

Analysis on the Influence of Programmed Harmonized Nursing Combined with Hierarchical Management on Nursing Quality and Nursing Satisfaction in Health Management Center

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Abstract: *Objective:* To investigate the impact of programmed harmonious nursing combined with hierarchical management on nursing quality and satisfaction in a health management center. *Methods:* A total of 100 patients who received care at this health management center from January 2024 to January 2025 were selected as subjects. Using a random number table method, they were divided into an observation group (n=50) and a control group (n=50). The control group followed traditional methods, while the observation group integrated programmed harmonious nursing with hierarchical management. Comparative analysis was conducted on nursing quality scores, adverse event occurrence rates, and patient satisfaction between the two groups. *Results:* The observation group showed significantly improved nursing quality scores ($P < 0.05$) and markedly reduced incidence of adverse events ($P < 0.05$), with statistically significant differences compared to pre-treatment conditions ($P < 0.05$). *Conclusion:* The combination of hierarchical management and programmed harmonious nursing demonstrates effectiveness in enhancing medical service quality, reducing adverse reactions, and improving patient satisfaction—a method worthy of promotion.

Keywords: Programmed harmonious nursing; Hierarchical management; Health management center; Nursing quality; Nursing satisfaction

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1. Introduction

Health service institutions have played an increasingly vital role in disease prevention, health promotion, and chronic disease management. Beyond providing health screenings, these organizations deliver comprehensive services including health risk assessments, lifestyle interventions, and follow-up care. The quality of their medical services directly impacts patient satisfaction and the effectiveness of health management programs. However, issues such as non-standardized procedures, unclear accountability, and inefficient staffing have resulted in subpar service quality, severe complications, and diminished patient satisfaction. To elevate overall hospital service

standards, developing a scientifically validated nursing management approach has become imperative. Currently, the “harmonious coordination” and “tiered” nursing models have emerged as key research focuses in clinical practice.

Project-coordinated nursing emphasizes patient-centered care through standardized protocols that ensure seamless workflow execution, thereby enhancing service quality and efficiency. The core philosophy of “harmony” advocates for nurse-patient communication and trust-building, reflecting humanistic care. Tiered management leverages nurses’ expertise by assigning roles to different competency levels, maximizing their professional impact. Research demonstrates that this model reduces operational chaos, strengthens nurses’ professional identity, and boosts work motivation ^[1]. Moreover, with China’s healthcare system evolving, patients now demand not only treatment but also holistic, personalized health management throughout their entire life cycle. Health management institutions serve as the primary platform for hospital healthcare administration, where their operational effectiveness significantly impacts patient care.

Traditional medical management approaches, characterized by fragmentation and lack of standardization, have resulted in fragmented service delivery that fails to meet patients’ diverse needs. The question of how to effectively enhance patient satisfaction remains a crucial subject worthy of research and discussion. This study selected 100 patients who received nursing services at our health management center from January 2024 to January 2025 as subjects, comparing the efficacy of stratified management with traditional nursing practices. The findings provide valuable insights for health service centers to develop rational nursing service plans and offer reference value for quality improvement in similar hospitals ^[2].

2. General data and methods

2.1. General information

This study enrolled 100 patients who received care at the health management center from January 2024 to January 2025 as subjects (Table 1). The inclusion criteria were: (1) Age ≥ 18 years; (2) Consciousness and ability to communicate with nurses and complete questionnaires; (3) Willingness to participate and signed consent forms.

Meanwhile, the exclusion criteria included: (1) Significant psychological/cognitive impairment; (2) Severe organ damage (heart, liver, kidneys); (3) Withdrawal or incomplete follow-up during trial. Patients were randomly divided into two groups of 50 each for comparison. No significant differences were observed in basic data such as age, gender, and disease type between the groups ($P > 0.05$) ^[3].

