the daily work routines as per the risk register concept.

The study ascertained that a consultation mechanism as well as risk monitoring system developed to reduce risks to participants who were the operating room nurses. Further, the research sought to improve the operating room risk management capabilities. In so doing, it would help them to improve the quality-of-service delivery. As a result, quality service would be guaranteed alongside the realization of surgical patients' safety. The journal article concluded that risk management programme for operating room needs to establish, analyses, as well as eliminate both potential and actual risks. The programme should further



ascertain communication, monitoring, consultation, as well as review mechanisms which help in risk prevention. These also enhance continuous capabilities for risk management improvement.

#### 1.3.2 Journal Two

# Ali, Y., A. (2016). Steps in the Process of Risk Management in Healthcare.

The journal conceptualizes risk as a probability of injury, threat or damage, liability loss which vulnerability cause. These can be prevented through pre-emptive actions (Ali, 2016). The author affirms that human interactions with health systems often pose them to a threat. The risk exposure is as a result of intense complex procedures, high expectations, time pressures, complex technology, and high demand placed on services. The threats can also be alluded to high responsibilities as well as hierarchical nature of training involved.

Besides cancer and heart diseases, the threat of medical errors is a leading cause of death within the U.S. (Ali, 2016). The author alludes the causes of medical errors to communication problems, inadequate policies/procedures, workflow, staffing patterns, technical failures, and organisational transfer of knowledge. These are major underlying factors that deter the success of risk management within the healthcare settings.

The article affirms that organisational leaders have to be system thinkers who engage indepth analyses regarding safety concerns. They must place specific punitive actions to particular mistakes as they embrace open environment. This will help them address risks proactively. As a result, there will ample room to create safe healthcare organisations. Nonetheless, no opportunity exists to aid reckless behaviour within the healthcare environment.

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The article highlights the five basic steps of risk management. The first step is to establish the context, the second step is to identify the risks, the third step is to analyse risks. The fourth step is to evaluate risks, while the fifth step is to treat or manage risks. Establishing the context is critical in risk identification as well as management Emergency room, intensive care unit (ICU), coronary care unit (CCU), blood transfusion services, and medication management constitute contextually very high priority sites for risk management regarding patient care.

Identification of risks marks a step in which healthcare professionals as well as healthcare employees are made aware of the prevailing risks within the healthcare services as well as environment. Identified risks are then put in the Risk Management Tool (RMT). It is also referred to as a risk register. One of the sources of risks identification comprises the discussion with departmental heads. Analysis of risks marks the third phase of the process. It involves the creation of understanding regarding risks which have been identified. The



analysis comprises risk score or risk level, underlying causes, as well as the prevailing control measures.

Root Cause Analysis (RCA) demonstrates the systematic approach to establishing the root causes of severe occurrences. The identification facilitates the adoption of effective steps to modify as well as cushion the occurrences of future losses. It is effectively conducted by engaging informed individuals or teams into a brain storming session. Notably, risk score (R) is computed by multiplying the likelihood score (L) times the severity of impact (S).

The fourth basic step is to evaluate risks. This is done to prioritize risks as per risk analysis score. It also facilitates decision making regarding risks which need treatment as well as the treatment mode.

Finally, the fifth step risk treatment, which is also referred to as risk mitigation or risk reduction. Here, the decisions assumed concerning risk treatment has to be in conformity with the defined external, internal, as well as risk management contexts and factoring services goals or objectives. It is imperative or risk treatment plan to include proposed actions, require resources, individual (s) responsible for action, and timeframes for completion of action and reviews.

The article highlights a number of challenges of risk management. Organisations conducting risk management in healthcare are quite conscious of the proof that healthcare interface has risk. The organisations which are engaged in the active pursuant of risk management succeed more in making sure that there is safety services as well as yearning for quality care in comparison to their counterparts which do not. In this regard, risk management is considered as more complex as well as pro-active methodology of handling risks within the healthcare setups. Nonetheless, it is challenging in a number of sense, for instance, in the leadership commitment to facilitating risk management. A lack of commitment on the part of leadership may render the process ineffective.

Risks needs to be identified proactively as well as prioritized. Delays in the identification of risks may compound the severity of impacts. Risks must not be ignored. Once felt, they have to be properly managed to avoid causing severity of impacts. Pro-active engagement of risk management team, in liaison with employees as well as process is paramount. It will facilitate the acquaintance and understanding of the risk management process. Expertise has to be available within the team. Informed opinion from experts would guide effective decision-making process. It will be imperative in all the steps of risks management, right from risk identification to risk treatment. The adequacy of resources is another challenge in the risk management. Risk mitigation or treatment require adequate resources. Otherwise, insufficient resource would lead to an adverse outcome. Change within the system or process will only be agreed upon when indicated. The teams might refuse the change. Finally, risk management is effective when monitoring as well as control systems are put in order.



# 1.3.3 Journal Three

Krieger, T and Feron (2020). The development of implementation management Instruments for a new complex stroke caregiver intervention based on systematic stakeholder and risk analyses.

The journal article affirms that stakeholders are critical for implementing complex public healthcare interventions. In the development phase of the implementation, besides careful design of project components as well as investing in the search for a dynamic multistakeholder setup, it is beneficial to access probable implementation risks (Krieger & Feron, 2020). Therefore, systematic stakeholder as well as risk analyses may be utilised to act as a guide to the exploration process. This will enable the participating teams in the complex intervention to create context-tailored instruments to enhance the implementation management process.

The authors carried out systematic stakeholder as well as risk analyses by developing five activities. They identified, categorised, and assessed project stakeholders by employing the top-down approach (Krieger & Feron, 2020). On the other hand, implementation risks were established and evaluated by the application of bottom-up approach. The authors gathered data, which were mainly primary in nature, through focus group discussions (FGDs) as well as interviews.

