




# A Multi-Center Study on the Implementation and Challenges of Nursing Three-Level Ward Rounds in Tertiary Hospitals in Shanxi Province

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**Background:** The “Key Points of the Core System of Medical Quality and Safety” (hereinafter referred to as the “Key Points”) was promulgated by the National Health Commission of China in 2018, requiring that nursing ward rounds should be carried out with reference to the three-level ward round system; In 2020 and 2022 editions of the “Evaluation Standards for Tertiary Hospitals”, which were implemented in China, required that nursing ward rounds should be carried out with reference to the “Key Points”. Additionally, the Action Plan for Comprehensively Improving Medical Quality (2023–2025) also mentions the need to improve the quality of three-level ward rounds. However, there are no detailed guidelines regarding implementing “Nursing Three-level Ward Rounds”.

**Purpose:** This study aimed to investigate the current situation of nursing three-level ward rounds in tertiary hospitals after the promulgation of the “Key Points of the Core System of Medical Quality and Safety” to provide insights and guidelines regarding relevant standards, so as to better implement of the requirements of “nursing ward rounds” in the “Evaluation Standards for Tertiary Hospitals” and “improving the quality of three-level ward rounds” in the “Action Plan”.

**Methods:** A multi-center study was conducted in February 2024, including all tertiary public hospitals in the Shanxi Province, China. A questionnaire survey using the self-designed “[Questionnaire on the Implementation of Nursing Three-level Ward Rounds](#)” was carried out. The questionnaire included the basic information of the hospital and the implementation of the three-level (namely I, II, and III) rounds (including “five aspects”: ward round personnel, object, content, frequency, and record), which is expressed by quantity and composition ratio. Next is the text analysis method. First, the “five aspects” of the hospital that filled in the questionnaire survey with “nursing three-level ward rounds have been carried out” were assessed. Second, the five aspects of each hospital were assessed for consistency with the “Nursing Three-level Ward Rounds System” (hereinafter referred to as the “System”) of their respective hospitals. Third, the consistency of the “System” of the hospital with the “Key Points” was assessed. The results of the analysis of the former are expressed in terms of quantity and composition ratio; the results of the latter two were analyzed using Fisher’s exact test method to compare any differences.

**Results:** Notably, 14 of the 67 tertiary public hospitals (20.9%) carried out nursing three-level ward rounds. There were 4–10 situations in the five aspects of I, II, and III ward rounds filled in by the hospitals. The five aspects of the I, II, III ward rounds in 14 hospitals were significantly comparable with the “System”, which, in turn, was comparable with the “Key Points” ( $P < 0.05$ ).

**Conclusion:** Not all tertiary public hospitals in the Shanxi Province have not all carried out nursing three-level ward rounds. Furthermore, the five aspects of the hospitals that carried out nursing three-level ward rounds were not entirely consistent in terms of ward round personnel, object, content, frequency, and record. The filling in of the nursing three-level ward rounds carried out by the hospitals is inconsistent with the respective “System”; the “System” of the hospital is not in line with the “Key Points”.

**Impact on Nursing Work:** Nursing administrators should be aware of the newly issued norms and requirements in their workplace, and revise the relevant systems in accordance with the norms and requirements in a timely manner. Additionally, the revision of the

system should cover the core requirements of the norms and be practicable. The system should be supervised to ensure that 100% of the implementation is in accordance with the system.

**Keywords:** nursing three-level ward rounds, tertiary hospitals, core system, current status of ward round, multi-center

## Introduction

Rounds refer to the activities of medical staff in the ward to assess the effects of treatment on patients and develop and adjust treatment plans.<sup>1</sup> The “Three-level Physician Rounds System” is regarded as one of the core systems in China,<sup>2</sup> and medical institutions and their medical staff are required to comply with it to guarantee the quality of medical care and the safety of patients in diagnosis and treatment activities.<sup>2</sup> In 2016, the National Health Commission (NHC) of China promulgated the “Measures for the Management of Medical Quality”<sup>3</sup> (hereinafter referred to as the “Measures”), which changed the previous “Three-level Physician Ward Rounds System” to the “Three-level Ward Rounds System” with only change being the removal of the word “physician”. The “Key Points of the Core System of Medical Quality and Safety”<sup>2</sup> (hereinafter referred to as the “Key Points”) promulgated in 2018 interprets the “Three-level Ward Rounds System” as follows: each patient is required to receive three levels of physician rounds during hospitalization and nursing ward rounds should be carried out with reference to the “Three-level Ward Rounds System”. However, detailed guidelines on implementing the nursing three-level ward rounds have not been elucidated.

