BMC Public Health

RESEARCH

Open Access

Emotional dimensions of nurses' daily work in newborn units in Kenya: a qualitative study

Dyuti Sen[3†], Mwanamvua Boga[1*†], Peris Musitia[1], Dorothy Oluoch[2], Yasangra Adeniji[4], Nancy Odinga[2], Caroline Waithira[2], Gloria Ngaiza[3], Sebastian Fuller[3], Jacinta Nzinga[2], Mike English[2,3] and Sassy Molyneux[1,3]

Abstract

Background The importance of developing and supporting emotional well-being among all frontline health system staff, including those in leadership positions, is increasingly recognized as essential to health system resilience and patient outcomes. Nurses working in many public sector newborn units in sub-Saharan Africa work in highly stressful environments; often asked to perform what has been described as 'an impossible task' of meeting international standards of nursing in significantly under-resourced environments. This paper focuses on the emotional dimensions of nurses' daily work in newborn units in Kenya. These dimensions of newborn nurses' work are rarely documented and are under-supported in policy and practice.

Methods We conducted an empirical qualitative study design in two public hospital newborn units in Kenya. Methods included observations of nurses in their workplaces, individual in-depth interviews with 21 health workers (mostly nurses), and reviews of self-administered questionnaires submitted to us by these staff. Data were analyzed using a thematic analysis approach.

Results Neonatal nurses reported emotions ranging from pride and satisfaction to devastation, heartache, and indifference, with handling infant deaths and communicating bad news to families particularly distressing. Influenced by individual, interpersonal, and structural factors, emotions play a central role in nurses' interactions with their peers, supervisors, ward-in charges, and parents. Interactions with supervisors and in-charges have a an especially powerful impact on staff emotional well-being and team cohesion, and informal support from peers is a key coping strategy.

Conclusion We draw on our data, the wider literature, and nurses' recommendations to reflect on the interplay between emotional well-being and ethical nursing practice, and to make suggestions for ongoing health system strengthening efforts.

Keywords New-born nurses, Soft skills, Emotional well-being, Emotional dimensions, Emotional intelligence, Interpersonal skills, Resource-constrained health system

[†]Dyuti Sen and Mwanamvua Boga joint first authorship.

*Correspondence:
Mwanamvua Boga
mboga@kemri-wellcome.org
[1]KEMRI-Wellcome Trust Research Programme, Kilifi, Kenya
[2]KEMRI-Wellcome Trust Research Programme, Nairobi, Kenya
[3]NDM Centre for Global Health Research, Nuffield Department of Medicine, University of Oxford, Oxford, UK
[4]Federal Teaching Hospital Gombe, Gombe, Gombe State, Nigeria

Background

Newborn units (NBUs) can be stressful environments for healthcare workers and parents all over the world [1]. Given the highly specialized form of nursing in such units, and rapidly evolving health conditions among sick newborns, neonatal nurses often experience psychological and physical stress [2]. At the same time, nurses need to interact with and ideally be responsive to parents and other caregivers who have themselves been documented to experience fear, sadness, anxiety, guilt, and even shame in newborn units [3, 4].

In sub-Saharan African public health facilities, high workloads, low staffing levels, resource shortages, and environmental inadequacies (crowding, lack of privacy) potentially add to emotional burdens for staff and families, contributing to high levels of stress and 'burnout' [5]. Burnout has been defined as a constellation of symptoms – malaise, fatigue, frustration, cynicism, and inefficacy – that arise from 'making excessive demands on energy, strength, or resources' in the workplace [6]. Stress, burnout, and detachment have negative implications for intra and interprofessional team relationships, interpersonal quality of care, staff well-being, and patient outcomes. Two recent reviews suggest high rates of health worker stress and burnout across a range of geographical and clinical settings in sub-Saharan Africa, and significant communication challenges between staff and families [5, 7].

The WHO Framework of Global Standards for improving the quality of maternal and newborn care recognizes that the provision and experience of care depend on the soft skills and emotional competence of healthcare workers, including nurses [8]. 'Soft skills' refer to competencies that are not related to specific tasks but rather to managing intra- and interpersonal relationships within an organization, including communication, courtesy, flexibility, integrity, interpersonal skills, professionalism, teamwork, responsibility, work ethic, and having a positive attitude [9, 10]. Soft skills play a central role in the application and utilization of technical skills; for example, flexibility and adaptability support the effective delivery of care in dynamic clinical contexts such as hospital wards. Soft skills are valuable to individuals and teams, helping them navigate the difficult terrain of providing quality healthcare in resource-limited settings. They are also essential to systems in interplaying with hardware elements (technology, infrastructure, funding, human resources) to build system resilience to stresses [11–13]. When emotional well-being is undermined by resource constraints or a poor team climate, these skills erode, undermining resilience and intensifying burnout. Recognizing this interplay between the individual, relational, and organisational is essential in understanding how nurses navigate emotionally demanding roles and what strategies can help sustain their well-being.

Given the importance of soft skills in health care and the recognized stress among health workers, there are growing calls to strengthen health workers 'emotional intelligence. Salovey et al. have broadly defined emotional intelligence as the competence to identify, express, and understand emotions, assimilate emotions in thought, and reflectively regulate both positive and negative emotions in the self and others [14]. Emotional intelligence may reduce the likelihood of burnout by facilitating coping mechanisms to withstand the challenges encountered at work [15, 16]. However, daily challenges and structural constraints such as low staffing levels and inadequate resources may undermine staff's ability to demonstrate respect and dignity, offer emotional support, build supportive and effective intra- and interpersonal relationships, and manage change [11, 17, 18].

