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## Research Article

### The Concept of Burnout in the Nursing Profession

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#### Abstract

**Introduction:** Poor physical and mental health in nurses could decrease nurse performance and quality of care because nurses are one of the most important factors in the healthcare system to improve quality of care. As the literature review indicates, burnout among nursing staff may play an important role in the occurrence of adverse patient events. However, a better understanding of nurse burnout is still needed.

**Aim:** The aim is to clarify the meaning, attributes, antecedents, consequences, empirical indicators, and implications associated with the concept of burnout in the nursing profession.

**Design:** The method of Walker and Avant was used.

**Data Source:** A review of nursing literature was conducted from 2005 to 2020. Articles were reviewed from CINAHL, PubMed, and PsycINFO. Thirty-nine articles were included.

**Results:** The defining characteristics are emotional exhaustion, negative feelings and attitudes toward the recipients, and a feeling of low accomplishment and professional failure. The factors that precede burnout are work environment factors as well as personal characteristics. The consequences of nurse burnout are impacts on nurses, organizations, and patients. There are three commonly used empirical indicators of burnout.

**Conclusion:** Burnout is an important topic for nurse educators and staff developers since it is an occupational hazard that new nurses should anticipate. The sooner nurses recognize these signs and symptoms in themselves or other nurses, the better chance they can minimize the effects on nurses, organizations, and patients.

**Keywords:** Burnout; Concept analysis; Nursing; Nurse Burnout

#### Introduction

Nursing is a major key to improving the quality of patient care by reducing adverse outcomes, particularly in hospitals setting [1]. Nurses experience many challenges including managing complex medical care treatments and keeping up with more complicated diseases and current best practices [2]. The caregiving relationship between nurses and patients involves significant emotional output. An ideal nurse is expected to be compassionate and empathetic at all times, often creating internal turmoil [3]. Additional challenges that nurses face include heavy workloads, time pressures, the needs of patients' family members, and the demands of other staff

members. Furthermore, keeping up with new health information technologies, demanding too much of nurse's time and attention on a daily basis (Especially if the tools are not designed well), can contribute to nurse burnout [4]. Thus, work-related stress, and consequently burnout, is on the rise among nurses [3].

Burnout has played a significant role for health care organizations because of its negative impact on workforce turnover, job satisfaction, performance among nurses, and is a potential detriment to patient safety [5-7]. The physical and mental health of nurses could affect work performance, and this could lead to a lack of consistency in vigilance and overall quality of care [8,9]. Many studies report that increasing job demands have an impact on physical and psychological health, leading to such negative effects as emotional exhaustion, psychosomatic complaints, and a

lowered perception of job satisfaction as well as reduced quality of patient care [2,10-12].

Worldwide studies have reported high levels of burnout among nurses. The studies that explored burnout among nursing staff in the United States (US) found that nurses reported high levels of burnout [For example, high Emotional Exhaustion (EE), High Depersonalization (DP), low Personal Accomplishment (PA); these are three subscales of commonly used burnout measurements called Maslach Burnout Inventory (MBI)], and these studies reported mean burnout scores that remained high for three consecutive years after graduation [13,14]. In China, nurses reported high levels of burnout concurrent with diminished personal accomplishment [15]. Nearly 40% of nurses had a high level of EE, 25% of nurses reported high DP, and 49% reported low PA levels [15]. Approximately 30% to 60% of nurses reported high levels of burnout in eight of nine countries, including the USA, China, South Korea, Thailand, Japan, New Zealand, the UK, and Canada [16]. Likewise, a study of nurses in Thailand [17], found 41% of nurses had high burnout scores.

