

Exploring The Perspective of Nurses on Burnout and Coping Strategies: A Qualitative Study in Selected Public Hospitals in Homa-Bay County Teaching & Referral Hospital, Kenya

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Abstract

Background: Burnout is a problem among nurses globally which is characterized by increased physical and emotional exhaustion. The prevalence of burnout among nurses was high before the COVID-19 pandemic, currently, it is even higher. It leads to poor health, sickness absence, reduced job performance, and intention to leave jobs among nurses. It also affects nurses' personality, and productivity and is a determinant of depression. Due to nurses' burnout, patients experience poor quality of care, falls, medication errors, poor safety, adverse effects, and other negative experiences. The purpose of this qualitative arm of a mixed study was to explore participant's awareness of burnout, situations in which burnout was reported, perception, and coping strategies for burnout.

Methods: This case study was conducted among thirty nurses purposively sampled in Homa-Bay Teaching and Referral and Rachuonyo South sub-county hospitals. Twenty of these participants were selected for two focus group discussions in the first hospital and ten participants were selected from the other sub-county hospital for the third focus group discussion. These participants in the current study were part of the quantitative phase of the study which is not considered in the current study. They may have had or not had burnout but they gave the information to the inquiries made based on the focus group discussion guide. The ethical clearance was obtained from the Kenyatta National Hospital-University of Nairobi Ethical Review Committee and the National Ethics Review Board. A face-to-face group interview method was used to collect data where participants were asked relevant questions and responses were obtained. A focus group discussion guide was used as the tool. Data collection was conducted over six months during which responses were audio-recorded and field notes prepared. The researchers listened repeatedly to the audio-recorded information and transcribed them verbatim; the transcripts were read through and through for data immersion. Content analysis was conducted using NVivo 11 software which involved code formation, grouping similar codes into categories, and the themes generation from descriptions of related categories. The codes created were randomly reviewed by supervisors for intercoder rating and rigour.

Results: The participants were aware of burnout; quality of care was a major theme in nurses' awareness of burnout. The themes describing the situations in which the participants in Homa-Bay County experienced burnout include the competence of staff, work overload, lack of cooperation among team members, conflicts, negligence, the characteristics of the hospital, socio-demographic characteristics, supplies, lack of or inadequate involvement of nurses in decision-making, and delays in patient management. The participants perceived burnout negatively. The effects of burnout emerged in three themes: the effects on the participants' health, family, and job performance. The participants' coping with burnout was described in two major themes: resilience and social support systems.

Conclusion & Recommendation: This study provides information regarding participants' awareness, situations in which burnout was reported, perception, effects and burnout coping strategies in Homa-Bay County. Prevention and reduction of burnout, among nurses is a priority for every administrator and health policymaker.



INTRODUCTION

Burnout is a state of prolonged response to chronic interpersonal stressors on the job (Maslach, Schaufeli, & Leiter, 2001). It has three elements which are: emotional exhaustion (EE), depersonalization (DP), and reduced personal accomplishment (PA) (Maslach, 1998). Emotional exhaustion is a predictor of stress and relates to health outcomes (Maslach, Schaufeli, & Leiter, 2001). Burnout is common in several human services occupations in which it is indicative of poor health (Maslach, Schaufeli, & Leiter, 2001). It is a nursing problem globally (Borges et al., 2021; Doulougeri et al., 2016) which remains a big public health concern (Alabi et al., 2021).

One of the extremely stressful professions is the nursing occupation (de Oliveira et al., 2019) whose practice is characterized by increased physical and emotional exhaustion (de Oliveira et al., 2019). The magnitude of burnout experienced by nurses is a product of their work environment and coping resources (de Oliveira et al., 2019). Among nurses, the prevalence of burnout is high globally (Liu & Aunguroch, 2019). It was high before the COVID-19 pandemics, and it is even higher presently (Nwanya, 2021). In Europe and North America, approximately 3 to 65% of oncology nurses experience an extent of burnout (Gómez-Urquiza et al., 2016; Kołpa, Jurkiewicz, & Broda, 2017). Nurses in sub-Saharan Africa also report high burnout in all its dimensions (Owuor et al., 2020). In Kenyatta National Hospital, the prevalence of burnout among medical workers was 95.4% which was higher than in other countries worldwide reported at 66.0% (Kokonya, 2014). The nurses often report high burnout due to work overload and increased responsibilities (Dos Santos, 2020).

Burnout has been associated with poor health and sickness absence, reduced job performance, and intention to leave a job among nurses (Dall'Ora et al., 2020). It affects the personality and productivity of nurses (de Oliveira et al., 2019) while being a determinant of depression (Hsieh et al., 2021). In

the workplace, when a worker reports burnout and yet does not leave the job, productivity and effectiveness will be low (Maslach, Schaufeli, & Leiter, 2001). Nurses' burnout leads to poor quality of care, falls, medication errors, poor safety, and adverse effects among patients. In a meta-analysis of 82 studies with 210,669 healthcare providers, there was a statistically significant negative association between burnout and quality of care ($r = -0.26$, 95 % CI $[-0.29, -0.23]$) and safety ($r = -0.23$, 95 % CI $[-0.28, -0.17]$) (Salyers et al., 2017). This implies that provider burnout results in poorer quality of care and safety among patients (Salyers et al., 2017).

Despite its sequelae, burnout is reportedly significant in the health care settings more so among the nurses. Due to the relationship between provider burnout quality of care and patient safety, effective burnout interventions among healthcare providers are imperative (Salyers et al., 2017). The health sector in Kenya is prone to industrial action attributed to the poor work environment and low job satisfaction (Okoth, 2018). The nurses' work environment in Homa-Bay County is not conducive either due to resource limitations (Okoth, 2018), therefore, it may potentially foster burnout. Although causes of burnout are generally associated in the workplace, the interventions among nurses are majorly individual-directed building a person's coping mechanisms (Nwanya, 2021). Such interventions cushion the nurses against stressful work environments making them less responsive to stressful situations which may lead to burnout. The current study may provide beneficial information to the administrators and policymakers towards the development of individual-directed burnout management strategies among the nurses in this setting.

