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Professional Quality of Life and Advance Care Planning Self-efficacy of Medical and Surgical Nurses

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Abstract: Introduction: Nurses continuously navigate the ever-changing and evolving field of healthcare. As nurses adapt to the emerging landscape of healthcare, their quality of professional life and self-effectiveness in early care planning become crucial factors to consider. Establishing how the professional quality of life dimensions correlate with advance care planning self-efficacy among medical and surgical nurses could therefore generate valuable insights. Objectives: The study examines the relationship between Professional Quality of Life (ProQOL) and Advance Care Planning Self-efficacy (ACP-SEc) among medical-surgical nurses in Shandong Province, China. Methods: The research was a descriptive correlational study aimed at identifying trends between variables related to nurses' professional quality of life and advance care planning self-efficacy. It explores how nurses' self-efficacy in care planning impacts their professional quality of life, considering factors like compassion satisfaction, burnout, and secondary traumatic stress. Purposive sampling was used to select participants and employed questionnaires for demographic data, ProQOL, & ACP-Sec for data collection. Results: Findings suggest that higher self-efficacy in advance care planning correlates with a positive professional quality of life, but not significantly with burnout or secondary stress trauma. This suggests that while self-efficacy in advance care planning may contribute to a better professional quality of life, it may not directly influence the experience of burnout or secondary stress trauma in nurses. Conclusion: The study underscores the importance of enhancing nurses' self-efficacy in advance care planning to improve patient care and nurses' job satisfaction. Further research is needed to explore these relationships in more depth.

Keywords: Professional Quality of Life, Advance Care Planning, Self-efficacy, Relationship, Medical-surgical Nurse.

1. Introduction

Nurses continuously navigate the ever-changing and evolving field of healthcare. As nurses adapt to the emerging landscape of healthcare, their quality of professional life and self-effectiveness in early care planning become crucial factors to consider (Kim & Park, 2020). In doing so, they face the ongoing challenge of continuous self-assessment and refinement of their skills. These skills encompass a wide range of elements, including knowledge, expertise, talent, and personal attributes, which need to be regularly updated to align with the changing societal needs, healthcare environment, and nursing profession.

The professional quality of life (ProQOL) among nurses in China is currently facing significant challenges, as evidenced by research indicating low levels of compassion satisfaction and high levels of compassion fatigue (Li et al., 2021). These findings shed light on the state of well-being within the nursing profession. A particular concern is workplace bullying, which directly contributes to decreased compassion satisfaction and has a positive correlation with burnout and secondary traumatic stress (Jiao et al., 2023). Job stress among surgical nurses in China has been identified as a significant contributing factor to burnout, negatively impacting their quality of life. This stress not only directly contributes to burnout but also serves as a direct risk factor that affects the overall well-being and quality of life of nurses (Li et al., 2021). The presence of high levels of occupational stress and burnout among surgical nurses is concerning and indicative of their lower quality of life scores. These findings underscore the urgent need for interventions and support systems aimed at mitigating occupational stress, reducing burnout, and improving the quality of life for medical-surgical nurses in China.

To mitigate the discouraging effect of compassion fatigue and enhance job satisfaction among nurses, it is crucial to implement interventions that focus on improving nurses' care planning self-efficacy. By addressing and strengthening their belief in their ability to engage in effective care planning, nurses can better navigate the emotional challenges and demands of their profession (Jiao et al., 2023). Enhancing care planning self-efficacy can empower nurses to effectively communicate and collaborate with patients, their families, and healthcare teams, leading to more comprehensive and person-centered care (Gottlieb et al., 2021). Moreover, a strong sense of self-efficacy in care planning can contribute to nurses' overall job satisfaction by providing a sense of accomplishment and fulfillment in their role. Interventions aimed at boosting care planning self-efficacy should consider providing education, training, and support to enhance nurses' knowledge, skills, and confidence in engaging patients in meaningful advance care planning discussions (Alshammari & Alenezi, 2023). Additionally, creating a supportive organizational culture that values and recognizes the importance of care planning can further reinforce nurses' self-efficacy and job satisfaction (Kim & Park, 2023). By investing in interventions that enhance care planning self-efficacy, healthcare systems can promote the well-being and professional fulfilment of nurses while ensuring the delivery of high-quality, patient-centered care.

On the other hand, the concept of advance care planning (ACP) self-efficacy plays a crucial role in encouraging patients to engage in care planning (Pan et al., 2021). It involves acknowledging and addressing barriers that may discourage patients from participating in ACP while simultaneously bolstering their confidence in the feasibility and value of the process. Self-efficacy refers to an individual's belief in their ability to make meaningful changes, even when

faced with emotional, social, or physical obstacles (Zhang et al., 2022). It was discovered that self-efficacy, coupled with factors like knowledge, attitude, and experience, significantly influenced nurses' involvement in advance care planning for terminally ill patients (Pan et al., 2021). Researchers studying behavior change have consistently identified self-efficacy as a critical factor in understanding and promoting individuals' motivations and readiness to change specific behaviors. By enhancing self-efficacy, individuals are more likely to exert effort in initiating or persisting in behavior change, leading to improved performance in situation-specific contexts.

In another study conducted in China, the quality of work-life among nursing managers was examined, specifically looking at the relationships between self-efficacy, coping style, and work-life quality. The findings emphasized the crucial role of self-efficacy and coping style in promoting team stability and the overall quality of clinical care (Zhang et al., 2022). This suggests that nurses' belief in their capabilities and their coping strategies can have a substantial impact on the well-being of both the nursing team and the care they provide.

Furthermore, a study focused on oncology nurses in China identified the need for a comprehensive and structured training program on advanced care planning. The research indicated that limited knowledge and understanding of advanced care planning among oncology nurses hindered its effective implementation (Shih & Lu, 2024). This highlights the importance of providing nurses with adequate training and education on advanced care planning to ensure its successful integration into their practice.

Demographic characteristics may also influence professional quality of life. While age does not appear to have a significant impact, nurses with additional qualifications in critical care may experience a better professional quality of life (Ndlovu et al., 2022). However, regardless of demographic characteristics, nurses caring for patients with specific conditions, such as COVID-19, may prioritize patient outcomes over their well-being (Alloubani et al., 2021). Considering these factors, it becomes evident that demographic characteristics, specialized qualifications, and the specific patient populations nurses care for can all play a role in shaping their professional quality of life (Alloubani et al., 2021; Ndlovu et al., 2022). It is essential to recognize the significance of self-efficacy in nursing practice. Effective clinical environment should foster a sense of self-efficacy among medical-surgical nurses, enabling them to act confidently and independently in their profession (Pan et al., 2021). Furthermore, Clinical self-efficacy and competence are vital in delivering high-quality healthcare and ensuring patient safety (Pan et al., 2021). Although there is a need for further research specifically exploring the relationship between advance care planning self-efficacy and professional quality of life among medical-surgical nurses, investigating this area would provide a deeper understanding of this study.

Establishing how the professional quality of life dimensions correlate with advance care planning self-efficacy among medical and surgical nurses could therefore generate valuable insights. It will provide a more nuanced understanding of their needs as frontline caregivers facing both external work stressors and internal responsibilities requiring interpersonal skills and clinical judgment. By understanding these connections, we can develop interventions, policies, and support systems that empower nurses, promote their well-being, and ultimately lead to better patient outcomes and a more robust healthcare system.

1.1. Purpose of the Study

This study aims to determine factors associated to the respondents' advance care planning self-efficacy and professional quality of life of medical-surgical nurses in in Shandong Province, China.

2. Methods

2.1. Study Design and Locale:

The study was descriptive correlational research, aimed at uncovering trends and connections between variables to gain insights into future occurrences. The researcher described the socio-demographic characteristics of medical-surgical nurses and their training direction. To achieve this, a descriptive correlational design was used to examine the professional quality of life in terms of compassion satisfaction and fatigue, as well as the level of advance care planning self-efficacy among nurse respondents. The focus was on preference discussion and assessment, information guidance and disclosure, and content evaluation and determination.

