# Influence of Stress Management on Work Performance among Nurses in Health Facilities in Nakuru County

ENOCK ORINA ONDARI[1],DR KEZIAH NJOROGE[2],DR EUNICE MUTHONI MWANGI[3].

*1.Msc Student in Health Systems Management*
*Kenya Methodist University*
*2. Lecturer, Department of Health Systems Management and Medical Education*
*Kenya Methodist University*
*3. Lecturer, Department of Health Systems Management and Medical Education*
*Kenya Methodist University*

***Abstract***
*Healthcare professionals such as nurses encounter various health hazards that affect their work performance. This is because they work in extremely stressful conditions which tend to distort their emotional balance resulting into pervasive feelings of frustrations and hopelessness. Previous studies have reported varying outcomes regarding how stress affects job performance of nurses. This study sought to investigate the effect of stress on performance of nurses in public hospitals in Nakuru County, Kenya. The study population comprised of 21 departmental wards-in-charges and 345 nurses from health facilities in Nakuru county. Purposive sampling was used to select all the nurses in the critical care units in selected health facilities in Nakuru County with a total of 187 nurses. Closed ended questionnaires with likert scales of five response categories were used to collect data. Data was collected after approval from the national commission for science, technology and innovation in Kenya.  Quantitative data was analyzed using both descriptive and inferential statistics with the aid of the Statistical Package for Social Sciences (SPSS) version 25. The study established stress management significantly predicted the nurses' performance. Nurses who managed stress were 15.333 times more likely to perform better than nurses who were not able to managed stress.*
***Key words:*** *Stress, Stress Management, performance of nurses*

## I.    Introduction

Stress management comprises of stress tolerance and impulse control. The ability to effectively deal with emotions has been referred to as stress tolerance. This equally includes the capacity to address adverse events and stressful inevitable situations without getting overwhelmed in the process of coping with stress. Consequently compulsion control focuses on the ability to regulate emotions effectively and constructively. Previous studies have examined the effect of the stress management on workplace performance. However, the studies have not considered this in the context of emotional intelligence. For instance, Maurizioet (2006) investigated 120 nurses working in psychiatric, general medicine/work Performance and critical care surgery wards to explore the relationship of the level of stress and hopelessness. The results indicated that unmanaged stress predicted the level of hopelessness among nurses. Maurizioet (2011) focused on hopelessness but the present study focused on stress management as an aspect of emotional intelligence.

Another study was carried out by AbuAlRub (2014) on the effects of job stress on job performance among hospital nurses in Jordan. Data was collected using a structured questionnaire after which descriptive statistics, Pearson product moment correlations and hierarchical regression techniques were used to analyze the data. The finding showed a curvilinear (U-shaped) relationship between job stress and job performance; nurses who reported moderate levels of job stress performed their jobs less well than those who reported low or high levels of job stress. It would be important to determine the outcome of this study and compare the results with the present study.

In Kenya, Kurgat (2019) attempted to study the possible link between work stress and performance. This study considered as its target population 305 health workers who were selected based on stratified sampling in a general hospital. In this study data was collected using a structured questionnaire with a focus on the study variables such as job stress, job performance and organizational commitment. The study revealed that there was

a plausible negative direct connection between job stress and performance. Although, the study was informative, it did not consider stress tolerance and impulse control and their impact on work performance of nurses.

## 1.1 Statement of the Problem

Generally, nurses are reticent in explicitly expressing how they feel because in medical settings the behavior is often more formal. Yet they work in extremely stressful situations and struggle to process powerful feelings of frustrations and hopelessness experienced in the course of their work. In addition, nurses often mask their trauma as a defense against overwhelming negative feeling which impairs the quality of care nurses offer to patients (Missouridou, 2017). However, stress management and its influence on work performance are seldom addressed in hospital settings. Thus, within the hospitals in Kenya, stress management is not a widely understood element of work performance among nurses. Although previous research has demonstrated that nurses' stress management could contribute to the quality of service delivery, the study was designed to establish the scenerio among nurses in public health facilities in Nakuru County.

## 1.2 Research Objective

To examine the influence of stress management on the work performance of nurses in Public health facilities in Nakuru County.

## 1.3 Research Hypothesis

There is no statistically significant relationship between stress management and work performance of nurses in health facilities in Nakuru County.

## II. Methodology

### 2.1 Research Design

The research adopted a descriptive survey design. This is where the relationship between two or more variables is studied without manipulating them. In this study the design was used to investigate the possibility of relationships between two or more variables. The choice of this design for the current study was based on the fact that the researcher examined the relationship between stress management of nurses and their work performance in public health facilities in Nakuru County.