METHODS

This case study is a qualitative arm of a mixed-methods study conducted among nurses in Homa-Bay County to provide insight into situations that may foster burnout among nurses in the setting. The researchers adopted the



constructivist/interpretivism paradigm of inquiry (Panwar, 2017) where they explored the nurses' burnout experience in their work setting. Emphasis was made on the development and overall understanding of burnout (Hadiya, 2020). In this setting, the participants' experiences were explored in their workplace (Hadiya, 2020). The stance of the critical realist perspective was adopted which explained the existence of although with limited human interpretation (Panwar, 2017). The participants' perspectives and interpretations therefore brought out unique themes of burnout in the study setting. To reduce heterogeneity and triangulate data (Fusch, 2015), the study was conducted in two facilities (Homa-Bay Teaching and Referral and Rachuonyo South sub-county Hospital).

This study was conducted among thirty nurses to ensure that rich and thick data descriptions were obtained using the interviewing method (Kabir, 2016) involving face-to-face sessions in focus group discussions (Fusch, 2015). The focus group discussion guide was pilot-tested at the Rachuonyo South sub-County hospital and outcomes were discussed by the supervisors and the guide was reviewed accordingly. A focus group discussion guide with relevant questions assessed the burnout phenomenon in the current study. The participants' recruitment was conducted in the two settings to enable deeper insight into the setting and to triangulate the information (Fusch, 2015).

A purposive sampling method was used to select the study participants to ensure information-rich cases were engaged to obtain data based on the study objectives (Sukmawati, 2023). Purposive sampling was also useful in ensuring the representational representatives of the sample (Wan, 2019). Three different focus group discussions each made of 10 participants were undertaken. Twenty participants for two group discussions were selected in Homa-bay County Teaching and Referral Hospital and ten participants for the third discussion group were from Rachuonyo South sub-County hospital. These participants must have participated in phase 1 of the

mixed study which quantitatively assessed burnout and related factors among the nurses in the setting, whether they have reported burnout or not. The participants were eligible if they had worked in any ward or department other than intensive care units for at least one year. Some nurses who were legible did not participate since they remained in the wards to continue with patient care. A research assistant identified by the researcher based on specified criteria worked with researchers to organize meetings and collect data.

Data was collected by the researchers for about two hours on awareness of burnout, the situations in which the participants experienced burnout, the perception as well as the experience of burnout and the coping strategies for burnout among the participants in the setting. Data was collected over six months from January to June 2020, where audio recording was conducted during the interviews and field notes were also written. The researchers ensured data saturation was attained when no new data, coding or themes came up (Fusch, 2015).

Rigour in the study was enabled through a member-checking approach where unclear information was clarified by follow-up from the participants for concession at the end of each question in the focus group discussion guide. After codes were generated, the supervisors compared them with related codes randomly developed for an inter-coder rating.

To ensure trustworthiness in the data analysis, the current study has described the role of each research team member and the timing as well as the sequence of activities undertaken (Sargeant, 2012). Besides, the development of the data codes or categories is discussed which includes a comparison of findings within and among transcripts. Once codes and categories were developed, the supervisors did parallel ones and any differences were discussed and resolved in a meeting by the three research team members. Content analysis was used to analyse the data because it allows for both qualitative and quantitative approaches which determine the frequency of responses (Harwood, 2003). It is also



beneficial in auditing content to match the objectives (Harwood, 2003).

The process of qualitative content analysis involves four steps (Kleinheksel, 2020). First, the researchers identified the units of meaning. Secondly, the researchers labelled equivalent units with codes, at this point to ensure rigour, the supervisors randomly compared the codes to ensure inter-coder rating. During content analysis, we ensured that a measure in a coding scheme produces similar findings applied by different human coders (Neuendorf & Kumar, 2016). In the third step, the researchers grouped similar codes into categories and finally, the themes were created from descriptions of related categories.

Data analysis was aided by NVivo 11 software which counted the responses from each participant and a diagrammatic presentation of the major and minor codes was generated. The codes and the themes were reviewed by the second and third authors for authenticity and rigour. COREQ (Consolidated Criteria for Reporting Qualitative Research) Checklist has been used to ensure crucial aspects of qualitative research are considered, see in the appendix. The study was approved by the Kenyatta National Hospital-University of Nairobi ethical committee (P342/04/2019) and the National Commission for Science, Technology and Innovation, Kenya (NACOSTI):-P/20/2404.

RESULTS

Participant's characteristics

Twenty-six female and four male nurses were considered in the current study. The youngest participant was 34 years and the oldest was 55 years old with a work experience range of 5 to 28 years. The other results are presented below based on the questions in the focus group discussion guide. The illustrative excerpts on the major and minor themes that emerged are presented in *Table 1*.

I. Are you aware of burnout?

When asked to describe whether they were aware of burnout; the participants reported knowledge of burnout. They defined burnout as a situation in which one has worked to the maximum therefore, she/he cannot continue; when there is too much for the individual to do. The participants also reported that burnout manifested through the overwhelming workload which harmed the care provided to the patients. Quality of care provided by the participants emerged as a major theme of this question. Non-adherence to care standards and reduced job performance were the minor themes of quality care, see *Table 1* for the illustrative excerpts.

II. In which situations did you experience burnout?

When the participants were asked about the situations in which they experienced burnout, the following themes emerged: - competence of staff, work overload, lack of cooperation among team members, conflicts in the workplace, negligence, the characteristics of the hospital, sociodemographic characteristics, lack or inadequate supplies, lack of nurses' involvement and participation in decision-making regarding patient care, and delays in patient management. Each theme is described below: -

Competence of staff

Ten responses were referenced and coded [4.51% Coverage] from the NVivo 11. The participants believed that a gap existed in the staff competence.

This was observed when clients who ought to be managed as outpatients were admitted, patients with certain diagnoses were admitted in the wards in which they could not benefit from care offered and delays in making patient care decisions. Three sub-themes emerged under the theme which were: - lack of autonomy, inadequate mentorship and patients' misdiagnosis. The excerpts are illustrated in *Table 1*

Work overload



Work overload is also a major theme which led to participants' reports of burnout experience see the excerpts illustrated in *Table 1*. The participants had work pressure that was exhibited by working beyond normal shift hours; working both day and nights at times especially in the theatre due to nurses' shortage. Such experiences of high workloads with high patient-nurse ratios were also reported in the maternity wards. The minor themes of the work overload were: patient acuity, nurse-patient ratios and work hours. The illustrative excerpts are in *Table 1*.