The study was conducted at a Level III hospital in Shandong Province, China. This hospital, known for its commitment to public health, is a leading and rapidly expanding medical complex in the region. With the evolution of modern medical services and the expansion of hospital services, the scope of care provided by the hospital has extended from simple medical treatment to encompass disease prevention and control, health care, physical and mental well-being, and health education. The target audience for the hospital's services includes patients as well as the wider public with health needs.

2.2. Sample Size and Settings

The researcher used a purposive sampling, a non-probability sampling method. To determine the appropriate sample size, the Raosoft sample size calculator (Raosoft, 2020) was utilized. Given the unknown population size, a 5% margin of error, a confidence level of 95%, and a response distribution of 50%, the minimum recommended sample size was determined to be 377 participants. The inclusion criteria for the study were as follows: a) individuals who were 18 years old and above, b) those who were on duty in the medical or surgical unit during the time of data collection, c) individuals who had been deployed in the medical or surgical unit for at least 3 months, and d) those who voluntarily agreed to participate in the study. On the other hand, participants who were at least 60 years of age and were on leave during the study period were excluded from the study. Nursing administrators were also excluded as they do not directly participate in patient care. Lastly, participants with incomplete data or those who were unwilling to continue with the study were also excluded.

2.3. Instrument:

The study utilized three questionnaires, which were adapted from previous research studies. The first part of the questionnaire included demographic data of the respondents where the primary researcher developed to align with the aims of the study. The Professional Quality of Life: Compassion Satisfaction and Fatigue Version 5 questionnaire by B. Hudnall Stamm (2009) and the Chinese Version of Advance Care Planning Self-Efficacy Scale by Yang, Wang & Wang

(2022) were employed. The questionnaires consisted of demographic data in the first part, while the ProQOL framework, developed by Stamm formed the basis for assessing the well-being of professionals in caregiving roles. The framework encompassed three scales: Compassion Satisfaction, Burnout, and Compassion Fatigue. These scales provided insights into the emotional experiences of individuals in helping professions and allowed for targeted strategies to enhance well-being and prevent burnout. The ProQOL questionnaire used a 5-point Likert scale to measure work experiences over the past 30 days. The scales demonstrated good reliability, with alpha reliability scores ranging from .72 to .87. The ACP-SEc questionnaire, on the other hand, aimed to assess the self-efficacy levels of nurses in China regarding Advance Care Planning. It consisted of 16 items and utilized a 5-point Likert scale. The scale exhibited good reliability and validity, with a Cronbach's α of 0.896. To ensure accuracy and equivalence, a back translation procedure was employed, and the instruments underwent face validity testing by a panel of experts.

2.4. Ethical Consideration:

The researcher obtained approval from the Ethics Review Board (ERB), with an ERC code of 2024-MAN-Student-087, before proceeding with data collection. The ERB assessed the study and played a vital role in protecting the rights and welfare of human research subjects. Participants in the study were provided with detailed information about the research in both English and Chinese languages, ensuring informed consent. They had the freedom to withdraw from the study at any time without facing consequences, and the questionnaire took approximately 30 minutes to complete. Anticipated risks were minimal, as the researcher took precautions to protect participants' privacy and maintain data security. Confidentiality and anonymity were maintained throughout the study, and participants' identities were safeguarded. By participating, nurses had the opportunity to contribute to the development of strategies aimed at improving their well-being and enhancing patient care. Privacy, confidentiality, and data management were prioritized, with secure electronic storage and anonymized data analysis. The researchers had exclusive access to the data, which was stored for one year and then deleted. Hard copies were shredded, and data and statistics were made available for public inspection.

2.5. Data Collection:

Data collection Done from April to May, 2024. The researcher meticulously followed a structured procedure for data collection, beginning with obtaining approval from hospital administrators to involve nursing staff in the study. A formal letter was submitted to the medical and nursing director for their consent, followed by individual consent through an electronic questionnaire ensuring participant permission. The study utilized a traditional pen-and-paper format administered face-to-face, fostering direct interaction and allowing immediate clarification or instructions, which led to a higher response rate. This method also enabled prompt data collection, as completed questionnaires were gathered on the spot, reducing the risk of data loss. Finally, participants were asked to return the questionnaires directly to the researchers during follow-up visits, with assurances of confidentiality and anonymity to encourage participation. After the retrieval period, the securely stored questionnaires underwent a thorough data entry process, converting responses into a digital format for analysis.

2.6. Data Analysis

The collected data underwent statistical analysis to address the research objectives. Descriptive statistics were utilized to summarize the demographic characteristics of medical-surgical nurses, advance care planning self-efficacy levels, and professional quality of life status. Measures such as frequencies, percentages, means, and standard deviations were computed to present the data clearly and concisely. inferential statistics were employed to determine differences in advance care planning self-efficacy and professional quality of life among medical-surgical nurses based on demographic characteristics. ANOVA, were used to examine potential differences between demographic groups. To identify the relationship between advance care planning self-efficacy and professional quality of life among medical-surgical nurses. Correlation analysis, using common coefficients Pearson R was conducted to assess the strength and direction of the relationship between these variables. The statistical analyses were performed using SPSS version 29 to ensure accurate and reliable results. A significance level of $p < 0.05$ was set a priori to determine the statistical significance of findings. The results were interpreted and discussed in relation to the research objectives, providing valuable insights into the factors associated with advance care planning self-efficacy and professional quality of life among medical-surgical nurses.

3. Findings and Discussion

3.1. Results:

Table 1. Demographic characteristics of the respondents.

	M	*SD*
Age	25.67	3.158
Years of Working in the Current Unit	2.68	1.020
	n	*%*
Sex		
Male	44	10.45%
Female	377	89.55%
Highest Educational Attainment		
Bachelor's Degree	127	30.17%
Master's Degree	224	53.21%
Doctorate Degree	70	16.63%
Position Title		
Nurse	267	63.42%
Senior Nurse	84	19.95%
Supervisor Nurse	34	8.08%
Deputy Chief Nurse	19	4.51%
Chief Nurse	17	4.04%
Unit or Department		
Emergency Department	72	17.10%
Intensive Care Unit	11	2.61%
Internal Medicine	243	57.72%
Operating Room	5	1.19%
Rehabilitation Medicine	2	0.48%
Surgery	88	20.90%
Type of Employment		
Contract of Service	293	69.60%
Regular	128	30.40%

The average age of respondents is 25.67 years, with a standard deviation of 3.158 years. The respondents have worked in their current unit for an average of 2.68 years, with a standard deviation of 1.020 years. The respondents are predominantly female, with 377 female respondents making

up 89.55% of the total, while males constitute only 10.45%. In terms of educational attainment, the majority of respondents hold a Master's Degree (53.21%), followed by those with a Bachelor's Degree (30.17%), and a smaller percentage with a Doctorate Degree (16.63%). Regarding position titles, the majority are Nurses (63.42%), followed by Senior Nurses (19.95%), with smaller proportions holding the titles of Supervisor Nurse (8.08%), Deputy Chief Nurse (4.51%), and Chief Nurse (4.04%). The largest proportion of respondents work in the Internal Medicine unit (57.72%), with significant representations from the Emergency Department (17.10%) and Surgery (20.90%). Smaller percentages work in the Intensive Care Unit (2.61%), Operating Room (1.19%), and Rehabilitation Medicine (0.48%). Finally, the type of employment is predominantly "Contract of Service", encompassing 69.60% of the respondents, while regular employment accounts for 30.40%.