Studies reported nurse burnout is associated with patient safety [18,19]; however, some studies claimed that only some burnout dimensions are related to patient safety. For example, Spence, et al. [7] found that two out of three categories of burnout—EE and DP—were correlated with adverse events including falls, nosocomial infections, medication errors, and patient complaints. Patient safety has become a core value within the contemporary health care institutions and is based on data demonstrating better patient outcomes with improved nursing care quality [20]. Ehsani, et al. [21] determined that patients with adverse events extended their hospital stays 10 days longer and were at seven times the risk of death than patients without complications. Dietsche [22] reported that the cost of patient safety events in the US and European healthcare systems combined was \$317.93 billion in 2016. Frost and Sullivan [23] estimate the cost of patient safety events in 2020 which will rise to \$383.7 billion. Medication safety is one of the six biggest adverse events that contributes to these costs [22].

Joolaee, et al. [24] reported that medication errors were adversely associated with nurse' work conditions. As the literature review indicates, burnout among nursing staff may play an important role in the occurrence of adverse patient events. Therefore, reducing burnout among nurses could provide better nurse outcomes (Lower workforce turnover, better job satisfaction, and better nursing performance) and improve patient outcomes especially patient safety in health care organizations. To understand nurse burnout, the aim of this concept analysis is to clarify the meaning, attributes, antecedents, consequences, empirical indicators, and implications associated with the concept of burnout in the nursing profession. Also, exemplar cases of nurse burnout are provided.

## Materials and Methods

The method of Walker and Avant [25], which is based on the original method of Wilson [26], was used as the framework for this concept analysis. The Walker and Avant method has 8 steps: “1) select a concept, 2) determine the aims or purpose of analysis, 3) identify all uses of the concept that can be discovered, 4) determine the defining attributes, 5) identify a model case, 6) identify borderline, related, and contrary cases, 7) identify antecedents and consequences, and 8) define empirical referents” [25]. Because the concept has been identified and the purpose of analysis stated in the introduction section, steps 3 through 8 serve as the framework for the rest of the results section. A review of nursing literature was conducted throughout the last decade to the present. The databases that were used in this study included CINAHL, PubMed, and PsycINFO.

## Results

Computer searches using the keyword “burnout” resulted in 3,107 articles from CINAHL, 9,679 articles from PsycINFO, and 8,640 articles from PubMed. The keyword “professional nursing burnout” narrowed the search. The number of articles found on CINAHL, PsycINFO, and PubMed were 139; 524; and 1,024 respectively, for a total of 1,687. Abstracts were reviewed to scan the articles and only articles that defined or described burnout in the nursing profession (N=39) were used in this study.

### Identify All Uses of the Concept of Professional Nursing Burnout

Burnout first appeared in the literature to describe a phenomenon that was common to social service workers in the United States. The American psychologist Herbert Freudenberger first coined the term “Burnout” in the 1970s. Although he first used the term burnout to describe the effect of chronic drug abuse in 1972 [27,28], he later described burnout as mental exhaustion resulting from severe stress in the lives of human service workers [29]. Merriam Webster’s definition of burnout is the status, both physical and mental, of employees who encounter work-related stress [27]. In addition, Maslach and Goldberg [30] defined burnout as an individual stress experience that involves an individual and others in a prolonged response to chronic interpersonal stress on the job. A relationship was established between burnout and health and community services work [15,31,32]. The burnout phenomenon then drew attention in other English-speaking countries (e.g., Canada and England). Soon, a common research instrument, the Maslach Burnout Inventory, was translated into French, German, Italian, Dutch, and Hebrew, for use in studies worldwide [28]. Therefore, the term burnout is most commonly used to describe work-related mental stress experienced by workers in people-oriented occupations (e.g., human services, health care, and education).

Burnout has been studied as outcomes of nurse characteristics and work environments and also as a factor related to nurse, patient, and healthcare organization outcomes, as discuss later in this paper.

### Determine the Defining Attributes

The defining characteristics of burnout that appear consistently in the literature are emotional exhaustion or insufficient emotional energy to provide services, negative or neutral feelings and attitudes toward the recipients of services, and a feeling of low accomplishment and professional failure [31-37] (Table 1). It has been clearly reviewed that these three attributes occur when an individual person experiences stress involves close interpersonal relationships in the context of [38]. Therefore, these three attributes (e.g. emotional exhaustion, negative or neutral feelings and attitudes toward the recipients of services, and a feeling of low accomplishment and professional failure) were considered in terms of the nursing profession.

