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Influence of Risk Taking on Performance of Healthcare Units in Nairobi, Kenya

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Abstract:
The main purpose of this study was to explore how risk-taking influences the performance of healthcare units in Kenya. The study specifically sought to determine how the six indicators of risk taking namely:taking bold actions necessary to achieve the healthcare units' objectives, undergoing threats from patients other employees, undergoing injuries while lifting lowering equipment or patients, contracting infectious diseases from patients, getting injuries caused by needle stick while injecting patients and getting blood and body fluid spills from patients influence the performance of healthcare units in Nairobi County, Kenya. To compete effectively, healthcare units must constantly improve their performance by reducing maternal mortality, reducing child mortality and increasing the number of referrals to the healthcare unit. The study adopted a survey research design with the target population being healthcare units in Nairobi, County. The healthcare units comprised of County Hospitals, Health Centres and Health Clinics totalling to 71 and the sample size was 49. Data was collected using questionnaires and analysed using SPSS version 23 software. Inferential data analysis was carried out by the use of factor and correlation analysis. Regression models were fitted and hypothesis testing carried out using multiple regression analysis and standard F and t tests. The findings of this study from multiple regression analysis indicated that risk taking positively influences performance of healthcare units in Nairobi, County. The study results lead to the conclusion that risk taking improves the performance of Healthcare units in Nairobi, County. The study recommends that healthcare units should equip their healthcare units with personal protective equipment to avoid exposing their employees to body injuries and infections while at work since their practice is necessary to ensure improved performance.

Keywords: *Risk taking, taking bold actions, threats from patients or from other employees, injuries during lifting and lowering equipment or patients, infectious diseases, needle stick injuries and blood and body fluid spills*

1. Introduction

Reduction of maternal and child mortality remains a major challenge to attaining global social and economic development. Worldwide, more than 515,000 women die each year from pregnancy and childbirth complications while four million babies die within the first week (neonatal period) of life. Almost all of the maternal deaths occur across all developing countries where 450 women per every 100,000 live births die during pregnancy, childbirth or at postpartum period (ROK, 2006; WHO, 2007) as cited in Kiprono, M. K. (2009). In a healthcare unit,risk includes violence from patients, threats from patients and other employees, contracting communicable diseases, bullying from employees, infections from HIV/ AIDs and other infectious diseases, handling aids (or lack of protective gear), Manual Handling, lifting and handling in teams and lifting and lowering. It also means that a healthcare unit is not afraid to break away from routine, safe, well known core business and venture into the unknown.

Healthcare industry, also referred to as medical industry, is an aggregation of sectors within the economic system that provides goods and services to treat patients with curative, preventive, rehabilitative, and palliative care. The modern healthcare industry is divided into many sectors and depends on interdisciplinary teams of trained professionals and paraprofessionals to meet health needs of individuals and population at large. This industry is one of the world's largest and fastest- growing industries' consuming over 10% of gross domestic product (GDP) of most developed nations (RoK, 2011).

World Health Organization (WHO) revealed that health costs paid into the Healthcare industry in the United States in the year 2011 consumed 17.9% of the Gross Domestic Product, being the largest of any country in the world and that it was to continue its upward trend to reach 19.6% of the GDP by 2016. It also revealed that in the year 2001, for the Organization for Economic Corporation and Development (OECD) countries the average was 8.4% with the United States (13.9%), Switzerland (10.9%), and German (10.7%) being the top. In Kenya however, only 4.6% of the nation's GDP was invested in its healthcare industry which has a serious implication for the country's urgent healthcare problems (RoK, 2011).

Although Kenya is making significant gains in promoting awareness of health and wellness, preventable diseases remain a serious issue. Malaria is one of the country's biggest problem with thousands of children dying every year from this treatable disease (RoK, 2011). Improving access, coverage and quality of health services depends on the ways services are organized and managed, and on the incentives influencing providers and users. In market- based health care systems, such services are usually paid for by the patient or through the patient's health insurance company (RoK, 2011). Other mechanisms include government- financed systems (such as the National Health Services in the United Kingdom, & NHIF in Kenya).