Table 2.1 Distribution of respondent's rating on Preference Discussion and Evaluation.

	n	*%*
Preference Discussion and Evaluation		
1. Find time to discuss prognosis, preference and care plan with patients.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	52	12.35%
(3) Unsure	160	38.00%
(4) Confident	85	20.19%
(5) Very Confident	124	29.45%
2. Discuss and negotiate individualized care goals and plans with the patient.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	54	12.83%
(3) Unsure	152	36.10%
(4) Confident	95	22.57%
(5) Very Confident	120	28.50%
3. Discuss with the patient how to complete the living will.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	47	11.16%
(3) Unsure	154	36.58%
(4) Confident	93	22.09%
(5) Very Confident	127	30.17%
4. Respond compassionately to the concerns of patients and families.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	60	14.25%
(3) Unsure	153	36.34%
(4) Confident	103	24.47%
(5) Very Confident	105	24.94%
5. Reassess the patient's wishes when a shift in care goals is needed.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	65	15.44%
(3) Unsure	138	32.78%
(4) Confident	85	20.19%
(5) Very Confident	133	31.59%

For the first item, "Find time to discuss prognosis, preference and care plan with patients," a substantial proportion of respondents felt confident (20.19%) or very confident (29.45%), making up nearly half of the respondents. However, 38.00% were unsure. Similarly, for the second item, "Discuss and negotiate individualized care goals and plans with the patient," a combined 51.07% felt confident or very confident, while 36.10% remained unsure. This pattern of high confidence paired with considerable uncertainty continues with the third item, "Discuss with the patient how to complete the living will," where 52.26% of respondents felt confident or very confident, and 36.58% were unsure.

In addressing "Respond compassionately to the concerns of patients and families," confidence levels drop slightly, with 49.41% feeling confident or very confident, but with a higher proportion of respondents being unsure (24.47%) or unconfident (36.34%). The final item, "Reassess the patient's wishes when a shift in care goals is needed," shows the highest confidence levels, with 51.78% of respondents feeling confident or very confident, although 32.78% remain unsure.

Table 2.2 Distribution of respondent's rating on Information Guidance and Disclosure.

	n	*%*
Information Guidance and Disclosure		
1. Provide the information and guidance to help the patient make decisions		
(1) Very Unconfident	0	0.00%
(2) Unconfident	62	14.73%
(3) Unsure	148	35.15%
(4) Confident	97	23.04%
(5) Very Confident	114	27.08%
2. Describe the pros and cons of different life-sustaining care schemes.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	50	11.88%
(3) Unsure	144	34.20%
(4) Confident	98	23.28%
(5) Very Confident	129	30.64%
3. Discuss the existing uncertainty openly with patients.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	55	13.06%
(3) Unsure	153	36.34%
(4) Confident	90	21.38%
(5) Very Confident	123	29.22%
4. Educate patient and clarify any misconceptions on the disease or prognosis.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	49	11.64%
(3) Unsure	155	36.82%
(4) Confident	102	24.23%
(5) Very Confident	115	27.32%
5. Deliver "bad news" to patients and their families.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	54	12.83%
(3) Unsure	154	36.58%
(4) Confident	90	21.38%
(5) Very Confident	123	29.22%

The table 2.2 presents the distribution of respondents' ratings on various aspects of Information Guidance and Disclosure in a healthcare setting. For providing information and guidance to help patients make decisions, the majority of respondents felt confident or very confident, with 23.04% rating themselves as confident and 27.08% as very confident. A significant portion, 35.15%, felt unsure, while a smaller group, 14.73%, felt unconfident, and none felt very unconfident. When it came to describing the pros and cons of different life-sustaining care schemes, confidence levels were higher, with 23.28% confident and 30.64% very confident. However, 34.20% of respondents were unsure, and 11.88%

felt unconfident. Discussing existing uncertainties openly with patients also showed a higher level of confidence, with 21.38% feeling confident and 29.22% very confident. Yet, a notable 36.34% were unsure, and 13.06% were unconfident. In educating patients and clarifying misconceptions about the disease or prognosis, respondents exhibited a similar pattern. About 24.23% felt confident and 27.32% very confident, whereas 36.82% were unsure, and 11.64% unconfident. Finally, in delivering "bad news" to patients and their families, the confidence levels were comparable to other categories, with 21.38% confident and 29.22% very confident. A substantial 36.58% of respondents felt unsure, and 12.83% were unconfident.

Table 2.3 Distribution of respondent's rating on Content Evaluation and Determination.

Content Evaluation and Determination		
1. Determine how much the patient wants to know about the prognosis.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	46	10.93%
(3) Unsure	149	35.39%
(4) Confident	99	23.52%
(5) Very Confident	127	30.17%
2. Determine the level of involvement the patient wants in decision-making.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	49	11.64%
(3) Unsure	161	38.24%
(4) Confident	94	22.33%
(5) Very Confident	117	27.79%
3. Determine the surrogate decision-maker the patient wants.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	59	14.01%
(3) Unsure	149	35.39%
(4) Confident	91	21.62%
(5) Very Confident	122	28.98%
4. Determine the patient's specific wishes for the type of care.		
(1) Very Unconfident	0	0.00%
(2) Unconfident	59	14.01%
(3) Unsure	153	36.34%
(4) Confident	79	18.76%
(5) Very Confident	130	30.88%
5. Determine when there should be a shift in care goals		
(1) Very Unconfident	0	0.00%
(2) Unconfident	51	12.11%
(3) Unsure	139	33.02%
(4) Confident	109	25.89%
(5) Very Confident	122	28.98%
6. Ensure that patient's care preferences will be honored at your work		
(1) Very Unconfident	0	0.00%
(2) Unconfident	53	12.59%
(3) Unsure	146	34.68%
(4) Confident	89	21.14%
(5) Very Confident	133	31.59%

The table 2.3 illustrates the distribution of respondents' ratings on their ability to evaluate and determine patient preferences regarding care, covering several specific areas. For determining how much the patient wants to know about their prognosis, a significant portion of respondents felt confident or very confident, with 23.52% rating themselves as confident and 30.17% as very confident. A notable 35.39% were unsure, while 10.93% felt unconfident, and none felt very unconfident. In assessing the level of involvement the patient wants in decision-making, 22.33% felt confident and 27.79% very confident. However, 38.24% of respondents were unsure, and 11.64% felt unconfident, indicating some uncertainty in this area. Regarding the determination of the surrogate decision-maker preferred by the patient, confidence levels were slightly lower, with 21.62% confident and 28.98% very confident. A significant 35.39% were unsure, and 14.01% felt unconfident. When it came to determining the patient's specific wishes for the type of care, 18.76% of respondents felt confident and 30.88% very confident. A considerable 36.34% were unsure, and 14.01% felt unconfident, showing a higher level of uncertainty in this aspect. For determining when there should be a shift in care goals, 25.89% felt confident and 28.98% very confident. Meanwhile, 33.02% were unsure, and 12.11% felt unconfident, indicating a moderate level of confidence but significant uncertainty. Lastly, ensuring that patient care preferences would be honored at work showed that 21.14% felt confident and 31.59% very confident. However, 34.68% of respondents were unsure, and 12.59% felt unconfident.

The table 2.4 presents the mean total and standard deviation of nurse respondents' self-efficacy in advance care planning across three key domains: Preference Discussion and Evaluation, Information Guidance and Disclosure, and Content Evaluation and Determination. In the domain of Preference Discussion and Evaluation, the mean self-efficacy score was 18.33 with a standard deviation of 3.961. For Information Guidance and Disclosure, the mean score was slightly higher at 18.36, with a standard deviation of 3.945. The highest mean self-efficacy score was observed in the Content Evaluation and Determination domain, with a mean of 22.15 and a standard deviation of 4.638.