The findings of the study based on the knowledge that the stakeholders gave, two context-tailored instruments for implementation management were developed with the aid of the top-down approach. The first one engaged a detailed stakeholder-risk atlas giving individual stakeholder information, including perceived risk, contribution, access, role, expectations, distinct engagement activities, and power/interest (Krieger & Feron, 2020). The second entailed the second one comprised the entire project implementation strategy focusing on communication, network building, professionalism as well as transparency.

The results on stakeholder as well as risk analyses: generating inputs. The first activity involved stakeholder identification. The study identified 24 stakeholders and classified them into 12 stakeholder groups. Intervention's end-users and service provides were explicitly involved. The end-users comprised family caregivers of stroke patients. The second activity involved the stakeholder categorization involved exploration of every stakeholder's contribution as well as their assignment in the future phase of implementation.

The identification was done on seventeen (17) potential risks. They were allocated to 3 risk domains as well as grouped as per their likelihood. The risk domain labelled as "performance" had a high likelihood of occurrence. It implied the high potential to disrupt implementation. Therefore, it demands much attention. Generally, performance was perceived as highly influenced by the engaged staff. The results from the stakeholders showed that the entire project would be disrupted or terminated because of external and internal misunderstanding as well as emotional discord. Potential risks concerning the project were identified. They included ineffective communication skills as well as weak leadership. Further, it was established that stakeholders may disrupt performance. For instance, they may do so by engaging in interpersonal conflicts and non-participation. Evidently, the performance domain would be overlapping other two domains.



The study concluded that complex interventions stand the chance to gain from early as well as comprehensive stakeholder as well as risk analyses. Notably, the early engagement of stakeholders, with their crucial knowledge, helps the research team to design context-tailored management instruments for the implementation process. The team will be supported by instruments in the implementation phase. The instruments may also have positive influence of the intervention outcomes. Knowledge may be acquired by incorporating both bottom-up and top-down approaches.

#### 1.3.4 Journal Four

Aduma, L. K. & Kimutai, G. (2018): Project risk management strategies and project performance at the National Hospital Insurance Fund in Kenya: The study was anchored on Resource Based View (RBV), Transaction Cost Economic (TCE), contingency, agency, and uncertain theories. It focused on the variables of project risk prevention, risk control, risk transfer, as well as risk acceptance management techniques and their effects on the project performance at National Hospital Insurance Fund (NHIF) Kenya. This presented a contextual gap in this study as it was based mainly on one healthcare facility in Kenya. It would be imperative to widen the scope of this study to cover other public healthcare facilities in the country to enable the researcher to collect variety of data that give generalisation of findings, which can be replicated elsewhere.

Risk control encompasses the process by which organisations identify potential losses as well as devise strategies aimed to minimise or terminate such losses. The method is applied to establish potential risks within the operation of an entity. Risk acceptance on the other hand implies risk retention. It is experience when individual (s) or firms identifies risk and make it acceptable, thus making no attempt to mitigate or reduce its impact. Project performance refers to successful delivery of a project according to the scope of its clients, stipulated time, and specified budget. The study used project performance indicators of numbers of projects completed within the stipulated time and extent of insurance coverage provided to members all-over the country. The other performance parameters involved the efficiency of risk identification, membership turnover rate, and efficiency in risk identification.

The study however also left out some importance variable which are directly linked to performance. Besides, the aspect of health care providers' performance have not been explored. The authors did not cover a critical aspect of risk unsafe medical practices underlined in medical errors, which significantly influence performance outcomes. The study used a descriptive research design. The application of this design has several advantages including, the inability to gather a larger sample of data, a lack of confidentiality, and a compromised objectivity. It would be more appropriate for the authors to adopt more robust designs such as explanatory research design.

Another methodological gap that is evidenced in this journal article is that it only sampled management staff (241) who were sampled by stratified proportionate random sampling method. The respondents were chosen from logistics, pharmaceuticals, human resources, public procurement, legal affairs, health insurance, and finance departments. It is evidenced here that other key stakeholders involved in risk management and healthcare project implementation had been left out from the study since only management staff were involved. It would be appropriate to seek the perceptions of patients who are the receivers



of healthcare and other HCPs who are not in the management because their inputs are critical in the health outcomes and ultimately the overall performance.

The authors gathered primary data by using self-administered questionnaires. In this kind of study focusing on performance outcomes, the use of a single tool is considered in adequate for data collection. Performance outcomes constitute several parameters, some of which are financial and non-financial indicators. It would be important to consider the use of secondary data in this study besides the primary one. Data were analysed using both descriptive and inferential statistics. The authors have stated that the descriptive analysis of the primary data were done using mean score, percentages, and standard deviation to estimate quantitative variable as well as information presented in graphs and tables. However, it is not clear from this journal article how the qualitative items in the questionnaire were transformed into quantitative attributes to support such kind of quantitative analysis.

The study further used Pearson correlation and multiple regression analysis to ascertain the link between the independent and dependent variables. The authors assumed that the data would be uniform, and thus their justification for the regression analysis. However, there are instances where researches have come across unbalanced data. The study did not convince readers who it would handle such a challenge, in case it arose. In such scenarios, panel data analysis would be preferred.

The results of the study showed that risk prevention significantly influences the NHIF projects performance to a greater extent. Further, the application of work plans risk prevention, alternative approaches risk avoidance, and contingency risk prevention have significant influence on NHIF projects performance. Further findings revealed that comprehensive planning risk avoidance greatly influence NHIF projects performance. However, risk avoidance safety inspections as well as safety systems risk prevention have a moderate impact on NHIF projects performance.

The study established that risk transfer greatly influences NHIF projects performance. High risk premium costs, overreliance on outsourcing, as well as stakeholder engagement in risk transfer greatly influence NHIF projects performance. The findings also revealed that the application of insurance policy as well as contractual agreements in risk transfer greatly influence NHIF projects performance. Nonetheless, legal agreements involved in the risk transfer to third parties have a low influence on performance of these projects.