Kenya's Vision 2030 for health is to provide 'equitable and affordable health care at the highest affordable standard' to her citizens. Good health is expected to play an important role in boosting economic growth, poverty reduction and the realization of social goals. The majority of Kenyans still do not have access to affordable health care. Under the Vision 2030, Kenya is to restructure the health delivery system and also shift the emphasis to 'promotive' care, in order to lower the nation's disease burden. This has improved access and equity in the availability of essential health care and result in a healthy population that will effectively participate in the development of the nation (RoK, 2007).

Wangalwa et al., (2012), in their research on Effectiveness of Kenya's community Health Strategy in delivering community- based maternal and new-born health care in Busia County, revealed that maternal mortality ratio and neonatal mortality rate trends in Kenya have remained unacceptably high. That the implication on the Kenya health policy and practice is for the policy to focus on people centeredness and participatory approaches in delivery of health care services. In the year 2007, the ministry of Public Health and Sanitation adopted a community health strategy to reverse the poor health outcomes in order to meet Millennium Development Goals 4 and 5 (RoK, 2011).

1.1. Statement of the Problem

Globally Healthcare units are still performing poorly although they registered a decrease in the number of child deaths from 12.5 million in 1990 to 8.8 million in the year 2008 (Danzhen*et al.,* 2010) as cited in Wangalwa*et al.,* (2012). This decrease in child death is an indication of improved performance of the Healthcare units. Wangalwa*et al.* (2012) also revealed that neonatal deaths accounted for about one third of child deaths and that they are linked closely to slow progress in reduction of maternal mortality. The high maternal and new-born mortality in the sub- Saharan Africa is related to unsafe maternal and new-born health practices. These performance in the Health sector; maternal and neonatal health trend in Kenya is a replica of other sub-Saharan African countries where the maternal mortality ratio is estimated to be 488 women per 100,000 live births which has not significantly changed over the last decade as reported by the Kenya Demographic and Health Survey (2003) as cited in Wangalwa*et al.* (2012). Kenya Demographic and Health Survey (2008-2009) observed an improved performance in the Health sector due to the under- five reduced mortality between the years 2003 and 2008 from 36% and 32% respectively but neonatal mortality marginally declining by 6.1%. Wangalwa*et al.* (2012) revealed that maternal mortality ratio and neonatal mortality rate trends in Kenya have remained unacceptably high.

Health Sector Working Group Report (2012) reported an improved performance in the sector with a reduction of under-five and infant mortality but reported a poor performance on the side of maternal mortality having deteriorated from 414 in 2003 to 488 deaths per 100,000 live births in 2008-9.Dustin (2010) revealed that in Kenya, the overall under five child mortality ratio is approximately 121 per 1000 live births, which is roughly double the global average. This is a measure that reveals poor performance of the Healthcare sector. Dustin (2010) also observed that this number drops significantly to 90 per 1000, for the wealthiest 20% of the population, while it jumps to nearly 150 for the poorest 20%. Experience over the years has shown that to improve maternal new-born health and reduce morbidity and mortality, efforts should focus on building capacities at individual, family, community levels to ensure appropriate self-care, prevention, and care-seeking behaviour. Elder *et al.,* (1999) as cited in Wangalwa*et al,* (2012) revealed that limited resource settings, community-level interventions are potentially effective ways to address the problem at its roots, as decisions to seek and access healthcare are strongly influenced by the social-cultural environment. These past studies have failed to examine how risk taking influences performance of Healthcare units and specifically in terms of reduced maternal mortality, reduced child mortality and increased referrals to the Healthcare unit. The Healthcare units have a great potential for improvement in terms of reduced maternal mortality, reduced child mortality and through increased referrals if only they take can risks to save life.

