Section A-Research paper

BURNOUT EXPERIENCE AMONG NURSES IN PUBLIC HOSPITALS; A CASE OF HOMA-BAY COUNTY TEACHING AND REFERRAL HOSPITAL, KENYA

Owuor, R.A., [1, 2], Kivuti-Bitok, L.W., [2] Wagoro M.C.A.[2]

Rosebenter A. Owuor
MSc in Nursing Administration Chiang' Mai University, Thailand, BScN (University of Eastern Africa Baraton)
Lecturer, Department of Nursing Education, Leadership & Research, School of Nursing, Maseno University
PhD candidate University of Nairobi
Email: Rowuor@maseno.ac.ke/ rowuor@students.uonbi.ac.ke

Dr Lucy W. Kivuti-Bitok
PhD in Mathematical Modelling (Health Systems Engineering) University of Nairobi, Masters in Health Sector Management (Roskilde University/ Galilee College), BScN (University of Nairobi)
Senior Lecturer, School of Nursing Sciences, University of Nairobi
Email: lukibitok@uonbi.ac.ke

Dr Miriam C. A. Wagoro, RN, PhD
Clinical Mental Health Nurse & International Research Ethics Specialist
Senior Lecturer, School of Nursing Sciences, University of Nairobi
Email: carole@uonbi.ac.ke

Corresponding Author
Rosebenter A. Owuor
+254-710-715
Email: Rowuor@maseno.ac.ke/ rowuor@students.uonbi.ac.ke

Abstract:

Background: Burnout is a global phenomenon that is common among health care workers more-so nurses due to the numerous stressors and the high demands associated with the profession. Burnout does not only negatively affect nurses but also patients and healthcare institutions. **Objectives:** The study assessed the prevalence and factors predicting burnout among nurses in Homa-Bay County Teaching & Referral Hospital (HCTRH), Homa-Bay County, Kenya. The primary outcome was burnout scores and the secondary outcomes are the predictor factors of burnout. **Methods:** We recruited 104 participants for this cross-sectional descriptive study. A simple random sampling method was applied to allocate the participants from the sampling frame made of 140 nurses. A self-administered questionnaire with four sections on demographic characteristics, professional characteristics, individual characteristics of the participants and the Maslach Burnout Inventory (MBI) was used. The response rate was 86 nurses (82.7%). The prevalence of burnout was assessed using frequency, while Fisher's Exact was applied to assess the relationship between dimensions of burnout and the socio-demographic, professional and individual factors. Chi-square test of independence and regression analysis were applied to assess the relationship between burnout and the factors.

Results: Thirty-nine (45.3%) of the nurses reported burnout while 55 (64.0%) experienced high emotional exhaustion, 70 (81.4%) high depersonalization and 76 (88.4%) low personal accomplishment. Period of deployment in the current ward, hours per week and experience of reduced self-efficacy had a statistically significant association with depersonalization (p=0.02, 0.03 and 0.02). The years of practice as a nurse, assessment of self-worth and experience of reduced self-efficacy also had a statistically significant relationship with personal accomplishment (p=0.01, 0.02 and 0.04). Bivariate analysis using the Chi-Square (X^2) test reported only dependence on others at work and experience of reduced self-efficacy to be statistically related to burnout (p=0.00 and 0.02). Further, the regression analysis reported gender (OR=0.35, 95% CI [0.10 to 1.22], p=0.01) and dependence on others at work to be the only predictor of burnout among nurses in HCTRH (OR= 3.60, 95% CI [1.30 to 142.2], p=0.03).

Conclusions: Burnout is considerably prevalent among nurses in Homa-Bay County Teaching and Referral Hospital. It is associated with gender, the experience of reduced self-efficacy and dependence on others at work. Therefore, the nurse managers should develop comprehensive interventions based on current knowledge to reduce burnout among these nurses.

Key Words: Burnout, Emotional Exhaustion, Depersonalization, Personal Accomplishment, Nurse.