The study found that risk control greatly influences NHIF projects performance. It was ascertained that application of contingency plans, risk control meetings as well as signed contracts have great influence on the performance of these projects. Risk mitigation during crisis meetings were found to have great influence on the projects performance. However, the utilisation of quality assurance has a moderate influence while safety systems have a low influence on the performance of these projects.

The study established that risk acceptance has a great influence on projects performance. Further, it was revealed that training and skills development to face risks, manager's understanding of risks, and reserve time greatly influence performance of NHIF projects. Allowance resources were also found to have great impact. Failure to take any action on



potential risk has a moderate influence on the projects performance. However, alternatives in projects have a low level of influence on their performance.

The study concluded that risk prevention strategies bore the most significant effect on the performance of NHIF projects. This was followed by risk control, risk acceptance, and finally risk transfer. This statement should have been on the findings part instead of the conclusion. The review of this journal article finds the part on results or findings misplaced or missing. Instead of the authors making recommendations based on the study findings, they jumped into making recommendations for further studies. The study recommended that "more studies should be directed at the field of risk management to unearth more methods of risk management…" (Aduma & Kimutai, 2018). Again, the limitation of the study is missing. The authors should have identified the limitations of their studies before jumping into the suggestion for the future research.

# 1.3.5 Journal Five

Gitonga, Z. & Keiyoro, P. (2017). Factors influencing the implementation of healthcare projects: The case of Meru County, Kenya. The study was anchored on four theories, including optimal resource allocation, empowerment, organisational learning, as well as fiscal decentralization theories. The study was further guided by organizational learning, Fiscal decentralization, optimal resource allocation, and empowerment theories. However, none of these theories is specific to risk management and project implementation. It is imperative to focus on theories specific to risk management and project implementation.

Empowerment theory was coined by Fawcett *et al.* (1995). It asserts that the provision of healthcare constitutes complementary influence which act as a guide to various stakeholder within public health sector. In this regard, effective implementation of healthcare projects demands an interactive process of empowerment which entails collaborative planning, capacity building, and community action. The theory advances the idea that collaborative partnerships are critical for the realisation of the success of healthcare projects. It is linked to the variable of communities' collaborations as applied in the study that extend the idea that devolved healthcare units, private sector, traditional healers, and civil societies' collaborations have a positive influence on the healthcare projects implementation.

Optimal Resource Allocation theory, coined by Laska, Meisner and Siegel (1972) rests on the premise that tasks characterised by homogenous service distribution are prone to failing, especially when resources have not been allocated uniformly. The adoption of this theory was guided by the premise that successful implementation of healthcare projects, in the confine of reliable strategies, is imperative to optimal allocation of human resources to health. It is linked to variable on the distribution of human resources such as nurses, doctors, midwives, physicians who have great influence on the implementation of healthcare projects.

Fiscal Decentralization Theory, developed by Oates (1972) is anchored on the decentralization of funds from the national government to sub-national governments. The funds are meant for development and to bring services closer to local communities. Fiscal decentralization relies mainly on effective and efficient allocation of financial resources to improve service delivery within the public sector. The theory therefore advances the idea



that fiscal decentralisation is imperative to the realisation of sustainable development within the healthcare sector. This is more so in the implementation of healthcare projects when utilised for local support as well as resource mobilisation as well as encouraging participation among the beneficiaries.

Organisation Learning Theory was coined by Argyris and Schon (1978). The theory is anchored on the premise that organisations should have an environment that facilitates knowledge acquisition to enhance better processes. Learning brings in new dimensions of viewpoints and better processes. The adoption of this theory therefore advances the idea that successful implementation of healthcare projects requires conducive environments that foster institutional learning. The theory is linked to the variable of adoption and learning. In this regard, devolved governments should develop learning environments for effective implementation of healthcare projects, specifically by incorporating management processes of performance appraisals, medical informatics, as well as e-health applications.

The study used the independent variables of communities' collaborations, financing of human resources for health as well as health infrastructure, human resources as well as learning and adoption of best practices. Despite the importance of these indicators of successful healthcare project implementation, none of them focused on specific aspects of risk management strategies. The dependent variable was the Health-Care Projects Implementation under the devolved system of governance. The conceptualization of the dependent variable is scanty as readers of this journal article may find it difficult to establish the measure of healthcare projects implementation under the devolved governance. This aspect needs to be operationalized properly, otherwise, readers would be left guessing what the authors intended to do. The journal article applied a descriptive survey research design. However, it appears from the title of the paper that this was a case study of Meru County Kenya. It is against the backdrop of this observation, that a case study research design would be preferred. Nonetheless, there is superficial justification why Meru County was the preferred case study. Readers might find nothing motivating as per the justification of the context of this study.

The authors targeted a population of 703 respondents. However, it is inaccurate to state that the sample size of only 15 (n=n) was derived from the population of 703 (N=703). It is advisable to recalculate the sample size to come up with a more accurate number. The participant in the survey were the department of Health staff, civil society managers, and medical personal. Despite the inclusion of variety of stakeholders in the survey, some key stakeholders of healthcare project implementation such as community members, patients, and opinion leaders have been left out. Studies have shown that most projects have failed because they excluded key stakeholders in the implementation process. It is imperative to collect views from the community members to ascertain the extent to which they have benefited from the implemented healthcare projects in the county. This would help to gauge what has really worked and what has not worked well so that corrective actions can be devised.

The authors stated the use of stratified and simple random sampling to select the respondents. The study does not state where stratified sampling was specifically applied and what warranted its application. The same argument extends to the use of simple random sampling. The selection of healthcare experts such as medical personnel could have been



better performed using purposive random sampling. The rationale for this is that it is the most preferred method for gathering experts' opinion.