Table 2.4 Mean Total and Standard Deviation of Advance Care Planning Self-Efficacy of Nurse Respondents

		M	*SD*
Preference Discussion and Evaluation		18.33	3.961
Information Guidance and Disclosure		18.36	3.945
Content Evaluation and Determination		22.15	4.638

The table 3.1 presents the distribution of nurse respondents' satisfaction levels based on various aspects of their Professional Quality of Life (ProQOL). Regarding satisfaction from caring for people, a significant majority of nurses reported high satisfaction, with 34.20% responding "Often" and 44.89% "Very Often." None of the respondents selected "Never" or "Rarely," indicating a generally high level of satisfaction in this area. When asked if they feel invigorated after working with those they care for, responses were more varied. About 36.82% said "Often" and 30.64% "Very Often," while a considerable 32.54% said "Sometimes," suggesting that while many nurses feel invigorated, a notable proportion only occasionally experience this feeling. In terms of overall job satisfaction as a nurse, 34.68% responded "Often" and 46.32% "Very Often," with no respondents choosing "Never" or "Rarely." This indicates a high level of job satisfaction among the respondents. Regarding their ability to keep up

with caring techniques and protocols, 25.18% felt "Often" satisfied and 29.22% "Very Often" satisfied. However, 13.06% responded "Never" and 13.78% "Rarely," indicating some dissatisfaction in this area, likely due to the fast-paced nature of medical advancements. The satisfaction derived from their work overall was high, with 38.24% indicating they "Often" felt satisfied and 43.47% "Very Often." None chose "Never" or "Rarely," showing a strong sense of fulfillment from their work. When it comes to having happy thoughts and feelings about their care for patients, 24.47% reported feeling this way "Often" and 29.93% "Very Often." Yet, 16.15% felt this way "Never" and 11.88% "Rarely," suggesting a mix of positive and negative emotional experiences. A belief in making a difference through their work was also high, with 37.05% responding "Often" and 42.28% "Very Often." No respondents chose "Never" or "Rarely," demonstrating a strong sense of purpose. Pride in their ability to care was expressed by 40.86% "Often" and 42.28% "Very Often," with no responses of "Never" or "Rarely," reflecting a high degree of professional pride. Feeling successful as a nurse was affirmed by 40.14% who felt this "Often" and 39.43% "Very Often," with no "Never" or "Rarely" responses, indicating a strong sense of achievement. Finally, happiness in choosing their profession was high, with 33.49% "Often" and 45.37% "Very Often" feeling content, while no respondents chose "Never" or "Rarely," underscoring a generally positive sentiment about their career choice.

The data in Table 3.2 reveals insights into the burnout and professional quality of life (ProQOL) among nurse respondents. The overwhelming majority (99.29%) reported that they are happy very often, with a negligible 0.71% indicating they are often happy and none reporting lower frequencies of happiness. A significant proportion (83.14%) feel very often connected to others, while 16.86% often feel this way. Interestingly, 75.30% of nurses never lose sleep over traumatic experiences of those they care for, but 19.48% sometimes do, highlighting an area of concern. A large majority (89.31%) never feel trapped by their job, while 10.59% rarely feel this way.

Regarding sustaining beliefs, 81.47% very often hold beliefs that sustain them, with 18.53% often holding such beliefs. Notably, 100% of respondents feel they are the person they always wanted to be. Despite this, 93.59% never feel worn out by their work, although 6.18% sometimes do, and 10.93% often feel this way. Similarly, 93.59% never feel overwhelmed by their workload, with 6.41% sometimes feeling overwhelmed.

Moreover, 100% of the respondents reported never feeling bogged down by the system, indicating strong resilience or satisfaction with their work environment. Finally, 83.37% very often see themselves as caring persons, 15.20% often see themselves this way, and 1.43% sometimes do.

Table 3.1 Number and Proportion of Satisfaction ProQOL of Nurse Respondents

	n	*%*
3. I get satisfaction from being able to [help] people.		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	88	20.90%
(4) Often	144	34.20%
(5) Very Often	189	44.89%
6. I feel invigorated after working with those I [help].		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	137	32.54%
(4) Often	155	36.82%
(5) Very Often	129	30.64%
12. I like my work as a [helper].		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	80	19.00%
(4) Often	146	34.68%
(5) Very Often	195	46.32%
16. I am pleased with how I am able to keep up with [helping] techniques and protocols.		
(1) Never	55	13.06%
(2) Rarely	58	13.78%
(3) Sometimes	79	18.76%
(4) Often	106	25.18%
(5) Very Often	123	29.22%
18. My work makes me feel satisfied.		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	77	18.29%
(4) Often	161	38.24%
(5) Very Often	183	43.47%
20. I have happy thoughts and feelings about those I [help] and how I could help them.		
(1) Never	68	16.15%
(2) Rarely	50	11.88%
(3) Sometimes	74	17.58%
(4) Often	103	24.47%
(5) Very Often	126	29.93%
22. I believe I can make a difference through my work.		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	87	20.67%
(4) Often	156	37.05%
(5) Very Often	178	42.28%
24. I am proud of what I can do to [help].		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	71	16.86%
(4) Often	172	40.86%
(5) Very Often	178	42.28%
27. I have thoughts that I am a "success" as a [helper].		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	86	20.43%
(4) Often	169	40.14%
(5) Very Often	166	39.43%
30. I am happy that I chose to do this work.		
(1) Never	0	0.00%
(2) Rarely	0	0.00%
(3) Sometimes	89	21.14%
(4) Often	141	33.49%
(5) Very Often	191	45.37%

Table 3.2 Number and Proportion of Burnout ProQOL of Nurse Respondents

	n	*%*
1. I am happy.		
(1) Very Often	418	99.29%
(2) Often	3	0.71%
(3) Sometimes	0	0.00%
(4) Rarely	0	0.00%
(5) Never	0	0.00%
4. I feel connected to others.		
(1) Very Often	350	83.14%
(2) Often	71	16.86%
(3) Sometimes	0	0.00%
(4) Rarely	0	0.00%
(5) Never	0	0.00%
8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I [help].		
(1) Never	317	75.30%
(2) Rarely	22	5.23%
(3) Sometimes	82	19.48%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
10. I feel trapped by my job as a [helper].		
(1) Never	376	89.31%
(2) Rarely	45	10.59%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
15. I have beliefs that sustain me		
(1) Very Often	343	81.47%
(2) Often	78	18.53%
(3) Sometimes	0	0.00%
(4) Rarely	0	0.00%
(5) Never	0	0.00%
17. I am the person I always wanted to be.		
(1) Very Often	421	100.00%
(2) Often	0	0.00%
(3) Sometimes	0	0.00%
(4) Rarely	0	0.00%
(5) Never	0	0.00%
19. I feel worn out because of my work as a [helper].		
(1) Never	349	93.59%
(2) Rarely	0	0.00%
(3) Sometimes	26	6.18%
(4) Often	46	10.93%
(5) Very Often	0	0.00%
21. I feel overwhelmed because my workload seems endless.		
(1) Never	394	93.59%
(2) Rarely	0	0.00%
(3) Sometimes	0	0.00%
(4) Often	27	6.41%
(5) Very Often	0	0.00%
26. I feel "bogged down" by the system.		
(1) Never	421	100.00%
(2) Rarely	0	0.00%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
29. I am a very caring person.		
(1) Very Often	351	83.37%
(2) Often	64	15.20%
(3) Sometimes	0	1.43%
(4) Rarely	0	0.00%
(5) Never	0	0.00%