While many studies have documented high levels of stress and burnout in sub-Saharan Africa, few have explored the emotional dimensions of neonatal ward nurses' daily work lives. In this paper, we present qualitative data collected as part of a wider set of evaluations of long-term, collaborative health system strengthening initiatives involving newborn units in Kenya. We highlight the range of emotions that neonatal nurses described in interactions with colleagues and parents and some of the individual, interpersonal, and systems drivers of nurses' emotional well-being.

We also share formal and informal strategies used by newborn nurses to cope with stressful interactions and encounters. The interviewees in this study were participants in a communication skills and emotional competence course aimed at enhancing nurses' communication skills, confidence, professional identity, and ability to provide respectful care [19].

In the discussion, we explore the links between soft-skills and burnout, emotional well-being, emotional competence training, and organizational change. In so doing, we support others in arguing that in such significantly constrained environments, burnout might often be better described as 'moral injury'. This term suggests that the sources of nurses' distress are 'in a broken system, not a broken individual, which in turn suggests the importance of organizational interventions [6].

Methods

This empirical qualitative study was conducted as part of a wider long-term collaboration between county hospitals, researchers, the Ministry of Health, and pediatric professional groups. This wider collaboration is focused on the quality and outcomes of inpatient pediatric and newborn care and on fostering learning to strengthen practice (the Clinical Information Network, CIN) [20].

In this paper, we draw primarily on interviews conducted by PM with 21 health workers from two public hospitals (Table 1) involved in the CIN (12 from hospital A and 9 from hospital B), who participated in a communication skills and emotional competence course. Most interviewees were nurses working in the newborn units ($n = 19$), including the two newborn unit in-charges and the hospital nurse manager. The other two participants were a clinical officer and a nutritionist. Of the 21 participants, 18 were female and 3 were male, all aged between 25 and 55 years with 2 to 30 years of work experience. Most of the nurses, including one in charge, had diploma rather than degree-level training, except for two participants (including an in-charge) who had a nursing degree.

Interviews were conducted in English before the start of the course, each lasting between 45 min and one hour. They focused on three main areas: (1) nurses' communication experiences with parents, colleagues, and supervisors; (2) the emotional challenges encountered in their daily work; and (3) the support available to both nurses and parents in coping with these challenges. Data collection continued until saturation was achieved. During the early stages of the course, and before any input, participants completed a self-administered questionnaire to reflect on their communication strengths and challenges. Additionally, they were asked to conduct guided self-observation of their daily work interactions over blocks of one week. Each week, they focused on aspects of their communication and links to their emotions. They were given short, focused self-observation and reflection tasks to build self-awareness of their communication habits (listening, asking questions, handling emotions, handling death, patient-centered care, and constructive feedback) and their impacts on themselves and others. They submitted their written reflections and a self-filled Copenhagen burnout inventory tool [21] to MB. Data from interviews and self-reported documents were supplemented by observations of nursing teams during their daily work routines over two weeks in each hospital. The observations were conducted during different shifts: day shift, night shift, and weekend shift, when there were different workloads.

Table 1 Description of the two study hospitals

	Hospital A	Hospital B
Location	Semi-urban Metropolitan	Rural
Catchment population	63,767	47,000
Number of annual births (2019)	5679	3975
Annual neonatal admissions to the neonatal unit (2019)	2357	1251
Total number of NBU nurses	17	10
No of nurses per shift	2 or 3	1 or 2
Average ratio of babies: Staff during shifts	56/5	44/5
Number of cots	49	18
Percent neonatal unit capacity filled	93%	122%
More than 1 baby per cot/radiant warmer/phototherapy light/incubator	Frequently	Frequently

Data analysis

Data were analyzed using a thematic analysis approach [22, 23]. Encrypted audio recordings were transcribed verbatim by a team of external professional transcribers. DS and PM read through the transcripts and observation notes to develop initial coding frameworks based on the study foci. The richest transcriptions and initial coding frameworks were shared with other team members (MB, DO, and SM) for discussion and agreement on the main themes and sub-themes. Themes were iteratively refined through constant comparison of coded segments across transcripts. Discrepancies were resolved by group consensus, and overlapping categories were merged until a stable set of overarching themes and sub-themes were felt to capture the range of nurses' emotional experiences. Emotional triggers and reactions (sub-themes and codes) were clustered around who the nurses were interacting with (themes). Transcriptions were uploaded into Nvivo12 and coded using the agreed framework. Coded data were summarised across the main themes, and additional data from the self-observation reflective notes and the observations were used to enrich the summaries. Copenhagen Burnout Inventory data were analyzed using descriptive statistics in Excel for each hospital.

Ethical considerations

Ethics approval was obtained from the Kenya Medical Research Institute Scientific Ethics Review Committee (SERU), reference number 3852. Permission to conduct the study was granted by the County Department of Health and the medical superintendents of each hospital. All participants provided written informed consent at the start of the study and verbal consent to continue through all stages, including publication. All participants were assured of the confidentiality of information shared and all audio recordings, transcriptions, and consent forms were stored in a secure database. No significant ethical issues arose during the study conduct.