Cooperation and teamwork among the healthcare team

Cooperation and teamwork among the healthcare team was another major theme which had seven references coded. A lack of teamwork was reported among: - nurses themselves, nurses- doctors, and even other healthcare team members see *Table 1* for illustrative excerpts.

Conflict

Conflict in the workplace presented situations in which the participants reported experience of burnout. It was explained by 8 references coded [4.24% Coverage] extracted from Nvivo 11. Participants believed that conflict existed in their day-to-day work for example, when a patient landed in a ward where his/her condition could not be handled. The illustrative excerpts are shown in *Table 1*.

Negligence

This was another situation that contributed to the nurses' burnout experience. It had four references coded [3.47% coverage] in NVivo. Participants noted that negligence was often associated with negative patient outcomes, for example, when a needed intervention was not undertaken, a participant said, "...then there is that negligence where somebody simply does not want to take patients to theatre and patient deteriorates..." (P3). Malpractice was a minor theme of which negligence was among healthcare workers.

The characteristics of the hospital/ work environment

The characteristics of the hospital were used

synonymously with the work environment in the current study due to the similarity of responses which were reported when both were assessed. Four references coded [3.01% Coverage] were recorded in this theme with two minor themes including: - nurses' staffing levels, and lack or inadequate management support. An example of a report on nursing staff levels. A participant says, "...yes, like there is a time when you are very few you cannot even make the duty roster for that month and go to complain in the office and you are thrown back you are told, what do you want me to do? You to go sort among yourselves; you come back and strain..." (P6).

Inadequate support from top management was one of the situations which led to nurses' experience of burnout. It manifested in the ways the managers failed to appreciate, recognize, or even provide training opportunities for their staff. Besides, poor relationships also existed between supervisors and supervisees. The illustrative excerpts are reported in *Table 1*.

Socio-demographic characteristics

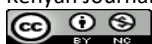
Work experience and salary were reported. The participants indicated that an experienced nurse could be innovative in managing many patients compared to a novice. A participant said, "...patients are so many, there is salary delay and lack of pay for excess time, you work overtime but there is nothing, but here you are working overtime but there is nothing and the salary is also small..." (P 3) see *Table 1*.

Lack of or inadequate supplies

The participants described the manifestation of lack or inadequate supplies in terms of missing essentials for the patients' care. This further necessitated out-of-pocket payments by the patients and their families leading to delayed patient care for example a participant stated, "...maybe, there are no supplies..." (P1, 6 and 7). Other excerpts are illustrated in *Table 1*.

Lack of nurses' involvement and participation in decision-making regarding patient care

The participants reported that nurses' input in patient care was devalued. This situation manifested when clinicians instituted care interventions for certain patients where nurses may have suggested otherwise.



For example, in this excerpt, "...you feel like, if somebody listened to you, then that wouldn't have happened..." (P4). Lack of respect was a minor theme derived; the related excerpts are presented in *Table 1*.

Delays in the Hospital

Delays in the hospital as a theme was one of the situations in which nurses experienced burnout. It was characterized by delays experienced in implementing care interventions towards positive patient outcomes, for example in this excerpt, "...and then there is that negligence where somebody simply does not want to take patients to theatre and patient deteriorates..." (P3). Other illustrative quotes are in *Table 1*.

III. What is your perception of burnout?

When the participants were asked about their perception of burnout; they verbalized a negative perception of burnout. The minor theme was the negative perception of nurses by the community which occurred due to nurses' response to burnout. The nurses may have shown less personalized and humanized care to both patients and caretakers. One participant said, "...burnout makes the community develop a negative attitude towards us and the hospital while it is not our fault especially when the patients have negative outcomes..." (P7).

IV. Have you ever experienced burnout?

When asked whether they have experienced burnout the participants reported daily experience of burnout which they associated with the stressors in their work environment like ill-health among the patients, loss and associated conflict during their work. The excerpts considered are illustrated in *Table 1*.

V. What are the effects of burnout among the participants in Homa-Bay County?

When asked about the effects of burnout within their setting; three themes emerged classifying the effects of burnout into three categories: - family, nurses' performance and health. The effects of burnout on the family had 4 references coded [2.58% Coverage]. It described the effects of burnout on the family where the effects on nurses' quality of work-life balance and sexual life were

considered and explained. An excerpt which explained for example stated, "... you know you go home you are physically exhausted, so at home, you don't have a quality of work life; you can't balance work-home life: physically exhaustion, quality of work life, work-home life..." (P3).

The second theme was the effect of burnout on nurses' job performance which had three references coded [0.92% coverage]. Burnout reduced nurses' output for instance, an excerpt said "...it reduces output and quality of care..." (P 1). The third theme described the effects of burnout on the nurse's health which were described as follows: - "...burnout even brings mental health challenges; yes, you can break out (chuckles), it can lead to depression, you just find that you don't want to talk, you just come on duty and you sit down; you may experience a mental breakdown, depression, fatigue..." (P 1). Other illustrative quotes are in *Table 1*.

VI. How do you cope with burnout?

When the participants were asked how they coped with burnout they indicated that they felt 'caged' in their situation. They also verbalized burnout being part of life that no one could deal with including the organization, there was hopelessness about their situation. One said, "...you adapt it and it becomes part of your life." (P3). This may be resilience built by the nurses over time.

Two other themes emerged: individual-directed intervention and organizational-directed interventions. In the individual-directed interventions, the first theme was the social support system which had three minor themes; family, colleagues and friends. The participants considered that being with family was the most integral support, two references were coded with 0.73% coverage. For example, "...we just go and sit with family members and share our sorrows with them..." (P1). The second minor theme in the support system was that from the colleagues, a participant mentioned "...for us here we just come, sit together, talk, and refresh ourselves in the ward (P 1). The other minor theme of the support system was received from the friends.



An illustrative excerpt indicated: - "...you can go to your friends to enjoy your hobbies..." (P1). The other theme which would be the second under individual-directed interventions suggested by the participants was the modification of lifestyle example going to gyms although it was not tenable. One participant said: - "...there are gyms but when do you go...?" (Participant 2). Other illustrative excerpts are shared in *Table 1*.