### 2.2 Study Site

Nakuru County is located in the south eastern part of the Rift Valley it covers an area of 7495.1 square kilometers. Nakuru County borders seven counties with Kiambu, Bomet to the North, Laikipia to the North East, Nyandarua to the east, Kajiado to the North, Narok to the South West with Kericho to the West. It has 11 sub counties and a population of approximately 2,046,395. It comprises of all major tribes in Kenya.

### 2.3 Study Population

The study population of this study was nurses, and nurse in charges of the departments in public health facilities in Nakuru County. The public health facilities were selected because of the massive work load and diverse patients served. The selected public health facilities had 345 nurses, and 21 Departmental heads or nurses in charges.

### 2.4 Sampling

Purposive sampling was then applied to select 187 nurses from 11 sub county hospitals in Nakuru County. All nurses constituted the sample size because of their exposure to traumatizing experiences. The distribution of the sample size is presented in table 1

**Table 1: Distribution of the sample respondents in the Sub County hospitals**

| Sub County Hospital | Nurses |
|---|---|
| Nakuru East | 20 |
| Nakuru town West | 10 |
| Njoro | 15 |
| Molo | 25 |
| Kuresoi South | 15 |
| Naivasha | 17 |
| Rongai | 20 |
| Subukia | 20 |
| Gilgil | 25 |
| Bahati | 10 |
| Kuresoi North | 10 |
| **TOTAL** | **187** |

### 2.5 Instrumentation

A self-administered questionnaire for nurses and nurse administrators with closed ended questions were used to collect data. Questionnaires were used for the study because they can gather a large amount of

information from a large audience in a short period of time. The researcher constructed closed ended likert scale questionnaires. Due to the critical nature of the patients in the critical care units the questionnaires were distributed and later collected once they were filled by the nurses and the nurse in charge.

**2.6 Data Analysis**

Data analysis was based on the research questions. The bivariate analysis using Pearson's Chi square was used to compare the variables for factor analysis between each independent and the dependent variable. An adjusted odds ratio at 95% confidence was used to test the strength of the association. The threshold for statistical significance (*p-value*) was set at *p<0.05*. Multivariate analysis using logistics regression was used to correlate the independent variable and the dependent variable in a combined relationship.

## III.    Findings And Discussion

**3.1 Socio Demographic Characteristics of the Respondents**

This section presents the results on the characteristics of the respondents. This categorization was meant to generate responses which are representative of the view of the respondents. This was also relevant in providing a better understanding of the background of the respondents such as gender, age, level of education, marital status, and period worked as a nurse. The results are presented in Table below

**Table 1:  Socio Demographic Characteristics of Respondents**

|  | Frequency (n) | Percentage (%) |
|---|---|---|
| **Gender** | | |
| Male | 63 | 35 |
| Female | 117 | 65 |
| **Age** | | |
| Minimum | 22 | Mean Age=37 years |
| Maximum | 55 | |
| **Level of Education** | | |
| Diploma | 140 | 78 |
| Bachelor | 24 | 13 |
| Master's | 12 | 7 |
| PhD | 4 | 2 |
| **Marital status** | | |
| Single | 22 | 12 |
| Married | 90 | 50 |
| Divorced | 32 | 18 |
| Separated | 22 | 12 |
| Windowed | 14 | 8 |
| **Years working as a nurse** | | |
| Minimum | 3 | Mean=13 years |
| Maximum | 30 | |

The results indicate that majority of respondents were female 117 (65%), followed by male represented by 63 (35%). The mean age of the respondents was 37 years, with minimum being 22 years and maximum being 55 years. This shows that although the majority of the respondents were fairly distributed across the concerned age brackets, most of them were middle aged adults between 30-40 years. The results show that majority of the respondents 165(50%) were married, followed by divorced (18%), single (12%), separated (12%) and widowed were 8%. Findings indicate that 140 (78%) of the respondents had diploma level of education while those with bachelors' level of education were 24(13%). It is also evident that 12 (7) % had obtained masters level of education while 4 (2%) had obtained PhD level of education. The mean period of having worked as a nurse was 13 years of age, with minimum years of experience being 3 years and maximum being 30years.