Table 3.3 Number and Proportion of Secondary Traumatic Stress ProQOL of Nurse Respondents

	n	*%*
2. I am preoccupied with more than one person I [help].		
(1) Never	421	100.00%
(2) Rarely	0	0.00%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
5. I jump or am startled by unexpected sounds.		
(1) Never	370	87.29%
(2) Rarely	51	12.11%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
7. I find it difficult to separate my personal life from my life as a [helper].		
(1) Never	299	71.02%
(2) Rarely	30	7.13%
(3) Sometimes	92	21.85%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
9. I think that I might have been affected by the traumatic stress of those I [help].		
(1) Never	413	98.10%
(2) Rarely	7	1.66%
(3) Sometimes	1	0.24%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
11. Because of my [helping], I have felt "on edge" about various things.		
(1) Never	343	81.47%
(2) Rarely	78	18.53%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
13. I feel depressed because of the traumatic experiences of the people I [help].		
(1) Never	421	100.00%
(2) Rarely	0	0.00%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
14. I feel as though I am experiencing the trauma of someone I have [helped].		
(1) Never	337	80.05%
(2) Rarely	0	0.00%
(3) Sometimes	28	6.65%
(4) Often	56	13.30%
(5) Very Often	0	0.00%
23. I avoid certain activities or situations because they remind me of frightening experiences of the people I [help].		
(1) Never	392	93.11%
(2) Rarely	1	0.24%
(3) Sometimes	0	0.00%
(4) Often	28	6.65%
(5) Very Often	0	0.00%
25. As a result of my [helping], I have intrusive, frightening thoughts.		
(1) Never	421	100.00%
(2) Rarely	0	0.00%
(3) Sometimes	0	0.00%
(4) Often	0	0.00%
(5) Very Often	0	0.00%
28. I can't recall important parts of my work with trauma victims.		
(1) Never	336	79.81%
(2) Rarely	70	16.63%
(3) Sometimes	15	3.56%
(4) Often	0	0.00%
(5) Very Often	0	0.00%

The data in Table 3.3 explores the prevalence of secondary traumatic stress (STS) among nurse respondents, revealing several key patterns. Remarkably, 100% of the respondents report never being preoccupied with more than one person they care for, indicating an absence of this particular stressor. A majority (87.29%) never jump or startle at unexpected sounds, though 12.11% experience this rarely.

The ability to separate personal and professional life shows variability: 71.02% never find it difficult, 7.13% rarely struggle, and 21.85% sometimes face this challenge. The impact of traumatic stress on the nurses is minimal, with 98.10% never feeling affected and only 0.24% sometimes feeling the impact. Feelings of being "on edge" are not widespread, with 81.47% never experiencing this and 18.53% rarely feeling this way.

Depression due to patients' traumatic experiences is non-existent among respondents, with 100% never feeling this way. However, some nurses do feel as though they are experiencing the trauma of someone they have cared for: 80.05% never, 6.65% sometimes, and 13.30% often. Avoidance of activities or situations reminding them of frightening experiences is rare, with 93.11% never avoiding, 0.24% rarely avoiding, and 6.65% sometimes avoiding such activities.

Intrusive, frightening thoughts as a result of their helping role are absent in all respondents, with 100% reporting never experiencing these thoughts. Memory recall related to their work with trauma victims is generally intact: 79.81% never have difficulty recalling, 16.63% rarely have difficulty, and 3.56% sometimes struggle.

The table 3.4 provides the mean total scores and standard deviations for nurse respondents' self-efficacy in three dimensions related to their Professional Quality of Life (ProQOL): Satisfaction, Burnout, and Secondary Traumatic Stress. In terms of Satisfaction, the mean score is 29.27, with a standard deviation of 7.647. For Burnout, the mean score is notably low at 11.49, with a standard deviation of 1.146. Regarding Secondary Traumatic Stress, the mean score is 11.43, with a standard deviation of 1.093.

Table 3.4 Mean Total and Standard Deviation of Advance Care Planning Self-Efficacy of Nurse Respondents

		M	*SD*
Satisfaction		29.27	7.647
Burnout		11.49	1.146
Secondary Traumatic Stress		11.43	1.093

The results of the t-tests presented in Table 4.1 compare various scores between male and female nurse respondents as well as between two different employment modes. For sex differences, the average scores between males and females for preference discussion and evaluation (Males: 18.45, Females: 18.31), information guidance and disclosure (Males: 18.52, Females: 18.34), content evaluation and determination (Males: 22.50, Females: 22.11), satisfaction (Males: 29.50, Females: 29.24), burnout (Males: 11.48, Females: 11.49), and secondary traumatic stress (Males: 11.34, Females: 11.45) do not show significant differences. The p-values for these comparisons (ranging from 0.548 to 0.930) indicate that none of the differences are statistically significant, suggesting that male and female nurses have similar experiences across these measures.

Similarly, when comparing the scores between two employment modes, no significant differences are observed. The average scores for preference discussion and evaluation (Mode 1: 18.43, Mode 2: 18.09), information guidance and disclosure (Mode 1: 18.44, Mode 2: 18.19), content evaluation and determination (Mode 1: 22.21, Mode 2: 22.01), satisfaction (Mode 1: 29.45, Mode 2: 28.87), burnout (Mode 1: 11.54, Mode 2: 11.38), and secondary traumatic stress (Mode 1: 11.43, Mode 2: 11.45) also do not present significant differences. The p-values for these comparisons (ranging from 0.168 to 0.819) indicate no statistically significant variations based on employment mode.

Table 4.1 T-tests for Sex and Employment Mode

	Male		Female		*t*	*p*
	M	*SD*	*M*	*SD*		
Average preference discussion and evaluation score	18.45	4.168	18.31	0.203	0.22	0.823
Average information guidance and disclosure score	18.52	3.991	18.34	3.944	0.29	0.774
Average content evaluation and determination score	22.50	4.516	22.11	4.656	0.53	0.595
Average satisfaction score	29.50	7.816	29.244	7.637	0.21	0.834
Average burnout score	11.48	1.045	11.49	1.158	-0.09	0.930
Average secondary traumatic stress score	11.34	0.987	11.45	1.105	-0.60	0.548
	Employment Mode (1)		Employment Mode (2)			
Average preference discussion and evaluation score	18.43	3.996	18.09	0.343	0.83	0.408
Average information guidance and disclosure score	18.44	3.961	18.19	3.918	0.60	0.551
Average content evaluation and determination score	22.21	4.715	22.01	4.471	0.41	0.684
Average satisfaction score	29.45	7.470	28.867	8.053	0.72	0.475
Average burnout score	11.54	1.124	11.38	1.191	1.38	0.168
Average secondary traumatic stress score	11.43	1.075	11.45	1.36	-0.23	0.819

The ANOVA results in Table 4.2 examine the impact of educational attainment on various scores among nurse respondents, comparing those with a Bachelor's degree, Master's degree, and Doctorate degree. The analysis reveals no significant differences across the different educational levels for any of the measures.

For the average preference discussion and evaluation score, respondents with a Bachelor's degree (M = 18.86, SD = 3.963), Master's degree (M = 18.04, SD = 3.987), and Doctorate degree (M = 18.27, SD = 3.826) show similar results, with an F-value of 1.72 and a p-value of 0.180, indicating no significant difference. Similarly, the average information guidance and disclosure scores are quite close across the educational groups (Bachelor's: M = 18.60, SD = 3.824; Master's: M = 18.23, SD = 4.028; Doctorate: M = 18.34, SD = 3.926), with an F-value of 0.35 and a p-value of 0.705, further supporting the lack of significant differences.

The average content evaluation and determination score is

also consistent across the groups (Bachelor's: M = 22.50, SD = 4.344; Master's: M = 21.89, SD = 4.825; Doctorate: M = 22.31, SD = 4.557) with an F-value of 0.76 and a p-value of 0.470. Satisfaction scores are similarly aligned (Bachelor's: M = 29.86, SD = 7.575; Master's: M = 28.90, SD = 7.772; Doctorate: M = 29.40, SD = 7.406) with an F-value of 0.65 and a p-value of 0.522.

Burnout scores (Bachelor's: M = 11.50, SD = 1.201; Master's: M = 11.52, SD = 1.112; Doctorate: M = 11.40, SD = 1.160) show no significant differences, as indicated by an F-value of 0.28 and a p-value of 0.754. Lastly, the average secondary traumatic stress scores are similar across educational levels (Bachelor's: M = 11.54, SD = 1.075; Master's: M = 11.39, SD = 1.107; Doctorate: M = 11.37, SD = 1.079) with an F-value of 0.91 and a p-value of 0.404.