Organizational-directed interventions to facilitate nurses' coping with burnout were barely implemented. On their part, the nurses reported delegation and planning at work to be helpful. The participants described some of the interventions the organization or government would provide in an ideal situation. They described workload appropriateness, availing training opportunities, adequate staffing, motivation at work, management of burnout, involvement in decision-making, criticism and appreciation, and others which were largely lacking in the setting.

DISCUSSION

The discussion presents the demographic characteristics of the participants and the questions in the focus group discussion guide.

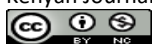
Twenty-six female and four male nurses were considered in the study. Nursing is predominantly a female nurses' profession (Shah *et al.*, 2021), and many studies conducted on burnout always report more female than male nurses (Nugroho & Widiyanto, 2022; Shah *et al.*, 2021). In the current study, the female nurses were the majority (73.1%). The youngest participant was 34 years and the oldest was 55 years old. The experience of participants ranged from 5 to 28 years. The association between work experience and burnout has been reported as non-linear. In a study conducted in the Slovak Republic nurses and midwives with 1 to 3 years of experience and 5 or more years of experience in both periods had significantly higher rates of burnout (Dimunová & Nagyová, 2012). In another study among Finnish nurses, burnout increased with age

and nurses who had worked for who had short work experience experienced lower levels of burnout (Koivula, Paunonen & Laippala, 2000). These findings contravene those of the current study, a plausible explanation would be contextual as well as difference in the self-efficacy of nurses, especially at the end of training in the two contexts.

The nurses in Homa-Bay County were aware of burnout. The major theme that emerged in this question was the quality of care offered by the participants. This finding resonates with a study where burnout had been associated with quality of care (Clifton *et al.*, 2021). This finding also resonates with the result of a study conducted among 53,846 nurses from six countries between 1998 to 2005 which found that higher levels of burnout were related to low quality of care (Poghosyan *et al.*, 2010). Non-adherence to standards of care and reduced job performance among nurses were the minor themes derived and reported in this theme. The finding on reduced performance among the participants corroborates those of a study where workers' performance was influenced by the amount of work in the context (Peeters *et al.*, 2014). Other studies also corroborated this finding reporting an association between burnout and reduced job performance among nurses (Ashipala & Nghole, 2022; Bakhamis *et al.*, 2019; Lubbadah, 2020). Non-adherence to standards set among nurses has been widely reported among nurses (Porto & Marziale, 2016). It has been associated with stressful work environments the foster burnout as shown in the current study.

The second question assessed situations in which burnout experience was reported among the participants. Several themes were derived including: - competence of staff, work overload, lack of cooperation and teamwork among staff, conflicts, negligence among staff, characteristics of the hospital, socio-demographic characteristics, lack of or inadequate supplies, involvement in decision-making, respect and delays in the management of patients.

In this setting, the participants reported competence



gaps among the healthcare team in the following ways described: - the patients with certain diagnoses landed in care departments where relevant care will not be provided. There was also a delay in making patient care decisions and patients who ought to be managed as outpatients were hospitalized. Competence in this study, is used synonymously with self-efficacy whose relationship with burnout has been reported across countries (Shoji *et al.*, 2016). The three minor themes of staff competence were: - misdiagnosis, autonomy and mentorship, especially of young doctors. This finding on autonomy corroborates findings in a study where low autonomy predicted burnout (Dall'Ora *et al.*, 2020).

Burnout was also reported due to work overload among nurses in this setting this was another major theme. This finding was corroborated by a study in Sao Paolo that found work overload among nurses was related to the development of depersonalization (Zanatta & de Lucca, 2015). High stress was reported among individuals who have excessive workloads, work for long or unpredictable hours, have too many responsibilities, work at a rapid pace receive too many phone calls, deal directly with difficult people without sufficient relief and deal with constant crises (Beheshtifar & Omidvar, 2013). According to Galanis *et al.* (2021) and Andlib *et al.* (2022) increased workload characterized by high patient loads was associated with higher burnout levels among the nurses. Maslach (1998) stated that work overload is one of the variables that creates a person-job misfit. In this setting, the nurses' high workload is a chronic situation which does not allow for rest, recovery and restoration, this persistent state may lead to burnout among these nurses. *Patient acuity* was the first minor theme of work overload; many patients were classified in category A and needed intense care thus the higher the workload. The *nurse-patient ratio* was the second minor theme, this finding is supported by another study that found a positive bidirectional relationship between the nursing shortage of oncology registered nurses (RNs') with burnout

(Toh, Ang, & Devi, 2012). The third minor theme was the *work hours which* was also attributed to nurses' experience of burnout. This finding was supported by (Galanis *et al.*, 2021; Shah *et al.*, 2021) who asserted that long hours of work among nurses were associated with burnout. The finding was also similar to a study that suggested that the nurses' work environment is related to both long hours of work and non-commensurate pay to their workload (Bakhamis *et al.*, 2019). Emotional exhaustion was predicted by the work and time pressure and the demands of the job (Gelsema *et al.*, 2006). This equally corroborates with findings of a study in the United States of America (USA) in which a comparison of nurses who worked for less than 20 hours per week, and those who worked more than 40 hours each week the latter had a higher likelihood identifying burnout (odds ratio, 3.28; 95% CI, 1.61 to 6.67) (Shah *et al.*, 2021).

Lack of cooperation and teamwork among the healthcare team in the public hospitals in Homa-Bay County also was a theme that emerged while assessing situations in which the nurses' reported burnout. Its related minor themes were: - *health care team and poor interpersonal relationships*. The finding on teams was supported by another study that reported a negative team relation as a predictor of burnout (Dall'Ora *et al.*, 2020). The second minor theme was *interpersonal relationships* which was congruent with Maslach (1998) argument that poor interpersonal relationships were a potential source of burnout due to low social support.