Findings

Overall, interviewees described the newborn unit as a busy and intense environment, where every activity from admission to discharge involves a high level of interaction with peers, colleagues, supervisors, and babies' parents. These interactions took place during regular ward functioning, with particularly important points of interaction described as handovers between shifts, ward rounds during care and drug administration, patient critical incidents, especially deaths, and tea breaks. In

Table 2 Summary of emotions triggered in interactions with peers, supervisors, and patients

Interactions with	Emotion Triggers	Range of emotions
Peers and team members	working together in collaboration	appreciation, respect, confidence
	informal interactions, friendships	Relief, Understood
	working together but with less collaboration/Respect	Intimidation, humiliation, embarrassment, demotivation, anger
Seniors, supervisors, and managers	working with nurses with higher degrees	Disrespected inferior
	support and respect from supervisors	happy, valued
	insensitive, unapproachable, unsupportive supervisors	under-valued, unhappy, fearful, traumatized
Mothers and Family members	mothers are cooperative with nurses, Good communication	satisfaction, feeling valued, confidence
	Mothers not being cooperative, rude, unappreciative, doubtful of skills	anger, frustration
	family or father's interference	frustration
	communicating news of the death	guilt, sadness, demoralization, shame, feeling like a failure, regrets

one of the two hospitals, there were also monthly audit monitoring meetings where health workers met to discuss and debrief on any mortalities. Emotions regularly expressed included fear, insecurity, irritation, anger, anxiety, pressure, frustration, 'switching off', happiness, pride, and feeling empowered. Following an overview of overall emotional well-being, we show how a range of these emotions were triggered across interactions with peers and team members, seniors and supervisors/managers, and patient family members (as summarised in Table 2). We then describe findings on influences on emotional well-being, coping strategies, and support needs.

Overall emotional well-being

The results from the Copenhagen burnout inventory (Fig. 1) suggest just under half of the participants in both hospitals experience a high or very high level of work-related burnout. Over one-third find their work emotionally exhausting, and just over a third reported feeling that to a high or very high degree, they give more than they get back from their patients. Although not depicted in the Figure, about a third of participants reported that they often or sometimes wonder if they will be able to

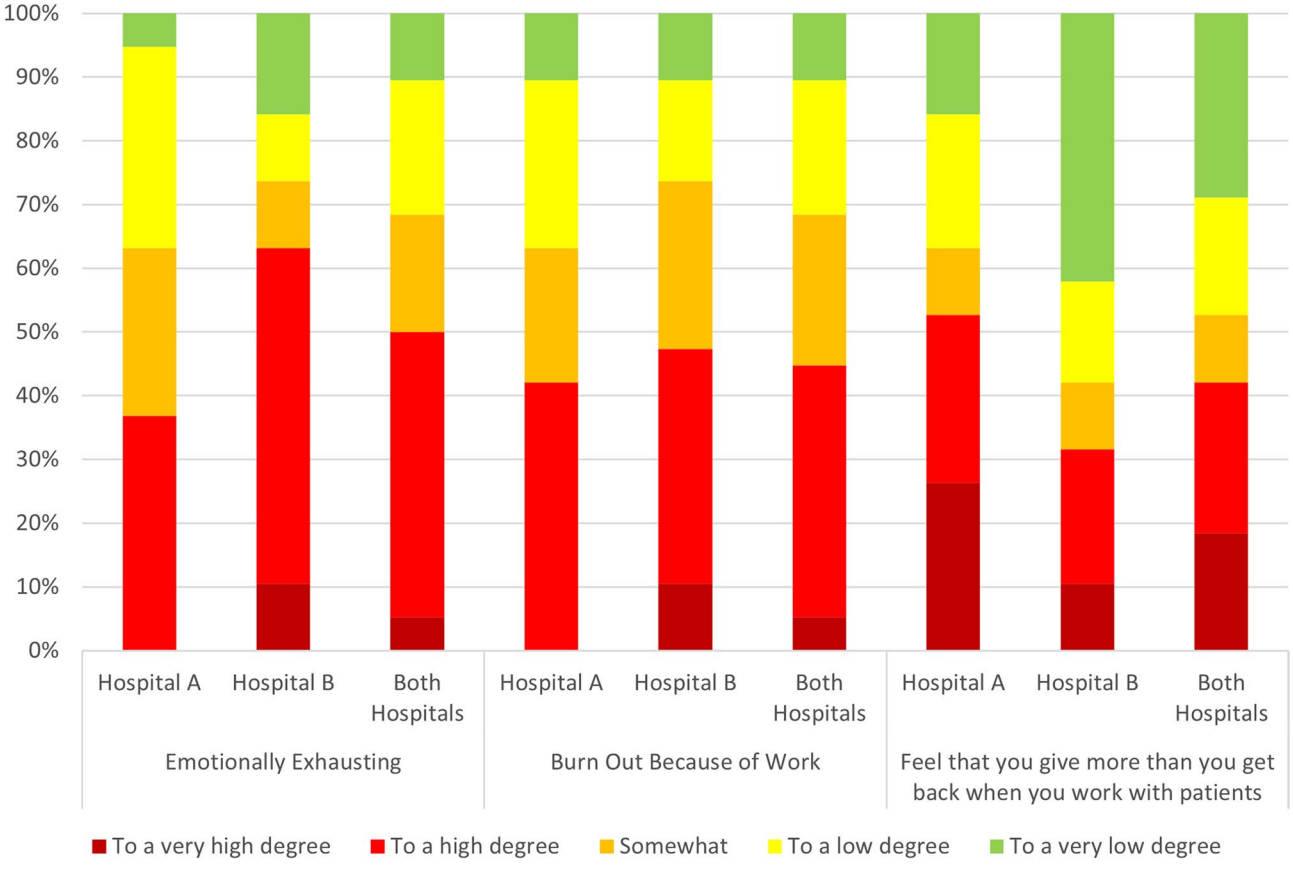

Fig. 1 Staff responses to selected Copenhagen burnout inventory results

continue working with patients (20% in Hospital A and 42% in Hospital B).

