

Current Status and Influencing Factors of Professional Quality of Life Among Oncology Nurses

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Abstract: Objective: To evaluate the professional quality of life (ProQOL) of oncology nurses, analyze its current status and influencing factors, and thereby provide a scientific basis for improving nurses' ProQOL. Methods: A questionnaire survey was conducted among 202 oncology nurses from multiple general hospitals in Guangdong Province using a general information questionnaire, Professional Quality of Life Scale, and Short Form of Self-Compassion Scale. Results: The raw scores of compassion satisfaction (CS), burnout (BO), and secondary trauma stress (STS) in the ProQOL of oncology nurses were (32.88 ± 8.34) , (23.59 ± 6.25) , and (21.44 ± 7.30) , respectively. Multivariate analysis showed that the main factors affecting nurses' ProQOL included job environment satisfaction, job income satisfaction, and self-compassion. Conclusion: The overall ProQOL of oncology nurses is at a moderate level. Nursing managers and nurses themselves need to pay attention to the cultivation of self-compassion ability. In addition, medical institutions should improve the working environment, establish a reasonable scheduling and salary distribution system, etc., to create a good organizational atmosphere.

Keywords: Oncology nurses; Professional quality of life (ProQOL); Influencing factors

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1. Introduction

With the development of the social economy, people's lifestyles have undergone significant changes, and the incidence of tumors has been increasing year by year. Oncology nurses provide direct nursing services to patients, and their work is of great value. However, due to the particularity of oncology nursing, nurses face many challenges, which have a profound impact on their professional quality of life. Professional quality of life (ProQOL) refers to a series of psychological impacts on helpers (such as nurses) who are in close contact with or perceive the trauma and pain experienced by the recipients of their assistance during the process of providing aid services. It includes two dimensions: compassion satisfaction (CS) and compassion fatigue (CF)^[1]. Compassion fatigue

consists of two aspects: burnout (BO) and secondary trauma stress (STS). Due to the particularity of clinical work, oncology nurses are at high risk of developing compassion fatigue ^[2]. Studies have shown that nurses with compassion fatigue symptoms are prone to physical and mental health problems, reduced ability to care for patients, increased nursing risks, decreased job satisfaction, and higher turnover rates ^[3]. This study intends to investigate the current status of ProQOL among oncology nurses and analyze its influencing factors, so as to provide a reference for preventing and alleviating nurses' compassion fatigue and improving the quality of clinical nursing in oncology departments.

2. Current status of professional quality of life among oncology nurses

In this study, the raw scores of each dimension of professional quality of life (ProQOL) for oncology nurses are presented in **Table 1**. The researchers converted the raw scores into standardized T-scores and compared them with the 25th percentile (T=43) and 75th percentile (T=57) of the norm ^[4]. The distribution of each ProQOL dimension level among the surveyed group is shown in **Table 2**.

Table 1. Raw scores of professional quality of life among oncology nurses (Score, Mean \pm SD)

Dimension	Minimum score	Maximum score	Total score	Average score per item
Compassion satisfaction (CS)	12	50	32.88 \pm 8.34	3.29 \pm 0.83
Burnout (BO)	10	39	23.59 \pm 6.25	2.36 \pm 0.63
Secondary trauma stress (STS)	10	50	21.44 \pm 7.30	2.14 \pm 0.73

Table 2. Distribution of each dimension level of professional quality of life among oncology nurses [n(%)]

Level	Dimension		
	Compassion satisfaction (CS)	Burnout (BO)	Secondary trauma stress (STS)
Mild (<43 points)	55 (27.2%)	60 (29.7%)	56 (27.2%)
Moderate (43~57 points)	92 (45.5%)	76 (37.6%)	102 (50.5%)
Severe (>57 points)	55 (27.2%)	66 (32.7%)	44 (21.8%)