Conflict was another theme which fostered burnout experience reports among the participants in this setting. This was supported by Poncet *et al.* (2007) in a study that reported severe burnout in nurses in regards to the conflicts between patients and nurses, (or, 1.96; 95% ci, 1.16 to 3.30), and those who reported poor relationships with physicians (or, 0.81; 95% ci, 0.74 to 0.87). In- effective relationships and team-predicted burnout among nurses in a systematic review (Dall'Ora *et al.*, 2020). This finding of the current study is also supported by a



systematic review that found that in stressful situations which is characteristic of nurses' work environment instead of implementing the nurses using their resources to withstand the pressure of stress, they may be aggressive, irritable, hostile and resentful thereby could worsen relationships with colleagues and patients (Maresca *et al.*, 2022).

Another theme that emerged was negligence among healthcare workers creating a suitable situation in which nurses' burnout was reported. A study confirmed that burnout causes negligence among nurses (Clavruel, 1982). The first minor for negligence was *complication, loss, and patient outcomes*. Most of the participants reported negative outcomes such as deaths, especially in the surgical unit and maternity. This finding agrees with a study that reported the experience of loss like death to be related to burnout (Alzailai, Barriball, & Xyrichis, 2021). *Malpractice* was also a minor theme here. Some participants reported malpractice where nurses had advocated for a patient to be operated on during their daytime shift but ended up with poor outcomes due to non-implementation. Burnout has been associated with malpractice among health workers, a study conducted among nursing students in Turkey reported burnout and stress being causes of malpractice (DoĖAn, 2020).

Another situation in which nurses experienced burnout was due to uncondusive characteristics of the hospital used synonymously for the work environment. The minor themes were nurses' staffing levels, management support and workload among staff. This concurred with a study at Kenyatta National Hospital in which the work environment explained up to 56% of burnout intensity scores among health workers (Kokonya, 2014). This finding was also corroborated by a study in which 68.6% and 59.5% of the participants reported leaving or intent to leave their job due to burnout associated with stressors in the work environment and inadequate staffing (63.0% and 60.9%, respectively (Shah *et al.*, 2021). Another study in the United States of America supported the current study's finding by asserting that nurses considered leaving their jobs due to burnout

associated with stress in their work environment. These stressful work environments and inadequate staffing contributed to nurse turnover (Shah *et al.*, 2021). Another sub-theme under the work environment was the lack of or insufficient support from the top management. A participant reported, "...there is no motivation or appreciation from the management..." This was corroborated by a study that reported poor supervisor-worker relationships being related to burnout (Dall'Ora *et al.*, 2020).

Socio-demographic characteristics considered two minor themes: - the experience of the nurse in the unit and salary. Sociodemographic factors were scientifically associated with burnout among nurses (Borges *et al.*, 2021). A participant reported, "... for somebody new, to manage is not easy; you don't know the shortcuts..." (P 2). This finding is supported by a study in Kenyatta National Hospital in which less experienced healthcare workers reported greater burnout levels than their counterparts (Kokonya, 2014). Salary was supported by Alabi *et al.* (2021) where remuneration predicted burnout among nurses. Burnout was also attributed to workload-pay misfit (Maslach, 1998) indeed the experience of nurses in the setting.

Lack of or inadequate supplies was another theme that fostered situations in which nurse burnout experience occurred in the public hospitals, in Homa-Bay County. There was either lack of or inadequate supplies reported which delayed the patient care which was a potential source of stress. This agrees with the findings of a study in Greece in which adequate medical supply was significantly associated with emotional exhaustion and depersonalization (Rachiotis *et al.*, 2014). The result is also corroborated by another study in which an inadequate supply of equipment was associated with emotional exhaustion (Ghavidel *et al.*, 2019). Lack of involvement, participation and decision-making of nurses in patient care was another that created situations in which participants' burnout was reported. The patients may have experienced negative outcomes due to non-consideration of



nurses' input in patient care in some cases. For instance, patients with certain contraindications for certain procedures may have anyway been taken through such procedures against nurses' advice. *Disrespect* was a minor related theme illustrated for example by "...they look down at you, you are the nurse but you cannot contribute anything..." (P4).

The participants perceived burnout negatively which in turn, may have affected their ability to offer compassionate care to patients or achieve the optimum performance. This finding is similar to that of a systematic review that found that in stressful situations like unsupportive nurses' work environments instead of the staff coping through their internal resources to withstand the pressure of stress they may be aggressive, irritable, hostile and resentful thereby could worsen relationships with colleagues and patients (Maresca *et al.*, 2022). This kind of response may cause a ripple effect on the community which may have a negative perception of the nurses. Ideally, the nurses ought to perceive the community as a resource for building their capacity to cope with burnout and not vice-versa. To improve the well-being of nurses, they must perceive the community and the organization as resources (Borges *et al.*, 2021). This contravenes the findings of the current study where the community is regarded as unsupportive. The difference might be contextually explained due to the difference in the work environments.

The participants reported that they experienced burnout. This finding is corroborated by other studies, for example, burnout was experienced by nurses who worked in the psychiatric wards in China (Zhang *et al.*, 2022). Besides, in a study conducted in Ethiopia among 412 nurses, 183 (44.4%) at a 95% confidence interval reported burnout experience. Although this seems to be lower, burnout seems to be a common phenomenon among nurses in Africa, (Dechasa *et al.*, 2021). The finding is similar to another study that found that burnout is a reality among nurses

(Ashipala & Nghole, 2022).

Three themes emerged on the effects of burnout among nurses including effects on the: - family, job performance and health. Burnout negatively influenced the nurses' home, quality of life, and sexual life. This corroborates with a study previously conducted in Nigeria among 259 nurses where the mean total quality of life (QOL) scores was significantly higher among participants who reported no emotional exhaustion and depersonalization $p < 0.001$ (Alabi *et al.*, 2021). According to Demerouti (2015), job and home demands may result in burnout due to enhanced work-family conflict and family-work conflict respectively, this finding concurs with the finding of the current study. The second theme was the effect of burnout on the participants' performance. Burnout was reportedly associated with reduced output. This finding was confirmed by Maslach, Schaufeli and Leiter (2001) who indicate that burnout was linked with key outcomes of the organization such as job performance and worker productivity.

The third theme was the health effects of burnout on nurses. The findings of this study are supported by Lubbadah (2020) who reported that burnout is associated with health problems such as headaches, type 2 diabetes, cardiovascular problems, insomnia, depression, and anxiety.