Emotions triggered in interactions with peers and team members

Emotions were often triggered in nurse interactions with their colleagues. In the self-administered forms and meetings, nurses described feeling appreciated when they were treated with respect by colleagues, as demonstrated through understanding, cooperation, and good teamwork. They valued having colleagues who were ready to help when called upon, where staff assisted one another in an emergency or a personal crisis, and where cheerful nurses kept a shift lively with their humour. Where treated with respect by colleagues, many described confidence and appreciation in being part of a supportive team: *"My confidence builds up and I feel appreciated"; "I feel good, loved and a sense of belonging"; "I feel loved, Respected, Needed, Appreciated" (excerpts from self-administered forms, NBU staff).*

The importance of friendship, and of informal interactions with peers, particularly between shifts, in helping nurses feel relieved and understood was clear:

> *"….in NBU, mostly we value friendship. Because it's a unit where you cannot work with a heavy heart or with a heavy mood swing because we need to communicate every time." (Nurse, IDI _011, Hospital B).*
> *"Yeah, and even after every shift, we spend some time, we socialize after the report we talk things outside work. At least when you're breaking the shift, you feel relieved because you have people that you talk to." (Nurse, IDI _007, Hospital B).*

In contrast, where nurses felt they were not adequately assisted or treated with respect by colleagues, they described feeling intimidated, humiliated, embarrassed, demotivated or angered. While some reported 'acting out' with these emotions in their self-administered forms, others described themselves as conflict-averse and unable to share their feelings even when unhappy or hurt by a situation.

> *"I tend to feel intimidated i.e., once a colleague corrected me rudely and in the presence of the patient. I was demotivated. I left what I was doing and went to the tearoom feeling emotionally down". (excerpts from self-administered forms, NBU staff).*
> *"When I am overwhelmed, I usually blame my colleagues for unfinished work or untidy nursing station "(excerpts from self-administered forms, NBU staff).*
> *"[when angered] I don't answer questions rightly especially to colleagues, I become rude. I cry sometimes. I respond harshly. One time I spoke so badly at my supervisor"(excerpts from self-administered forms, NBU staff).*

Emotions triggered in interactions with 'seniors', supervisors, and managers

Interactions between nurses with different levels of formal training, particularly between degree- and diploma-trained nurses, as well as between supervisees and supervisors, could be particularly triggering emotionally. Six nurses reported feeling disrespected when engaging with colleagues who held higher degrees. As one nurse explained:

> *Okay, sometimes you find that those Bachelor of Science Nurses feel like they are learned, more than you as a diploma; …Even the in-charge you find she feels like those degree nurses are more knowledgeable. You, see? With some, you find you have more experience than them, but they feel like they are the best, they know more than you know, which is not good. (Nurse, IDI _012, Hospital A)*

In interviews, self-reflection, and observations, nurses noted that issues with senior staff, such as lack of attention, unequal treatment, and harsh tones—especially in public—left them unhappy, fearful, and sometimes even traumatized. Supervisors being insensitive, unsupportive, or unapproachable, and especially apparently unfairly so, had similar negative emotional impacts.

> *"I think …if she wanted to correct me, she could have until waited we finish up with the clients then talk to me while we're the two of us." (Nurse, IDI _017, Hospital A).*
> *"…they (senior staff) have their favourites, and that is very true, it's the truth. You find that he or she has those people that you see that he or she tends to favour." (Nurse, IDI _012, Hospital A).*

Supervisors who were supportive, approachable, and respectful, and ensured privacy while talking to the nurses made them feel good and valued.

> *"It makes me feel good, yeah, in that if I have a problem, and in case I have a problem, I am free to air it. And I can't be pressed or stressed by something I can air out. I will just talk to her; tell her I have this issue, and she will assist you to solve it." (Nurse, IDI _001, Hospital A).*

Emotions triggered in interactions with mothers and family members

Nurses in this study described feeling satisfied and valued while interacting with parents. Such interactions often

led to positive outcomes of care in the newborn unit. For instance, a nurse wrote, *"I communicate confidently and feel good that I am seeing the fruits of my input in work. A baby was admitted with AKI (Acute Kidney Injury) because of not getting enough breastmilk, I showed the mother how to express/attach the baby to the breast and later the baby was able to get enough and gained weight and discharged. The mother was very happy." (excerpts from self-administered form, NBU staff).*

Some of the 'positive results' described by nurses included mothers being happy with and appreciative of the service and having new understanding and confidence (for example in breastfeeding). However, this satisfaction among nurses appeared to be conditional on family members' cooperation. Nurses described feeling frustrated or angry when mothers or parents of newborns would not cooperate, were rude, unappreciative, or even doubted their skills.

> *"If I've explained the first time, the second time, the third time it hurts me, and I get angry. I just tell my colleague 'Continue with that one'" (Nurse, IDI _001, Hospital A)*
> *A mother talked rudely to me and assumed I didn't know what I was doing. I angrily threatened her that her child will complicate and be returned to [hospital X]" (excerpts from self-administered form, NBU staff]*

A specific source of frustration for nurses arises when interactions with mothers are further complicated by the involvement of other relatives, particularly babies' fathers:

> *"I reacted madly in a situation where I attended a patient with bronchiolitis. I took my time, examined this infant, and informed them that the child did not need antibiotics, but they could bring the child when the symptoms worsened. This young mother came a few hours later with her husband [asking] so aggressively why I didn't treat a child with antibiotics. I tried to explain to the husband, but he couldn't understand and started to abuse me which I could not bear, and we ended up quarrelling bitterly." (excerpts self-administered form, paediatric staff).*

Nurses frequently described feelings of guilt, sadness, or demoralization following the loss of a baby or child, particularly when delivering the news to the parents. As a result, many either avoided communicating altogether or did so inadequately, leaving them feeling ashamed. These emotions were often intensified when relatives spoke rudely to the nurses or seemed to blame them for the death.