The professional quality of life reflects the positive or negative psychological responses that nurses develop due to long-term exposure to cancer patients. Positive responses manifest as compassion satisfaction, which is beneficial to physical and mental health; negative psychological responses, on the other hand, are reflected in compassion fatigue, which can be specifically divided into two dimensions: job burnout and secondary trauma. Job burnout is mostly characterized by emotional exhaustion, depersonalization, and reduced personal accomplishment, often accompanied by persistent fatigue and resistance to work tasks. Secondary trauma stems from long-term exposure to patients' traumatic experiences, such as disease progression and end-of-life scenarios, leading nurses to indirectly develop post-traumatic stress responses, with symptoms including intrusive memories and emotional numbness ^[2]. When these two factors act together, they not only cause physical discomfort in nurses, such as headaches and gastrointestinal disorders, but also lead to sleep disturbances (e.g., difficulty falling asleep and early awakening). Additionally, they may induce emotional problems like anxiety and depression. In the long run, such accumulation will result in diminished professional enthusiasm, emotional indifference toward patients,

and even errors in nursing operations, directly threatening the quality of care and medical safety^[3]. This study shows that the overall professional quality of life of oncology nurses is at a moderate level: compassion satisfaction is above moderate, while job burnout and secondary trauma are below moderate. These results are consistent with the findings of studies conducted by Ma Ning, Chen Xiaocen, Ma Jinhong, and other researchers^[1, 3, 5]. Among the 202 nurses surveyed: The proportions of nurses with mild, moderate, and high levels of compassion satisfaction were 27.2%, 45.5%, and 27.2% respectively; The proportions of nurses with mild, moderate, and severe job burnout were 27.2%, 37.6%, and 32.7% respectively; The proportions of nurses with mild, moderate, and severe secondary trauma were 27.2%, 50.5%, and 21.8% respectively. The data suggest that the professional quality of life of oncology nurses still needs further improvement.

3. Influencing factors of oncology nurses' professional quality of life

3.1. Job environment satisfaction

Univariate analysis showed that there was no difference in the secondary trauma scores of oncology nurses regarding job environment satisfaction, but there were statistically significant differences in compassion satisfaction and job burnout scores. Further multiple linear regression analysis revealed that the level of job environment satisfaction is a key factor affecting compassion satisfaction and job burnout among oncology nurses. Specifically, the lower the nurses' job environment satisfaction, the higher their job burnout scores, and the lower their compassion satisfaction scores.

The job environment comprises both the physical environment and the organizational climate. The Conservation of Resources (COR) Theory suggests that if the work environment experienced by employees does not match their personal expectations, this "sense of inconsistency" will lead to employee burnout^[6]. Currently, there are relatively few domestic studies on the impact of environmental factors on nurses' professional quality of life. Gillet et al., through a study of 296 oncology nurses in Europe, found that long-term exposure to a work environment with chemical drugs, combined with a depressing work atmosphere, will gradually cause nurses to lose compassion and empathy. This seriously affects the physical and mental health of oncology nurses^[7]. Lin et al. obtained similar results in a survey of emergency department nurses in Taiwan, China^[8]. This indicates that nursing managers should gain a deep understanding of the negative effects of an adverse environment. For specific special departments, it is important to not only actively improve the physical environment of the ward but also create a positive organizational climate. Efforts should be made to care for nurses in their daily lives, enhance peer support, appropriately adopt incentive mechanisms, provide nurses with opportunities for further study and career promotion, and increase nurses' sense of belonging through empowerment. These measures can help improve nurses' satisfaction, thereby reducing burnout and enhancing compassion satisfaction.

3.2. Job income satisfaction

Income is the economic reward for employees' work efforts, and the level of salary has a significant impact on employees' work engagement and job satisfaction. Univariate analysis in this study showed that there was no difference in the secondary trauma scores of oncology nurses in terms of job income satisfaction, but there were statistically significant differences in compassion satisfaction and job burnout scores. Further multiple linear regression analysis indicated that the level of job income satisfaction is a major factor affecting compassion satisfaction among oncology nurses, but it has no impact on job burnout or secondary trauma. Previous studies

have shown that nurses with lower income levels face a higher risk of compassion fatigue ^[5]. All respondents in this survey were nurses from hospitals in economically developed regions, with relatively stable income levels. Therefore, the level of job income satisfaction is more reflected in its impact on compassion satisfaction. The increase in job income represents social recognition of the nursing profession and is an important aspect of nurses' self-worth realization. This reminds nursing managers to pay active attention to this issue and appropriately improve nurses' salary levels and welfare benefits.

