Investigation and Analysis of Factors Influencing the Quality of Community Nursing Services in Laishan District, Yantai City

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Abstract: *Objective:* The purpose of this study is to conduct an in-depth investigation and analysis of the factors affecting the quality of community nursing services in Laishan District, Yantai City, and provide suggestions for improving the quality of the services. *Method:* The community nursing services in Laishan District, Yantai City were investigated through questionnaires and on-site observations. *Result:* The content of nursing services was correlated with the professional titles of the staff. The guidance given to patients and caregivers was significantly correlated with the educational level of community nursing personnel. Therefore, this indicates that the professional titles and educational backgrounds of the community nursing personnel have a significant impact on the quality of service provided. *Conclusion:* The role of professional title evaluation can be optimized, further enhancing the educational level of nurses in surrounding communities, optimizing service content and methods, etc., in order to improve the quality of community nursing services in the region.

Keywords: Laishan District; Community nursing; Service quality; Influencing factors

1. Introduction

As society develops and the population ages, the demand for community nursing services increases. As a relatively developed community, the quality of community nursing services in the Laishan District of Yantai City to some extent reflects the development level and the quality of life in the area [1]. Therefore, this study aims to investigate and analyze the factors affecting the quality of community nursing services in Laishan District, Yantai City, in order to provide a theoretical basis and practical guidance for improving the quality of community nursing services in the area.

2. Method and data

2.1. Method

Several methods were used to investigate the influencing factors of community nursing service quality in Laishan District, Yantai City

(1) Questionnaire survey

A questionnaire survey was designed for relevant aspects of community nursing services (including nursing staff, patients and their families, management personnel, etc.), covering the following aspects: educational background, training status, and work experience of nursing staff.

(2) Feedback from patients and their families regarding nursing services

The aspects included in the feedback from patients and their families regarding the nursing services were as follows: facilities, equipment, and resources of community nursing centers; the execution of service tasks and standard operations; the effectiveness of communication and teamwork; assessment of emergency response capabilities; other factors that may affect service quality.

(3) Visiting community nursing centers

On-site investigations were performed by visiting nursing centers for relevant research, along with reviewing literature, reports, and statistical data, to understand the history and development trends of community nursing services and provide background information for the survey.

(4) Data analysis

Statistical analysis was performed on the questionnaire data, including descriptive statistics and correlation analysis, to identify the relationships and trends between influencing factors. Medical experts, nurses, social workers, and other related professionals were invited to evaluate the situation of community nursing services and provide suggestions to improve the quality of services.

2.2. Data

In 2023, 64 nursing patients, family members, and other stakeholders from Laishan District, Yantai were selected as the survey subjects of this study. Taking into account the impact of community nurses' demographic data and service content options, the following results were obtained.

3. Result

Table 1. Demographic Statistics of Nursing Personnel in a Community in Laishan District

Category	Item	Frequency	Percentage (%)
Gender	Female	45	70.31
	Male	19	29.69
Age	25–34	22	34.38
	35–45	12	18.75
	< 25	18	28.13
	> 45	12	18.75
Level of position	Junior	30	46.88
	Intermediate	25	39.06
	Senior	9	14.06

Table 1. (continued)

Category	Item	Frequency	Percentage (%)
Qualification	Polytechnic school	6	9.38
	Junior college	32	50.00
	Undergraduate	19	29.69
	Master	7	10.94
Experience in community nursing	0–4 years	31	48.44
	5–9 years	24	37.50
	≥ 10years	9	14.06
Total		64	100.0

From **Table 1**, it can be seen that most of the nurses in this community were women, accounting for 70.31%. In terms of age distribution, there were relatively more nurses within the age range of 25–34 years old in our sample (34.38%). In terms of level of position, there were more junior nurses in our sample (46.88%). More than 50% of the participants were "degree holders. In terms of experience in community nursing, most of them had 0–4 years of experience in community nursing (48.44%), and those with 5–9 years of experience accounted for 37.50%. In short, it can be concluded that the nurses in a selected community of Laishan District, Yantai City were mostly women, and most of them had less experience in community nursing and were of lower educational background and job positions.