In sum, the definition of burnout that used in this concept analysis is a state of physical and emotional exhaustion caused by long-term exposure to situations that are emotionally demanding, especially in people-oriented occupations such as nursing. Three attributes include emotional exhaustion, negative or neutral feelings and attitudes toward the recipients of services, and a feeling of low accomplishment and professional failure used in these following cases.

<b>Attributes</b>	Emotional exhaustion Depersonalization Personal accomplishment
<b>Antecedents</b>	Work environment or job setting Work overload Time pressure Ethical conflict Nurse-physician relations Supervisors and peer support Personal characteristics Age Gender Work experience Race Marital status Children in the home
<b>Consequences</b>	Diminished organizational commitment Affective commitment Normative commitment Cost commitment Turnover and absenteeism Patient safety* Physical and mental illness.

<b>Empirical indicators</b>	Maslach Burnout Inventory-Human Services Survey (MBI) Copenhagen Burnout Inventory (CBI) Professional Quality of Life Scale (ProQOL)
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\*Conflicting results

**Table 1:** Attributes, antecedents, consequences, and empirical indicators of burnout among nurses.

### Identify a Model Case

#### Model Case

A model case, using a nursing example, was constructed to demonstrate all defining characteristics of burnout and to provide insight into the internal structure of the concept [25]. GD is a 31-year-old female mental health nurse who has worked in a community mental health center for 3 years. Her patients have multiple needs with very few resources, and she has substantial responsibility for their care. She is also responsible for families in crisis (e.g., stressed family members and patients with mental illnesses). She often feels powerless to improve their health and well-being. One day, she said to one of her co-workers, "I feel so drained. I feel like I have changed from a caring individual to numb person in just two and a half years. I have a hard time falling asleep and then don't want to get up and go to work. Some days, I am anxious, angry, and afraid without any reason. I feel like I am hindrance to my co-workers. I need a long vacation to get away from my patients' sicknesses and problems, and all my co-workers; otherwise I might show my dark side. If my head nurse won't let me take vacation, I will quit this job because if I keep working like this and feeling like this, I am afraid I may become ineffective and not care at all anymore and quit my nursing job".

**Discuss a Model Case:** GD shows high emotional exhaustion (saying "I feel so drained"), negative feelings and attitudes toward the recipients of services (Feeling "She often feels powerless to improve their health and well-being"), and a feeling of low accomplishment and thinking of quitting her job (Stating "I will quit this job because if I keep working like this and feeling like this, I am afraid I may become ineffective and not care at all anymore and quit my nursing job").

### Identify Additional Cases

The identification of borderline, related, and contrary cases allowed the authors to distinguish between concepts similar and contrary to burnout. However, it should be noted that all cases were constructed because no factual cases were found in the literature.

#### Borderline Case

MP is a new 24-year-old nurse who works in the Outpatient Pediatric Department (OPD). Today 90 patients are in the

department requiring nursing care. MP has already provided care to stressed family members and sick, crying children because of treatment delays due to the high volume of patients. With two hours left in her shift, she complains to her nurse manager, "Every time I care for the sick kids and deal with upset parents, I try to prove to myself and others that I am a good nurse. Sometimes I don't feel like I give good care to the patients. I want to help them, but I don't feel like doing it. Somedays, I am really emotionally drained at work, but I feel better when I come home to be with my lovely children and husband. They always make me smile and feel better. Also, they make me realize that I must go on because of my family responsibility because I really do love nursing so much."

**Discuss a Borderline Case:** This case study includes two characteristics of burnout, emotional exhaustion and negative feelings and attitudes toward the recipients of service. However, the nurse did not demonstrate feelings of low accomplishment or professional failure.

#### Related Case

SD, a 50-year-old home health nurse, has cared for an overweight laparotomy patient for the past two days. She assists the patient with changing position every 2 hours and gives basic nursing care. However, she feels she can't accomplish nursing tasks like she used to and feels like a failure as a nurse. Today, she calls her nurse manager to ask for a half shift off because she is experiencing back pain.