3.3. Monthly night shifts

Univariate analysis showed that the number of monthly night shifts had no significant difference in the secondary trauma scores of oncology nurses, but there were statistically significant differences in the scores of compassion satisfaction and job burnout. Further multiple linear regression analysis revealed that the number of monthly night shifts was one of the factors affecting the job burnout of oncology nurses—specifically, the more night shifts nurses worked, the more likely they were to experience job burnout. However, it had no impact on compassion satisfaction or secondary trauma. Research findings on the impact of rotating night shifts on nurses' professional quality of life (ProQOL) are inconsistent. Studies by Ma Shu and Liu Qian indicated that ICU nurses who worked more night shifts were prone to job burnout and secondary trauma, and had lower levels of compassion satisfaction ^[9–10]. In contrast, a study by Liu Minghui et al. showed that the number of monthly night shifts had no effect on the ProQOL of oncology nurses ^[11]. This discrepancy is believed to result from differences in the intensity of night shifts across different departments. Nevertheless, a large body of previous research has demonstrated that rotating night shifts disrupts an individual's circadian rhythm, impairs sleep quality, and can lead to autonomic nervous system and endocrine disorders. This indirectly increases nurses' risk of developing diseases and exerts adverse effects on their physical and mental health. Therefore, nursing managers should pay close attention to the health status of rotating-shift nurses: reduce high-frequency shift rotations, ensure adequate post-night-shift rest, and adopt reasonable scheduling methods (e.g., avoid long-term shift rotations for older nurses). These measures help nurses find an optimal balance between shift work and health, and mitigate the impact of shift-related diseases.

3.4. Self-compassion

Self-compassion, first proposed by psychologist Professor Neff in 2003, refers to an individual's ability to face the suffering and failure they are experiencing directly (without avoidance) and regulate emotions to alleviate pain by maintaining a kind and tolerant attitude toward themselves at all times ^[12]. It comprises three components: Self-kindness: When facing suffering or failure, individuals treat themselves with acceptance and tolerance, rather than harsh self-criticism. Common humanity: Individuals perceive their own suffering as a universal experience shared by all humanity, instead of viewing themselves as isolated victims. Mindfulness: Individuals observe current physical and mental phenomena (including sensations, emotions, and thoughts) with a balanced awareness—neither avoiding nor over-identifying with them. Studies have found that self-compassion is positively correlated with individuals' mental health, adaptability, and sense of well-being, while being negatively correlated with negative emotions such as stress perception, anxiety, and depression ^[13–15]. Correlation analysis in this study showed that the total score of self-compassion of oncology nurses was closely correlated with their scores in all dimensions of ProQOL. Further multiple linear regression analysis indicated that self-compassion had an impact on all dimensions of oncology nurses' ProQOL, with the strongest effect observed on job burnout and secondary trauma. This result is consistent with the findings of Ma Ning, He Yiqing, Abdollahi, and other researchers ^[16–17].

It suggests that self-compassion, as a positive self-attitude or emotional regulation method, can help nurses effectively convert negative emotions into positive ones, which is conducive to maintaining their mental health.

4. Summary

In conclusion, the ProQOL of oncology nurses is at a moderate level, with the following factors influencing it: Self-compassion affects all three dimensions of ProQOL, with the most significant impact on job burnout and secondary trauma. Job environment satisfaction, job income satisfaction, and the number of monthly night shifts also exert a certain influence on nurses' ProQOL. Nursing managers and nurses themselves need to focus on cultivating self-compassion skills. Meanwhile, medical institutions should take institutional measures: establish a reasonable nurse salary distribution system, a performance evaluation mechanism, and a scheduling system; create a positive organizational atmosphere; and prevent the occurrence of compassion fatigue among nurses. This study has limitations: it only included oncology nurses from selected general hospitals in Guangdong Province, resulting in a relatively small sample size. Additionally, the Short Form of Self-Compassion Scale (SCS-SF) was used, and its limited number of items prevented an in-depth analysis of the relationship between each dimension of self-compassion and ProQOL. It is recommended that future studies improve research tools and expand the scope of investigation to more accurately and comprehensively reflect the current status of oncology nurses' ProQOL and its influencing factors.

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