Therefore, more needs to be investigated about how healthcare units may impact on Healthcare unit performance in Kenya and especially determining performance in terms of reduced maternal death, reduced child mortality and increased referrals. Many of the Healthcare units, in their process of transformation to the market economy are accepting new business approaches and models, one of them being risk taking. Medical Care is characterized by enormous inefficiency with high costs and poor outcomes. These high costs leads to poor performance by the Healthcare units, but taking risks can help reduce the costs of the healthcare units. In other industries characterized by inefficiency, efficient firms expand to take over the market, or new firms enter to eliminate inefficiencies which do not happen in medical care (Cutler, 2010).

This study investigated how risk taking influences performance of Healthcare units in Nairobi, County. Nairobi's healthcare units, in their process of reducing maternal mortality, reducing child mortality and increasing referrals have tried to take risks for example: healthcare workers attending to patients without personal protective equipment, taking bold wide ranging actions to save lives of both expectant mothers, unborn and or new born babies, withstanding threats and violence from both patients and other employees, withstanding injuries caused by lifting and lowering equipment and patients, contracting infectious diseases from patients, sustaining injuries caused by needle stick while injecting patients and also getting blood and other body fluid spills from patients. Poor quality health care leads to increased maternal

mortality, increased child mortality and reduced referrals to the healthcare unit. However, not enough studies have been done locally to unearth the influence risk taking has on performance of Healthcare units in Kenya. This study therefore seeks to fill the knowledge gap by determining how risk taking influences the performance of Healthcare units in Nairobi, County.

1.2. Objectives of the Study

The overall objective of this study was to determine the influence of risk taking on Performance of healthcare units in Nairobi, County. The study's specific objectives were: To determine how withstanding violence and threats from patients and other employees influences the performance of healthcare units in Nairobi County, to determine how risking contracting infectious diseases from patients influences the performance of healthcare units in Nairobi County, to determine how enduring bullying from other employees by healthcare workers influences performance of healthcare units, to determine how risking working without handling aids (lack of protective gear) influences performance of healthcare units in Nairobi County, to determine How taking bold ranging actions by healthcare workers to achieve the healthcare unit objectives influences performance of the units, to determine how risking getting injuries while lifting lowering equipment and patients influence performance of healthcare units, to determine how risking getting injuries caused by Needle stick while injecting patients influences performance of healthcare units, and to determine how risking getting blood and other body fluid spills from patients influence performance of healthcare units in Nairobi County.

2. Literature Review

Risk taking refers to possibility of loss related to quickness in taking bold actions and committing resources in the pursuit of new opportunities (Kolakovic*et al.,* 2007). Baird and Thomas (1985) define risk taking as 'venturing into the unknown; committing a relatively large portion of assets; borrowing heavily'. For unknown risky actions, uncertainties and risks are generated, such as personal risks, social risks and psychological risks. Risk taking behaviours of individuals or firms range from low risky actions to high risk actions (for example huge borrowing, investing heavily in unexplored technologies or putting new products onto new markets) as argued by Lumpkin and Dess, (1991). Lumpkin and Dess (1996) argue that methods and styles of management associated with risk taking are an indication of an entrepreneurial orientation. The duo argue that all activities might be understood to entail a degree of risk, ranging from low risk behaviour such as investing in bank deposits to high risk behaviour such as engaging heavy financial leverage. Miller (1983) argues that a high level of financial leverage may not be enough in itself to classify an enterprise as entrepreneurial along the dimension of risk taking. Lumpkin and Dess (1996) argue that risk is also experienced in terms of innovatively expanding into untried technologies or entering new markets with new products and that risk is a fundamental aspect of entrepreneurship.