Apart from the primary data gathered, the use of secondary data was not seen in the report. It would be important to collect information on reports on healthcare projects implemented within the county. The monitoring and evaluation team would be helpful in getting this secondary information to ascertain the success, failures, outcomes, and completion rates of these projects. Hence, the use of secondary data collection form or document review guide would be important at this stage. The study could also incorporate other tools for data collection such as observation guide and focus group discussions (FGDs). The observation guide would help the researcher to take pictures and record the status of the implemented projects in the county. Further, the FGDs would be appropriate for engaging the collaborators in the community as they discuss and share their views regarding the implemented projects.

The study suggested the used of qualitative and quantitative methods in the analysis. However, the qualitative attributes are scantly as verbatim of respondents' statements have not been captured. Readers may not tell what the respondents  $(R_1, R_2, R_3, ... R_n)$  said as per the questionnaire. This ought to have been captured and analysed according to the themes of the study.

The study was based on four objectives; to determine the influence of communities' collaboration, distribution of human resources for healthcare services, financing of human resources for health and infrastructure, as well as learning and adoption of best practices on healthcare projects implementation. The findings of the study showed that communities' collaborations, learning and adoption, financing, human resource distribution influenced the level of healthcare project implementations under the developed systems of governance in Meru County Kenya.

On the first objective, the study found that the nature of collaborations would strengthen the provision of healthcare services by promoting e-health pharmaceuticals as well as medical supplies management. Giving medical personnel the chance to attend international benchmarking is critical for the success of project implementations. Collaboration is important for the realisation of healthcare goals. The partnerships help in addressing the challenges associated with child and maternal health. On the second objective, the study showed that a lack of county government's involvement in hiring and even distribution of midwives consequently raises maternal morbidity as well as infant mortality cases in rural areas. The reason is alluded to a deficit in the human resources health management information systems. This causes low numbers of human resources for health, specifically among midwives.

On the third objective, the study established that taxes raised by local administration have negative impacts on the provision of healthcare services via project implementations. The unfortunate experience has been as a result of fraudulent transactions, misuse, corruption, and embezzlement of public financial resources. Such resources are meant to enhance healthcare projects implementations. On the fourth objective, the findings obtained showed that county government had not acted in good faith to adopt performance appraisals. Medical personnel's' evaluations were glaringly missing. The aftermath was seen in low levels of motivation among human resources for health (HRH). Consequently, this



negatively impacted the provision of healthcare services. Besides, it caused low levels of HRH engagement in the healthcare projects implemented at the county levels like the community disability centres, community clinics, as well as mobile clinics.

The study showed that most of the responded agreed to the statement that collaborations of communities influenced the sustainability of community healthcare projects. This was demonstrated by a mean of 3.77. However, readers may find it difficult to know whether this was a high or low mean score as the mean threshold or aggregate mean score was not presented in the analysis to make the basis for comparison. Again, the aspect of sustainability of healthcare projects has not been properly conceptualised and operationalized in this article. Based on the abstract of this journal article, much emphasis has been given to descriptive statistical analysis as opposed to inferential analysis. It is difficult to identify the direction and strength between factors and their influence on the implementation of healthcare projects. Instead of using mean, the relationship could have been discussed based on the findings of correlation analysis

The authors concluded that benchmarking forms a critical learning tool for medical personnel in improving quality standards in healthcare provisions (Gitonga & Keiyoro, 2017). They have further concluded that adequate financial resources which are timely disbursed constitute principal driver of healthcare projects implementation in the county. Based on the study findings, the journal article recommends for the enforcement of Kenya's Health Policy 2011-2030 concerning human resources distribution for health within public facilities which county governments need to adopt. This is to be done by particularly leveraging on effective stakeholder strategy which would be crucial in forming working collaborations with other sectorial players such as the Non-Government Organisations. However, the review has ascertained that the recommendations for further studies are unfounded on the study limitations

#### **Section Two**

# 2.1 JOURNAL ARTICLE ANALYSIS

This section focused on the empirical literature review on Risk Management Strategies and Implementation of Healthcare Projects. This was in relation to convergence an Divergency aspect. Critical view for each journal was discussed with aim of drawing informed conclusion from each of the journals.

#### 2.1.1 Journal article one

The journal article conceptualized a risk management programme on the basis of AS/NZS4360 risk management standards created as well as implemented within Perking University Third Hospital operating room. The study achieved its objective by developing a risk quantification matrix as well as a risk register form to help in the establishment of potential risks within the operating room. It then implemented certain operating room policies to eliminate or monitor the identified risks. The author used the variables of communication, monitoring, consultation, and review mechanisms to ascertain their effect on risk prevention and risk management improvement.

Risk communication as well as consultation have been identified as critical methods for risk management. Effective communication as well as consulting systems forms the



foundation for identifying risk, analyzing, eliminating, and receiving employee feedback (Guo, 2015). Communication in the operating room is a wider process that does not only entails communication between different sections and departments, but also involves internal employees. The journal article emphasizes that risk management demands everyone's participation in the process. Therefore, it is imperative to continually improve staff members' training concerning their knowledge and understanding of risk as well as seek their opinion on risk management. Further, it is important to communicate with some higher-level sections or departments and seek to evaluate and eliminate risk factors which are faced in the daily work routines as per the risk register concept.

The study ascertained that a consultation mechanism as well as risk monitoring system developed to reduce risks to participants who were the operating room nurses. Further, the research sought to improve the operating room risk management capabilities. In so doing, it would help them to improve the quality-of-service delivery. As a result, quality service would be guaranteed alongside the realization of surgical patients' safety. The journal article concluded that risk management programme for operating room needs to establish, analyses, as well as eliminate both potential and actual risks. The programme should further ascertain communication, monitoring, consultation, as well as review mechanisms which help in risk prevention. These also enhance continuous capabilities for risk management improvement.

#### 2.1.2 Journal Article two

The journal conceptualizes risk as a probability of injury, threat or damage, liability loss which vulnerability cause. These can be prevented through pre-emptive actions (Ali, 2016). The author affirms that human interactions with health systems often pose them to a threat. The risk exposure is as a result of intense complex procedures, high expectations, time pressures, complex technology, and high demand placed on services. The threats can also be alluded to high responsibilities as well as hierarchical nature of training involved.