Both, the 2020<sup>4</sup> and 2022<sup>5</sup> editions of the “Evaluation Standards for Tertiary Hospitals” implemented in China require that nursing rounds should be carried out following the “Key Points”, and the Shanxi Province was assigned a score of 0.3 points, accounting for 2.1% of the total score of the nursing component. However, the lack of detailed requirements for conducting nursing three-level ward rounds results in confusion among most administrators regarding implementing this provision and among accreditation experts for judging, assigning points, and providing guidance on the implementation.

Additionally, the Action Plan for Comprehensively Improving Medical Quality (2023–2025)<sup>6</sup> mentions the need to improve the quality of three-level ward rounds to ensure that the frequency, form, and content of clinical departments on patients ward rounds comply with regulations for timely grasping the changes in the conditions of patients and adjusting diagnosis and treatment plans accordingly. However, there is no detailed description of the frequency, form, and content of ward rounds, and nursing managers urgently need clear guidance on the implementation of the action plan.

Presently, there are various types of nursing rounds in China, mainly including nursing administrative rounds, business rounds, and teaching rounds.<sup>7</sup> Nursing administrative rounds<sup>7</sup> include supervision and inspection to ensure the quality and safety of nursing work and improve patient satisfaction. Nursing business rounds<sup>8</sup> include in-depth discussions among nursing staff on critical (difficult) cases for problems solving. Nursing teaching rounds<sup>9</sup> mainly focus on imparting theoretical knowledge, practical skills, and practical experience in new nurses. However, these ward rounds do not meet the requirements of the “Key Points” for each inpatient to achieve a three-level personnel round. Ward rounds in foreign countries include nursing grand rounds,<sup>10</sup> where nurses report cases and conduct public discussions to achieve professional growth; nursing management rounds,<sup>11</sup> where nurses check if the care and treatment are in line with the condition of the patient to ensure patient safety and quality of care; and nursing teaching rounds,<sup>12</sup> where nurses impart nursing expertise and guide nursing students to combine professional knowledge and clinical practice.

Text analysis refers to the analyses and interpretation of textual contents, such as text and video, to investigate the meaning of texts and refine opinions.<sup>13</sup>

This study aimed to understand the current situation of nursing three-level ward rounds in tertiary hospitals and provide ideas and directions for standardizing the implementation of nursing three-level ward rounds. It consists of two parts: first, a survey of 67 tertiary public hospitals in the Shanxi Province was carried out to understand the clinical implementation of nursing three-level ward rounds. Next, the text analysis of the questionnaire filled, along with the assessment for the nursing three-level ward round system (hereinafter referred to as the “System”) of each hospital and the “Key Points”, was performed. And “the five aspects”: ward rounds personnel, objects, content, frequency, and records were extracted from the three, one is to describe the five aspects of the questionnaire, the second is to analyze whether the filling is consistent with the “System”, and the third is to analyze whether the “System” meets the requirements of the “Key Points”.

## Materials and Methodologies

### Materials

A questionnaire survey was carried out in February 2024, on the current status of the development of nursing three-level ward rounds among the tertiary hospitals in the Shanxi Province.

Questionnaire survey part: inclusion criteria was as follows: hospitals in the Shanxi Province that have been rated as “tertiary hospitals” by the Shanxi Provincial Health Management Commission; exclusion criteria was as follows: private hospitals.

Text analysis section: inclusion criteria was as follows: hospitals that fill in the survey as “carried out”; exclusion criteria was as follows: hospitals that refuse to provide the full text of the “System”.