Table 2. Analysis of factors influencing the content of nursing services in a community in Laishan District, Yantai City

Ccategory	Vital sign monitoring		Placement of operational materials		Psychological Care Assessment		Nursing operation process		Basic nursing services	
	β	P	β	P	β	P	β	P	β	P
Gender	0.064	0.614	0.270*	0.031	0.054	0.674	0.097	0.448	0.193	0.126
Age	-0.002	0.987	-0.175	0.168	0.001	0.996	-0.225	0.074	-0.151	0.234
Level of position	-0.302*	0.030	-0.302*	0.015	0.303*	0.015	0.275*	0.028	0.376**	0.002
Qualification	0.057	0.655	-0.227	0.072	0.077	0.548	-0.181	0.152	-0.060	0.639
Seniority	0.025	0.842	-0.093	0.465	0.045	0.725	-0.137	0.280	-0.011	0.933

Note: *$P < 0.05$, **$P < 0.01$

Table 2 shows that the level of position was related to five service contents, including vital sign monitoring, placement of operational materials, psychological nursing evaluation, nursing operation procedures, and basic nursing services. There was a negative correlation between vital sign monitoring and placement of operational materials. The level of position showed the most significant correlation with basic nursing services ($P < 0.01$). This indicates that professional titles have strong constraints on the above five service contents. The professional title, being a mandatory criterion for community service personnel, was highly attractive to them. The five aspects of nursing service content in a community in Laishan District, Yantai City, were mainly driven by the promotion of professional titles and played an important role, which also had a positive promoting effect.

Table 3. Analysis of factors affecting other nursing services in a community in Laishan District, Yantai City

Category	Patient guidance		Caregiver guidance		Knowledge awareness rate	
	β	P	β	P	β	P
Gender	0.073	0.564	0.031	0.809	0.008	0.949
Age	-0.178	0.160	-0.256*	0.041	0.252*	0.045
Level of position	-0.061	0.633	-0.123	0.333	-0.002	-0.989
Qualification	0.248*	0.048	0.279*	0.026	0.061	0.634
Seniority	-0.136	0.284	-0.243	0.053	0.122	0.338

Note: *$P < 0.05$, **$P < 0.01$

As shown in **Table 3**, through correlation analysis between other service indicators and demographic factors in a community in Laishan District, Yantai City, it can be seen that there is a correlation between patient and caregiver guidance and the qualifications of the nurses ($P < 0.01$). This is because nurses have to have a certain level of medical and nursing knowledge in order to provide basic health care, health education, and guidance. The higher the educational level of nursing staff, the better their level of knowledge and skills [2].

4. Discussion

Formal professional title evaluation should be promoted to enhance personnel quality and training. This is because the professional quality and training of community nursing staff directly affect the quality of the services. The evaluation can include assessments of educational background, training experience, and professional certifications.

The educational level of community service personnel in Laishan District, Yantai, should be improved, and also the health guidance process for patients or caregivers and other standard procedures. Clear health guidance processes and smooth nursing procedures are crucial to ensuring service quality. The nursing procedures and patient guidance can be evaluated based on their transparency, operability, and compliance with industry standards.

By conducting a satisfaction survey on patients receiving community nursing services, their evaluation and feedback on service quality and identifying areas for improvement can be understood [3].

The community nursing center should establish a continuous quality improvement mechanism, including regular evaluations, feedback loops, etc., to ensure the continuous improvement of the quality of services [4].

5. Conclusion

Through a comprehensive investigation and analysis, it can be concluded that the quality of nursing services in a community in Laishan District, Yantai City is mainly influenced by the educational level and the job positions of the community service personnel. Several suggestions were given to improve the quality of community nursing services in Laishan District, Yantai City. At the same time, further in-depth research and analysis of the impact of specific factors can be conducted based on the actual situation to develop targeted improvement measures. Professional title evaluation can be used as a way to motivate the staff to improve their capabilities. Research and analysis can be done on the needs of community residents' patients or caregivers so that the service content and methods can be optimized [5] to improve the quality of community nursing services in the region.

Disclosure statement

The authors declare no conflict of interest.

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