> *"It saddens us when we lose a baby because, sometimes you have given your best Kabi sa, kabisa, kabisa [totally, totally, totally] and thinking that maybe the baby will pick and maybe the mother will go home. It really saddens us. Personally, I hate breaking bad news …because I'm too emotional." (Nurse, IDI _002, Hospital A).*
> *"…. you see now how the relatives talk? [they accuse you] 'You don't feel any compassion' but you see you go to the office and cry, then you leave. Because you can't cry in front of them you, see?" (Nurse in-charge, IDI _020, Hospital B).*

Health workers described feeling empowered when their communication assists family members cope with such a traumatic situation. As one nurse:

> *"….it makes me feel good that I've explained to her [the mother]. I've talked to her, I took my time to talk to her and I see that if she was crying a lot, she has stopped it, it makes me feel good and feel appreciated." (Nurse, IDI _001, Hospital A.*

Influences on emotional well-being

Interwoven across emotional dimensions of interactions among colleagues and between staff and parents, there are clearly individual and interpersonal influences and deeper organizational or structural drivers. At the individual level nurses' experience, training and emotional awareness influenced their ability to manage their own and mothers' emotions:

> *"…being patient and understanding. Okay, you know a person can be facing some issues, some stress and sort of stress, and if I don't take my time to understand them and be patient with them, it will affect me emotionally." (Nurse, IDI _001, Hospital A).*

Where emotions are not managed well, many nurses described interactions escalating, sometimes into conflicts:

> *"I learned that sometimes when communicating especially when I feel that my colleagues have done something wrong, I tend to rebuke him/her in front of a patient or vice versa which escalates or worsens a disagreement" (excerpts self-administered form, NBU staff).*

As would be expected, a big influence on the nature of interactions was nurses feeling overwhelmed, stressed, and sometimes panicked by staff shortages, high workloads, and serious infrastructural challenges:

"Sometimes we make noise because we are overwhelmed. Mothers stress you; you keep telling a mother about e.g., feeding but they keep repeating the mistake. So, if she does not understand or keeps doing the same thing it pushes me, and I lose my peace. (Nurse, IDI_001, Hospital A)

A nurse reporting for the afternoon shift comes in at 1.30 pm. She is the only nurse in the shift. As she greets the other nurses who are leaving, she expresses her frustration at being alone. She says she will do what she can and if babies are many, she will only concentrate with the babies in HDU. (Observations-Hospital A)

"There is a blackout, there is no oxygen, it was a very, very stressful scenario because you're seeing babies are dying." (Nurse, IDI _011, Hospital B).

These challenges are compounded by frequent staff rotations across wards which make it difficult for the nurses to build rapport across the team. New staff from different wards also feel inadequately prepared or disempowered to treat newborns:

"…. you know after staying with adults for long, we were not used to staying with kids, with neonates. So, you could find that most of the procedures we can't remember … Yeah, so we find that it's kind of leaving us as if we're illiterate." (Nurse, IDI _001, Hospital A).

Notable through our observations and informal interactions was that although both hospitals had similar infrastructural challenges, nurses in one hospital functioned much more cohesively than in the other, where two 'camps' of nurses had minimal interaction beyond basic requirements. These differences appeared to be related in part to the relative busy-ness and high workloads of the less cohesive hospital, but also to the different leadership styles of the in-charges, with one being far more 'command and control' in communication and decision-making and the other more nurturing and consultative. The more 'command and control' hospital operated within a generally busier environment, with an average 1:11 nurse-to-baby ratio rather than 1:8. There was also a broader organizational culture in that hospital of shifting staff regularly between wards, including for disciplinary reasons.

Coping with emotional distress and support needs

Several nurses in both hospitals mentioned receiving formal support from the hospital, such as access to counsellors or regular debrief sessions to help them cope with stressful situations like newborn deaths. They found these resources helpful in identifying and discussing emotional challenges early on. Informal discussions with supervisors, and especially peers, were more common and described as valuable for understanding and managing difficult situations and helping minimize self-blame.

"We only talk amongst ourselves. Like the people that you're working with, when they come in the morning, you're handing over the shift…. you pour your heart out and tell them, "I've been confronted here with relatives." "Why?" Now that is now the only way you can burst so that that thing can come out of your chest…" (Nurse, IDI _007, Hospital B).

However, nurses also often described coping strategies such as going silent, withdrawing, sticking to basic tasks, and even crying alone. One nurse was observed suggesting she would handle anger with a colleague by seeking relocation to another ward.

Twelve participants expressed the need for more formal emotional support for healthcare workers. Suggestions included counseling, psychological support, training in emotional management and bereaved motherhood therapy, as well as spaces or recreation time to release emotions and avoid taking stress home:

"There is death… you are human, and there is nobody who will assist you. It just stops there; you go home with your problems. So, this thing - counseling sessions - would help a lot. And especially, being okay with the issue of death." (Nurse, IDI_014, Hospital A).