When the participants were asked how they coped with burnout; they reported adapting to burnout as part of life. Suitable coping strategies applied by the team may be helpful in the prevention of psychological health effects of burnout more so in stressful work environments (Maresca *et al.*, 2022). The participants in the current study verbalized that burnout was part of life that no one could deal with including the organization. This was described as nurses' resilience which has been noted to improve nurses' response to stressors in the workplace (Choi & Kim, 2016). Building nurses' resilience enhances their coping with burnout was reported in the current study. It concurs with the findings of a systematic review



in which training on resilience led to reduced burnout (Choi & Kim, 2016; de Oliveira *et al.*, 2019).

Two other themes emerged in the current study, individual-directed intervention and organization-directed interventions also emerged. In the individual-directed interventions, the first theme was the social support system which had three minor themes; family, colleagues and friends. The finding of the current study corroborates other studies (Constable & Russell, 1986; Mansour Bayrami, 2014). In the first study, the multiple regression results showed that (29%) of the variance of burnout was predicted by social support both by family and friends this had a pivotal role in burnout by contributing to social support resources.

The second minor theme under individual-directed interventions which was suggested by the participants was the modification of lifestyle for example; going to gyms although it was not tenable. This was supported by a systematic study in which related activities such as yoga were considered and reported (de Oliveira *et al.*, 2019).

Organizational-directed interventions to facilitate nurses' coping with burnout were barely implemented. Some considered and reported strategies the participants described were: - workload appropriateness, training, adequate staffing, motivation at work, involvement in decision-making, criticism and appreciation, and other good characteristics of the hospital although they largely lacked in the setting. delegation of duties and planning work were also considered. These organizational-directed interventions agree with some interventions reported in a systematic review (de Oliveira *et al.*, 2019).

Limitations

Case studies generally are devoid of rigour; however, we have triangulated data from two study settings to overcome this methodological limitation. Content analysis used in this study selects the data of interest to analyze rather than exhaustive categorization of all

data, thus may lead to bias. However, the researchers selected areas of interest.

CONCLUSION

Competence of staff, work overload, lack of cooperation among team members, conflicts in the workplace, negligence, the characteristics of the hospital, socio-demographic characteristics, lack of or inadequate supplies, patient misdiagnosis, work environment, lack of involvement of nurses in decision-making, management support, collegial respect, and delays in patient management were themes which emerged when the situations in which burnout experience was reported by the participants.

Burnout affected nurses' family, job performance and health.

The participants had no clear ways of coping with burnout. It was not clear whether the government had any strategies designed to reduce nurses' burnout. However, building nurses' resilience and social support systems were the key strategies that may help enhance participants' coping with burnout in this setting. Development and implementation of individual-directed interventions to prevent and reduce burnout among nurses should be a priority for nurse administrators and policymakers to minimize the sequelae on nurses, patients as well as organizations.

Recommendations for administration, policy and research

Every nurse manager must develop and or use effective burnout management strategies to improve the quality of nursing care in hospitals. The nurse administrators should develop a guideline based on individual-directed strategies to enhance coping with burnout in this setting since they build internal coping from an individual nurse.

Nurse managers need to implement individual-directed intervention guidelines to prevent and reduce burnout.

Nursing policy makers should consider the integration of burnout management interventions



in human resource policies.

Future studies should test the effectiveness of burnout management strategies applied in the setting.

Individual nurses should practice job crafting to increase job resources and reduce hindering demands facilitating coping within a stressful work environment.

Each nurse manager/County health administrator must enhance nurses' self-efficacy through well established and effective staff development plans and strategies.

Optimum staffing level enabling appropriate work hours for nursing staff should be ensured by nursing administrators and the County health administrators. Every hospital administrator should form counselling units and possibly basic units for recreation activities such as gyms.

The County government should advocate for and improve the health systems for effective service delivery.

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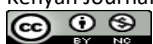
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Appendices

Table 1: Illustrative Excerpts from Focus Group Discussion Guide Exploring Participants' Awareness of, the Situations in Burnout Experience was Reported, Perception, Effects of Burnout and Coping Strategies among Participants in the Selected Public Hospital

| Themes | Minor-themes(Sub-themes) | Excerpts |
|---|--|---|
| I. Awareness of burnout among participants | Quality of care | <p>“...Burnout is when you have worked to a maximum, that you cannot continue; there is too much for you that you cannot contain...” (P 1 and 2).</p> <p>“...Yes, I have heard about burnout...” (P1). “...You cannot give quality care...” (P4). “...Quality of care reduces...” (P 4).</p> |
| | <i>Non-adherence to care standards</i> | <p>“... You end up doing the opposite...” (Participant 1) “...With burnout; you cover a lot; you do not do things the way they are supposed to be done...” (P 6)</p> |
| | <i>Reduced job performance by the nurses</i> | <p>“...It is when you have worked to a maximum, that you cannot continue. There is too much for you that you cannot contain...” (P1)</p> <p>“... Having no control: overwhelming...” (P 1). A participant said; ... “if you continue, it will not be effective, or you may develop negativity which used not to be there.” (P2)</p> |
| | I. Competence/self-efficacy of staff | <i>Misdiagnosis</i> |



