

## **The Relationship Between Burnout and the Self-Awareness Among Emergency Healthcare Workers**

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### **Abstract**

This study, conducted among emergency healthcare workers at in a Kenyan health institution in 2019, explored the relationship between burnout and emotional intelligence. The specific objective was to establish the relationship between burnout and self-awareness which is one aspect of emotional intelligence. The ethical approvals were obtained and the theoretical framework for burnout was based on Goleman's model while that of emotional intelligence was based on Maslach's multidimensional theory. The study was based on a sample of 120 (76 females, 44 males) respondents from a target population of 218 healthcare workers. A complete enumeration method was used and the Pearson correlation coefficient used to investigate the relationship between the variables. The study results showed presence of burnout, and established a negative correlation that is not significant of self-awareness with exhaustion ( $r = -0.36$ ,  $p = 0.696$ ) as well as depersonalization ( $r = -0.068$ ,  $p = 0.464$ ), but a positive correlation with personal achievement ( $r = 0.287$ ,  $p = 0.001$ ). The study recommends that the health institution should develop interventions and framework mechanisms to safeguard the self-awareness and investigate burnout among their healthcare workers.

Keywords: *Burnout, emotional intelligence, self-awareness, Emergency Healthcare Workers*

### **Introduction and Background**

The Maslach Burnout Inventory is a psychometric instrument that outlines extreme exhaustion, depersonalization and an experience of diminished personal achievement as components assessing burnout (Chemali et al., 2019; Maslach, 1998) and burnout is described as a syndrome in the International Classification of Diseases, 11<sup>th</sup> edition (WHO, 2020). This multifaceted syndrome is explained as a deep-seated feeling of being emotionally drained (exhaustion), overall negativity and scornfulness towards one's work hence cynical (depersonalization), and a diminishing positive appraisal of self or self-appreciation own ability despite professional competency and accomplishment (personal achievement). These result in an observable reduced effectiveness and impairment in the workplace (Morse et al., 2012).

Goleman's theory describes emotional intelligence as the capability of an individual to accurately recognize their own thoughts and feelings, subsequently handle the resultant emotions and express these emotions to others defined as personal and social competencies (Kanesan & Fauzan, 2019). The personal competence is the mastery of own emotional state and an ability of one to be self-aware, and subsequently, one's reflexive display of self-management. Self-awareness results from understanding, evaluating, deliberating, and determine one's emotional experiences. This results in self-management, which is the ability to regulate, handle and express oneself thoughtfully (Agnoli et al., 2019; Fiori & Vesely-Maillefer, 2018). The other facet of emotional intelligence, social competence, on the other hand is described as the social awareness and relationship management capabilities. The social awareness aspect of social competence involves recognizing own and others' emotions and feelings and their interactions, while social management involves correct interpretation, understanding, informed decision, providing response and communicating to others effectively (Mayer et al., 2016).

The description of burnout was extensively discussed in the early 1970's by Herbert J. Freudenberg and Sigmund Ginsburg (Freudenberger, 1975). Freudenberg described the symptoms that he and his working colleagues experienced while at work. These included changes of character, fatigue and feeling unenthusiastic. The National Institute of Mental Health (NIH) indicates stress as a natural response to activities of daily living and is beneficial to motivate and exert positive pressure to engage in an activity (NIH, 2020). In the workplace, stress can provide the fuel to work and respond to patients' needs. However, persistent stress and stressors can deplete the body of the natural resilience to respond to challenges (Kokonya et al., 2014). Chronic stress is associated in physiological changes such as elevated heart rate and blood pressure, and changes in appetite etc., and also clinical manifestation such as high blood pressure and diabetes. Chronic stress can manifest in symptoms such as nervousness, being easily startled, lack concentration, irritability, altered sleep patterns, and these can lead to depression, anxiety disorders, among other mental health disorders (Dubale et al., 2019; NIH, 2020). Burnout is a product of workplace emotional pressures, leading to progressive emotional demoralization and diminishing self-confidence. Burnout is a condition that depletes an individual of physical and emotional energy and changes one's outlook of professional work (Morawetz et al., 2017).

Workplace emotional pressures, progressive emotional demoralization and diminishing self-confidence are the evidence of burnout. Burnout is a condition that depletes an individual's physical and emotional energy and changes one's outlook on professional work. The individual is naturally fatigued, mentally disconnected in exemplifying their line of duty – cynical and often inefficient, implying that their emotions have been affected. These have been attributed to neurocognitive impairment implication on an individual (Morawetz et al., 2017). The presence of depression has been reported among health workers who had burnout (Smeds et al., 2020). Smeds further records that the physicians interviewed reported having burnout. It was noted that specialists, that included emergency room specialists had higher burnout levels than their counterparts. Burnout interferes with patient care and interpersonal skills like active listening, patience, adaptability (Dubale et al., 2019; Kokonya et al, 2014; McKinley et al., 2020; Smeds et al., 2020).