Generally, firms having entrepreneurship orientation display risky behaviour by borrowing heavily or by allocating very huge resources to the opportunities in the market in order to get high yields. This can be viewed as the indicator or the measure of their risk taking tendency. Firm- level risk taking requires acting quickly for seizing and valuing the market opportunities, making fast resource combinations and displaying bold action. Boldness in seeking or pursuing opportunities and for the very new product or service attempts is considered as a reflection of entrepreneurial orientation (Lumpkin & Dess, 1991; Antoncic & Hisrich, 2003). Entrepreneurs in entrepreneurial firms are seen to manage the risks better by focusing on lower risk market endeavours by developing various new product and service alternatives targeted to the different market segments or niches (Morris & Kuratko, 2002). Risk taking involves taking bold actions by venturing into the unknown, borrowing heavily and/or committing significant resources to ventures in uncertain environments (Wang, 2008; Lumpkin *et al.,* 2009; Rauch *et al.,* 2009).

Zahra and Garvis (2000) define risk taking as a company's disposition to support innovative projects, even when the payoff from these activities is uncertain. Subsequently these activities can enhance the company's ability to recognize and exploit market opportunities ahead of its competitors. Autonomy within the entrepreneurial organization allows individuals to act freely and be able to explore new ideas (Lumpkin *et al.,* 2009) that can create competitive advantage. This type of behaviour by individuals within the firm brings about the possibility of acting on potential ideas for the future growth of the firm. The behaviour of managers by insisting on following the tried-and-tested paths or tending to support only projects with expected returns that are certain, have a negative relation to performance as compared to taking bold actions by entering the unknown business environment (Lumpkin & Dess, 1996). Thus, the support by senior management within the organization allows for individuals to take calculated risks.

Entrepreneurial firms are risk-tolerant and this characteristic often stimulates them to eliminate the kind of traditional authoritarian structures that inhibit collaborative learning (Wang, 2008). These firms allow individuals and teams to act independently and exercise their creativity by taking risks in coming up with new ideas (Lumpkin & Dess, 1996). According to Miller (1983) and Wang (2008), risk-tolerant and innovative firms' managers encourage new ways of thinking - tolerating mistakes and rewarding individuals with new ideas that contribute to innovation and business improvement. The culture of allowing individuals to making mistakes when trying new ways of improving business performance promotes a sense of open-mindedness (Moreno & Casillas, 2008) as cited in Linyiru (2015).

A study by Sabrina et al. (2019) on addressing risks of violence against Healthcare Staff in emergency Department in Northeastern Italy revealed that violence by visitors and patients in emergency departments is a serious risk for nurses and doctors. That this violence is affected by several factors relating to both patient pathologies and the way the workplace and work patterns are organized by the healthcare units. Another study by Farahnaz et al. (2018) on eight teaching hospitals in Rasht, Iran on needlestick injuries among Healthcare Workers and why they do not report their incidences revealed that needlestick instances is still a major problem among nurses and that they do not even take reporting system

seriously. Another study by Sabbah et al. (2013) on 277 healthcare workers in four general hospitals in South Lebanon on occupational exposures to blood and body fluids: Assessment of knowledge, attitude and practice among healthcare workers revealed that exposure remains a problem. The study revealed that 30% of healthcare workers declared having had at least one occupational exposure to blood and body fluid.

In this study, indicators of risk taking included violence from patients, threats from patients and employees, contracting communicable diseases, bullying from employees, infections from infectious diseases, working without handling aids (or lack of personal protective equipment), Manual Handling, lifting and handling in teams and lifting and lowering. It also means that a company is not afraid to break away from routine, safe, well known core business and venture into the unknown.

3. Research Methodology

3.1. Research Design

This study adopted a descriptive survey design. This was adopted to investigate the study variables for an in-depth understanding. Descriptive survey is a method of collecting data by interviewing or administering a questionnaire to a sample of individuals (Orodho, 2003). The design can also be used when collecting data about people's attitudes, opinions, habits or any of the variety of education or social issues (Orodho & Kombo, 2002).

