Concept analysis of nurse burnout

Review

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Abstract: **Objective:** To explore the concept of burnout among nurses. Through this concept analysis would expect in assisting hospital management departments in establishing supportive programmes to manage burnout of nurses.

Method: Walker and Avant's framework is adopted for the concept analysis of burnout.

Results: Burnout is a syndrome that can happen among helping professions which characterized as emotional exhaustion, depersonalization, and reduced personal accomplishment. The antecedents of burnout are cognitive-competence, role overload, role conflict, lack of social support, and rewards. On the other hand, the consequences of burnout could be both personal and organizational, such as sub-clinical issues, behavioral change, absenteeism, and poor quality of care.

Conclusion: The analysis of burnout on its attributes, together with antecedents and consequences (Appendix A) and presenting with case study, it may help the nurse to gain a better understanding of nurse burnout and build coping strategies.

Keywords: burnout • emotional exhaustion • depersonalization • reduced personal accomplishment • compassion fatigue • nurse or nurses or nursing • concept analysis

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1. Introduction

Burnout is a syndrome that can happen among helping professions which characterized as emotional exhaustion (EE), depersonalization (DEP), and reduced personal accomplishment (PA).¹ Research for the concept of burnout has been continuing for several decades. According to Marek et al.,² burnout is not an academic issue, but a social problem at the beginning. Although studies for occupational burnout have been carrying out for over 30 years, it is still a major issue that affects employees in social services and problematically influences public health in many countries.³ The figures adopted by Sharma and Cooper illustrated that there were approximately 33% of Americans and 62% of

Australian managers experienced job burnout.⁴ That is the case for nurses' burnout as well. Russell conducted a descriptive study by using questionnaires among a convenience sample of 61 nurses, and the findings revealed that inpatient oncology nurses' burnout syndrome reached a moderate level.⁵ Landau also pointed out that 25% of all nurses suffer from burnout.⁶

According to Maslach and Jackson,⁷ professional caregivers are more likely to suffer from burnout. However, nursing as a helping profession is exposed to the burnout contributing factors,⁸ such as overload working condition,^{9,10} under high mental and physiological pressure.¹¹ Furthermore, the International Statistical Classification of Diseases and Related Health Problems (ICD-10) refers "burn-out" as an additional diagnostic

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term with its code Z73.0¹² advocated to maintain the mental health of the employees in the organization,¹³ so do for nurses. In addition, mental health as a kind of physiological parameter is quite important while it was used to assess the development of burnout.¹⁴ Therefore, this concept analysis aims to fully understand burnout syndrome among nurses, and it would be expected in assisting hospital management departments to establish supportive programmes for nurse burnout and improve nurses' well-being.

2. Search strategy

After searching for the literature by using keywords ("burnout", or "burn out", or "burn-out", or "compassion fatigue" and "concept analysis", or "concept"), peer-reviewed journals were selected from the library database such as CINAHL, Academic Search, Psyc ARTICLES, Health Source: Nursing/Academic Edition, MEDLINE, Pubmed, and Google Scholar. The retrieved literature was screened by reviewing titles and abstracts. A total of 39 articles were considered relevant to this concept analysis after screening; subsequently, by reading the full text, 24 articles were excluded due to not related to nurses' burnout or mainly focus on stress and the remaining 15 articles were studied regarding the concept of burnout.

3. Methods

By analyzing this concept, Walker and Avant's framework is adopted,¹⁵ and this framework is widely used for concept analysis in relation to nursing. It includes eight steps: (1) selection of the concept, the concept being chosen should reflect the topic; (2) determine the aims of analysis, it may consist of clarification of the meaning, development of an operational definition, differentiation of the ordinary and scientific language use of the concept, and personal interest for the concept analysis; (3) identify all kinds meaning of the concept, which might be looked for the meaning from different resources, such as dictionary, thesauruses, team workers, and literature; (4) defining attributes, by assessing the concept in different instances, making notes on the repeating characteristics in relation to concept, these characteristics will be the defining attributes of the concept; (5) construct model case, a real-life story related to the concept that includes all the key attributes of the concept should be built. The model cases may be developed first, or concurrently with the attributes, or after the attributes are temporarily identified; (6) construct contrary case without any attributes of the concept; (7) identifying antecedents and consequences, antecedents refer to the events that must appear before the occurrence of the concept, on the

other hand, consequences mean that the occurred events due to the occurrence of the concept; and (8) the final stage is to determine empirical referents. In this stage, the main task is to identify the useful instruments and strive for constructing a valid new instrument.¹⁵ In this concept analysis, identifying appropriate embedded middle range theory is added on for obtaining more comprehensive understanding of nurse burnout.