There is a growing body of evidence that suggests burnout and emotional intelligence are linked (Szczygiel & Mikolajczak, 2018). Healthcare services engage the cognitive skill of the provider and therefore require continual development, regulation and self-evaluation of their emotions. This is an aspect of emotional intelligence (Kabunga et al., 2020). Emotional intelligence involves recognition of one's emotions, competently interpreting and regulating one's responses to the environment, and effective verbal and non-verbal communication requires cognitive ability. Individuals who regulated their own moods radiated wellness and were temperate, asserted Donnelly (2017). According to Tripathy, (2018), one of the evidences of emotional intelligence is the ability to demonstrate personal competence in self-awareness and self-management. Strategies in improving emotional intelligence include understanding oneself which is self-awareness, improve adaptability and problem-solving skills (Arnone et al., 2019).

Emotional intelligence is credited for a work culture, individuals are self-aware, provide and are open to feedback that generates better teamwork. Their premise is to maximize on strengths and constructively work on areas of improvement (Szczygiel & Mikolajczak, 2018). Efficient conflict management and ability to effectively adjustment to an emotionally charged work-related environment, an individual's ability to calm themselves, display management skills and have positive work attitude was attributed to self-awareness, an aspect of emotional intelligence believed to improve the individual's wellbeing and work performance (Kabunga et al., 2020;

Năstasă & Fărcaș, 2015). Furthermore, Huang et al., (2019) postulated that emotional intelligence has a positive and protective factor against burnout.

Various studies in high-income countries identified burnout among various disciplines in the health sector (McKinley et al., 2020). Findings following an extensive review of studies involving doctors in 45 countries over the period between 1991 and 2018 reported a high burnout level of 67% among the respondents who completed the self-administered Maslach Burnout Inventory (Rotenstein et al., 2018). In Sub-Saharan Africa, a systemic study of 65 articles which included South Africa, Ethiopia and Nigeria done by Dubale et al., (2019), sampled from 963 articles in which 45 applied the Maslach Burnout Inventory (MBI). The articles combined sample population of these health professionals and provided reports on burnout among physicians, nurses, midwives medical and nursing students. The MBI-based burnout articles, demonstrated 81% burnout levels among physicians in South Africa. They scored 31% on each the MBI subscales: emotional fatigue, depersonalization and reduced personal accomplishment that characterizes diminished interest in personal achievement. Meanwhile, in Ethiopia, the physicians scored 65% on the emotional exhaustion MBI subscale, 91% and 85% on low personal accomplishment and high depersonalization respectively. There was no record of the overall burnout levels. The selected studies by Dubale et al. (2019) revealed that nurses in Nigeria had reported 39% on emotional exhaustion, 29% on the depersonalization aspect, while they scored 40% on low personal accomplishment. The systemic study revealed that 46% of the nurses in South Africa had reported emotional exhaustion.

Research findings among 1,163 healthcare providers in Accra North established that there was an effect of emotional intelligence and burnout on employee job performance (Nestor et al., 2018). Năstasă and Fărcaș (2015) study on emotional intelligence and burnout among health professionals, and observed that emotional intelligence was negatively correlated with emotional exhaustion ( $r = -.138$ ) and low personal accomplishment ( $r = -.451$ ,  $p < .001$ ). In the Năstasă study, conclusion was that a higher personal accomplishment aspect of burnout was attributed to the ability to identify, manage and express their emotions constructively. The study recommended implementation of programs that enhanced emotional intelligence at the workplace.

This study was prompted by the above findings and more specifically, the insufficient academic literature establishing the nature of relationship between burnout and self-awareness among healthcare workers in Kenya. Moreover, the study was carried out during the 2019 pandemic caused by the corona virus. Raudenská et al. (2020) had already reported high levels of burnout among workers in China due to the pandemic. On the other hand, there was a very high prevalence rate of burnout syndrome reported earlier among 345 doctors and nurses in a health institution in Nairobi (Kokonya et al., 2014). Therefore, the study aimed at establishing the current levels of burnout among healthcare workers in the emergency departments. Additionally, the research purposed to identify the level of self-awareness and to determine the relationship between burnout and self-awareness among the study respondents.

## Methodology

The study was guided by the following hypotheses:

- a. There is no significant difference between self-awareness and exhaustion aspect of burnout
- b. There is no significant difference between self-awareness and depersonalization aspect of burnout
- c. There is no significant difference between self-awareness and personal accomplishment aspect of burnout

The correlational design was used and according to the Human Resource Department records there were a total of 218 healthcare workers in the emergency departments as shown in Table 1. However, a total of 120 HCW participated in the study.