### Methods

#### Questionnaire Survey

To investigate the clinical implementation of the nursing three-level ward rounds a self-designed, two-part questionnaire “[Questionnaire on the Implementation of Nursing Three-level Ward Rounds](#)” was adopted. The first part was a general information survey and included the basic situation of the hospital and the implementation of nursing three-level ward rounds, with a total of five choice questions. The second part included the clinical implementation of nursing third-level ward rounds, including the five aspects of the three-level ward rounds (with grades I, II, and III), all of which are fill-in-the-blank questions. The survey content was converted into a questionnaire star and was distributed as follows: a list of tertiary public hospitals (including the name of the hospital and the name and contact information of the director of the nursing department) was obtained from the Shanxi Provincial Health Commission; the director of the nursing department was contacted, and the purpose of the study was explained; all contact persons were added on WeChat; the questionnaire star QR code (including survey purpose and survey content) was distributed; the director of the nursing department sent the QR code of the questionnaire star to the head nurse of any department in the hospital that carries out the nursing three-level ward rounds (because the “System” of the whole hospital is the same, only one copy was filled); and the filled questionnaire was submitted (only when completed completely or when hospitals directly submitted after clicking “Not Carried Out”). A total of 67 questionnaires were returned.

#### Textual Analyses

The full text of the “System” was obtained from the directors of the nursing department of respective hospitals through WeChat, and eight hospitals sent WORD documents, two hospitals sent PDF documents, and four hospitals sent photos of the full text of the “System”. Herein, two nurse managers with more than 5 years of clinical management experience were selected, who marked and sorted out the content of the questionnaire, the “System” and “Key Points” based on the five aspects. If there was a disagreement, a third person with the same qualifications intervened to reach a consensus.

#### Statistical Analyses

The data were imported from the questionnaire star into Excel21, and the Statistical Package for Social Sciences 29.0 software was used for statistical analysis. The general information about the hospital and the implementation of nursing three-level ward rounds were expressed by numbers and composition ratios. The consistency rate of clinical implementation of nursing three-level ward rounds with their respective “Systems” were compared with 100%, and the consistency rate of “Systems” and “Key Points” were compared with 100%, using the Fisher’s exact test method. The threshold of statistical significance was  $P < 0.05$ .

## Results

### General Information on Surveyed Hospitals

In total, 67 tertiary public hospitals in the Shanxi Province were surveyed, and their general information is presented in [Table 1](#).

**Table 1** General Information of Tertiary Hospitals in the Shanxi Province (n=67)

Item	Categorization	Quantities (hospital)	Component ratio (%)
<b>Hospital type</b>	General hospital	39	58.21
	Specialized hospital	28	41.79
<b>Status of implementation</b>	Implemented	14	20.90
	Not implemented	53	79.10
<b>Availability of system</b>	Developed	14	20.90
	Not developed	53	79.10
<b>Organizational learning on the eighteen core systems</b>	Studied	34	50.75
	Not studied	33	49.25
<b>Organizational Learning on the Key Points</b>	Studied	36	53.73
	Not studied	31	46.27

## Implementation of I Level Nursing Ward Rounds

The situation of level I nursing ward rounds in the 14 hospitals that implemented nursing three-level ward rounds is presented in Table 2. There were four types of ward rounds personnel, and “charge nurse” accounted for the highest

**Table 2** Implementation of Nursing Level I Ward Rounds in 14 Hospitals (n=14)

Item	Categorization	Quantities (hospital)	Component ratio (%)
<b>Personal</b>	Charge nurse	10	71.43
	Charge nurse and responsible team leader	1	7.14
	Charge nurse and nurse manager	1	7.14
	Charge nurse, responsible team leader and nurse manager	2	14.29
<b>Object</b>	Patients supervised by charge nurse	5	35.71
	Difficult, critical, newly admitted, and surgical patients	3	21.43
	All patients	5	35.71
	N0 nurse	1	7.14
<b>Content</b>	Implementation of nursing measures and treatment	3	21.43
	Evaluating nursing measures	1	7.14
	Problem-centered approach to solving existing patient problems	2	14.29
	Raising the issue of nursing, evaluating nursing measures and analyzing / discussing	1	7.14
	Accountable holistic nursing	2	14.29
	Hierarchical nursing	1	7.14
	Diseases in the department	1	7.14
	Changes in patients' conditions	1	7.14
	Disease observation, patient management and risk control	1	7.14
	skincare	1	7.14
<b>Frequency</b>	Once a month	1	7.14
	Once a day	1	7.14
	Twice a day and more	1	7.14
	1 per shift	9	64.29
	3–4 times per shift	1	7.14
	Determined by level of care	1	7.14
<b>Record</b>	non-record	2	14.29
	Recorded but location unknown	2	14.29
	Ward round book	3	21.43
	Quality control system	2	14.29
	Nursing record sheets	2	14.29
	Nurse manager's record book of rounds	1	7.14
	Nurse manager quality control management record book	1	7.14
	Whole hospital nursing rounds supervision record sheet	1	7.14