Besides cancer and heart diseases, the threat of medical errors is a leading cause of death within the U.S. (Ali, 2016). The author alludes the causes of medical errors to communication problems, inadequate policies/procedures, workflow, staffing patterns, technical failures, and organizational transfer of knowledge. These are major underlying factors that deter the success of risk management within the healthcare settings.

The article affirms that organizational leaders have to be system thinkers who engage indepth analyses regarding safety concerns. They must place specific punitive actions to particular mistakes as they embrace open environment. This will help them address risks proactively. As a result, there will ample room to create safe healthcare organisations. Nonetheless, no opportunity exists to aid reckless Behaviour within the healthcare environment.

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The article highlights the five basic steps of risk management. The first step is to establish the context, the second step is to identify the risks, the third step is to analyses risks. The fourth step is to evaluate risks, while the fifth step is to treat or manage risks. Establishing the context is critical in risk identification as well as management Emergency room, intensive care unit (ICU), coronary care unit (CCU), blood transfusion services, and medication management constitute contextually very high priority sites for risk management regarding patient care.

Identification of risks marks a step in which healthcare professionals as well as healthcare employees are made aware of the prevailing risks within the healthcare services as well as environment. Identified risks are then put in the Risk Management Tool (RMT). It is also referred to as a risk register. One of the sources of risks identification comprises the discussion with departmental heads. Analysis of risks marks the third phase of the process. It involves the creation of understanding regarding risks which have been identified. The analysis comprises risk score or risk level, underlying causes, as well as the prevailing control measures.

Root Cause Analysis (RCA) demonstrates the systematic approach to establishing the root causes of severe occurrences. The identification facilitates the adoption of effective steps to modify as well as cushion the occurrences of future losses. It is effectively conducted by engaging informed individuals or teams into a brain storming session. Notably, risk score (R) is computed by multiplying the likelihood score (L) times the severity of impact (S). The fourth basic step is to evaluate risks. This is done to prioritize risks as per risk analysis score. It also facilitates decision making regarding risks which need treatment as well as the treatment mode.

Finally, the fifth step risk treatment, which is also referred to as risk mitigation or risk reduction. Here, the decisions assumed concerning risk treatment has to be in conformity with the defined external, internal, as well as risk management contexts and factoring services goals or objectives. It is imperative or risk treatment plan to include proposed actions, require resources, individual (s) responsible for action, and timeframes for completion of action and reviews.

The article highlights a number of challenges of risk management. Organisations conducting risk management in healthcare are quite conscious of the proof that healthcare interface has risk. The organisations which are engaged in the active pursuant of risk management succeed more in making sure that there are safety services as well as yearning for quality care in comparison to their counterparts which do not. In this regard, risk management is considered as more complex as well as pro-active methodology of handling risks within the healthcare setups. Nonetheless, it is challenging in a number of sense, for instance, in the leadership commitment to facilitating risk management. A lack of commitment on the part of leadership may render the process ineffective.

Risks needs to be identified proactively as well as prioritized. Delays in the identification of risks may compound the severity of impacts. Risks must not be ignored. Once felt, they have to be properly managed to avoid causing severity of impacts. Pro-active engagement of risk management team, in liaison with employees as well as process is paramount. It will facilitate the acquaintance and understanding of the risk management process.



Expertise have to be available within the team. Informed opinion from experts would guide effective decision-making process. It will be imperative in all the steps of risks management, right from risk identification to risk treatment. The adequacy of resources is another challenge in the risk management. Risk mitigation or treatment require adequate resources. Otherwise, insufficient resource would lead to an adverse outcome. Change within the system or process will only be agreed upon when indicated. The teams might refuse the change. Finally, risk management is effective when monitoring as well as control systems are put in order.

#### 2.1.3 Journal Article Three

The journal article affirms that stakeholders are critical for implementing complex public healthcare interventions. In the development phase of the implementation, besides careful design of project components as well as investing in the search for a dynamic multistakeholder setup, it is beneficial to access probable implementation risks (Krieger & Feron, 2020). Therefore, systematic stakeholder as well as risk analyses may be utilized to act as a guide to the exploration process. This will enable the participating teams in the complex intervention to create context-tailored instruments to enhance the implementation management process. The authors carried out systematic stakeholder as well as risk analyses by developing five activities. They identified, categorized, and assessed project stakeholders by employing the top-down approach (Krieger & Feron, 2020). On the other hand, implementation risks were established and evaluated by the application of bottom-up approach. The authors gathered data, which were mainly primary in nature, through focus group discussions (FGDs) as well as interviews.

The findings of the study based on the knowledge that the stakeholders gave, two context-tailored instruments for implementation management were developed with the aid of the top-down approach. The first one engaged a detailed stakeholder-risk atlas giving individual stakeholder information, including perceived risk, contribution, access, role, expectations, distinct engagement activities, and power/interest (Krieger & Feron, 2020). The second entailed the second one comprised the entire project implementation strategy focusing on communication, network building, professionalism as well as transparency.

The results on stakeholder as well as risk analyses: generating inputs. The first activity involved stakeholder identification. The study identified 24 stakeholders and classified them into 12 stakeholder groups. Intervention's end-users and service provides were explicitly involved. The end-users comprised family caregivers of stroke patients. The second activity involved the stakeholder categorization involved exploration of every stakeholder's contribution as well as their assignment in the future phase of implementation. The identification was done on seventeen (17) potential risks. They were allocated to 3 risk domains as well as grouped as per their likelihood. The risk domain labelled as "performance" had a high likelihood of occurrence. It implied the high potential to disrupt implementation. Therefore, it demands much attention. Generally, performance was perceived as highly influenced by the engaged staff.

The results from the stakeholders showed that the entire project would be disrupted or terminated because of external and internal misunderstanding as well as emotional discord. Potential risks concerning the project were identified. They included ineffective communication skills as well as weak leadership. Further, it was established that



stakeholders may disrupt performance. For instance, they may do so by engaging in interpersonal conflicts and non-participation. Evidently, the performance domain would be overlapping other two domains.