*Table 1: Number of Healthcare Workers in Emergency Departments*

Job Category/Title	N	Percentage
Doctors	46	21%
Nurses	141	65%
Pharmacists	9	4%
Medical Social Workers	6	3%
Clinical officers	16	7%
Total	N = 218	100%

*Statistics from the Human Resource Department*

The inclusion criteria entailed that the HCW must have worked in the emergency and accident unit for more than 6 months and in full time employ of the organization. Because the population was small, census sampling was used. To measure burnout Maslach Burnout Inventory tool (Maslach, 1998) was used. The tool is a 22 self-administered Likert scale questionnaire with three sub-scales of emotional exhaustion [7 items], depersonalization [7 items], and personal achievement [8 items]. The scoring ranges from “0 = Never to 6 = Everyday”. The interpretations of the scores are: for the depersonalization section, a score of 5 or less indicated low level of burnout, 6 to 11 indicated moderate burnout, while 12 and over was high level of burnout. For the section on Personal achievement, a score of 33 or less showed high levels of burnout, between 34 and 39 was moderate levels while scores greater than 40 was low levels of burnout. In total, a score 17 or less indicated low levels of burnout, while 18 and 29 moderate levels, and over 30 high levels indicated of burnout. The reliability coefficients of the MBI tool in sub-Saharan Africa, Nigeria had Cronbach’s Alpha results of .86, and Split-half of .57 with Odd-Even result of .92 (Coker & Omoluabi, 2009). A Malawian study identified the reliability of the MBI for emotional exhaustion, depersonalization and personal accomplishment to be 0.90, 0.79 and 0.71 respectively. The test-retest reliability range of these was between 0.50 and 0.82 (Thorsen et al., 2011).

To measure emotional intelligence, the emotional intelligence self-assessment tool (Sterrett, 2000) was adopted. This tool is a 20-item inventory that has Likert-scale ratings ranging from “1= Never to 5= Always”. The tool measures four aspects of emotional intelligence namely: the self-awareness, self-management, social awareness and relationship management. The scoring of the instrument includes of having a total of each aspect which could range from 5 to a high score of 25. Scores below 18 in each area indicate a need to intentionally improve one’s emotional intelligence while a score 18 and above in each aspect is considered high emotional intelligence. Previous studies found the reliability for the tool to be ranging 0.83 to 0.92 with alpha Cronbach of the emotional intelligence tool that has the dimensions of self-awareness, self-management, social-awareness, and social-relationship. Similarly, a co-efficient range of 0.81 to 0.95 on split-half test was noted (Sulaiman & Noor, 2015). The tools were therefore used because these reliability results had delivered consistent results in previous studies. Due to Covid19 pandemic the research tools were administered virtually after the researcher held a virtual (zoom) meeting with targeted participants to provide information about the online administration of the

instrument while participants’ concerns were addressed. The researcher developed a link to research questionnaire via one-time response Google form that was shared to the study participants. Statistical Package for Social Science version 25 (SPSS v. 23.0) was used to analyze the data, that provided correlational and descriptive statistics used to establish the relationship between the variables and summarize the study findings.

## Results

This section displays the levels of burnout and self-awareness, and exhibits their correlation. The analysis of the findings on burnout showed that, 43% (n =52) had moderate level, 41% (n =49) had low level while 16% (n =19) had high level burnout (exhaustion). The depersonalization level revealed 42% (n =50) had low level, 32% (n =38) had moderate level while 27% (n =32) had high level burnout, while on the personal achievement level 66% (n =79) had low level, 18% (n =22) had moderate level while 16% (n =19) had high level burnout as presented in Table 2.

*Table 2: Levels of burnout among study respondents*

	Low-level	Moderate-level	High-level
Burnout	burnout n (%)	burnout n (%)	burnout n (%)
Exhaustion aspect	49(41%)	52(43%)	19(16%)
Depersonalization aspect	50(42%)	38(32%)	32(27%)
Personal achievement	79(66%)	22(18%)	19(16%)

The score on the emotional intelligence self-assessment tool had 5 to 25 points, a total score of less than 18 was considered to be low. Table 3 presents the number of respondents with low and high self-awareness.

*Table 3: Levels of emotional intelligence*

Emotional Intelligence (Personal competence)		Frequency (n)	Percentage (%)
Self-awareness	Low self-awareness	31	26
	High self-awareness	89	74

The findings as illustrated in Table 3 showed that 74% (n = 89) of the respondents had high self-awareness, while 26% (n = 31) had low self-awareness.

To determine the relationship between self-awareness aspect of emotional intelligence and the exhaustion, depersonalization and personal accomplishment components of burnout, a Pearson Product Moment Correlation analysis was conducted and the result shown in Table 4.