Many nurses emphasized the importance of adding staff to share tasks and provide moments of respite from difficult situations. They also suggested small acts of encouragement from the government, such as inviting them to seminars or offering tokens of appreciation for good work, as valuable motivators, especially in a context where salaries are often delayed, and staff still need to provide for their families:

"First of all, we need enough staff …. because for example I wake up in the morning one baby dies, after lunch another baby dies, tomorrow another one and I'm in the same room. Aih, of course I will need a break. That thing affects you even in the house… you're just thinking about that. And maybe you have a small baby, it hurt, you so much…." (Nurse, IDI _017, Hospital A).

Discussion

We have shared some of the wide range of emotions staff report experiencing in their daily work in Kenyan newborn and related units, from professional pride and

satisfaction to devastation, heartache, and indifference. Emotions play a central role in nurses' interactions with their peers, supervisors, ward-in charges, and parents, shaped by individual, interpersonal, and underlying structural factors. A central factor is the low staffing levels handling large workloads. Interactions with supervisors and in-charges appear to play a significant role in staff emotional well-being and team cohesion, while peer support serves as a key coping strategy. Handling infant deaths and communicating bad news with families are particularly triggering events emotionally for nurses as well as mothers.

Our study contributes to the relatively small number of papers describing the emotional dimensions of the lives of nurses working in newborn units and allied units in sub-Saharan Africa. Our findings support the work of others who suggest that the management of emotions is critical for the well-being of healthcare workers, for communication with colleagues and parents, and for ensuring the quality of care. Nurses in Chad for example felt empowered when they were able to draw on their interpersonal and technical skills to take care of serious cases [24]; conversely, in a study in rural Kenya, stress and burnout among maternity care providers were reported to have contributed to disrespectful behaviours towards mothers, including verbal and physical abuse [25]. More specific to neonatal units, a study in South Africa found that poor communication between nurses and mothers led to misunderstanding and mismanagement of babies, feeding back into nurses' frustrations and communication challenges [26]. Globally, but particularly in sub-Saharan Africa where neonatal mortality is high, neonatal nurses are having to deal with the trauma of deaths among their patients [27–29].

Our findings suggest there is a potential role, albeit limited, for training programmes in communication skills and emotional competence for nurses working in NBUs in Kenya, as has been widely recommended for health staff more widely in sub-Saharan Africa [5]. However, this must be seen as complementary to, not instead of, interventions and change processes aimed at reducing the organisational drivers of emotional distress including, most critically, nursing staff shortages. These shortages result in long working hours, huge workloads and staff rotation systems that undermine team building and opportunities for mutual support. Nurse managers and supervisors should be a key focus for such training due to the significant impact their leadership style has on nurse confidence, emotional well-being, and team dynamics. Such training should be designed to acknowledge and address the structural factors influencing staff interactions and behaviors, while building on existing leadership practices and coping strategies, including management of emotions, positive appraisal, and social support. Such training should recognize tensions between diploma and degree nurses and support the resolution of stressful situations in ways that strengthen team relationships and quality of care [30]. In Kenya, we initiated a communication and emotional competence training process through a co-design and implementation process involving 18 nurse managers from 14 hospital NBUs [19]. The process offers some positive potential alongside a broader set of efforts introduced through a long-term collaboration between county hospitals, researchers, the Ministry of Health, and pediatric professional groups.

Any communication skills and emotional competence initiatives targeting leaders and frontline staff will be undermined by the same structural constraints that necessitate such support in the first place, not least high workloads, low wages, and other resource constraints [11]. In the neonatal wards we are working in, the high nurse-to-baby ratio is likely to lead to coping strategies of clinical tasks being prioritized over non-clinical tasks and informal delegation of care to untrained parents [17, 31–33]. As noted by Riley and Weiss, cited in Ramsey [34], in resource-constrained environments, providers tend to rationalize or withdraw from the 'emotional work' required to manage personal or others' emotions in the workplace and focus instead on biomedical work [33], as seen when nurses in our study described staying silent in difficult situations. In these ways, burnout might be better described as moral distress or even 'moral injury', where health workers know what care patients need but are unable to provide it due to constraints beyond their control [6]. This distinction is important because the term moral injury shifts the focus of potential solutions from individual resilience to addressing broader systematic constraints. It also emphasizes 'creating a health care environment that …[values]… developing …trust, understanding and compassion' [6].

Failure to tackle organizational drivers of moral distress and injury has the potential to contribute to 'moral neutralization' among some staff, whereby they become too discouraged to show moral sensitivity, normalize or justify unethical behaviour, or become morally indifferent. This can be a sub-conscious strategy to cope in such difficult contexts. Hakimi et al. described a pattern whereby Iranian nurses' ethical performance changed negatively during their work years as a result of their ethical practice being critiqued or discouraged and unethical practices being normalized [35]. They argue that over time this can lead to an unethical climate where nurses cannot recognize and solve moral issues, and they 'give up moral performance and even start to engage in immoral actions' (p 7). In Kenya and Uganda, Zhao et al.'s examination of medical officer intern transition experiences also suggests the normalization of unethical behaviors as a result of chronic resource constraints [36]. Such behaviours

can feed back into communication and relationship challenges with colleagues and patients/family members, as part of a vicious circle. As noted by Jenkins about physicians in the United States, in our setting nurses may be effectively serving as 'shock absorbers', routinely absorbing countless, interconnected structural demands ("shocks"), at significant cost to their mental well-being, and with negative longer-term implications for system resilience [37].

Recognizing burnout and stress as structurally driven highlights the need for policy interventions targeting organizational causes of emotional distress, such as increasing nurse staffing levels. Initiatives to improve emotional well-being and team dynamics must also be carefully designed to avoid disrupting existing coping mechanisms. For example, policymakers planning communication training and emotional support programs should avoid adding responsibilities onto nurses that could further strain their well-being. Furthermore, any such initiatives should be part of multi-level, comprehensive change processes that focus on addressing systemic pressures.