Table 1. Comparison of baseline data between the two groups

Metric	Age (years)	Gender (male/female)	Hypertension (example)	Diabetes mellitus (cases)	Hyperlipidemia (cases)	Other chronic conditions (cases)
Observation group (n = 50)	42.3 ± 10.5	26/24	12	10	15	13
Control group (n = 50)	41.8 ± 11.2	25/25	11	9	16	14
t/χ^2 price	0.23	0.04	0.1	0.11	0.06	0.07
P price	0.82	0.84	0.75	0.74	0.81	0.79

2.2. Methodology

The control group adopted a standard nursing model without hierarchical divisions, operating under traditional

shift scheduling. Key nursing measures included: (1) Basic care services such as vital sign monitoring and physical examinations; (2) Health education programs covering disease prevention, treatment, and lifestyle guidance; (3) Postoperative follow-up through regular phone calls and WeChat updates to track patients' health status. This management approach exhibited issues including non-standardized procedures, ambiguous role assignments, overlapping responsibilities, and missed diagnostic evaluations ^[4].

The observation group implemented a structured harmonious nursing approach with hierarchical management while maintaining standard care protocols. Establishing standardized nursing procedures to ensure procedural continuity and standardization is crucial for achieving this harmonious nursing model. First, during hospitalization, designated nurses conduct physical examinations and assess patients' health status. Second, nurses strictly follow protocols when performing health checks, including blood pressure measurement, blood sampling, and electrocardiogram (ECG) tests to ensure accurate results. Additionally, nurses actively communicate with patients to understand their needs and concerns, providing tailored healthcare guidance. For example, hypertension patients receive detailed instructions on proper diet and exercise regimens, while diabetic patients receive focused attention on blood sugar monitoring and medication adherence. After completing physical examinations, nurses implement planned follow-ups using mobile devices or online platforms to evaluate patients' conditions and propose corresponding strategies ^[5].

2.3. Observation indicators

- (1) Nursing quality score.
- (2) Incidence of adverse nursing events.
- (3) Nursing satisfaction.

2.4. Statistical methods

The results were analyzed by SPSS26.0 statistical software. The count data were expressed as $x \pm s$ and tested by *t*-test, while the measurement data were expressed as *n* (%) and tested by chi-square test. $P < 0.05$ indicated that there was a significant difference ^[6].

3. Results

3.1. Nursing quality score

The observation group was significantly higher than the control group in all dimensions and the total score ($P < 0.05$), as shown in Table 2.

Table 2. Comparison of nursing quality scores between the two groups

Dimension	Standard nursing practice	Communication skills	Emergency response capacity	Effect of health education	Patient feedback	Total points
Observation group (n = 50)	28.5 ± 1.2	19.2 ± 0.8	18.8 ± 0.9	19.0 ± 0.7	9.5 ± 0.5	94.0 ± 3.5
Control group (n = 50)	25.1 ± 2.1	16.3 ± 1.5	15.7 ± 1.8	16.5 ± 1.3	8.2 ± 0.9	81.8 ± 5.2
<i>t</i> price	9.87	11.23	10.56	12.14	8.91	14.2
<i>P</i> price	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

3.2. Incidence of adverse nursing events

The overall incidence of adverse events in the observation group was significantly lower than that in the control group, as shown in **Table 3**.

Table 3. Comparison of the incidence of nursing adverse events between the two groups

Type of adverse event	Operate miss	Specimen confusion	Patient complaint	Falling incident	Overall incidence
Observation group (n = 50)	0(0%)	0(0%)	1(2%)	0(0%)	1(2%)
Control group (n = 50)	3(6%)	2(4%)	4(8%)	1(2%)	10(20%)
χ^2 price	3.13	2.04	2.38	1.01	8.27
<i>P</i> price	0.077	0.153	0.123	0.315	0.004

3.3. Nursing satisfaction score

The observation group was significantly better than the control group in all satisfaction scores and total scores ($P < 0.05$), as shown in **Table 4**.