proportion (71.43%). There were four types of ward rounds objects, and “patients supervised by charge nurse” and “all patients” accounted for the highest proportions (each accounting for 35.71%). There were ten types of ward rounds contents, and “implementation of nursing measures and treatment” accounted for the highest proportion (21.43%), There were six types of ward round frequency, and “1 per shift” accounted for the highest proportion (64.29%). There were eight cases of ward rounds records, and “ward round book” accounted for the highest proportion (21.43%).

## Implementation of II Level Nursing Ward Rounds

The situation of level II nursing ward rounds in the 14 hospitals with nursing three-level ward rounds is presented in Table 3. There were five types of ward rounds personnel, and “responsible nursing team leader/ team leader” accounted for the highest proportion (42.86%). There were four types of ward rounds objects, and “difficult, critical, newly admitted, and surgical patients” accounted for the highest proportion (50.00%). There were ten types of ward rounds contents, and “implementation of nursing measures and treatment” accounted for the highest proportion (21.43%). There

**Table 3** Implementation of Nursing Level II Ward Rounds in 14 Hospitals (n=14)

Item	Categorization	Quantities (hospital)	Component ratio (%)
<b>Personal</b>	Responsible nursing team leader/team leader	6	42.86
	Responsible team leader/nurse specialist	3	21.43
	Responsible team leader and quality control team leader	1	7.14
	Charge nurse and nurse manager	3	21.43
	Nurse manager	1	7.14
<b>Object</b>	Patients supervised by charge nurse	1	7.14
	Difficult, critical, newly admitted, and surgical patients	7	50.00
	All patients	5	35.71
	NI nurse	1	7.14
<b>Content</b>	goal-oriented	1	7.14
	Implementation of nursing measures and treatment	3	21.43
	Assessment of nursing safety hazards and potential dangers	1	7.14
	Developing and adapting care programs, solving difficult care problems	2	14.29
	Disease observation, patient management and risk control	1	7.14
	Critical and priority patients	2	14.29
	Accountable holistic nursing	1	7.14
	Hierarchical nursing	1	7.14
	Specialized nursing	1	7.14
	Tube care	1	7.14
<b>Frequency</b>	Once a month	3	21.43
	Twice a week	1	7.14
	Three times a week	2	14.29
	Three or more times a week	1	7.14
	Once a day	4	28.57
	Twice a day.	2	14.29
<b>Record</b>	1 per shift	1	7.14
	non-record	2	14.29
	Recorded but location unknown	2	14.29
	Team leader's logbook	1	7.14
	Nursing record sheets	1	7.14
	Quality control system	2	14.29
	Ward rounds book	3	21.43
	Nurse manager's record book of rounds	1	7.14
Nurse manager quality control management record book	1	7.14	
Whole hospital nursing rounds supervision record sheet	1	7.14	

were seven kinds of cases of ward rounds frequency, and “once a day” accounted for the highest proportion (28.57%). There were nine kinds of cases of ward round records, and “ward rounds book” accounted for the highest proportion (21.43%).