Conclusion

Our findings and the literature highlight the urgent need for interventions that reduce and manage emotional distress and strengthen emotional well-being in ways that improve care quality. There is a potential role for training programs in communication skills and emotional competence for nurses working in NBUs in Kenya. However, any such initiatives must complement broader efforts to address organizational drivers of emotional distress, such as nurse shortages.

Abbreviations

NBU	Newborn Unit
WHO	World Health Organization
CIN	Clinical Information Network
IDI	Individual Interviews
HDU	High Dependency Unit
AKI	Acute Kidney Injury
KEMRI	Kenya Medical Research Institute
SERU	Science Ethics and Review Unit
CGMR	C–Centre for Geographical Medical Research–Coast
iCARE	Intelligent Communication, Awareness and Action, Reflection, Emotions

Acknowledgements

The authors would like to acknowledge the selected hospitals management for the support to allow their staff to attend the trainings and appreciate the staff who dedicated their time for the training and to participate in the interviews. We also acknowledge the neonatal nurse managers who were part of the trainer team (Zainab Kioni, Nancy Mburu, Loise Nditi, Joan Baswetty, Lucy Kinyua, Joyce Mkanyama) and Hiza Dayo, a senior clinical officer at KEMRI Wellcome Trust for her invaluable support in the training workshops.

Authors' contributions

DS: Conceptualisation, design, analysis, first draft of the paper and review of all subsequent drafts; MB: Conceptualisation, design, data collection, analysis, first draft of the paper and review of all subsequent drafts; PM: Design, data collection, analysis, reviewing and editing drafts; DO: Conceptualisation, design, analysis, reviewing and editing drafts; YR: Design, data collection, analysis, reviewing and editing drafts; NO: Data collection, reviewing and editing drafts; CW: Data collection, reviewing and editing drafts; GN: Data collection, reviewing and editing drafts; SF: Reviewing and editing drafts; JN: Reviewing and editing drafts; ME: Conceptualisation, design, analysis, reviewing and editing drafts, funding acquisition; SM: Conceptualisation, design, fieldwork oversight, analysis, reviewing and editing drafts, funding acquisition.

Funding

This work was supported by the Wellcome Trust, through a Senior Fellowship awarded to ME [207522/Z/17/Z]; and a Core award to the KEMRI-Wellcome Trust Research Programme [227396/Z/23/Z]; and by the NIHR (project reference: NIHR130812 and NIHR303168) using UK international development funding from the UK Government to support global health research and Bill and Melinda Gates Foundation Subaward [263771–5119872]. The views expressed in this publication are those of the author(s) and not necessarily those of the NIHR or the UK government. The funders had no role in study design, data collection and analysis, decision to publish, or preparation of the manuscript.

Data availability

The data supporting the findings of this study consists of recordings and transcripts that are confidential and cannot be effectively de-identified because participants were sharing some personal information about themselves and their patients that cannot be shared publicly. However, this data (transcripts) will be available on request though an email to dgc@kemri-wellcome.org.

Declarations

Ethics approval and consent to participate

The study was conducted in accordance with the Declaration of Helsinki 1964 and local guidelines. The study was approved by the Kenya Medical Research Institute, Science and Ethics Review Unit. KEMRI/SERU/CGMR-C/161/3852. Informed consent was obtained from all study participants

Consent for publication

Not applicable

Competing interests

The authors declare no competing interests.

Received: 29 January 2024 / Accepted: 9 September 2025
Published online: 28 October 2025

References

1. Green J, Darbyshire P, Adams A, Jackson D. A burden of knowledge: A qualitative study of experiences of neonatal intensive care nurses' concerns when keeping information from parents. J Child Health Care. 2015;19:485–94.
2. Braithwaite M. Nurse burnout and stress in the NICU. Adv Neonatal Care. 2008;8:343–7.
3. Obeidat HM, Bond EA, Callister LC. The parental experience of having an infant in the newborn intensive care unit. J Perinat Educ. 2009;18:23–9.
4. Austin B, Downing C, Hastings-Tolsma M. Experience of neonatal intensive care unit nurses in providing developmentally-supportive care: A qualitative study. Nurs Health Sci. 2019;21:336–44.
5. Dubale BW, Friedman LE, Chemali Z, Denninger JW, Mehta DH, Alem A, Fricchione GL, Dossett ML, Gelaye B. Systematic review of burnout among healthcare providers in sub-Saharan Africa. BMC Public Health. 2019;19:1–20.
6. Dean W, Talbot S, Dean A. Reframing clinician distress: moral injury not burnout. Fed Practitioner. 2019;36:400.
7. Owuor RA, Mutungi K, Anyango R, Mwita CC. Prevalence of burnout among nurses in sub-Saharan africa: a systematic review. JBI Evid Synthesis. 2020;18:1189–207.
8. World Health Organization. Standards for improving quality of maternal and newborn care in health facilities. ISBN: 9789241511216. https://www.who.int/publications/i/item/9789241511216.