Table 4. Comparison of nursing satisfaction scores between the two groups

Metric	Attitude towards care	Service efficiency	Effect of health education	Environmental comfort	Overall satisfaction	Total points
Observation group (n = 50)	23.8 ± 1.1	22.6 ± 0.9	23.5 ± 1.0	12.1 ± 0.6	12.6 ± 0.5	94.6 ± 3.8
Control group (n = 50)	20.5 ± 1.8	19.3 ± 1.6	20.0 ± 1.7	10.8 ± 1.0	10.6 ± 1.2	81.2 ± 5.6
<i>t</i> price	10.89	12.34	12.78	8.21	10.45	14.87
<i>P</i> price	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05

3.4. Distribution of patient satisfaction levels

The proportion of “very satisfied” in the observation group was significantly higher than that in the control group, as shown in **Table 5**.

Table 5. Comparison of satisfaction level distribution between the two groups

Level of satisfaction	Very satisfied (≥ 90 points)	Satisfied (80–89)	Average (70–79)	Not satisfied (< 70 points)
Observation group (n = 50)	38(76%)	10(20%)	2(4%)	0(0%)
Control group (n = 50)	15(30%)	20(40%)	10(20%)	5(10%)
χ^2 price	21.33	4.76	6.06	5.26
<i>P</i> price	< 0.05	0.029	0.014	0.022

4. Discussion

The results of this study show that the combination of programmed harmonious nursing and hierarchical management can significantly improve the nursing quality of health management centers, reduce the incidence of adverse nursing events, and improve patient satisfaction. The advantages of this model are mainly reflected in the following aspects.

First, standardized work procedures have reduced nurses' discretionary actions in their duties, enhancing both the standardization and effectiveness of nursing practices. In health management centers, nurses' responsibilities encompass pre-examination guidance, clinical collaboration during assessments, and post-examination follow-ups. Through systematic procedural management, every step is meticulously executed without gaps or errors. Before conducting physical examinations, nurses provide detailed patient instructions to prevent psychological preparation deficiencies that might compromise test results. During examinations, strict adherence to established protocols ensures measurement accuracy. Comprehensive post-examination tracking enables timely diagnosis and treatment. This holistic, standardized nursing management approach not only boosts operational efficiency but also strengthens professional consistency and scientific rigor. The implementation of a tiered management model maximizes workforce efficiency across different nursing levels. In China, traditional nurse management methods often resulted in ambiguous role definitions, leading to uneven workload distribution and resource waste. The new hierarchical system clarifies responsibilities among three nursing tiers: junior nurses handle basic care, mid-level nurses manage challenging health education programs, while senior nurses focus on quality control and team development. This stratified management approach effectively enhances both nursing productivity and professional growth. For N0-level nursing staff, after training and evaluation, they can gradually advance to N1 level to assume greater responsibilities. Meanwhile, N2-level nurses can enhance their leadership skills and professional competence through quality control training. This career development pathway effectively motivates nurses' enthusiasm while reducing occupational burnout ^[7].

Currently, China's healthcare management institutions primarily serve "healthy individuals" and "sub-healthy populations," who demand higher medical quality. During surgical procedures, errors or improper patient communication can lead to dissatisfaction. Process control helps reduce human errors—standardizing blood collection processes minimizes sample contamination risks, for instance. Implementing a hierarchical system significantly enhances nurses' vigilance: N2-level nurses regularly review patient records to identify and correct potential issues. Effective communication during care also helps prevent conflicts caused by misunderstandings or information asymmetry. Patient satisfaction depends not only on the doctors' skills but also on the nurses' attitudes and service details.

5. Conclusion

In conclusion, the integration of programmatic harmonious nursing with hierarchical management can significantly enhance medical service quality, reduce medical accidents, and improve patient satisfaction. This model has demonstrated effective implementation in practice, making it a method worthy of vigorous promotion in primary care hospitals. Subsequent research could also focus on other cases to further optimize the efficiency of the entire nursing system.

Disclosure statement

The author declares no conflict of interest.

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