The study concluded that complex interventions stand the chance to gain from early as well as comprehensive stakeholder as well as risk analyses. Notably, the early engagement of stakeholders, with their crucial knowledge, helps the research team to design context-tailored management instruments for the implementation process. The team will be supported by instruments in the implementation phase. The instruments may also have positive influence of the intervention outcomes. Knowledge may be acquired by incorporating both bottom-up and top-down approaches

#### 2.1.4 Journal Article Four

The study was anchored on Resource Based View (RBV), Transaction Cost Economic (TCE), contingency, agency, and uncertain theories. It focused on the variables of project risk prevention, risk control, risk transfer, as well as risk acceptance management techniques and their effects on the project performance at National Hospital Insurance Fund (NHIF) Kenya. This presented a contextual gap in this study as it was based mainly on one healthcare facility in Kenya. It would be imperative to widen the scope of this study to cover other public healthcare facilities in the country to enable the researcher to collect variety of data that give generalization of findings, which can be replicated elsewhere. Risk control encompasses the process by which organisations identify potential losses as well as devise strategies aimed to minimize or terminate such losses. The method is applied to establish potential risks within the operation of an entity. Risk acceptance on the other hand implies risk retention. It is experience when individual (s) or firms identifies risk and make it acceptable, thus making no attempt to mitigate or reduce its impact.

Project performance refers to successful delivery of a project according to the scope of its clients, stipulated time, and specified budget. The study used project performance indicators of numbers of projects completed within the stipulated time and extent of insurance coverage provided to members all-over the country. The other performance parameters involved the efficiency of risk identification, membership turnover rate, and efficiency in risk identification. The study however also left out some importance variable which are directly linked to performance. Besides, the aspect of health care providers' performance has not been explored. The authors did not cover a critical aspect of risk unsafe medical practices underlined in medical errors, which significantly influence performance outcomes.

The study used a descriptive research design. The application of this design has several advantages including, the inability to gather a larger sample of data, a lack of confidentiality, and a compromised objectivity. It would be more appropriate for the authors to adopt more robust designs such as explanatory research design. Another methodological gap that is evidenced in this journal article is that it only sampled management staff (241) who were sampled by stratified proportionate random sampling method. The respondents were chosen from logistics, pharmaceuticals, human resources, public procurement, legal affairs, health insurance, and finance departments. It is evidenced here that other key stakeholders involved in risk management and healthcare project implementation had been left out from the study since only management staff were



involved. It would be appropriate to seek the perceptions of patients who are the receivers of healthcare and other HCPs who are not in the management because their inputs are critical in the health outcomes and ultimately the overall performance.

The authors gathered primary data by using self-administered questionnaires. In this kind of study focusing on performance outcomes, the use of a single tool is considered in adequate for data collection. Performance outcomes constitute several parameters, some of which are financial and non-financial indicators. It would be important to consider the use of secondary data in this study besides the primary one.

The results of the study showed that risk prevention significantly influences the NHIF projects performance to a greater extent. Further, the application of work plans risk prevention, alternative approaches risk avoidance, and contingency risk prevention have significant influence on NHIF projects performance. Further findings revealed that comprehensive planning risk avoidance greatly influence NHIF projects performance. However, risk avoidance safety inspections as well as safety systems risk prevention have a moderate impact on NHIF projects performance. The study established that risk transfer greatly influences NHIF projects performance. High risk premium costs, overreliance on outsourcing, as well as stakeholder engagement in risk transfer greatly influence NHIF projects performance. The findings also revealed that the application of insurance policy as well as contractual agreements in risk transfer greatly influence NHIF projects performance. Nonetheless, legal agreements involved in the risk transfer to third parties have a low influence on performance of these projects.

The study found that risk control greatly influences NHIF projects performance. It was ascertained that application of contingency plans, risk control meetings as well as signed contracts have great influence on the performance of these projects. Risk mitigation during crisis meetings were found to have great influence on the projects performance. However, the utilization of quality assurance has a moderate influence while safety systems have a low influence on the performance of these projects. The study established that risk acceptance has a great influence on projects performance. Further, it was revealed that training and skills development to face risks, manager's understanding of risks, and reserve time greatly influence performance of NHIF projects. Allowance resources were also found to have great impact. Failure to take any action on potential risk has a moderate influence on the projects performance. However, alternatives in projects have a low level of influence on their performance.

The study concluded that risk prevention strategies bore the most significant effect on the performance of NHIF projects. This was followed by risk control, risk acceptance, and finally risk transfer. This statement should have been on the findings part instead of the conclusion. The review of this journal article finds the part on results or findings misplaced or missing. Instead of the authors making recommendations based on the study findings, they jumped into making recommendations for further studies. The study recommends that "more studies should be directed at the field of risk management to unearth more methods of risk management…" (Aduma & Kimutai, 2018). Again, the limitation of the study is missing. The authors should have identified the limitations of their studies before jumping into the suggestion for the future research.



#### 2.1.5 Journal Article Five

The study was anchored on four theories, including optimal resource allocation, empowerment, organizational learning, as well as fiscal decentralization theories. The study was further guided by organizational learning, Fiscal decentralization, optimal resource allocation, and empowerment theories. However, none of these theories is specific to risk management and project implementation. It is imperative to focus on theories specific to risk management and project implementation. Empowerment theory was coined by Fawcett et al., (1995). It asserts that the provision of healthcare constitutes complementary influence which act as a guide to various stakeholder within public health sector. In this regard, effective implementation of healthcare projects demands an interactive process of empowerment which entails collaborative planning, capacity building, and community action. The theory advances the idea that collaborative partnerships are critical for the realization of the success of healthcare projects. It is linked to the variable of communities' collaborations as applied in the study that extend the idea that devolved healthcare units, private sector, traditional healers, and civil societies' collaborations have a positive influence on the healthcare projects implementation. Optimal Resource Allocation theory, coined by Laska, Meisner and Siegel (1972) rests on the premise that tasks characterized by homogenous service distribution are prone to failing, especially when resources have not been allocated uniformly. The adoption of this theory was guided by the premise that successful implementation of healthcare projects, in the confine of reliable strategies, is imperative to optimal allocation of human resources to health. It is linked to variable on the distribution of human resources such as nurses, doctors, midwives, physicians who have great influence on the implementation of healthcare projects.