4. Results

Two of concept analysis related to burnout were found. One was discovered in a book named "professional burnout",² the other is a concept analysis of compassion fatigue in nursing.¹⁶ Burnout is defined as the "total exhaustion and inability to work effectively as a result of excessive demands or overwork" in Collins dictionary.¹⁷ The explanation for compassion is "a feeling of distress and pity for the suffering or misfortune of another", fatigue as "to make or become weary or exhausted";¹⁷ thus, compassion fatigue is the physical and mental state of exhaustion by experiencing with care for the suffering or traumatized people over a period of time. According to Sheppard, compassion fatigue is used to be defined as decreasing or losing job satisfaction due to job-related stress.¹⁸ However, decreasing job satisfaction may lead to a higher level of burnout.¹⁸ Therefore, there are differences between compassion fatigue and burnout, but they are also related. Marek et al. pointed out that there was a lack of theory supports for burnout research;² thus the conceptual framework of burnout varied in many different ways, and the recent concept was established in the United States. By learning relevant terms of burnout, it will be beneficial to build up comprehensive concept analysis and contribute to its theoretical development.

4.1. Defining attribute

Terms of attributes for burnout were revealed after intensively searching for the literature. The following three attributes will be discussed, which are the "emotional exhaustion, depersonalization, and reduced personal accomplishments."² It was well-accepted that burnout is a sequential and gradual developmental phase beginning with EE which may result in DEP and finally, to cause dissatisfaction with personal achievements.^{19,20} However, Leiter' revised the model of burnout separate reduced PA with the other two components.⁴ In addition, both Golembiewski Model and Van Dierendonck-Schaufeli-Buunk Model are all based on these three dimensions, there are some changes in the sequence.⁴

In terms of Maslach model, the first attribute EE is a subjective condition in which one's resource could

not be restored during or after a normal event experience caused by the excessive job stress,⁴ it can be measured by Maslach Burnout Inventory (MBI) which is applied for the following two attributes, either. However, according to the understanding of Cañadas-De la Fuente et al.,²¹ EE was explained as an overload condition caused by interaction with colleagues and health-care users. Though this latest explanation makes this attributes more specific, it is a bit narrower compared with the description of Sharma and Cooper.⁴ The clinical evidence supported the aforementioned explanations for EE, Russell reported that clinical nurses, such as oncology nurse, whose works are high demand in physical and psychological ways, consequently they are prone to EE as a result of frequent missed or shortened meals due to their work.⁷ Similarly, the study of Lorenz et al. results showed a high score at dimension of EE among nurses by using MBI.²² Persistent stress produced by all the job events exerting on nurses that would not be able to resume their energy in such working circumstances.

The second attribute DEP was explained by Maslach as an indifferent attitude toward one's clients which is commonly seen in service professions such as nursing field. Apathetic reaction or behavior identified in one's working circumstances.⁴ DEP in Golembiewski Model is considered as a building up defensive factor to lessen the stress at work which is in line with Maslach model.⁴ Russell also indicated that nurses present signs of emotional detachment in their working places manifested as loss of mutual interaction with patients or colleagues caused by stress aroused in their jobs.⁵

The third attribute reduced PAs is perceived by an individual as a sense of incapability or fulfill one's expectation toward his or her job which is a kind of subjective feeling as well. Hence, the victim is overwhelmed by the feeling of lower PA.⁴ However, in Golembiewski model, reduced PA refers to a consequence of DEP. Although Maslach redefined reduced PA as inefficacy which made its concept extend broadly in the non-human service profession,⁴ since nurses always play roles as caregivers, the former is thought to be a more suitable attribute in describing burnout in nursing.

4.2. Operational definition

By exploring the attributes in relation to burnout, its operational definition could be constructed as that it is an individual reaction either physically or emotionally due to excessive stress in one's working circumstance characterized as EE, DEP, and reduced PA which is observable and measurable by the application of certain instruments. To better understand the concept of burnout, cases are presented in the following.