| | | |
|---|--|---|
| | <i>Autonomy</i> | “...You are the nurse but you cannot contribute anything...” (P4) |
| | <i>Mentorship & consultation</i> | “...The doctors who accepted midwives’ mentorship were of those days, not the ones being trained now...” (P1 and P3) “...What they forget is that midwifery is midwifery irrespective of the fact that we are nurses and they are doctors...” (P3) “...Even the consultants are not consulting adequately...” (P1) |
| Lack of cooperation and teamwork | <i>Healthcare team</i> | “...Or you can be so many nurses but no cooperation and lack of teamwork...” (P2) “...Lack of teamwork...” (P2 and P3) “...Why did you bring us the wrong patient; they say you have refused to take the patient so at times it is just bad...” (P6) “...The biggest problem we have right now is in the teamwork between the medical officers and the other teams, particularly the nurses; like in maternity, we are ever quarrelling...” (P3) “...There is that assumption that this is a nurse who has made a decision, a nurses’ decision...” (P3) |
| Conflicts | | “...There was a lot of exchange when the patient above lost the precious baby, bitterness between the medical and nursing team...” (P2) “...Why did you bring us the wrong patient? And the exchange between the staff continues, they say, ‘you have refused to take the patient’...” (P6) “... A patient will land in a ward where she or he should not be, and before the patient is diagnosed to go to the relevant ward, usually it is late. Then it is a struggle when you call the team to come and review so that you take the patient to the relevant ward, it becomes a problem...” (P6) “...Sometimes you even end up fighting...” (P6) “...There was a lot of exchange when a patient lost a precious baby; bitterness between the medical and nursing team...” (P2) “...There are political interference/ caretakers’ threats on patient care matters by the members of County Assembly...” (P10) |
| Negligence | | “...There is negligence where somebody simply does not want to take patients to theatre and patient deteriorates...” (P3) “... It is common in surgical wards. And even in the maternity ward, mothers lose babies, a mother is crying now she lost her baby, she had a 4.2kg, diagnosed with cephalopelvic disproportion and somebody simply refused to take her to theatre...” (P3) |
| Characteristics of the hospital/work environment | <i>Nursing staff shortage</i> | “...Yes, like there is a time you are very few you cannot even make the duty roster for that month go to complain in the office and you are thrown back you are told; what do you want me to do’ and to go sort among yourselves; you come back and strain...” (P6) |
| | <i>Lack or inadequate Management support</i> | “...No motivation, appreciation from the management...” (P2) “...You are not appreciated for a good job...” (P7) “...You are not sponsored for training...” (P1) |



| | | |
|---|------------------------|---|
| | | “...Even you are doing it better, even that word, even ‘well done’ is not mentioned...” (P1, P2 and P7) |
| Sociodemographic characteristics | <i>Work experience</i> | “...For somebody new, to manage is not easy you don’t know the shortcuts...” (P2) - “...At the end of the day you talk about salary, the pay is small and here you have many clients so many that you cannot tolerate...” (P1) |
| | <i>Salary</i> | “...Salary does not come regularly...” (P4) “... Salary cannot help with burnout, but without it, there will be more burnout. No, it cannot help you to manage burnout but, if you work too much with no pay, you will have more burnout...” (P3) |
| Lack or inadequate supplies | | “...Maybe, there are no supplies...” (P1, P6 and P7) “...The hospital is not supplying some of the equipment and non-pharmaceuticals like blades; you want to do an operation you wait; maybe it’s a night the patient is sent to go and buy it and you cannot get it ...” (P7) |
| Lack of involvement and participation in decision-making | | “...You feel like, if somebody listened to you, then that would not have happened...” (P4) |
| | <i>Disrespect</i> | “...Or they look down at you...” (P5) “...There is that assumption that this is a nurse who has made a decision, a nurse’s decision...”(P3) “...They look down at you, you are the nurse but you cannot contribute anything...” (P4) |
| Delays in patients’ management | | “...And then there is that situation in which somebody simply does not want to take patients to theatre and patient deteriorates...” (P3) “...To take patients to the theatre, it’s too late...” (P1) “...It is common in surgical in fact; and even in maternity, mothers lose babies, for example, a mother is crying now she lost her baby, she had a 4.2kg, a CPD and somebody simply refused to take to theatre...” (P3) |
| III. Perception of Burnout | | |
| Negative perception of burnout | | “...Remember you have adopted a negative perception since you feel burnout is part of life (P3) “...It can make me have a negative attitude towards patients because I feel the ratio is more, so I may throw words at patients...” (P5) “...Actually, burnout it’s a demotivating factor number one...” (P3) “...Of late we are also facing threats and pressure from caretakers...” (Participant 7). “...There is interference from the members of county assembly...” (P10) |
| IV. Participants experience of burnout | | |
| | <i>Frequency</i> | “...We do experience burnout...’ (P1) “...Everyday...’ (participant 3). |



| | | |
|---|---|--|
| | <i>Experiences</i> | “...Like yesterday I’ll give an example of this ‘mama’ whom we came in the morning and found she had lost her baby and that was a precious baby. The whole day all of us were stressed...” (P3) |
| V. The effects of nurses’ burnout | | |
| Effects of burnout on family, job performance and health | <i>Effects on family</i> | “...It can also affect your family when you go back home you are stressed displacing to the children...” (P6) “... You know you go home you are physically exhausted, so at home you don’t have a quality of work-life; you can’t balance work-home life: physical exhaustion, quality of work life, work-home life...” (P3) “...So, you find your family will also suffer because of related work pressure...” (P4) “...At the end of the day, you go home so stressed you want to quarrel even with the house girl and you put aside your marital duties...” (P3) |
| | <i>Effects on nurses’ job performance</i> | “...It reduces output and quality of care...” (P1) |
| | <i>Effects on nurses’ health</i> | “...Actually, it’s related to stress; it brings a lot of stress at work, and that’s why it affects you even emotionally and physically...” (P 3) “...You can develop high blood pressure...” (P1) “...Burnout even brings mental health challenges; yes, you can break out (chuckles), it can lead to depression, you just find that you don’t want to talk, you just come on duty and you sit down; you may experience a mental breakdown, depression, fatigue...” (P1) |
| VI. Participants’ Coping with burnout | | |
| | <i>Resilience</i> | “...You to adapt it and it becomes part of your life.” (P3) |
| Individual-directed interventions | <i>Support systems: the family</i> | “...We just go and sit with family members and share our sorrows with them...” (P1) “...Ladies go pick your children, you go and swim...” (P1) |
| | <i>Support system by the colleagues and friends</i> | “...For us here we just come, sit together, talk, and refresh ourselves in the workplace...” (P1) “...You can go to your friends or family, to enjoy your hobbies...” (P1) The male nurses stated, “...you go to a restaurant and drink with friends ...” (P 2 and 7). |
| | <i>Hobbies and interests</i> | “...Some of us used to go for Sport-Pesa (games), refresh with drinks and dance in the club for the live band this is mostly for male nurses...” (P2) |
| | <i>Modification of lifestyle</i> | “...There are gyms but when do you go?” (P2) |
| Organizational-directed | | “...The government is only paying us salary...” (P1) “...They should create counselling areas...” (P1) “...Presently counselling services are not available; nothing...” (P2) |



interventions

Delegation of duties

“...We do delegate duties, but there are no staff to be delegated to, you are either one or two; we also allocate duties among ourselves so that we see what we can do with the minimal staff we have...” (P1)