Fiscal Decentralization Theory, developed by Oates (1972) is anchored on the decentralization of funds from the national government to sub-national governments. The funds are meant for development and to bring services closer to local communities. Fiscal decentralization relies mainly on effective and efficient allocation of financial resources to improve service delivery within the public sector. The theory therefore advances the idea that fiscal decentralization is imperative to the realization of sustainable development within the healthcare sector. This is more so in the implementation of healthcare projects when utilized for local support as well as resource mobilization as well as encouraging participation among the beneficiaries.

Organisation Learning Theory was coined by Argyris and Schon (1978). The theory is anchored on the premise that organisations should have an environment that facilitates knowledge acquisition to enhance better processes. Learning brings in new dimensions of viewpoints and better processes. The adoption of this theory therefore advances the idea that successful implementation of healthcare projects requires conducive environments that foster institutional learning. The theory is linked to the variable of adoption and learning. In this regard, devolved governments should develop learning environments for effective implementation of healthcare projects, specifically by incorporating management processes of performance appraisals, medical informatics, as well as e-health applications.

The study used the independent variables of communities' collaborations, financing of human resources for health as well as health infrastructure, human resources as well as



learning and adoption of best practices. Despite the importance of these indicators of successful healthcare project implementation, none of them focused on specific aspects of risk management strategies. The dependent variable was the Health-Care Projects Implementation under the devolved system of governance. The conceptualization of the dependent variable is scanty as readers of this journal article may find it difficult to establish the measure of healthcare projects implementation under the devolved governance. This aspect needs to be operationalized properly, otherwise, readers would be left guessing what the authors intended to do.

The journal article applied a descriptive survey research design. However, it appears from the title of the paper that this was a case study of Meru County Kenya. It is against the backdrop of this observation, that a case study research design would be preferred. Nonetheless, there is superficial justification why Meru County was the preferred case study. Readers might find nothing motivating as per the justification of the context of this study.

The finding was, that the nature of collaborations would strengthen the provision of healthcare services by promoting e-health pharmaceuticals as well as medical supplies management. Giving medical personnel the chance to attend international benchmarking is critical for the success of project implementations. Collaboration is important for the realization of healthcare goals. The partnerships help in addressing the challenges associated with child and maternal health. On the second objective, the study showed that a lack of county government's involvement in hiring and even distribution of midwives consequently raises maternal morbidity as well as infant mortality cases in rural areas. The reason is alluded to a deficit in the human resources health management information systems. This causes low numbers of human resources for health, specifically among midwives.

On the third objective, the study established that taxes raised by local administration have negative impacts on the provision of healthcare services via project implementations. The unfortunate experience has been as a result of fraudulent transactions, misuse, corruption, and embezzlement of public financial resources. Such resources are meant to enhance healthcare projects implementations.

On the fourth objective, the findings obtained showed that county government had not acted in good faith to adopt performance appraisals. Medical personnel's' evaluations were glaringly missing. The aftermath was seen in low levels of motivation among human resources for health (HRH). Consequently, this negatively impacted the provision of healthcare services. Besides, it caused low levels of HRH engagement in the healthcare projects implemented at the county levels like the community disability centers, community clinics, as well as mobile clinics.

The authors concluded that benchmarking forms a critical learning tool for medical personnel in improving quality standards in healthcare provisions (Gitonga & Keiyoro, 2017). They have further concluded that adequate financial resources which are timely disbursed constitute principal driver of healthcare projects implementation in the county. Based on the study findings, the journal article recommends for the enforcement of Kenya's Health Policy 2011-2030 concerning human resources distribution for health within public facilities which county governments need to adopt. This is to be done by



particularly leveraging on effective stakeholder strategy which would be crucial in forming working collaborations with other sectorial players such as the Non-Government Organisations. However, the review has ascertained that the recommendations for further studies are unfounded on the study limitations.

#### 2.2 CONVERGENT ANALYSIS

The section presents the conforming ideas in terms of conceptualization of the problem, methodology and findings drawn from the five journal articles

# 2.2.1 Conceptualization of the Problem

Guo's (2015) article conceptualized a risk management programme on the basis of ASeNZS4360 risk management standards created as well as implemented within Perking University Third Hospital operating room. The study attained its objective by developing a risk quantification matrix as well as a risk register form to help in the establishment of potential risks within the operating room

Ali (2016) conceptualizes risk as a probability of injury, threat or damage, liability loss which vulnerability cause, which can be avoided through pre-emptive actions. Risk occurs because of intense complex procedures, high expectations, time pressures, complex technology, and high demand placed on services. Medical errors to communication problems, inadequate policies/procedures, workflow, staffing patterns, technical failures, and organizational transfer of knowledge, which are the key underlying factors that deter the success of risk management within the healthcare settings.

Krieger and Feron (2020) conceptualized systematic stakeholder and risk analyses may be utilized to act as a guide to the exploration process, which enable the participating teams in the complex intervention to create context-tailored instruments to enhance the implementation management process. On the other hand, Aduma and Kimutai (2018) conceptualized project risk management strategies as project risk prevention, risk control, risk transfer, and acceptance management techniques which affect project performance. Finally, Gitonga and Keiyoro (2017) conceptualized factors influencing the implementation of healthcare projects as communities' collaborations, financing of human resources for health as well as health infrastructure, human resources, and learning/adoption of best practices.