**Discuss a Related Case:** Although SD has feelings of low accomplishment from taking care of the laparotomy patient, she demonstrates physical fatigue and feelings of tiredness, although she does not feel emotionally exhausted.

#### Contrary Case

CK has been working for 10 years in pediatric intensive care at a university hospital. She loves caring for sick children, even though she often experiences both stressed family members and a heavy workload. She keeps telling the new nurses, "I feel I am valued, that I'm doing something that actually helps other people. When I see sick children feeling better and having happy lives with their families and their friends, it makes me so happy. I know this is my calling and where I am supposed to be".

**Discuss a Contrary Case:** CK represents a clear example of a nurse who is not experiencing burnout. She does not show signs of emotional exhaustion or depersonalization, or feelings of low accomplishment. In other words, she is fully engaged in her work.

#### Identify Antecedents and Consequences

##### Antecedents

Walker and Avant [25] define antecedents as events that lead to the occurrence of the concept. Two antecedents, the

work environment or job setting (Workload, time pressure, ethical conflicts, nurse-physician relations, and supervisors and peer support) and personal characteristics (Age, gender, work experience, race, marital status, and children in the home) have been identified as factors associated with or leading up to burnout (Table 1).

**Work Environment or Job Setting:** Nurses seem to report lower levels of burnout when they perceive better work environments [39-41]. Work overload is one of the factors that contributes to professional nursing burnout [42]. Shoorideh, et al. [43] explored the relationship between work, individual factors, moral distress, and burnout in intensive care nurses. The results showed that the higher the patient-to-nurse ratio (i.e., the more patients per nurse), the greater the workload for nurses. In addition, the higher the nurse-to-patient ratio, the more likely nurses are to experience burnout. Among Emergency Department nurses, time pressures decrease their feelings of control and increased their experiences of burnout compared to nurse practitioners, who reported the most control and the least burnout [13]. To explain the relationship between ethical conflicts and burnout among nurses, a correlation study was conducted in Poland [37]. Four of fourteen ethical conflicts showed a significantly strong relationship to professional burnout, including being a witness to an unfair critique by a colleague, being part of an inappropriate interpersonal relationship between nurses, being a witness to the discrediting of a nurse by another in the presence of a third party, and a lack of colleagues' understanding when enhancing professional qualifications. Wang, et al. [44], conducting a nursing study in 6 hospitals in China, found that work-environment factors, including nurse-physician relationships and the ability of the nurse manager to be a leader and supporter, are related to all three dimensions of burnout. However, Kalicińska, et al. [45] found that supervisor and peer support was significantly related to only EE, not DP and PA.

**Personal Characteristics:** Personal characteristics which showed statistically significant differences in professional nursing burnout levels were age, gender, work experience, race, marital status, and children in the home [46-49]. Padilla Fortunatti et al. [49] reported that younger nurses had higher emotional exhaustion scores. These results are congruent with other studies that predicted burnout by nurse gender, age, and years of experience [36,43]. They reported that male gender and younger age were significantly correlated with cynicism and a statistically significant relationship existed between work experience and depersonalization [36]. A study in a pediatric health care system reported that black participants reported higher Personal Burnout, whereas white participants reported higher Work-related Burnout, and Asian nurses reported higher Client-related Burnout [50]. Also, a lower level of personal accomplishment was found in single individuals than in married individuals. Likewise, nurses with children reported a greater sense of personal accomplishment than those who had no children

[46,47,48,51]. However, single parents reported higher burnout levels (High EE, high DP, low PA, and high overall burnout) than those who lived with partners [52]. In sum, the factors that precede burnout among nurses are work environment factors (i.e., work overload, time pressure, and ethical conflicts) and personal characteristics (i.e., age, gender, work experience, race, marital status, and children in the home).

### Consequences

Walker and Avant [25] describe consequences as events that happen as a result of the concept. The consequences of nurse burnout can be grouped into three major categories; organizational outcomes, patient outcomes, and nurse outcomes.