Glossary of Abbreviations

AOR: Adjusted Odds Ratio

BScN: Bachelor of Science in Nursing

CI: Confidence

DP: Depersonalization

EE: Emotional exhaustion

HCTRH: Homa-Bay County Teaching & Referral Hospital

MBI: Maslach Burnout Inventory

KRN: Kenya Registered Nurse

KRN/M: KRN midwife

KRCHN: Kenya Registered Community Health Nurse

NO: Nursing Officer

PA: reduced personal accomplishment (PA)

SNO: Senior Nursing Officer

USA: United States of America

WHO: World Health Organization

INTRODUCTION

Burnout is a global phenomenon (1). It is common among health care workers more-so nurses due to the numerous stressors and the high demands associated with the profession (1). The high demand for nurses' work is associated with a high workload and job stress due to their involvement with patients and patient care (2). Burnout is a condition characterized by three dimensions including emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (PA) in individuals involved in 'people work' of some kind. Emotional exhaustion refers to feelings of fatigue and being drained by own work; DP is a negative attitude towards and dehumanizing treatment of one's clients at work, and reduced PA is feelings of incompetence and non-achievements in an individual's work involving people (3 & 4). Burnout was declared a mental health problem (World Health Organization [WHO]). Burnout reduces the quality of health care provided (2). It also reduces productivity, increases clinical errors, it also leads to higher absenteeism, decreased empathy, poor interpersonal relationships with patients, alcohol and substance abuse, misconduct at work, depressive illness, suicide, reduced patient satisfaction, and poor staff retention (5, 6 & 7).

Many studies across the world have reported moderate to high levels of burnout. Globally, the prevalence of burnout among nurses is 50% (8). A systematic study of sixteen studies involving 18,935 nurses reported a prevalence of 34.1%, 12.6% and 15.2% respectively for EE, DP, and low PA (9). A cross-sectional study among workers from 14 emergency departments; 8 from the West Bank and 6 from the Gaza Strip involving 161 nurses found high (48.8%) levels of depersonalization and high levels (69.8%) of emotional exhaustion (10). Besides, a systematic study conducted among seven African countries including 12 studies reported the prevalence of emotional exhaustion at 66%, depersonalization at 60% and low personal accomplishment at 49% (8). In Kenya, (12) conducted a study among medical workers at Kenyatta National Hospital to establish the prevalence of burnout in medical workers and reported that it stood at 95.4%. Several factors have been associated with burnout; married marital status [AOR: 2.3, 95% CI: (1.2 to 4.3)], poor current health status [AOR:4.8, 95% CI:(1.1 to 21.4)] and fair current health status [AOR:12, 95% CI:(4.5 to 32)], working greater than eight-hour per-day [AOR:0.52, 95% CI:(0.29 to 0.92)], intention to leave a job [AOR:0.48,95% CI: (0.2 to 0.88), is working in the emergency room [AOR:0.3,95% CI:(0.1 to 0.98)] and using a different medication related to

work-related health problems (2). No single and readily identifiable cause of burnout is recognized rather, many factors can contribute to its occurrence (13). Our study assessed the relationship between sociodemographic, professional and individual factors and burnout among nurses in Homa-Bay County Teaching & Referral Hospital.

The World Health Organization highlights the need for the world to add nine million more nurses and midwives by 2030 to attain Sustainable Development Goal number three on health and well-being. Africa and South East Asia experience great nurses shortage. Whereas the World Health Organization (WHO) recommends a minimum of 23 doctors, nurses and midwives for every 10,000 people. Kenya has one doctor, 12 nurses and midwives per 10,000 people, the recent ratio is 13 for every 10 000. Owing to financial constraints, the government is not able to attract and retain its employees through competitive salaries (14). Therefore, its employees experience rampant strikes due to stress. In Homa-Bay County, the facilities' nurse-population ratio is 1 for every 1,500 (15). In the fiscal year 2013/2014, Homa Bay county Referral hospital experienced shortages of supplies characterized by non-payment of suppliers due to untimely allocation of recurrent budget, therefore, contributing to poor quality of service delivery. With this kind of work environment, nurses in Homa-Bay County Hospital are at risk of stress at work with a high likelihood of burnout experience. Burnout and the related factors have been well researched in high-income countries. However, limited data on nurses' burnout in low-medium income countries like Kenya where the disease burden is greatest (11). The current study, therefore, assessed the prevalence and predictors of burnout among nurses working in HCTRH, Kenya.