#### 2.2.2 Methodology

Both Guo (2015) and Ali (2016) relied on document review to study risk management in the health care setting. Besides, all the journal articles reviewed were based on the context of healthcare setting. Aduma and Kimutai (2018) used descriptive research design. Similarly, Gitonga and Keiyoro (2017) used descriptive research survey design. These two studies were both based in Kenya. They also used questionnaires to gather primary data. Further, their data were analysed using descriptive means. The two studies relied on questionnaires as a tool to collect primary data for analyses and interpretation.

#### 2.2.3 Findings

Guo (215) found communication, monitoring, consultation, and review mechanisms as critical factors for risk avoidance and management. Ali (2016) found that addressing risk



concerns in an open environment is critical to risk management. Similarly, Krieger and Feron (2020) found that stakeholder engagement in providing information regarding perceived risk, contribution, access, role, expectations, distinct engagement activities, and power/interest is critical to risk management. The authors also found that communication, network building, professionalism as well as transparency facilitates the overall project implementation. Similarly, Gitonga and Keiyoro (2017) found that collaborations of communities influenced the sustainability of community healthcare projects. Aduma and Kimutai (2018) found that risk prevention strategies have the most significant effect on the performance of healthcare projects.

# 2.3 DIVERGENT ANALYSIS

The contradicting views drawn from the reviews of the five journal articles are presented in terms of conceptualization of the problem, methodology, and findings.

# 2.3.1 Conceptualization of the Problem

Guo (2015) conceptualized the implementation of a risk management plan in terms of communication, monitoring, consultation, and review mechanisms while Ali (2016) contextualized the process of risk management in terms of medical errors caused by communication problems, inadequate policies/procedures, workflow, staffing patterns, technical failures, and organizational transfer of knowledge. Krieger and Feron (2020) conceptualized systematic stakeholder and risk analyses based on stakeholders' perceived risk, contribution, access, role, expectations, distinct engagement activities, and power/interest. Further the authors conceptualized project implementation strategy based on communication, network building, professionalism as well as transparency.

Aduma and Kimutai (2018) conceptualized project risk management strategies in terms of project risk prevention, risk control, risk transfer, as well as risk acceptance management techniques. However, Gitonga and Keiyoro (2017) conceptualized factors influencing the implementation of healthcare projects based on communities' collaborations, learning and adoption, financing, human resource distribution influenced.

# 2.3.2 Methodology

Guo (2015) and Ali (2016) relied on documentary reviews to complete their studies. However, Krieger and Feron (2020) collected primary data through group discussions as well as interviews to derive their findings. These authors used a different methodology from Aduma and Kimutai (2018) and Gitonga and Keiyoro (2017) who relied on questionnaires to collect primary data for analysis. Besides, these last studies were done in Kenya whose regulatory framework when it comes to risk management and project implementation, may be different from these other studies completed in other countries.

## 2.3.2 Findings

Guo (2015) found that risk management programme for operating room needs to establish, analyse, as well as eliminate both potential and actual risks. This to identify communication, monitoring, consultation, as well as review mechanisms which help in risk prevention, which further facilitates continuous capabilities for risk management improvement. Ali (2016), on the other hand found that addressing risks proactively creates a bigger room for building safe healthcare organisations. Krieger and Feron (2020) found



that early engagement of stakeholders, with their crucial knowledge, helps the research team to design context-tailored management instruments for the implementation process.

Aduma and Kumutai (2018) found that risk prevention strategies had the most significant effect on the performance of NHIF projects. This was followed by risk control, risk acceptance, and finally risk transfer. However, Gitonga and Keiyoro (2017) communities' collaborations, learning and adoption, financing, human resource distribution influenced the level of healthcare project implementations under the developed systems of governance in Meru County Kenya.

## 2.4 Summary of the gaps

The review of the related literature above presented a number of significant gaps which will need to be filled. Guo (2015) narrowed the scope of the study of implementation of a risk management plan to a hospital operating room, which makes generalization and replication of findings difficult. On the other hand, Ali (2016) focused on steps in the process of risk management within healthcare setting but left out the crucial bit of project implementation.

Krieger and Feron (2020) narrowed the scope of the study to implementation management Instruments for a new complex stroke caregiver intervention instead of focusing on the entire healthcare project implementation. Besides other limitations, a study by Aduma and Kimutai (2018) excluded other crucial variables which are directly linked to performance. Besides, the aspect of health care providers' performance has not been explored. They failed to explore a critical aspect of risk unsafe medical practices underlined in medical errors, which significantly influence performance outcomes. Gitonga and Keiyoro (2017) ignored the use of secondary data. It would be beneficial to gather information on reports on healthcare projects implemented within the county. The monitoring and evaluation team would be helpful in getting this secondary information to ascertain the success, failures, outcomes, and completion rates of these projects.

# 3.0 CONCLUSIONS

The study concluded that risk management strategies are imperative to the success of project implementation in the healthcare setting. Element of almost all strategies for mitigating risk and raising the effectiveness of health interventions and risk management strategies comprises health care providers (HCPs) such as health workers within clinics, hospitals, drug retails, pharmacies, as well communities. Besides, the early engagement of stakeholders, with their crucial knowledge, helps the research team to design context-tailored management instruments for the implementation process. Risk benchmarking forms a critical learning tool for medical personnel in improving quality standards in healthcare provisions.

#### 4.0 RECOMMENDATIONS

The study recommended that risk management strategies should be strengthened for the effectiveness of project implementation. This will in turn enhance the performance of health care providers (HCPs). The effect will result in the success of project implementation in the low resources countries (LRCs). The recommended risk management strategies for the implementation of healthcare projects in LRCs include:



- i. Developing and implement a risk management programme
- ii. A quantification matrix as well as a risk registers form to aid the identification of potential risks.
- iii. Early engagement of stakeholders,
- iv. Focusing on communication, network building, transparency, as well as professionalism.
- v. Gathering Knowledge by integrating top-down with bottom-up working strategies.



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