**Organization Outcomes:** In Zhang, et al. [15], Zhou, et al. [53] and Cao, et al. [54], studies of nurses in China, a negative correlation was found between the three dimensions of professional burnout (i.e., emotional exhaustion, depersonalization, and reduced personal accomplishment) and the three dimensions of organizational commitment (i.e., affective commitment, normative commitment, and cost commitment). Furthermore, Fragoso et al. [55] found that total scores on burnout using the Copenhagen Burnout Inventory was negatively related to organization commitment using the affective Commitment Scale. These results are congruent with a study that examined the correlation between burnout and productivity among Iranian nurses [35]. The findings of Nayeri et al. [35] suggested that productivity had a significant negative correlation to emotional exhaustion and depersonalization. A significant positive correlation was found between productivity and personal accomplishment.

**Patient Outcomes:** Burnout was a mediating variable in the relationship between emotional intelligence and caring behavior [56]. Strong evidence connects better nurse outcomes to better patient outcomes. Many studies reported that high burnout levels among nurses were significantly related to poor or fair quality of nursing care [17,35,57,58]. Adverse patient events may be a consequence of burnout, but this relationship has conflicting results in the literature. Studies conducted in Canada and Belgium reported that burnout among nursing staff was associated with patient adverse patient events (Patient falls, nosocomial infections, patient and family complaints, and medication errors) [34,59]. These findings conflict with a study conducted to investigate the relationship between nurse burnout among 148 nurses from a Midwestern Veteran's Administration (VA) hospital and patient safety [60]. These researchers found no significant relationship between nurse burnout and adverse event reports. Two explanations of this unexpected result were as follows: 1) reports of adverse events were extremely rare, and 2) participants may have felt that adverse event reports required too much effort. The lack of consistent findings regarding the relationship between nurse burnout and patient safety is a consequent gap in the literature.

It appears that the prevention of burnout has not been studied sufficiently as an antecedent of patient safety.

**Nurse Outcomes:** Nurses who had high levels of burnout, such as new graduate nurses and emergency nurses, reported more stressors, depressive symptoms, and hostility towards them [13,14]. Lower level of satisfaction was another consequence of high burnout levels that was found in this literature review [61-64]. Lower job satisfaction has been shown consistently to predict turnover; indeed Zhang et al. [15] found nurse burnout preceded turnover and absenteeism. Jourdain and Chênevert [65] conducted a survey to explore the relationship between job demands, burnout and intention to leave among nurses in the Canadian public healthcare sector. They found that emotional exhaustion and depersonalization were significantly correlated with the intention to leave the profession.

Finally, another consequence of burnout, depressive symptoms were found in a study of the first three years of nurse practitioner practice [14]. In addition, newly-registered nurses who experienced burnout exhibited the following symptoms: low self-esteem, irritability, depression, emotional exhaustion and disengagement. The participants also reported impaired sleep quality and poor eating habits [14]. Therefore, consequences of nurse burnout include diminished organizational commitment, turnover, absenteeism, and physical and mental illness.

### Define Empirical Referents

According to Walker and Avant [25], empirical referents demonstrate the occurrence of the concept. Empirical indicators of burnout provide nurses and others with observable phenomena by which to measure the level of burnout in an individual level (Table 1). There are three most commonly used burnout empirical indicators among nurses including the MBI, the Copenhagen Burnout Inventory (CBI), and the Professional Quality of Life Scale (ProQOL).

### MBI

The Maslach Burnout Inventory-Human Services Survey [30] has been the most commonly used empirical indicator of burnout [31,32,35-37]. The key aspects of this instrument are increasing feeling of emotional exhaustion; developing negative attitude toward to clients; and evaluating themselves negatively and feeling dissatisfied with their accomplishments on the job [66]. These key aspects consistent with three attributes of burnout (Emotional exhaustion, negative or neutral feelings and attitudes toward the recipients of services, and a feeling of low accomplishment and professional failure). These indicate clearly that why the MBI Human Services Survey is the most common instrument for measuring burnout in nurses. This survey includes 22 items divided into three components; 1) Emotional Exhaustion (EE); 2) Depersonalization (DP); and 3) Personal Accomplishment

[30]. The MBI uses the scores from all three components to identify burnout (i.e., EE >27; DP >10; and PA < 33).