MATERIALS AND METHODS

This quantitative cross-sectional study was conducted between January to May 2020 in Homa-Bay County Teaching and Referral Hospital (HCTRH). Homa Bay County is found along the shores of Lake Victoria. It covers 3,183.3Km^2 with a population of 963,794. It has 262 facilities (16). HCTRH was selected since it is the only teaching and Referral Hospital in the County. One hundred and forty nurses deployed in medical, surgical and maternity units in HCTRH were targeted. The exclusion criteria were nurses on transfer at the time of the study and those who were deployed in the intensive care and renal units since their nurse-patient ratios also nurse managers were not eligible. The sample size was calculated by Yamane's formula at a level of

significance of 0.05 yielding 104 nurses in the study. The sampling frame consisted of 140 nurses out of whom 104 were selected using a computer program to conduct simple random sampling among the eligible nurses to participate in the study. The primary outcome was the burnout scores while the secondary outcomes were the predictors of burnout. A self-administered questionnaire consisting of socio-demographic, professional, and individual factors and Maslach burnout inventory (MBI) was used to collect data. The Maslach Burnout Inventory (MBI) is a globally validated 22-item tool (17); nine items are on EE, five negative items on DP and eight items assessing low PA. It is scored on a 7-point scale where a participant responds from never (0) to every day (6) and yields three subscale scores. The emotional exhaustion score range is 0–54; low (0–16), moderate (17–26), and high (≥ 27) burnout. Depersonalization score range is 0–30, with low being (0–6), moderate (7–12), and high (≥ 13) burnout. The personal accomplishment score range is 0–48, where low is (0–31), moderate (32–38), and high (≥ 39) burnout. We calculated overall scores in the domains by summing the item scores in each. An individual who scores high levels in EE and DP with low levels of score in PA had burnout (2 & 7). Determination of content validity was not undertaken since the MBI has been widely tested and reported for internal consistency, test-retest reliability and validity (4). Accordingly, reliability coefficients for the subscales reported are 0.90 for (emotional exhaustion) EE, 0.79 for depersonalization (DP), and 0.71 for personal accomplishment (PA). Ten per cent of the targeted nurses in HCTRH who were not in the sample participated in pretesting to determine the face validity of the instrument. A rigorously trained research assistant in the study process provided information about the study, distributed and received consent forms and filled out coded questionnaires. Eighty-six (82.7%) of the nurses submitted complete questionnaires. Data were cleaned, coded and entered into Statistical Package for Social Packages (SPSS) version 23. Descriptive statistics were used to estimate the prevalence of burnout among nurses. The relationships between the socio-demographic, professional, and individual factors, dimensions of burnout and burnout were assessed using Fisher's Exact Test and Chi-square tests respectively. A logistic regression model was used to determine the predictors of burnout among nurses in HCTRH. The University of Nairobi, the University of Nairobi/ Kenyatta National Hospital Ethics and Research Committee approved the study, P342/04/2019 and the National Commission for Science, Technology, and Innovation, 840541.

RESULTS

Thirty-nine (45.3%) of the nurses reported burnout in HCTRH. A majority of 55; 64% of the nurses experienced high emotional exhaustion, many other 70 (81.4%) reported high depersonalization, and 76 (88.4%) had reduced personal accomplishment. A majority of the nurses 62; 72.1% were female and many 53 (61.6%) were between 25 and 35 years of age. The married nurses were 60 (69.8%). Kenya Registered nurses (KRCHNs) were the majority 68 (79.1%). Only 21; 24.4% had been enrolled in formal courses within the year of study. Most 38; 44.2%) of the nurses were Nursing officers three. Many of the nurses had worked in their current placement for between one to four years 73 (84.9%). Fourteen (16.3%) of the nurses in HCTRH worked for more than 50 hours. No shift preferences were reported by a majority of 62 (72%). In terms of individual characteristics: most of the nurses reported high self-worth 77 (89.5%). Also, 38; 44.2% of nurses perceived a feeling of insecurity in their job. Only 11; 12.8% depended on others in their job. Besides only 48;55.8% experienced reduced self-efficacy. A majority of 55; 64% reported an inability to accomplish their daily work (table 1).