3.2. Study Population

The target population of this study was 71 Healthcare units in Nairobi County consisting of County Hospitals, Health centre, Dispensaries and Health Clinics. Nairobi Hospital and Kenyatta Referral Hospitals were left out as they are in their own category and are only two. A drop and pick method was conducted to all 49 Health Officers in the three categories of Health units in Nairobi. The list of the Health Units in Nairobi is as per Nairobi City County records of 26th January 2015.The researcher did a stratified random sampling of County Hospitals, Health centres and Health Clinics as the sub- samples for the study excluding the referral hospitals (Kenyatta National Referral Hospital and Nairobi Hospital) due to their advanced level. The sample size was 49 Healthcare units with each of the remaining three categories allocated equal proportions as per their contributions of 24, 35 and 41 per cent of the total 49 Health units. This is represented by 12 County Hospitals, 17 Health centres and 20 Health Clinics. The respondents were Medical Superintendents for County Hospitals, Clinical Officers for Health centres and Nurse in Charge for Health Clinics.

3.3. Survey Instrument

The main tool for data collection used in the study was a structured questionnaire. The structured questionnaire was divided into three different parts in order to capture information from different parts of the Healthcare unit.

3.4. Data Collection Method

The main tool for data collection used in the study was a structured questionnaire. The structured questionnaire was divided into three different parts in order to capture information from different parts of the Healthcare Unit. The first part of the questionnaire seeks demographic information of the respondent and that of the Healthcare Unit to enable a clear understanding of the Healthcare Units in Kenya: the second part captured information on the level of adoption of innovativeness indicators (moving services close to patients, hiring highly skilled workforce, opening up new revenue, standardizing operating procedure and borrowing assets); the third part of the questionnaire captured information on child mortality, maternal death and on number of referrals to the healthcare unit. The questionnaire was designed to address the objective as captured in the study (Mugenda Mugenda, 2003). Previous research studies undertaken in the entrepreneurship field, management and firm performance from previous studies undertaken in other parts of the World also provided a good source of secondary literature. Information contained in annual reports and other documented literature, proved very useful in providing the necessary secondary information during the study. Further secondary information was obtained through the internet by visiting various Websites to access publications relevant to the study. This made it possible to have an in-depth assessment, appreciation and understanding of the existing literature.

4. Results and Discussion

4.1. Results of Survey Response

Questionnaires were delivered to the 49 units, out of which 41 were returned. This represents a response rate of 83.7% of the sample which the study considered an adequate response rate. This is in line with Mugenda (2012) who stated that a response rate of 50% is adequate, 60% and above as good and above 70% very good (See Table 1).

Sector	Sample size	Returned	Response rate
County Hospitals	12	10	83.333%
Health Centre	17	14	82.353%
Health clinics	20	17	85.000%
Total	49	41	83.673%

Table 1: Response Rate
Source: Research Data (2018)

4.2. Normality Testing

Univariate normality tests were run for all independent and dependent variables and skewness and kurtosis examined. The common rule-of-thumb for normality is skewness to be within the range of -3 and +3 and Kurtosis to be within the range of negative or positive eight(8) (Kline, 1998). From the analysis, the skewness coefficients were all within the acceptable range of -3 and +3. According to Moran (2006) and Hair *et al.,* (1998), data in psychometric studies are often not normally distributed.

4.3. Descriptive Statistics for the Latent Variable Measurement Items

The independent variable used in the study was risk taking. The mode was used as the average being that the variable indicators were also measured categorically on an ordinal scale of 5. To measure Risk taking variable, the respondents were asked how much they agreed with the statement that the team believes in taking bold actions necessary to achieve the health care unit's objectives; to this indicator, 5.1% of the respondents observed that their healthcare units never believes in taking bold actions necessary to achieve the health care unit's objectives, 3.4% of the respondents observed that their healthcare units rarely believe in taking bold actions necessary to achieve the health care unit's objectives, 25.4% observed that it is only sometimes they take bold actions necessary to achieve the healthcare unit's objectives, 28.8% observed that their healthcare units usually believe in taking bold actions necessary to achieve the health care unit's objectives and the remaining 37.3% of the respondents observed that their healthcare units always believe in taking bold actions necessary to achieve the health care unit's objectives. The modal class of the responses to this indicator was found to be 5. This has an implication that on average, the team always believes in taking bold actions necessary to achieve the health care unit's objectives in the healthcare units.