### CBI

Other empirical indicators of nurse burnout that have been used in the 15 years are the Copenhagen Burnout Inventory (CBI). Allen, et al. [67] used CBI to examine the relationship between bullying and burnout, and Shoorideh et al. [43] used this tool to determine the relationship between burnout and turnover in intensive care unit nurses. The CBI has three dimensions (i.e., Personal, Client-related, and Work-related Burnout). Participants with high burnout levels scored greater than 50 overall on the three categories [68].

### ProQOL

The Professional Quality of Life Scale (ProQOL) was used in a nonexperimental, descriptive, predictive study by Hunsaker, et al. [69] to examine the prevalence of compassion satisfaction, compassion fatigue, and burnout among U.S. emergency nurses. According to the ProQOL developers, there are two scales: compassion satisfaction and compassion fatigue. Burnout is a subscale of the compassion fatigue along with Secondary Traumatic Stress (STS) [70]. However, without these three empirical indicators on hand, nurses, co-workers, or nurse managers can recognize the signs and symptoms of each attribute by following (Table 2). For example, emotional exhaustion could show as lack of energy, feeling drained, changes in eating habits, appetite, or change in sleep patterns.

Low personal accomplishment and professional failure	<ul style="list-style-type: none"> <li>- Feelings of apathy or hopelessness</li> <li>- Feeling ineffective or useless</li> <li>- Poor performance</li> <li>- Decreased satisfaction and sense of accomplishment</li> </ul>
Source [14,71].	

**Table 2:** Attributes and associated signs and symptoms of burnout.

## Discussion

Burnout is an important topic for nurse educators and staff developers since it is an occupational hazard that new nurses should anticipate. To ensure safe patient care and better patient safety outcomes, burnout needs to be reduced. The sooner nurses recognize the burnout signs and symptoms in themselves or other nurses, the better chance they can avoid or minimize the effects of burnout including effects on nurses themselves, healthcare organizations, and quality of patient care and safe. New nurses should know the signs of burnout and ask for help when they need it. The attributes of burnout indicate clearly that the MBI Human Services Survey is the most common instrument for measuring burnout in nursing; however, the CBI is also applicable and does not have a cost associated with its use. Furthermore, the antecedents or factors that could lead higher burnout were summarized into two categories including the work environment or job setting (workload, time pressure, ethical conflicts, nurse-physician relations, and supervisors and peer support); and personal characteristics (age, gender, work experience, race, marital status, and children in the home). The reasons that these factors could lead to higher nurse burnout are explained as follows. Organizational and management characteristics influencing nurse burnout have included the lack of supportive clinical supervision, lack of adequate resources to accomplish the work, excessive workloads, staff shortages, and a low nurse to patient ratio [72,73]. A lack of hospital management and organizational support for nursing is associated with both dissatisfaction in the nursing profession and nurse burnout [74]. According to Aiken et al. [61], significant changes or improvements in all aspects of the nurse practice work environment might not be realistic; however, small changes in the quality of work environment would reduce nurse burnout.

Certain personal characteristics are associated with burnout. Regarding age, Erickson and Grove [75] found that nurses below the age of 30 experienced higher burnout than those over age 30, and also that nurses under 30 were less likely to hide their true emotions than those over 30. Based on work experience, it could be explained by the fact that nurses with more experience may have more confidence about their jobs and more meaningful, developed relationships with co-workers, both in the nursing profession and with other professions at work. Nurses with