The period of deployment in the current ward, hours worked per week and experience of reduced self-efficacy were statistically significant to DP (p=0.02, 0.03 and 0.02). Years of practice as a nurse, assessment of self-worth and job insecurity also had a statistically significant relationship with reduced PA (0.00, 0.02 and 0.04) (Table 1). The Chi-square test above shows that dependence on others at work (p=0.00) and reduced personal efficiency (p=0.02) had a statistically significant relationship with burnout among the nurses in HCTRH (Table 2). With a p-value set at $p = 0.05$, the logistic regression model indicated that no socio-demographic or professional factor was a predictor of burnout among the participants (Table 3). Among the individual factors, only gender (OR=0.35, 95% CI [0.10 to 1.22], p=0.01), and dependence on others in the workplace was associated with burnout (OR=13.60, 95% CI [1.30 to 142.19]), p=0.03.

DISCUSSION

The study assessed the prevalence and factors predicting burnout among nurses in Homa-Bay County Teaching & Referral Hospital (HCTRH), Homa-Bay County, Kenya. Thirty-nine (45.3%) of the nurses reported burnout in HCTRH which is a lower rate compared to the 66%

burnout rate among nurses in a study conducted in the USA (19). This difference may be associated with higher resilience to burnout among the nurses in HCTRH. Further, the cross-sectional study in the USA was nested in a randomized control study while the current study is an analytical cross-sectional study. The finding of the current study is similar to a study conducted in Uganda where 40% of the nurses had high levels of burnout (20). It is also consistent with a study among Pakistanian nurses (17) in which the burnout rate was 48.6%.

In the current study, high EE; 55 (64%) high depersonalization 70 (81.4%) and low PA were reported among many nurses 76 (88.4%). This finding was corroborated by another study conducted in Spain/ Brazil that also reported high EE and Personal Accomplishments (1). The finding of the current study was also corroborated by a study in Portugal, that reported high EE among 59% of the nurses (21). However, our findings differ from those of a systematic study involving sixteen studies among 18,935 nurses that reported a lower prevalence of burnout with 34.1%, 12.6% and 15.2% respectively for emotional exhaustion, depersonalization, and lack of personal accomplishment (9). Inconsistent with our finding (17) high emotional exhaustion in 37.2%, depersonalization in 36.8%, and low personal accomplishment in 46.9% of the nurses were reported in Pakistan. The difference may be explained by the context of the study since the Pakistani study involved five private and three public hospitals. In Spain, a systematic review of primary care nurses reported that 50% of nurses had low/medium levels of EE and 50% had high levels (22). This contravenes our study where a majority 55 (64%) of the nurses reported either high EE. This difference may be explained by differences in the culture of the respondents as well as the study context. Although our study reported high depersonalization, a study reported low depersonalization (1) again this may be explained by the difference in sampling techniques where in Portugal, Spain and Brazil study intentional and snowballing techniques of sampling were used whereas we applied simple random. Their sample size was larger (1052) nurses. A systematic study involving sixteen studies that considered 18,935 nurses reported the prevalence of 34.1%, 12.6% and 15.2% respectively for emotional exhaustion, depersonalization, and lack of personal accomplishment (9). This contravenes our study and may be explained by the larger sample size in the systematic review. The findings of another study (2), corroborated the findings of the current study by reporting 269 (65.3%) nurses experienced high emotional exhaustion, 291 (70.6%) high depersonalization and 307 (74.5%) and low

personal achievements in public hospitals in the Harari region and Dire Dawa administration, eastern Ethiopia