The study also sought to find out the perception of respondents on the indicator that the team gets threats from patients and other employees; to this statement, 16.9% of the respondents observed that teams in their healthcare units never get threats from patients and other employees, 32.2% of the respondents observed that their healthcare units rarely get threats from patients and other employees, 42.1% of the respondents observed that their healthcare units sometimes get threats from patients and other employees, 3.4% of the respondents observed that their healthcare units usually get threats from patients and other employees and another 3.4% of the respondents observed that their healthcare units always get threats from patients and other employees. The modal class of the responses to this indicator was found to be 3. This has an implication that on average, the team sometimes gets threats from patients and other employees in the healthcare units.

Patient violence towards clinicians requires both attention and preparation to reduce risk and provide for the safety of the clinician. Clinicians are encouraged to identify and evaluate risk in their practice settings. Once risk is identified, the clinician should implement a safety plan that is re-evaluated at intervals to ensure that it is up to date and being followed. Environmental and organizational factors have been associated with patient and family assaults on health care workers, including understaffing (especially during times of increased activity such as meal times), poor workplace security, unrestricted movement by the public around the facility, and transporting patients. The presence of security personnel reduces the rate of assaults, while increased risk is associated with the perception that administrators consider assaults to be part of the job, receiving assault prevention training, a high patient/personnel ratio, working primarily with mental health patients, and working with patients who have long hospital stays.

Considering the indicator on the level of agreement with the statement that injuries occur while lifting and lowering equipment or patients; to this statement, 18.6% of the respondents observed that employees of their healthcare units never get injuries that occur while lifting and lowering equipment or patients, 64.4% of the respondents observed that employees of the healthcare units rarely get injuries that occur while lifting and lowering equipment or patients, 10.2% of the respondents observed that employees of the healthcare units sometimes get injuries that occur while lifting and lowering equipment or patients. None of the respondents observed that employees of the healthcare units usually get injuries that occur while lifting and lowering equipment or patients. The remaining 6.8% of the respondents observed that employees of the healthcare units always get injuries that occur while lifting and lowering equipment or patients. The modal class of the responses to this indicator was found to be 2. This has an implication that on average, injuries rarely occur while lifting and lowering equipment or patients in the healthcare units.

The results of this study are in agreement with those of Cudjoe (2011) that was to examine the effect of occupational health and safety on job performance. His population of study included; medical doctors/officers, administrators, technicians, cooks, nurse etc. in the departments and units of the hospital. Eighty respondents formed the sample size of the study. Data was collected through questionnaire, interviews and review of relevant literature from books, articles, website etc. It was found out that the current occupational health and safety practices at the hospital were inadequate. Staff commitment and compliance to health and safety rules was also low. It was recommended that management of the hospital constitute a safety committee and maintain regular monitoring, inspection and evaluation and conduct reviews for improvement.

Another research by Kwame (year not known) on the Occurrence of Medication errors and the Occurrence of risk factors for Medication errors in state hospitals in Ghana agrees with the study. Kwame observed that safety is not the best since there was ample evidence that the occurrence rate was high and the risk factors for errors were prevailing in the hospital setting. He averred that there is need for pragmatic effort by managements to intensify coordination between the stages of care and the professionals and patients interaction in the course of care delivery. Respondents were also asked on whether employees contract infectious diseases from patients; to this statement, 59.3% of the respondents observed that employees in their healthcare never contract infectious diseases from patients, 20.3% of the respondents observed that employees in their healthcare units rarely contract infectious diseases from patients, 16.9% of the respondents