**3.2 Nurses Stress Management Skills**

The fourth objective was to determine the influence of stress management on work performance among nurses in public health facilities in Nakuru County. Likert based questions were recorded from five point Likert scale to binary variables. It was assumed that nurses could have stress management skills or no stress management skills, therefore the 3-Not sure, 2-Disagree, and 1-Strongly disagree responses were recorded into (0) indicating not no stress management skills, while 5-Strongly agree and 4-Agree responses were recorded into (1) implying nurses had stress management skills. The descriptive statistics are presented below.

**Table 2: Descriptive Statistics on Stress Management skills (n=180)**

|  | Agree | | Disagree | |
|---|---|---|---|---|
| **Statement** | **N** | **%** | **n** | **%** |

| | | | | | |
|---|---|---|---|---|---|
| i | I make sure that my anger does not get out of hand when dealing with patients. | 159 | 88 | 21 | 12 |
| ii | I identify my feelings and express them appropriately in the presence of my patients | 144 | 80 | 36 | 20 |
| iii | I have the capacity to deal with stressful situations at my place of work | 147 | 82 | 33 | 18 |
| iv | I always create time to relax during weekly offs | 144 | 80 | 36 | 20 |
| v | I always wait for my turn to speak or to engage with my patients | 132 | 73 | 48 | 27 |
| vi | I always listen to my patients until they finish talking before I respond. | 126 | 70 | 54 | 30 |

The results show that the respondents agreed that they always controlled their feelings and made sure that their anger did not get out of hand when dealing with patients 159(88%) and that they always identified their feelings and expressed them appropriately in the presence of their patients 144(80%). This concurs with Dar and Khan (2011) who found out that the impact of stress could be broken down into workload and employment execution in dealing with exploitation, control cases, work uncertainty, vague job, and horrendous occurrences at work, harassing, tasks, work home interface, and monetary flimsiness among objective populace, poor focus, psychological barrier and poor basic leadership.

Moreover, majority of the respondents concurred that they had the capacity to deal with stressful situations in their place of work 147(82%) and they create time to relax during weekly offs 144 (80%), the results show that they manage to allow patients to speak132 (73%) and they actively engage in listening to their patients,126 (70%). From the responses obtained, it is evident that that work stress significantly influenced the nurses' job performance and changing nature of work may positively affect their job performance. Kilfedder (2013) concurs that burnout and its implication on wellbeing and job performances were common among nurses requiring intervention measures to address stress at the individual level. Christodolon-Fella (2018)'s study is also supportive as it revealed that work related stress was associated with substandard quality of care, poor health status, decreased quality of life and compromised safety among members.

### 3.3 Work Performance of Nurses

The dependent variable in this research was nurses' work performance. The researcher sought to establish the respondents' views regarding work performance of nursesamong nurses in public health facilities in Nakuru County. Likert based questions were recorded from five point Likert scale to binary variables. This was guided by the dependent variable which was nurses work performance. It was assumed that emotional intelligence may lead one to performing or not performing, therefore the 3-Not sure, 2-Disagree and 1-Strongly disagree responses were recorded into (0) indicating not performing work, while 5-Strongly agree and 4-Agree responses were recorded into (1) implying nurses were performing work. The descriptive statistics are presented below.

**Table 3: Descriptive Statistics on Work Performance of Nurses**

| | | Agree | | Disagree | |
|---|---|---|---|---|---|
| | **Statement** | **n** | **%** | **n** | **%** |
| i. | I always minimize risks of injury infections to myself, other health workers and patients. | 153 | 85 | 27 | 15 |
| ii. | I relate well with my colleagues, my managers and my patients | 132 | 73 | 48 | 27 |
| ii. | I keep up to date records for all my patients to facilitate continuity of care without interruption | 135 | 75 | 45 | 25 |
| v. | I am always willing to work in shifts to help my patients access services conveniently | 129 | 72 | 51 | 28 |
| v. | I always work in ensuring the discharge process is short | 132 | 73 | 48 | 27 |

Results indicate that majority 153(85%) work towards minimizing risks of injury infections to themselves, other health workers and patients. Majority135 (75%) also keep up to date patients' records to facilitate continuity of care without interruption. Majority 129(72%) are also willing to work in shifts to help patients access services conveniently, and ensuring the discharge process is short, 132 (73%). The findings are supported by Dusseldorp (2011) who averred that nursing job performance reflects the quality of delivered care and consequently patient outcomes, poor job performance is considered a risk factor for patient safety. Consequently, Salovey and Mayer (1997) considered nurses' work performance as a multifaceted phenomenon with many variables affecting its level, such as individual characteristics, work load, work satisfaction, personal competencies, recognition of achievements, social support, supportive communication and feedback, leadership behaviour and organizational climate. Considering all the factors it can be observed that work performance was influenced by the extent to which the nurses experienced organizational commitment and job satisfaction.