A majority of 62 (72.1%) were female, our study finding was consistent with that of a study conducted in Uganda where 257; 65.1% were also female (20). However, it was contradicted by a study conducted in Ethiopia where the number of females and males were almost the same 222 (53.9%); 190 (46.1%) respectively (2). Many nurses 53 (61.6%) were between 25 and 35 years of age this is supported by (2) in the public hospitals of Harari region and Dire Dawa administration, eastern Ethiopia in which almost half 198 (48.1%) of them were also between the age of 20–29. However, it is inconsistent with a study conducted in Poland where the majority were nurses between 41–50 years (48.80%) (18). These differences may be associated with the population differences in Poland and Kenya. In the current study, the majority 60 (69.8%) were married. (2) corroborated by a study in Ethiopia where more than half; 241(58.5%) of the study participants were also married (2). While in our study, the BSc. holders were 7 (8.1%) and diploma prepared nurses were 68; 79.1%, the majority 297 (72.1%) of the nurses were B.Sc. holders and 103 (25%) were diploma nurses in the public hospitals of the Harari region and Dire Dawa administration, eastern Ethiopia (2). In Poland, 44.5% of the nurses also had a bachelor's degree (18). This difference may be explained by the existence of a more supportive health system in Ethiopia which allows for the training and development of nurses as compared to the Kenyan Health system. It also suggests limited training opportunities in Homa-Bay County supported by 21; 24.4% of nurses enrolled in formal courses within the year of study. This is corroborated by another study in Homa-Bay County Most (90%) of the nurses did not attend a course in the past six months (23). The Kenya Registered nurses (KRCHNs) were the majority among these nurses 68 (79.1%). In the current study, work experience was almost the same across the years, this may be comparable to one-third of 135 (32.8%) of the nurses who had less than 3 years of experience in Ethiopia (7). Fourteen (16.3%) of the nurses in Homa-Bay County Teaching and Referral Hospital worked for more than 50 hours. 183 (44.4%) of nurses were working >8 hours and 229 (55.6%) of them were working for less than or equal to 8 hours in the public hospitals in Ethiopia (2). No shift preferences were reported by a majority of 62 (72.%). This difference may be explained by the differences in human resources policies in the two countries compared and nurses' availability. In Ethiopia, there may also have been no shift preferences since 148 (35.9%) were on daily duty, 147 (35.7%) were on night duty and the rest

were working alternatively (2). Most 77; 89.5% of the nurses in HCTRH reported high self-worth. Burnout has been reported among people who define their self-worth by their achievements (24). These nurses in HCTRH were less likely to report burnout due to a perception of high self-worth. In addition, 38; 44.2% perceived a feeling of insecurity in their job. Job insecurity is a predictor of emotional exhaustion among nurses (25). Besides 48; 55.8% experienced reduced self-efficacy. A study conducted in Behbaharan city in Iran among nurses reported that an increased self-efficacy was associated with a decrease in all dimensions of burnout (26).

Age, gender and marital status were not significantly associated with any dimension of burnout. This disagrees with a study that reported gender and age as predictors of depersonalization and age, as well as professional experience, predicted personal accomplishment (1). Our study also contravenes findings in Ethiopia that attributed marriage to burnout (2). This may be explained by the larger sample size in the Ethiopian study compared to our study. Similar to this study, marital status and working experience were not significantly associated with burnout (9). Period of deployment in the current ward, hours per week and experience of reduced self-efficacy had a statistically significant relationship with DP ($p=0.02$, 0.03 and 0.02). Working greater than eight hours per day was also reported as a predictor of burnout in our study as well as another study in Ethiopia (2). Greater burnout is associated with less than 20 hours none work-time weekly (18). The Chi-square test indicated that the dependence on others at work and experience of reduced self-efficacy were significantly statistically related to burnout ($p=0.00$ and 0.02). This finding corroborates that of a systematic study involving 57 articles among 22,773 people that reported that the association between self-efficacy and burnout was moderate (−.33) (27). The regression analysis reported gender ($p=0.01$) and dependence on others at work ($p=0.03$) to be the only predictors of burnout among nurses in HCTRH. In a meta-analysis, it was reported that women are slightly more emotionally exhausted compared to men ($\delta = .10$), while men are greatly depersonalized than their female counterparts ($\delta = -.19$) (28). Our study findings are subject to a limitation; the nurses in HCTRH may not be representative of the general nurse population in Kenya since we did not select participants from other counties. Nevertheless, it builds literature on the prevalence of burnout and associated factors among nurses.