Table 4.2 ANOVA for Educational Attainment

Educational Attainment	Bachelor's Degree		Master's Degree		Doctorate Degree		F	p
	M	SD	M	SD	M	SD		
Average preference discussion and evaluation score	18.86	3.963	18.04	3.987	18.27	3.826	1.72	0.180
Average information guidance and disclosure score	18.60	3.824	18.23	4.028	18.34	3.926	0.35	0.705
Average content evaluation and determination score	22.50	4.344	21.89	4.825	22.31	4.557	0.76	0.470
Average satisfaction score	29.86	7.575	28.90	7.772	29.40	7.406	0.65	0.522
Average burnout score	11.50	1.201	11.52	1.112	11.40	1.160	0.28	0.754
Average secondary traumatic stress score	11.54	1.075	11.39	1.107	11.37	1.079	0.91	0.404

The ANOVA results in Table 4.3 analyze the influence of technical title on various scores among nurse respondents, specifically comparing nurses, senior nurses, supervisor nurses, deputy chief nurses, and chief nurses. The analysis shows no significant differences across the technical titles for any of the measured scores.

For the average preference discussion and evaluation score, the means are very close across the different technical titles (Nurses: M = 18.37, SD = 3.931; Senior Nurses: M = 18.08, SD = 4.128; Supervisor Nurses: M = 18.85, SD = 4.179; Deputy Chief Nurses: M = 18.05, SD = 4.378; Chief Nurses: M = 18.11, SD = 2.804), with an F-value of 0.27 and a p-value of 0.900, indicating no significant differences. Similarly, the average information guidance and disclosure scores are similar (Nurses: M = 18.33, SD = 3.915; Senior Nurses: M = 18.19, SD = 4.073; Supervisor Nurses: M = 19.08, SD = 4.003; Deputy Chief Nurses: M = 18.42, SD = 4.611; Chief Nurses: M = 18.24, SD = 3.052), with an F-value of 0.34 and a p-value of 0.853.

The average content evaluation and determination scores also show no significant differences among the groups (Nurses: M = 22.22, SD = 4.626; Senior Nurses: M = 21.79, SD = 4.698; Supervisor Nurses: M = 22.59, SD = 4.704; Deputy Chief Nurses: M = 21.79, SD = 4.479; Chief Nurses: M = 22.24, SD = 4.982), with an F-value of 0.25 and a p-value of 0.909. Satisfaction scores are nearly identical across the titles (Nurses: M = 29.20, SD = 7.569; Senior Nurses: M = 29.14, SD = 7.752; Supervisor Nurses: M = 29.50, SD = 7.833; Deputy Chief Nurses: M = 29.63, SD = 8.883; Chief Nurses: M = 30.12, SD = 7.373), with an F-value of 0.08 and a p-value of 0.988.

The average burnout scores (Nurses: M = 11.47, SD = 1.161; Senior Nurses: M = 11.54, SD = 1.166; Supervisor Nurses: M = 11.65, SD = 1.098; Deputy Chief Nurses: M = 11.37, SD = 1.165; Chief Nurses: M = 11.41, SD = 0.939) show no significant differences, as indicated by an F-value of 0.28 and a p-value of 0.890. Finally, the average secondary traumatic stress scores are also consistent across the groups (Nurses: M = 11.43, SD = 1.065; Senior Nurses: M = 11.33, SD = 1.090; Supervisor Nurses: M = 11.53, SD = 1.285; Deputy Chief Nurses: M = 11.74, SD = 1.098; Chief Nurses: M = 11.47, SD = 1.179), with an F-value of 0.61 and a p-value of 0.655.

Table 4.3 ANOVA for Technical Title

Technical Title	Nurse		Senior Nurse		Supervisor Nurse		Deputy Chief Nurse		Chief Nurse		*F*	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
Average preference discussion and evaluation score	18.37	3.931	18.08	4.128	18.85	4.179	18.05	4.378	18.11	2.804	0.27	0.900
Average information guidance and disclosure score	18.33	3.915	18.19	4.073	19.08	4.003	18.42	4.611	18.24	3.052	0.34	0.853
Average content evaluation and determination score	22.22	4.626	21.79	4.698	22.59	4.704	21.79	4.479	22.24	4.982	0.25	0.909
Average satisfaction score	29.20	7.569	29.14	7.752	29.50	7.833	29.63	8.883	30.12	7.373	0.08	0.988
Average burnout score	11.47	1.161	11.54	1.166	11.65	1.098	11.37	1.165	11.41	0.939	0.28	0.890
Average secondary traumatic stress score	11.43	1.065	11.33	1.090	11.53	1.285	11.74	1.098	11.47	1.179	0.61	0.655

The ANOVA results in Table 4.4 examine the influence of different units or departments on various scores among nurse respondents. The departments considered are the Emergency Department, Intensive Care Unit (ICU), Internal Medicine, Operating Room, Rehabilitation Medicine, and Surgery. The analysis indicates no significant differences across these departments for any of the measured scores.

For the average preference discussion and evaluation score, the means are relatively close across departments (Emergency: M = 18.24, SD = 4.126; ICU: M = 17.73, SD = 3.101; Internal Medicine: M = 18.12, SD = 3.932; Operating Room: M = 18.40, SD = 4.037; Rehabilitation: M = 18.50, SD = 4.950; Surgery: M = 19.03, SD = 4.001), with an F-value of 0.75 and a p-value of 0.589, indicating no significant differences. Similarly, the average information guidance and disclosure scores do not differ significantly (Emergency: M = 17.92, SD

= 3.885; ICU: M = 18.82, SD = 4.285; Internal Medicine: M = 18.21, SD = 3.944; Operating Room: M = 20.20, SD = 4.207; Rehabilitation: M = 17.50, SD = 3.536; Surgery: M = 19.01, SD = 3.946), with an F-value of 1.00 and a p-value of 0.416.

The average content evaluation and determination scores are also similar across departments (Emergency: M = 21.76, SD = 5.003; ICU: M = 22.91, SD = 4.784; Internal Medicine: M = 22.021, SD = 4.641; Operating Room: M = 24.20, SD = 4.868; Rehabilitation: M = 22.50, SD = 6.364; Surgery: M = 22.59, SD = 4.317), with an F-value of 0.55 and a p-value of 0.738. Satisfaction scores (Emergency: M = 29.00, SD = 7.600; ICU: M = 28.82, SD = 8.448; Internal Medicine: M = 28.85, SD = 7.890; Operating Room: M = 31.80, SD = 8.044; Rehabilitation: M = 29.50, SD = 10.607; Surgery: M = 30.568, SD = 6.748) are also not significantly different, as indicated by an F-value of 0.79 and a p-value of 0.558.

Burnout scores show some variability (Emergency: M = 11.60, SD = 1.195; ICU: M = 10.91, SD = 0.831; Internal Medicine: M = 11.56, SD = 1.153; Operating Room: M = 12.00, SD = 1.00; Rehabilitation: M = 10.50, SD = 0.707; Surgery: M = 11.28, SD = 1.093), but the F-value of 1.96 and p-value of 0.084 suggest that these differences are not statistically significant. Lastly, secondary traumatic stress scores are consistent across departments (Emergency: M = 11.43, SD = 1.098; ICU: M = 11.27, SD = 1.009; Internal Medicine: M = 11.40, SD = 1.084; Operating Room: M = 11.00, SD = 1.225; Rehabilitation: M = 11.00, SD = 0.000; Surgery: M = 11.59, SD = 1.131), with an F-value of 0.68 and a p-value of 0.640.