9. Cimatti B. Definition, development, assessment of soft skills and their role for the quality of organizations and enterprises. Int J Qual Res. 2016;10:97.
10. Robles MM. Executive perceptions of the top 10 soft skills needed in today's workplace. Bus Communication Q. 2012;75:453–65.
11. Nzinga J, Boga M, Kagwanja N, Waithaka D, Barasa E, Tsofa B, Gilson L, Molyneux S. An innovative leadership development initiative to support Building everyday resilience in health systems. Health Policy Plann. 2021;36:1023–35.
12. Barasa E, Mbau R, Gilson L. What is resilience and how can it be nurtured? A systematic review of empirical literature on organizational resilience. Int J Health Policy Manage. 2018;7:491.
13. Biddle L, Wahedi K, Bozorgmehr K. Health system resilience: a literature review of empirical research. Health Policy Plann. 2020;35:1084–109.
14. Salovey P, Mayer JD. Emotional intelligence. Imagination Cognition Personality. 1990;9:185–211.
15. Kaur D, Sambasivan M, Kumar N. Effect of spiritual intelligence, emotional intelligence, psychological ownership and burnout on caring behaviour of nurses: A cross-sectional study. J Clin Nurs. 2013;22:3192–202.
16. Karimi L, Leggat SG, Donohue L, Farrell G, Couper GE. Emotional rescue: the role of emotional intelligence and emotional labour on well-being and job-stress among community nurses. J Adv Nurs. 2014;70:176–86.
17. Nzinga J, McKnight J, Jepkosgei J, English M. Exploring the space for task shifting to support nursing on neonatal wards in Kenyan public hospitals. Hum Resour Health. 2019;17:1–10.
18. Nzinga J, McGivern G, English M. Examining clinical leadership in Kenyan public hospitals through the distributed leadership lens. Health Policy Plann. 2018;33:ii27–34.
19. Musitia P, Boga M, Oluoch D, Haaland A, Nzinga J, English M, Molyneux S. Strengthening respectful communication with patients and colleagues in neonatal units - developing and evaluating a communication and emotional competence training for nurse managers in Kenya. Wellcome Open Res. 2022;7:223.
20. Tuti T, Bitok M, Paton C, Makone B, Malla L, Muinga N, Gathara D, English M. Innovating to enhance clinical data management using non-commercial and open source solutions across a multi-center network supporting inpatient pediatric care and research in Kenya. J Am Med Inform Assoc. 2016;23:184–92.
21. Montgomery AP, Azuero A, Patrician PA. Psychometric properties of Copenhagen burnout inventory among nurses. Res Nurs Health. 2021;44:308–18.
22. Furber C. Framework analysis: a method for analysing qualitative data. Afr J Midwifery Women's Health. 2010;4:97–100.
23. Gale NK, Heath G, Cameron E, Rashid S, Redwood S. Using the framework method for the analysis of qualitative data in multi-disciplinary health research. BMC Med Res Methodol. 2013;13:1–8.
24. Jaeger FN, Bechir M, Harouna M, Moto DD, Utzinger J. Challenges and opportunities for healthcare workers in a rural district of Chad. BMC Health Serv Res. 2018;18:1–11.
25. Afulani PA, Kelly AM, Buback L, Asunka J, Kirumbi L, Lyndon A. Providers' perceptions of disrespect and abuse during childbirth: a mixed-methods study in Kenya. Health Policy Plann. 2020;35:577–86.
26. Horwood C, Haskins L, Luthuli S, McKerrow N. Communication between mothers and health workers is important for quality of newborn care: a qualitative study in neonatal units in district hospitals in South Africa. BMC Pediatr. 2019;19:1–13.
27. Kain VJ. An exploration of the grief experiences of neonatal nurses: A focus group study. J Neonatal Nurs. 2013;19:80–8.
28. Imam A, Obiesie S, Aluvaala J, Maina M, Gathara D, English M. Nurse staffing and patient care outcomes: protocol for an umbrella review to identify evidence gaps for low and middle-income countries in global literature. Welcome Open Res. 2022;6:363.
29. Wong JQH, Charles JS, Mok HT, Tan TSZ, Amin Z, Ng YPM. Experiences of healthcare personnel with death in the neonatal intensive care unit: a systematic review of qualitative studies. Archives of Disease in Childhood-Fetal and Neonatal Edition. 2023;108(6)17–22.
30. Montero-Marin J, Prado-Abril J, Piva Demarzo MM, Gascon S, García-Campayo J. Coping with stress and types of burnout: explanatory power of different coping strategies. PLoS ONE. 2014;9:e89090.
31. McKnight J, Nzinga J, Jepkosgei J, English M. Collective strategies to Cope with work related stress among nurses in resource constrained settings: an ethnography of neonatal nursing in Kenya. Soc Sci Med. 2020;245:112698.
32. Oluoch D, Hinton L, English M, Irimu G, Onyango T, Jones CO. Mothers' involvement in providing care for their hospitalised sick newborns in kenya: a focused ethnographic account. BMC Pregnancy Childbirth. 2023;23:389.
33. Gathara D, Serem G, Murphy GA, Obengo A, Tallam E, Jackson D, Brownie S, English M. Missed nursing care in newborn units: a cross-sectional direct observational study. BMJ Qual Saf. 2020;29:19–30.
34. Ramsey K. Systems on the edge: developing organizational theory for the persistence of mistreatment in childbirth. Health Policy Plann. 2022;37:400–15.
35. Hakimi H, Joolaee S, Ashghali Farahani M, Rodney P, Ranjbar H. Moral neutralization: nurses' evolution in unethical climate workplaces. BMC Med Ethics. 2020;21:1–10.
36. Zhao Y, Mbuthia D, Gathara D, Nzinga J, Tweheyo R, English M. We were treated like we are nobody': a mixed-methods study of medical doctors' internship experiences in Kenya and Uganda. BMJ Global Health. 2023;8:e013398.
37. Jenkins TM. Physicians as shock absorbers: the system of structural factors driving burnout and dissatisfaction in medicine. Soc Sci Med. 2023;337:116311.

Publisher's Note