observed that employees in their healthcare units sometimes contract infectious diseases from patients while 3.4% of the respondents observed that employees in their healthcare units usually contract infectious diseases from patients. None of the respondents observed that employees in their healthcare units always contract infectious diseases from patients. The modal class of the responses to this indicator was found to be 1. This implies that on average, employees never contract infectious diseases from patients in the healthcare units. The results of this study agree with those ofNienhaus*et al.* (2012) that carried out their study in Germany which is a low-incidence country. Their study revealed that TB still pose a threat for HCWs and that screening for TB should be maintained. They observed that even though they are declining, HBV and HBV infections are still frequent and trends should be watched closely. Trends in NSIs should be observed closely in the following years in order to evaluate the effect of new regulations on the use of safety devices (Nienhaus*et al.,* 2012). In this study, 16.9% of the respondents agreed to the statement observing that they sometimes contract infectious diseases from patients and another 3.4% observed that they usually contract infectious diseases. This is an indication that 20.3% of health care workers contract infectious diseases from patients which is a very high percentage of infections.

Analysis of to whether employees suffer from injuries caused by needle stick while injecting patients; to this statement, 64.4% of the respondents observed that employees in their healthcare units never suffer from injuries caused by needle stick while injecting patients, 25.4% of the respondents observed that employees in their healthcare units rarely suffer from injuries caused by needle stick while injecting patients 6.8% of the respondents observed that employees in their healthcare units sometimes suffer from injuries caused by needle stick while injecting patients. None of the respondents observed that employees in their healthcare units usually suffer from injuries caused by needle stick while injecting patients and 3.4% of the respondents observed that employees in their healthcare units always suffer from injuries caused by needle stick while injecting patients. The modal class of the responses to this indicator was found to be 1. This has an implication that on average, employees never suffer from injuries caused by needle stick while injecting patients in the healthcare units but there is a 3.4% of the respondents that stated that they always suffered from needle stick. This percentage is quite high which justifies the existence of the risk. These results agree with the results by Salminen and Parantainen (2012) cited in Thapa (2015) who carried out a study in the district of Helsinki. Their study revealed that approximately five hundred cases of needlestick injuries (NSIs) were reported in district of Helsinki and regional capital and among them fifty cases of contamination sources were known to be a carrier of hepatitis B virus, hepatitis C virus or human immunodeficiency virus contributing to one fourth of the occupational injuries. Another research by Wafula (2012) revealed that nurses were among healthcare workers at the highest risk of sharps injury and that the critical care section presented more sharps injury risks than other sections at the hospital. Underreporting of medical sharps injury was also common and that many injured respondents did not seek for post-exposure prophylaxis. The next indicator was on whether employees get blood and body fluid spills from patients; to this statement, 54.2% of the respondents observed that employees in their healthcare units never get blood and body fluid spills from patients, 16.9% of the respondents observed that employees in their healthcare units rarely, 18.6% of the respondents observed that sometimes get blood and body fluid spills from patients, 3.4% of the respondents observed that employees in their healthcare units usually get blood and body fluid spills from patients and only 6.8% of the respondents observed that employees in their healthcare units always get blood and body fluid spills from patients. The modal class of the responses to this indicator was found to be 1, implying that on average, employees never get blood and body fluid spills from patients in the healthcare units.

The study findings agree with those of Ngesa (2008). Ngesa (2008) carried out a study to determine the knowledge of Universal Precautions Policy by Registered Nurses and their perception of Occupational risk of exposure to blood-borne pathogens. Ngesa (2008) in her study revealed a high level of occupational exposure, of which majority went unreported despite the respondent's awareness of the risk of occupationally acquired blood-borne infections. Katz (2013) observed that blood and body fluid spills from patients may expose healthcare workers to more than 20 different blood-borne pathogens, the most important of which being hepatitis B virus, hepatitis C virus, and human immunodeficiency virus (HIV) as observed by Katz (2013). Katz (2013) avers that all blood, body fluids, secretions, and excretions, except sweat, can contain transmissible infectious agents.

4.4. Results for Inferential Analysis

The study investigated the influence of Risk taking on performance of healthcare units. This objective was investigated by use inferential statistics, where the null hypothesis was tested.