Table 4.4 ANOVA for Unit/Department

	Emergency Department		Intensive Care Unit		Internal Medicine		Operating Room		Rehabilitation Medicine		Surgery		*F*	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
Average preference discussion and evaluation score	18.24	4.126	17.73	3.101	18.12	3.932	18.40	4.037	18.50	4.950	19.03	4.001	0.75	0.589
Average information guidance and disclosure score	17.92	3.885	18.82	4.285	18.21	3.944	20.20	4.207	17.50	3.536	19.01	3.946	1.00	0.416
Average content evaluation and determination score	21.76	5.003	22.91	4.784	22.021	4.641	24.20	4.868	22.50	6.364	22.59	4.317	0.55	0.738
Average satisfaction score	29.00	7.600	28.82	8.448	28.85	7.890	31.80	8.044	29.50	10.607	30.568	6.748	0.79	0.558
Average burnout score	11.60	1.195	10.91	0.831	11.56	1.153	12.00	1.00	10.50	0.707	11.28	1.093	1.96	0.084
Average secondary traumatic stress score	11.43	1.098	11.27	1.009	11.40	1.084	11.00	1.225	11.00	0.000	11.59	1.131	0.68	0.640

The ANOVA results in Table 4.5 examine the impact of the number of working years in the current position on various scores among nurse respondents. The working years are categorized into five groups: 1 year, 2 years, 3 years, 4 years, and 5 years. The analysis indicates no significant differences across these groups for any of the measured scores.

For the average preference discussion and evaluation score, the means are close across different working years (1 year: M = 18.58, SD = 4.021; 2 years: M = 17.94, SD = 3.752; 3 years: M = 18.66, SD = 3.970; 4 years: M = 17.93, SD = 4.234; 5 years: M = 18.16, SD = 4.337), with an F-value of 0.79 and a p-value of 0.530, indicating no significant differences. Similarly, the average information guidance and disclosure scores do not differ significantly (1 year: M = 18.52, SD = 4.080; 2 years: M = 18.42, SD = 3.804; 3 years: M = 18.43, SD = 4.028; 4 years: M = 17.76, SD = 3.905; 5 years: M = 17.76, SD = 3.905), with an F-value of 0.31 and a p-value of 0.872.

The average content evaluation and determination scores are also similar across the groups (1 year: M = 22.46, SD = 4.642; 2 years: M = 22.25, SD = 4.702; 3 years: M = 22.11, SD = 4.576; 4 years: M = 21.61, SD = 4.514; 5 years: M = 22.24, SD = 5.230), with an F-value of 0.23 and a p-value of 0.920. Satisfaction scores (1 year: M = 29.42, SD = 7.971; 2 years: M = 29.74, SD = 7.242; 3 years: M = 29.44, SD = 7.550; 4 years: M = 28.20, SD = 8.307; 5 years: M = 27.40, SD = 8.495) show no significant differences, as indicated by an F-value of 0.75 and a p-value of 0.5615.

Burnout scores are consistent across the different groups (1 year: M = 11.38, SD = 1.105; 2 years: M = 11.46, SD = 1.154; 3 years: M = 11.54, SD = 1.159; 4 years: M = 11.52, SD = 1.110; 5 years: M = 11.48, SD = 1.229), with an F-value of 0.24 and a p-value of 0.916. Finally, the average secondary traumatic stress scores (1 year: M = 11.67, SD = 1.080; 2 years: M = 11.52, SD = 1.104; 3 years: M = 11.29, SD = 1.078; 4 years: M = 11.49, SD = 1.110; 5 years: M = 11.40, SD = 1.080) show no significant differences, with an F-value of 1.55 and a p-value of 0.187.

Table 4.5 ANOVA for Working Years in Current Position

	1		2		3		4		5		*F*	*p*
	M	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*		
Average preference discussion and evaluation score	18.58	4.021	17.94	3.752	18.66	3.970	17.93	4.234	18.16	4.337	0.79	0.530
Average information guidance and disclosure score	18.52	4.080	18.42	3.804	18.43	4.028	17.76	3.905	17.76	3.905	0.31	0.872
Average content evaluation and determination score	22.46	4.642	22.25	4.702	22.11	4.576	21.61	4.514	22.24	5.230	0.23	0.920
Average satisfaction score	29.42	7.971	29.74	7.242	29.44	7.550	28.20	8.307	27.40	8.495	0.75	0.5615
Average burnout score	11.38	1.105	11.46	1.154	11.54	1.159	11.52	1.110	11.48	1.229	0.24	0.916
Average secondary traumatic stress score	11.67	1.080	11.52	1.104	11.29	1.078	11.49	1.110	11.40	1.080	1.55	0.187

The correlation analysis results in Table 5 show the relationships between different scores among nurse respondents, including preference discussion and evaluation, information guidance and disclosure, content evaluation and determination, satisfaction, burnout, and secondary traumatic stress.

There are strong positive correlations observed between preference discussion and evaluation, information guidance and disclosure, content evaluation and determination, and satisfaction scores, with correlation coefficients ranging from 0.81 to 0.85, all significant at $p < .001$. This suggests that nurses who report higher scores in one aspect of their professional quality of life are likely to report higher scores in other related aspects as well.

However, when examining burnout and secondary traumatic stress scores, weak or negligible correlations are observed with the other measures. Burnout and secondary traumatic stress show minimal correlations with preference discussion and evaluation, information guidance and disclosure, content evaluation and determination, and satisfaction scores, ranging from -0.07 to 0.04, and from -0.05 to 0.04, respectively. These correlations are not statistically significant, suggesting that the experience of burnout and secondary traumatic stress may be somewhat independent of other aspects of professional quality of life measured in this study.

Table 5. Correlation analysis result.

	n	M	SD	1	2	3	4	5
1. Preference discussion and evaluation score	421	18.33	3.961	-				
2. Information guidance and disclosure score	421	18.36	3.945	.82***	-			
3. Content evaluation and determination score	421	22.15	4.638	.83***	.85***	-		
4. Satisfaction score	421	29.27	7.647	.81***	.83***	.83***	-	
5. Burnout score	421	11.49	1.146	-0.04	-0.07	-0.04	-0.03	-
6. Secondary traumatic stress score	421	11.43	1.093	0.03	0.02	0.04	-0.02	-0.05

*p < .05. **p < .01. ***p <.001.

3.2. Discussion

Compassion satisfaction is a critical aspect of healthcare that influences both patient outcomes and the well-being of healthcare providers (Xie et al., 2021). The findings of the study conducted on medical-surgical nurses in China indicate that these nurses experience a moderate level of satisfaction in terms of compassion satisfaction. This implies that they take pride in their work and derive some joy from caring for their patients. When medical-surgical nurses are able to provide compassionate care, patients are more likely to feel heard, understood, and cared for, which can lead to improved health outcomes and increased patient satisfaction (Cao et al., 2021). Additionally, compassion satisfaction can also have a positive impact on nurses' job satisfaction and burnout rates (Cao et al., 2021; Yu et al, 2021). A recent investigation conducted by Yu et al (2021) echoes these same sentiments regarding medical-surgical nurses in China, thereby underscoring the idea that the level of compassion satisfaction observed in these healthcare professionals is shaped by a range of influencing factors, thereby necessitating attention from healthcare institutions and leaders in order to cultivate a supportive and nurturing work environment. Moreover, nurses, especially those in high-stress environments like emergency departments and ICUs, including medical and surgical departments experience moderate to high levels of compassion fatigue and burnout (Xie et al, 2021).

In terms of compassion fatigue, the findings showed a high burnout among medical-surgical nurses. Caring for patients with complex medical conditions can be emotionally taxing, especially when dealing with terminal illnesses, patient suffering, and death (Hu et al., 2021; Zhang et al., 2020). The emotional burden associated with these situations can contribute to burnout. In some Chinese healthcare settings, there is a hierarchical structure and a lack of autonomy for nurses, which can lead to feelings of powerlessness and burnout (Ren et al., 2021; Ying et al., 2020). Lack of autonomy and hierarchical structures can diminish nurses' ability to make decisions and exercise their professional judgment, leading to feelings of disempowerment and frustration. Furthermore, this sense of powerlessness can contribute to emotional exhaustion, a key component of burnout, as nurses may feel their efforts and opinions are undervalued or ignored (Ren et al., 2021; Ying et al., 2020). Regarding secondary stress, findings exhibited a moderate level. Secondary stress, also known as secondary traumatic stress, is a significant concern among medical-surgical nurses, particularly in high-stress environments such as those found in China. This stress can impact their mental health, job satisfaction, and overall quality of life, which in turn affects patient care and the healthcare system's efficiency (Li et al., 2021). As mentioned earlier, medical-surgical nurses in China

often face heavy workloads, which can amplify the effects of secondary stress by leaving them with less time for self-care and processing their emotional experiences (Wang et al., 2022). Furthermore, the emotional labor involved in providing compassionate care to patients and their families can be draining, particularly when dealing with complex cases or challenging situations (Li et al., 2021).