4.3. Model case

Linda has been working as a staff nurse at a surgical department for several years since she graduated from university in China. It is a 70-bed ward with approximately 15 new admissions, 15 discharge patients, and 10 post-operation patients per day. Despite these cases are not covered by one staff nurse, Linda still felt occupied all the time during the shift, especially at night shift. Furthermore, there is a shortage of staffing, 1 staff nurse usually in charge of 12 patients. During these working years, she felt both physically and emotionally tiredness on and off, her condition is getting worse recently. One day morning, she told her nursing officer that she was going to take sick leave on that day. Because she had insomnia last night and severe headache caught on her owing to the busy works the day before (physical signs of burnout). The following day she came to work and talked to her colleagues that she wants to withdraw on the way to the hospital (emotionally exhausted). During her shift, the call bell kept ringing, she ran from one room to another, became a bit disorientated and nobody was coming to assist her. Late in the afternoon, one relative approached her for updating the patient's condition. She talked to the relative quite indifferent (DEP behavior observed). By 6:30 pm, she still has not finished her routine job yet while the rest of her colleagues already left the ward (low PA). By the time she off duty reached home around 8 pm, she thought about her work and family members, felt so frustrated. Being in a busy ward, Linda works in a stressful environment and gradually develops symptoms of burnout.

4.4. Contrary case

Linda has been working as a staff nurse in one of the surgical units for several years since she graduated from university. She loves her working life in the department. This is a general surgical ward with a ratio of 1:0.4 for patients and staff nurses. In this ward, all the works go smoothly, staff nurse works as a team solving a problem together. Providing there is a tough case in the ward, the nursing officer will organize all the nurses to discuss how to handle the situation. Linda feels quite lucky to work in this department. Every morning when she steps in the ward, she greets everyone and has no feeling of EE. Whenever patients or patients' relatives approached her, she is very keen to help, no signs of indifference and DEP. Besides she made an invention about intravenous drip set which was in use in many hospitals in China. Nursing officer and colleagues in her ward always say that this girl works so efficiently and can bring new ideas to routine tasks. Linda shares her working experience with her boyfriend that she

is satisfied with what she is doing now. Because she knows how meaningful her job is and looks forward to make more contributions to her hospital, there is no way of decreasing her PAs.

On the contrary case, there are no signs of burnout showed in Linda. Although Linda has been worked for many years in the surgical unit and many routine duties need to be completed, she can manage her work successfully, besides she brought innovation into works. None of the burnout attributes displayed in this case.

4.5. Antecedents

From both the aforementioned cases and literature reviewed, several antecedents emerged. The first antecedent of burnout is cognitive-competence which refers to the ability to perceive the situation. Based on the understanding of Moore's attribution model of work exhaustion, Sharma and Cooper pointed out that individual's perception of the attributes caused by exhaustion can affect one's reaction to it.⁴ The analysis for nurses stress by Schaufeli and Buunk indicates the fact that uncertainty is commonly identified among nurses.²³ In the sense of uncertainty, nurses just do not know how to properly react to specific circumstances, including expressing feelings to patients and dealing with patients' problems.²³ Thus, without correct perception and judgment about their situation, nurses may encounter stress, and persistent stress may eventually lead to burnout. Moreover, the perception toward others with similar symptoms may support their persistent symptoms of burnout.

The second antecedent could be role overload which is one of etiology to burnout.³ Russell's study indicates that increased nurse-patient ratio results in nurses' emotional exhaustion.⁵ It implies that limited nurses tend to be overloaded in their jobs.

The third antecedent is role conflict, as Schaufeli, Maslach, and Moore's model mentioned it earlier on its empirical phase.^{4,24} Conflicts are pervasive in health care settings and happen every day among nurses working life, from disputes between colleagues to disputes with patients.²⁵ According to Schaufeli and Buunk,²³ conflicts are usually beyond nurses' control, and low perception of control leads to burnout. Özkan et al.'s study indicates the fact that the increased level of role conflict will lead to a high level of burnout²⁵ because a lack of control will cause people to feel hopeless and helpless.