- H_{02}: Risk taking does not influence the performance of healthcare units

In testing whether the influence of risk taking on performance of healthcare units was statistically significant or not, a bivariate Pearson's Product-Moment Coefficient of correlation was calculated.

		Performance	**risk taking**
Performance	Pearson's ρ	1	.325*
	2-tailed Sig.		.038
	N	41	41
risk taking	Pearson's ρ	.325*	1
	2-tailed Sig.	.038	
	N	41	41

Table 2: Correlation Analysis
Source: Research Data (2018)

The Pearson correlation coefficient was found to be 0.325 that shows positive direct relationship between performance of healthcare units and risk taking. The 2- tailed significance tests of the correlation coefficients shows a p-value of 0.038 which is less than 0.05 implying that the relationship is significant.

The null hypothesis was therefore rejected and the alternative hypothesis was taken to conclude that risk taking significantly influences the performance of healthcare units. This is in contrast to a research by Shamsuddin*et al.,* (2012) on dimensions of corporate entrepreneurship and the performance of established organization in Malaysia revealed that risk-taking does not have a direct effect on financial performance of the company, but with indirect effect of moderating factors, it showed a significant effect on financial performance. Their study revealed that resource availability, supportive organizational structure and rewards moderated the relationship between risk-taking and financial performance but not significantly. This study's results are however consistent with many other researches that have revealed that risk taking have a significant relationship with performance of firms (Kalokovic et al., 2007, Lumpkin & Dess, 1996, Lumpkin &Dess, 1991, Antoncic & Hisrich, 2003 and Kaya &Veysel, 2003).

To estimate the level of influence of risk-taking on performance of healthcare units, a coefficient of determination (R2) was computed. This was done using regression analysis, and the results were as shown in Table 3

R	R Square	Adjusted R Square	Std. Error of the Estimate
.325a	0.106	0.083	0.12081

Table 3: Model Summary for Risk Taking
A Predictors: (Constant), Risk Taking
Source: Research Data (2018)

Table 3 shows that there is a positive linear relationship between risk taking and performance. The R value of .324 shows the positive linear relationship between Risk taking and performance. The R^2 is the coefficient of determination which indicates that explanatory power of the independent variables is 0.106. This means that 10.66% of the variation in performance is explained by the variation of risk taking in the model $Y = \beta_0 + \beta_1 X_1$. The remaining 89.4% of the variation in the dependent variable is unexplained by this one predictor model but by other factors not included in the model.

However, to determine whether risk taking was a significant predictor of performance of healthcare units or not, Analysis of Variance (ANOVA) was worked out as shown in Table 4.

	Sum of Squares	Df	Mean Square	F	Sig.
Regression	0.067	1	0.067	4.609	.038b
Residual	0.569	39	0.015		
Total	0.636	40			

Table 4: ANOVA Table for Risk taking
a Dependent Variable: Performance
b Predictors: (Constant), Risk taking

The ANOVA results on Table 4 show that the influence of risk taking on performance of healthcare units in Kenya quality is significant. The p-value of the F-statistic as shown in the ANOVA table is 0.038 which is less than the 0.05 implying general significance of the one parameter model thus implying that risk taking significantly influences performance of healthcare units. A research by Kaya and Veysel (2003) on entrepreneurial orientation and performance of Turkish manufacturing FDI firms also revealed that risk taking positively affects firms although not significantly. The duo argues that managers should scan external environment to identify changes and opportunities and take calculated risks to gain advantage of these opportunities.

5. Conclusion and recommendation

The study, therefore, concludes that Healthcare workers need to be equipped with adequate skills and equipment as they carry out their daily duties. These will enhance results since risk taking was ranked second last in important determinant of performance of Healthcare units. This study, therefore, recommends that Healthcare workers be encouraged to dress appropriately to avoid blood and body fluids coming in contact with their bodies and formulate a policy that will help protect and compensate the Healthcare unit workers who get these body spills.

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