Regarding advance care planning self-efficacy, The study's findings indicate that the participants had a high level of self-efficacy in advance care planning, specifically in the areas of preference discussion and evaluation, information guidance and disclosure, and content evaluation and determination. This suggests that the medical-surgical nurses felt confident in their ability to engage in discussions about their preferences for end-of-life care, to seek out and evaluate information about advance care planning, and to make informed decisions about their care. This is a positive finding, as advance care planning is an important aspect of ensuring that individuals' preferences and values are respected in caring all types of patients (Hafid et al., 2020). It is also important for reducing stress and uncertainty for family members and healthcare providers, who may otherwise have to make difficult decisions without knowing the individual's wishes (Yang et al., 2021).

The high level of self-efficacy found in this study may be attributed to a number of factors. For example, the participants may have had previous experiences with advance care planning, either personally or through their work, which gave them the confidence to navigate the process (Lasmarías et al., 2021). Additionally, Organizational support intervention may have played a role in increasing the participants' self-efficacy, by providing them with information and resources to help them feel more confident and capable of engaging in advance care planning (Deng et al., 2020).

Considering the demographic determinants, Compassion satisfaction is moderate and burnout/secondary trauma stress are low across genders, employment modes, educational attainment levels, technical titles, departments, and years of experience. This indicates nurses in general experience moderate fulfillment from their work and low levels of work-related stress. This is resonated the findings of yan et al (2022) with Demographic factors were associated with moderate to high levels of compassion satisfaction among nurses, however, younger nurses often reporting lower levels of satisfaction. Maintaining moderate to high levels of compassion satisfaction while minimizing burnout and stress is important for nurse well-being and retention (Lee et al., 2021). The findings provide a baseline for this hospital. Tracking these measures over time could help identify areas where further support may be warranted to sustain this balance.

A similar pattern is observed for advance care planning self-efficacy - scores are moderate to high regardless of gender, job role, education, workplace or experience. This suggests nurses' system-wide feel capable of engaging patients most specially in the end-of-life care discussions. No significant differences between any groups on these key measures suggests the hospital environment supports nurse well-being and empowerment evenly, without predisposing certain segments to greater risks of self-doubt (Tripodoro et al, 2023). Maintaining moderate to high self-efficacy can help ensure nurses feel empowered and prepared to engage patients in important conversations about their care preferences (Pan et al., 2021). This can lead to better patient outcomes, as medical-surgical nurses are more likely to provide patient-centered care that aligns with the patient's values and goals (Pan et al, 2021; Tripodoro et al, 2023).

In terms of its Relationship, the study's findings suggest a strong positive relationship between advance care planning self-efficacy and compassion satisfaction among medical-surgical nurses. This means that nurses who have a high level of self-efficacy in advance care planning tend to have higher levels of compassion satisfaction in their work. Deng and Colleagues (2020) elucidated that Advance Care Planning (ACP) interventions have been shown to improve the quality of life and decision-making autonomy in caring with patients, which can indirectly influence the professional quality of life of healthcare providers by reducing conflicts and increasing satisfaction. Compassion satisfaction is a critical aspect of nursing, as it refers to the positive emotions and feelings of fulfillment that nurses experience when they are able to provide high-quality care to their patients (Zhang et al., 2022). It is closely linked to job satisfaction, burnout, and turnover, and is a key factor in determining the overall well-being of nurses and the quality of care they provide (Chen et al., 2021).

The positive relationship between advance care planning self-efficacy and compassion satisfaction suggests that nurses who feel confident in their ability to engage in advance care planning are more likely to experience positive emotions and feelings of fulfillment in their work. This may be because advance care planning allows nurses to better understand their patients' preferences and values, and to provide care that is aligned with these preferences (Song et al., 2021). It may also be because advance care planning enables nurses to provide care that is more patient-centered, which can lead to higher levels of patient satisfaction and better health outcomes (Deng et al., 2020). The study's findings have important implications for healthcare organizations and nursing professionals. They suggest that investing in education and support programs that promote advance care planning self-efficacy among nurses may be an effective way to improve nurses' compassion satisfaction and overall well-being. This, in turn, may lead to improved patient outcomes, increased patient satisfaction, and reduced turnover rates among nurses.

On the other hand, the study's findings suggest that there is a minimal correlation between burnout, secondary traumatic stress, and advance care planning self-efficacy scores. The correlations between these variables are not statistically significant, indicating that there is no strong relationship between them. This finding is interesting because it suggests that advance care planning self-efficacy is not heavily influenced by burnout and secondary traumatic stress. This means that even if a medical and surgical nurse is experiencing burnout or secondary traumatic stress, their ability to engage in advance care planning with patients remains intact. One possible explanation for this finding is that advance care planning self-efficacy is a distinct construct that is not heavily influenced by the emotional and psychological factors that contribute to burnout and secondary traumatic stress (Deng et al., 2020). Instead, advance care planning self-efficacy may be more closely tied to knowledge, skills, and attitudes related to advance care, which are not necessarily impacted by burnout and secondary traumatic stress (Gilissen et al., 2020). Another possible explanation is that the sample size of the study was small, and the lack of statistical significance may be due to a lack of power. While burnout and secondary traumatic stress may not

have a significant impact on advance care planning self-efficacy, other factors such as education, training, and clinical experience may play a more important role (Pan et al., 2022). Understanding the factors that contribute to advance care planning self-efficacy is crucial for developing effective interventions to improve the outcome of care.

4. Conclusion

This study sheds light on the important connection between advance care planning self-efficacy and Professional quality of life among medical-surgical nurses in China. The findings suggest that nurses who possess a high level of self-efficacy in advance care planning are more likely to experience a positive professional quality of life. However, no significant relationship was found between advance care planning self-efficacy and burnout or secondary stress trauma. Furthermore, the study's analysis of the nurses' sociodemographic profile indicates that there are no substantial differences in advance care planning self-efficacy, compassion satisfaction, and compassion fatigue based on sociodemographic factors. This suggests that regardless of sociodemographic background, nurses can benefit from this study aimed at improving advance care planning self-efficacy and enhancing the overall professional quality of life. Nursing educators and professionals should prioritize education and training, create a supportive work environment, and develop interventions that aim to enhance nurses' self-efficacy in advance care planning. By doing so, healthcare organizations can promote compassion satisfaction among nurses, improve patient outcomes, and provide high-quality, patient-centered care.

5. Recommendations

The study provides a solid foundation for understanding the relationship between advance care planning self-efficacy and Professional quality of life among medical-surgical nurses. Further exploration of potential mitigating or exacerbating factors through qualitative research may offer deeper insights beyond these demographic variables. Understanding what helps nurses experience meaning and resilience despite challenges could guide initiatives to optimize working conditions. Limitations include its cross-sectional nature. Longitudinal research examining within-subject changes is needed to make stronger claims. Generalizability may also be limited to similar hospital contexts. Future studies could explore additional factors that may influence these relationships and investigate specific interventions that can effectively enhance advance care planning self-efficacy among nurses. By addressing these areas, the healthcare industry can continue to improve the well-being and job satisfaction of its nursing workforce.

Conflict of Interest

The researchers declare no conflict of interest in this work. It was also acknowledged that there was no sponsorship involved in conducting the study.

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