CONCLUSION

Many nurses reported burnout while experiencing high levels of emotional exhaustion and depersonalization and low personal accomplishment. Age, gender and marital status had no statistically significant association with either emotional exhaustion, depersonalization or personal accomplishment. Period of deployment in the current ward, hours per week and experience of reduced self-efficacy were significantly statistically related to depersonalization. Besides, years of practice as a nurse, assessment of self-worth and experience of reduced self-efficacy were also statistically significantly related to reduced personal accomplishment. Dependence on others at work and experience of reduced self-efficacy were statistically significantly associated with burnout. The predictors of burnout were gender and dependence on others at work.

The nurse managers should develop comprehensive interventions based on current knowledge to reduce burnout among these nurses. This should focus on building innate hardiness and resilience among them. Also, appropriate staffing for health should be undertaken so that these nurses work for a maximum of forty hours each week. Besides, the nurses' engagement on a locum and contractual basis should be reduced to enhance their job security. The training opportunities for nurses should be increased so that their self-worth and efficacy are elevated. Further, multidisciplinary teams should be optimized to ensure each professional's autonomy is upheld.

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CONFLICT OF INTEREST STATEMENT

The authors have declared no conflict of interest in this work.

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Table 1: Sociodemographic characteristics and bivariate analysis of socio-demographic, professional and individual factors and emotional exhaustion (EE), depersonalization (DP) and personal accomplishment (PA) among nurses in Homa-Bay County Teaching and Referral Hospitals, Homa-Bay County, Kenya (January 2020- May 2020) (n=86)

Variable	n=86 (%)	Emotional Exhaustion p-value		Depersonalization		Reduced Personal Accomplishment	
		Fishers Exact test	p-value	Fishers Exact test	p-value	Fishers Exact test	p-value
SOCIO-DEMOGRAPHIC FACTORS							
Gender Female Male	62 (72.1)	0.48	0.86	1.32	0.6	1.32	0.6

	24(27.9)						
Age In Years ***25-35*** ***36-45*** ***46-55*** ***>55***	 53 (61.6) 23 (26.7) 8 (9.3) 2 (2.3)	10.52	0.06	7.37	0.25	7.37	0.08
Marital Status ***Single*** ***Married*** ***Divorced*** ***Separated*** *Widowed*	 14 (16.3) 60 (69.8) 5 (5.8) 5 (5.8) 2 (2.3)	8.76	0.29	5.85	0.71	5.85	0.7
PROFESSIONAL FACTORS							
Nursing Qualification KRN KRN/M KRCHN BScN	 4 (4.7) 7 (8.1) 68 (79.1) 7 (8.1)	4.26	0.60	2.77	0.83	2.77	0.73
Attendance of Further Formal Courses Yes NO	 21 (24.4) 68 (75.6)	0.38	0.92	0.89	0.77	0.89	0.25
DESIGNATION SNO NO I NO II NO III OTHER	 13 (15.1) 17 (19.8) 17 (19.8) 38 (44.2) 1 (1.2)	8.423	0.39	5.33	0.88	5.33	0.11
Years of Practice as a Nurse 1-4 years 5-9 years 10-15 years	 24 (27.9) 24 (27.9)	9.32	0.11	4.26	0.64	4.26	**0.00**