Planning

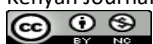
“...As a person, I plan activities from the morning I start with bed making, I give medication and when there is an emergency, I see how to handle it ...” (P4)



Table 2: COREQ (Consolidated criteria for Reporting Qualitative research) Checklist

A checklist of items that should be included in reports of qualitative research. You must report the page number in your manuscript where you consider each of the items listed in this checklist. If you have not included this information, either revise your manuscript accordingly before submitting or note N/A.

| Topic | Item No. | Guide Questions/Description | Reported on Page No. |
|--|----------|--|---|
| Domain 1: Research team and reflexivity | | | |
| <i>Personal characteristics</i> | | | |
| Interviewer/facilitator | 1 | Which author/s conducted the interview or focus group? | Rosebenter Awuor Owuor Page 1 |
| Credentials | 2 | What were the researcher's credentials? E.g. PhD, MD | MSc: Page 1 |
| Occupation | 3 | What was their occupation at the time of the study? | Lecturer, Maseno University: Page 1 |
| Gender | 4 | Was the researcher male or female? | Female |
| Experience and training | 5 | What experience or training did the researcher have? | MSc Nursing & a lecturer at the Department of Nursing Education, Leadership & Research (I teach Research Methodology) |
| <i>Relationship with participants</i> | | | |
| Relationship established | 6 | Was a relationship established before the study commencement? | The current study is a qualitative wing of a mixed-method study design Page 1 |
| Participant knowledge of the interviewer | 7 | What did the participants know about the researcher? e.g. personal goals, reasons for doing the research | The participants knew both the goal of the research and the reason it was being conducted Page 1 and 4: ethical clearance |
| Interviewer characteristics | 8 | What characteristics were reported about the interviewer/facilitator? e.g. Bias, assumptions, reasons and interests in the research topic | No biases were reported about the interviewer (pages 1 and 3) |
| Domain 2: Study design | | | |
| <i>Theoretical framework</i> | | | |
| Methodological Orientation and Theory | 9 | What methodological orientation was stated to underpin the study? e.g. grounded theory, discourse analysis, ethnography, phenomenology, content analysis | This is a case study of nurses' burnout in Homa-Bay County. Content analysis was used to analyse the collected data due to its qualitative and quantitative nature of presenting the results (page 3) |
| <i>Participant selection</i> | | | |



| | | | |
|--|-----------------|--|---|
| Sampling | 10 | How were participants selected? e.g. purposive, convenience, consecutive, snowball | Participants were selected by purposive sampling. (Pages 2-4) |
| Method of approach | 11 | How were participants approached? e.g. face-to-face, telephone, mail, email | Face-to-face (pages 2-4) |
| Sample size | 12 | How many participants were in the study? | 30 (pages 2-4) |
| Non-participation | 13 | How many people refused to participate or dropped out? Reasons? | Maybe a few nurses who remained in their units to take care of patients during the focus group discussion |
| <i>Setting</i> | | | |
| Setting of data collection | 14 | Where was the data collected? e.g. home, clinic, workplace | Workplace/ hospital |
| Presence of nonparticipants | 15 | Was anyone else present besides the participants and researchers? | The research assistant |
| Description of sample | 16 | What are the important characteristics of the sample? e.g. demographic data, date | The nurses must have served for at least one year and intensive care unit nurses were excluded |
| <i>Data collection</i> | | | |
| Interview guide | 17 | Were questions, prompts, guides provided by the authors? Was it pilot tested? | Page 3 |
| Repeat interviews | 18 | Were repeat interviews carried out? If yes, how many? | Three separate focus group discussions were conducted and data saturation was attained by this time Page 3 |
| Audio/visual recording | 19 | Did the research use audio or visual recording to collect the data? | Audio recording was done Page 2-4 |
| Field notes | 20 | Were field notes made during and/or after the interview or focus group? | Yes, field notes were made during and after the focus group discussion Page 2-4 |
| Duration | 21 | What was the duration of the interviews or focus group? | Page 3 |
| Data saturation | 22 | Was data saturation discussed? | Page 3 |
| Transcripts returned | 23 | Were transcripts returned to participants for comment and/or | Yes Page 3 |
| Topic | Item No. | Guide Questions/Description | Reported on Page No. |
| | | correction? | |
| Domain 3: analysis and findings | | | |
| <i>Data analysis</i> | | | |
| Number of data coders | 24 | How many data coders coded the data? | Page 4 |
| Description of the coding tree | 25 | Did authors provide a description of the coding tree? | The coding tree is not explicitly shared although there is a diagrammatic presentation of the nodes compared by the number of |



| | | | |
|------------------------------|----|--|--|
| | | | coding references/snippets extracted from the NVivo 11 (Figure 1) Page 4 |
| Derivation of themes | 26 | Were themes identified in advance or derived from the data? | They were derived from the data as the generated information was analysed from first question in the focus group discussion guide to the next Page 2-4 |
| Software | 27 | What software, if applicable, was used to manage the data? | NVivo 11 Page 1 and 4 |
| Participant checking | 28 | Did participants provide feedback on the findings? | Yes, the participants gave feedback on every question after it was completely answered Page 3 |
| <i>Reporting</i> | | | |
| Quotations presented | 29 | Were participant quotations presented to illustrate the themes/findings? Was each quotation identified? e.g. participant number | Yes, the illustrative quotations are described in Table 1 from one theme to the next See appendix after references |
| Data and findings consistent | 30 | Was there consistency between the data presented and the findings? | Yes, the data generated both from field notes and transcribed from audio recording and then analysed through content analysis matched the findings reported. (All through the document) |
| Clarity of major themes | 31 | Were major themes clearly presented in the findings? | Yes, both major themes and sub-themes were clearly described Page 7-11 |
| Clarity of minor themes | 32 | Is there a description of diverse cases or discussion of minor themes? | Yes. Minor/sub-themes are reported with relevant examples. Page 7-11 |

Developed from: Tong A, Sainsbury P, Craig J. Consolidated criteria for reporting qualitative research (COREQ): a 32-item checklist for interviews and focus groups. *International Journal for Quality in Health Care*. 2007. Volume 19, Number 6: pp. 349 – 357