*Table 4: Relationship between Burnout and Emotional Intelligence*

Emotional Intelligence component		Maslach Burnout inventory		
		Exhaustion	Depersonalization	Personal accomplishment
Self-awareness	Pearson correlation (r)	-0.36	-0.068	0.287
	Sig. (p-value)	0.696	0.464	0.001
	n	120	120	120

The results in Table 4 of the 120 respondents that took part in the research indicated a negative correlation that was not statistically significant between self-awareness and exhaustion ( $r = -0.36$ ,  $p = 0.696$ ). Further, there was a statistically significant negative correlation between self-awareness and depersonalization ( $r = -0.068$ ,  $p = 0.464$ ). Finally, the results showed a statistically significant positive relationship between self-awareness component of emotional intelligence ( $r = 0.287$ ,  $p = 0.001$ ) and personal accomplishment aspect of burnout.

## Discussion

The findings from this study showed that more than half of the respondents had either moderate or high burnout on the dimensions of exhaustion and depersonalization, while majority of the respondents scored well on personal accomplishment. These results depicted that while the respondents experienced aspects of burnout, they were able to maintain a feeling of personal achievement. Exhaustion has a significant influence on individual psychological as well as physical wellbeing hence the hospital should ensure that the levels of emotional exhaustion among healthcare workers especially within emergency department are extremely low. Further, one third of the respondents had high level of depersonalization while almost half of the respondents had low level of depersonalization. These findings are similar to literature by Dubale et. al. (2019) where high levels burnout was reported among healthcare providers in sub-Saharan Africa. Findings in Kokonya et. al. (2014) indicated 95.4% (crude prevalence rate) of burnout syndrome among sampled healthcare workers. This trend may interfere with healthcare practices.



The current study found that 74% ( $n = 89$ ) of the respondents had high self-awareness and 26% ( $n = 31$ ) had low self-awareness component of emotional intelligence. These findings may imply that the healthcare workers deployed in the emergency departments during the study period were able to recognize and master own emotions. Additionally, the results demonstrated that most of the respondents had an understanding and ability to monitor and adjust their feelings effectively thereby building a focus on mastering their emotions. The results were comparative with the findings by Nestor et al. (2018) where healthcare workers were classified as emotionally intelligent. Emotional intelligence was found to have positive influence on management on pressure associated with work (Szczygiel & Mikolajczak, 2018). Szczygiel suggested that it also modulates emotions that would otherwise instigate unhealthy behaviors that lead to burnout.

A negative correlation between self-awareness and exhaustion that was not statistically significant suggested that when the self-awareness of the healthcare workers increased, their level of exhaustion aspect of burnout reduced. Similarly, a negative correlation between self-awareness and depersonalization implied that as the respondents' self-awareness improved, their depersonalization aspect of burnout lessened. Nespereira-Campuzano and Vázquez-Campo (2017) had similar findings and they concluded that an ability of an individual to self-assess correlated with one's ability to minimize exhaustion and depersonalization. Further, they suggested that, cultivating emotional intelligence improved response to burnout hence enhancing work retention and further recommended a better work environment (Nespereira-Campuzano & Vázquez-Campo, 2017). It is therefore important to coach HCW on ways to maintain and improve their self-appraisal. The study's revelation that there was presence of moderate and high exhaustion and depersonalization burnout could imply that the HCW may have had sensitization sessions on self-awareness and subsequently taken precaution despite being exposed to conditions that could cause work-related burnout.

Personal accomplishment had positive significant relationship in the self-awareness ( $r = 0.287$ ,  $p = 0.001$ ) aspect of emotional intelligence. This corresponds with findings by Ünal (2014) whose study indicated that emotional intelligence was associated to personal accomplishment ( $\beta = .485$ ,  $p < .001$ ) on standardized regression coefficient. Similar findings by Năstasă and Fărcaș, (2015) established a statistically negative correlation ( $r = - 0.451$ ,  $p < 0.01$ ) between emotional intelligence and personal accomplishment. This infers that the respondents possess an awareness

of their emotions and developing a motivation towards professional work. Moreover, the institution could probably have a supportive training strategy which the HCW secure to improve their professional status. This could also mean that the HCW consider their personal accomplishment as important, that it could help in their upward professional mobility, and therefore keen to guard it. It was deduced that the respondents were able to maintain a good attitude towards self, their value and enthusiasm with their professional role.

## **Conclusion**

The implications of the results of the respondents in this study among the emergency healthcare workers had self-awareness, however, they experienced burnout. It is recommended that the health institution should strive at enhancing their self-awareness and develop programs to mitigate burnout. Consequently, future studies can investigate the root cause of burnout in the emergency departments. The current study did not attempt to do ranking for the burnout domains, therefore we recommend further research to establish the ranking of the different aspects of burnout, that is, exhaustion, depersonalization and personal accomplishment, that can be used to develop policies to mitigate the specific aspects of burnout.

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