Over 15 years	20 (23.3) 18 (20.9)						
Period of deployment in the current ward 1-4 years 5-9 years 10-15 years Over 15 years	73 (84.9) 10 (11.6) 2 (2.3) 1 (1.2)	7.87	0.23	14.48	**0.02**	14.48	0.55
Hours Per Week Less than 40 hours 40-50 hours More than 50 hours	7 (8.1) 65 (75.6) 14 (16.3)	3.25	0.45	9.85	**0.03**	9.85	0.05
Preference for any shift YES NO	24 (27.9) 62 (72.1)	0.92	0.46	1.33	0.52	1.33	1.00
INDIVIDUAL FACTORS							
Assessment of self-worth High Low	77 (89.5) 9 (10.5)	5.06	0.06	1.51	0.53	1.51	**0.02**
Job Insecurity in ones' job YES NO	38 (44.2) 48 (55.8)	4.52	0.10	3.21	0.22	3.27	**0.04**
Dependence on others in work YES NO	11 (12.8) 75 (87.2)	3.17	0.18	0.37	1.00	0.37	0.73
Perceived External Control in ones' Job		3.59	0.18	1.72	0.44	1.72	1.00

Table 2: Bivariate analysis using Pearsons Chi-square Test showing the association between the independent variables and burnout among nurses in Homa-Bay County Referral Hospital, Homa-Bay County, Kenya (January 2020- May 2020) (n=86)

YES NO	28 (32.6) 58 (67.4)						
Experience of reduced self-efficacy YES NO	48 (55.8) 38 (44.2)	3.97	0.14	7.6	**0.02**	7.6	0.43
Accomplishment of daily work YES NO	31 (36) 55 (64)	1.56	0.44	0.79	0.79	0.91	1.00

Fisher's Exact test
p-value=0.05 or less

KEY: KRN=Kenya Registered Nurse, KRN/M=KRN midwife, KRCHN=Kenya Registered Community Health Nurse, BScN=Bachelor of Science in Nursing, SNO=Senior Nursing Officer, NO=Nursing Officer

Variable	Chi-Square test	p-value
SOCIO-DEMOGRAPHIC FACTORS		
Gender	3.95	0.05
Age in years	2.75	0.43
Marital status	6.72	0.15
PROFESSIONAL FACTORS		
Nursing qualification	2.65	0.45
Attendance of further formal courses	1.56	0.21
Designation	2.35	0.67
Years of practice as a nurse	5.77	0.12
Period of deployment in the current ward	6.03	0.11
Hours per week	2.00	0.37
Preference for any shift	0.29	0.59
INDIVIDUAL FACTORS		
Assessment of self-worth	1.84	0.18
Job insecurity in ones' job	1.11	0.74
Dependence on others in work	10.56	**0.00**
Perceived external control in ones' job	1.13	0.29
Experience of reduced self-efficacy	5.21	**0.02**
Accomplishment of daily planned work	0.86	0.35

Pearsons Chi-square
p-value=0.05 or less

Table 3: Logistic Regression for factors most associated with Burnout among nurses in Homa-Bay County Referral Hospital, Homa-Bay County, Kenya (January 2020- May 2020) (n=86)

Variable	Multivariable or Adjusted OR (95% CI)	p-value
SOCIO-DEMOGRAPHIC FACTORS		
Gender	0.35 (0.10-1.22)	**0.01**
Age in years	0.55 (0.18-1.68)	0.29
Marital status	1.19 (0.55-2.56)	0.67
PROFESSIONAL FACTORS		
Nursing qualification	1.40 (0.51-3.85)	0.51
Attendance of further formal courses	2.09 (0.58-7.54)	0.26
Designation	0.92 (0.53-1.60)	0.76
Years of practice as a nurse	1.37 (0.68-2.78)	0.38
Period of deployment in the current ward	1.33 (0.37-4.81)	0.67
Hours per week	1.86 (0.56-6.12)	0.31
Preference for any shift	0.75 (0.22-2.58)	0.64
INDIVIDUAL FACTORS		
Assessment of self-worth	0.40 (0.06-2.95)	0.37
Job insecurity in ones' job	1.03 (0.32-3.32)	0.96
Dependence on others in work	13.60 (1.30-142.19)	**0.03**
Perceived external control in ones' Job	0.77 (0.23-2.55)	0.67
Experience of reduced self-efficacy	2.49 (0.81-7.65)	0.11
The accomplishment of daily planned work	0.63 (0.2-2.03)	0.44

p-value=0.05 or less