Ciarrochi (2018) emphasized that being able to perceive and express emotions in an appropriate way can determine whether nurses were successful or not in their work as reflected in the quality of delivered care and consequently patient outcomes and patient satisfaction.

### 3.4 Bivariate Analysis

Cross tabulations were done to establish whether there was a relationship between each independent variable and the dependent variable. The Chi-Square statistic was used to evaluate tests of independence of the categorical variables as shown below:

**Table 4: Chi-Square statistic**

| Variable | Sample Size (n) | $\chi^2$ | Df | *p*-value |
|---|---|---|---|---|
| Stress management | 180 | 10.827 | 1 | 0.001 |

The study established that there was a significant association between stress management and nurses work performance, with a p-value<0.05. Stress may emanate from several sources from work environment, family, other workers and patients. Therefore, being able to handle stress is critical in determining how a nurse performs their work.

Further the nature of the relationship between stress management and work performance among nurses, was done using the regression analysis. The results revealed that stress management significantly influencednurses' performance. Nurses who managed stress were 15.333 times more likely to perform better than nurses who were not able to managed stress.

Handling stress include being able to manage their anger when dealing with patients, expressing themselves appropriately in the presence of patients, handling any stressful situations at work, creating time to relax during weekly offs, listening to patients and giving them a chance to finish talking before the nurses respond. Mechando (2018) concurs that nurses with low levels of stress experienced lower level of job stress and increased work performance. Sikuku(2017) agrees that all employees, whether at higher management levels, middle or lower levels experience stress with the managers being the most affected due to time pressure, deadlines and responsibility without autonomy. In the case of nurses, Meneze (2005) agrees that rising degrees of occupation stress has turned into a test for health workers and the more significant level of employment stress is related with low profitability, expanded non-attendance subsequently enjoying medication misuse or infirmity identified with pressure, for example, hypertension and cardiovascular issues.

## IV. Conclusion

Stress management significantly influenced nurses' work performance. Stress may emanate from several sources from work environment, family, other workers and patients. Therefore, being able to handle stress is critical in determining how a nurse performs their work. Handling stress include being able to manage anger when dealing with patients, expressing oneself appropriately in the presence of patients, handling stressful situations at work, creating time to relax during weekly offs, listening to patients and giving them a chance to finish talking before the nurse respond. Therefore, to handle stress one should have intrapersonal skills, interpersonal skills and be able to adapt to their work environment.

## References

[1]. AbuAlRub, R. F. (2014). Job stress, job performance, and social support among hospital nurses: *Journal of Nursing Scholarship*, 36(1), pp73-78.
[2]. Christodolon-Fella, C. (2018). Emotional intelligence: a vital prerequisite for recruitment in nursing. *Journal of Nursing Management,* 9(6):321-324.
[3]. Ciarrochi, D. R. (2018). Models of emotional intelligence. In R. Sternberg (Ed.), *Handbook of intelligence*. Cambridge: Cambridge University Press.
[4]. Dusseldorp, A. (2011). Organizational justice: Personality traits or emotional intelligence? An empirical study. *Journal of Employment Counseling*, 49(1), 31-42
[5]. Kilfedder, H. (2013). Occupational stress and emotional intelligence in the context of emotional fatigue among Chinese nurses, *Journal ofBehaviour Management,* 12:351-360.
[6]. Kurgat, K. (2019). Understanding the role of Emotional Intelligence on Job Performance in the medical sector in Kenya, *Journal of Management*, 2(5), 51-59
[7]. Maurizioet, A. E. (2006). Impact of a nurse-led health promotion intervention in an aging population: results from a quasi-experimental study on the "Community health consultation offices for seniors, *Journal Aging Health*, 32(1):83-94.
[8]. Maurizioet, K. (2011). Tensions in informed self-assessment: how the desire for feedback and reticence to collect and use it can conflict. *Acad Med*, 86(9):1120-1127.
[9]. Mechando, A. H. (2018). Study of the relationship between emotional intelligence (EI) and management decision making styles. *World ApplSci J*;12(7):1017–1025.
[10]. Salovey, Z. & Meyer, G. (1997). The effect of labor's emotional intelligence on their job satisfaction, job performance and commitment, *Journal Management Stud*ies, 6(1):27-43.