Attributes	Signs and Symptoms
Emotional exhaustion	<ul style="list-style-type: none"> <li>- Lack of energy Feeling drained</li> <li>- A sense of dread</li> <li>- Impaired concentration or less attention</li> <li>- Changes in eating habits or appetite</li> <li>- Changes in sleep</li> <li>- Irritability - Depression</li> <li>- Angry outbursts</li> <li>- Headaches or muscle aches</li> </ul>
Negative or neutral feelings and attitudes toward recipients (patients)	<ul style="list-style-type: none"> <li>- Loss of enjoyment at work/ not wanting to go to work</li> <li>- Pessimism or cynicism</li> <li>- Isolation</li> <li>- Feelings of detachment</li> <li>- Disengagement</li> <li>- Withdrawing from responsibilities</li> </ul>

more experience in their current hospital are more likely to have previously experienced most scenarios. As a result, they are more likely to understand and manage problems or potential ambiguous situations at work with more confidence and certainty [76]. In term of gender, males comprise a lower proportion of nurses than females, and when males choose female dominant occupation, they tend to experience role conflict and high burnout [36,77-79]. Based on races, Kern and Grandey [80] hypothesized that customer incivility or microaggressions against racially diverse employees may contribute to higher burnout in a retail environment. This hypothesis could support the findings that other races reported higher burnout in the dominant racial area (e.g. white in the United States). The findings based on marital status and children in the home could be explained by the fact that the family environment provides security and support, which protects nurses from developing impersonal, cynical, and negative attitudes towards patients and/or colleagues in the workplace [81].

One of the limitations of this concept analysis is the time frame for the literature search. We would like to capture nurse burnout in the most current work environment and nurse characteristics but also would like to capture the most information. Therefore, the literature review spans only the last 15 years, the antecedents, consequences, and empirical indicators that had been mentioned in the literature before 2005 are excluded. Also, the indicators of burnout have been generated from disciplines outside of nursing but have been applied to the nursing profession. The empirical indicators may not cover all antecedents of burnout within the nursing profession (e.g., time pressure), and there may be even more that we are unaware of situations, such as bullying. These important antecedents of nursing burnout may require qualitative study beyond the MBI.

## Implications

### Research Setting

One result of this concept analysis is the gap in the literature concerning adverse patient events as a consequence of nurse burnout. Also, the few studies that do exist on burnout and patient safety report conflicting results. Further research is required to determine the effects of nurse burnout on patient safety.

### Clinical Setting

Furthermore, the findings of this literature review indicate that burnout plays a significant role in organizational commitment and nurse health. Therefore, the organization and nursing administration should develop strategies to create a supportive work environment for nurses to reduce nurse burnout and resulting turnover, and thus improve the quality of patient care. As shown in the antecedents of nurse burnout, personal characteristic variables are related to nurse burnout. Nurse Managers should take into account that younger, male, single parent, Black, or recently hired

nurses may be more prone to burnout. Thus, these nurses should be a primary target population for burnout prevention programs, and for hospital initiatives to promote clinician well-being at work. Nurse Managers should also be aware of the physical, mental, and emotional effort required of a nursing professional, and, if necessary, provide support from among nurses' peers, supervisors, and other professionals or to request interventions for burnout treatment or prevention.

### Education Setting

Nursing school curriculum at the undergraduate and graduate program levels should include content related to nurse burnout and its prevention. To prevent burnout among nurses, nursing students should have the knowledge and skills to recognize signs and symptoms of burnout (Table 2) and evaluate themselves or their co-workers, and either the MBI or the CBI instrument could be used to classify burnout levels.

## Conclusion

Burnout among nurses is an individual response to chronic occupational stress caused by both interpersonal and organizational stressors. This stress experience includes three attributes, emotional exhaustion, depersonalization, and feels of low personal accomplishment on the job. This concept analysis of burnout uncovered a unique set of attributes, antecedents, consequences and empirical referents of burnout (Table 1) that can be applied to nursing research, nursing practice, and nursing education. There are three commonly used burnout empirical indicators, and the most commonly used is MBI. All three components of burnout (i.e., EE, DP, and low PA) are characterized by signs and symptoms that might overlap in some components (Table 2).

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The authors declare that there are no conflicts of interest that could be perceived as prejudicing the impartiality of the research reported.

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