The fourth antecedent was thought to be lack of social support and rewards which is a combination of Maslach and Moore's study which was interpreted by Sharma and Cooper.⁴

4.6. Consequences

The antecedents have been described earlier, and there are also several consequences discovered in the literature. As a result of burnout, individual may appear sub-clinical issues such as physical disorder (insomnia, headache, and chronic heart disease), psychological symptoms (anxiety and depression), attitude problem (apathy and indifference), and behavioral change (insecurity, aggressive, and disrespect).^{4,26-28} In light of Moore's attribution model, individual may intend to develop DEP and attempt to change work situation or oneself as solutions toward burnout.⁴ Besides personal consequences, organizations can be strongly affected by other consequences such as sick leave, absenteeism, job turnover, and poor quality of care.^{4,24,28} According to the survey by Nursing Solutions Inc.,²⁹ the cost of turnover for a bedside registered nurse has resulted in hospital losing \$4.4M–\$7.0M averagely. However, the breakdown of the interpersonal relationship (IR) will lead to the interruption of communication, which is directly related to medical errors and quality and safety incidences. In summary, burnout can negatively influence both staff and organization which stated earlier.⁴

4.7. Empirical referents

Walker and Avant proposed that empirical referents, that is, the actual phenomena provide evidence for the occurrence of concept.¹⁵ Then, these phenomena can facilitate the clinician to "diagnose" the existence of the concept.¹⁵ With regard to the concept of burnout, the actual phenomena are EE, DEP, and PA which can be measured by using different instruments, for example, The Tedium Measure (TM), Nurse Stress Inventory (NSI), and Maslach Burnout Inventory (MBI). By measuring dimensions of burnout that make researchers' work more precise.²⁴ MBI is a confirmed instrument in assessing human service professions with its reliability and validity.⁴ MBI is used to measure the frequency with which stressors are perceived and consists of three aspects of occupational burnout: EE, DEP, and PA which can be tested by questionnaires including 22 statements. Each of the statements is connected with one of three independent subscales.³ MBI is utilized to measure nurses' stress perception in general; however, the NSI scale could be employed to analyze the frequency of the most strong stressors exerting on nurses which includes 38 valid statements and three domains: IRs, role stressors in career (RSC), and intrinsic work factors.³⁰ A combination of these two instruments together to meet the better interpretation for understanding burnout among nurses.

4.8. Embedded middle range theory

The theory is the core of scientific understanding because it uncovers the real meaning based on observed patterns, it allows us to see the relationship among phenomena.³¹ In addition, it discusses the fundamental components or causes of the phenomena and helps us to formulate effective interventions.³¹ Therefore, nurse scholars, clinical nurses, and other health care providers need to understand a given theory associated with the concept they might interested in.³¹ For the author's concept analysis of burnout, Conservation of Resource Theory (COR) was identified occupying a dominant position in understanding of burnout.³² Although COR plays a leading role in the understanding of burnout; however, social comparison theory seems to be an important basis for understanding nurses' job burnout.²³ Nursing as a human service profession has somehow maintained a kind of social relationship with patients, patients' relatives, and inter-professional ties with co-workers.²³ The social interaction between nurses and patients may contribute to reasons for burnout.

Second, according to the understanding of Schaufeli and Buunk's conclusion on social comparison theory that it is easy to understand that individual may link own emotion and stress situation with others who had the same experience and make a social comparison.²³ For instance, the nurse who has EE may intend to compare his or her own condition with those colleagues who have worse emotional experiences to make her or him feel better. This might be a consequence of burnout. Nurses may intend to make a social comparison while having EE, on the other hand, she or he might avoid revealing her or his real situation to others, attempt to pretend herself or himself still competent enough to do the job, which link to the other two dimensions of burnout

as well.²³ According to Schaufeli and Buunk, nurses in low job accomplishment are inclined to connect themselves with those colleagues at the same level with them instead of making an upward comparison.²³ In other words, nurses who have symptoms of burnout may sustain in that condition with a comparison with their colleagues who are also burnout. In the understanding of Schaufeli and Buunk's studies on social comparison theory,²³ there are plenty of knowledge on stressors in contributing to burnout among nurses. However, the author only presents the most relevant information for understanding burnout associate with social comparison theory.

5. Conclusions

In conclusion, burnout is the accumulation of prolonged stressors due to one's working conditions. The analysis of burnout on its attributes, together with antecedents and consequences (Appendix A) and presenting with a case study, it may help the nurse to gain a better understanding of nurse burnout and build coping strategies. Moreover, it might be a benefit for nurses who are interested in study burnout among nurses, since the introduction of certain theories related to burnout is depicted as well. By writing this concept analysis it also helps the author to gain a better understanding of nurses' burnout.

Ethical approval

Ethical issues are not involved in this article.

Conflicts of interest

All contributing authors declare no conflicts of interest.

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Appendix A