## Implementation of III Level Nursing Ward Rounds

The situation of level III nursing ward rounds in the 14 hospitals with nursing three-level ward rounds is presented in Table 4. There were seven types of ward rounds personnel, and “nurse manager” accounted for the highest proportion (42.86%). There were four types of ward rounds objects, and “difficult, critical, and newly admitted patients” accounted for the highest proportion, (50.00%). There were seven types of ward rounds contents, and “difficult, critical and special complications occurring” accounted for the highest proportion (28.57%). There were nine cases of ward rounds

**Table 4** Implementation of Nursing Level III Ward Rounds in 14 Hospitals (n=14)

Item	Categorization	Quantities (hospital)	Component ratio (%)
<b>Personal</b>	Nurse manager	6	42.86
	Nurse manager/associate chief nurse/chief nurse	2	14.29
	Nurse manager/clinical nurse specialist	2	14.29
	Charge nurse and responsible team leader	1	7.14
	Charge nurse, nurse manager and director of the nursing department	1	7.14
	Nursing department and professional group	1	7.14
	Nursing department and multidisciplinary experts	1	7.14
<b>Object</b>	All patients	5	35.71
	Difficult, critical and newly admitted patients	7	50.00
	Otherwise	1	7.14
<b>Content</b>	N2 nurse	1	7.14
	Implementation of nursing measures and treatment	1	7.14
	Supervision of nursing measures and existing problems	2	14.29
	Assessment of nursing outcomes, treatment progress and potential hazards	1	7.14
	Evaluating care interventions and addressing key existing problems	3	21.43
	Difficult, critical and special complications occurring	4	28.57
	Acute and critical care	2	14.29
<b>Frequency</b>	Disease observation, patient management and risk control	1	7.14
	Once a year	1	7.14
	Once a month	2	14.29
	3–4 times a week	1	7.14
	3 times a week	1	7.14
	2 or more times a week	1	7.14
	2 times a week	1	7.14
	1 times a week	2	14.29
	Once a day and more	2	14.29
	Once a day	3	21.43
<b>Record</b>	Non-record	2	14.29
	Recorded but location unknown	2	14.29
	Nursing record sheets	1	7.14
	Quality control system	2	14.29
	Ward rounds book	3	21.43
	Nurse manager's record book of rounds	1	7.14
	Nurse manager quality control management record book	1	7.14
	Nurse manager's daily priority book	1	7.14
	Whole hospital nursing rounds supervision record sheet	1	7.14

frequency, and “once a day” accounted for the highest proportion (21.43%). There were nine cases of ward rounds records, and “ward rounds book” accounted for the highest proportion (21.43%).

## Analysis of Nursing Three-Level Ward Rounds in the 14 Hospitals

The results of comparison of the clinical implementation of level I, II, and III nursing ward rounds in the 14 hospitals with the “System” of their respective hospitals, the “System” and “Key Points” in terms of ward rounds personnel, objects, content, frequency, and records are presented in Tables 5 and 6. Notably, compared with the “System”, the average  $P < 0.05$ , which is statistically significant, indicated that the implementation was inconsistent with the “System”.

**Table 5** Analysis of Nursing Three-Level Ward Rounds in 14 Hospitals (n=14)

Item		Implement with the “System” is consistent (hospital)	Implement with the “System” is inconsistent (hospital)	p
Level I rounds	Personal	9 (64.3%)	5 (35.7%)	0.041
	Object	7 (50.0%)	7 (50.0%)	0.006
	Content	3 (21.4%)	11 (78.6%)	<0.001
	Frequency	2 (14.3%)	12 (85.7%)	<0.001
	Record	4 (28.6%)	10 (71.4%)	<0.001
Level II rounds	Personal	7 (50.0%)	7 (50.0%)	0.006
	Object	3 (21.4%)	11 (78.6%)	<0.001
	Content	4 (28.6%)	10 (71.4%)	<0.001
	Frequency	1 (7.1%)	13 (92.9%)	<0.001
	Record	5 (35.7%)	9 (64.3%)	<0.001
Level III rounds	Personal	6 (42.9%)	8 (57.1%)	0.002
	Object	6 (42.9%)	8 (57.1%)	0.002
	Content	8 (57.1%)	6 (42.9%)	0.016
	Frequency	1 (7.1%)	13 (92.9%)	<0.001
	Record	7 (50.0%)	7 (50.0%)	0.006

**Notes:** The core system should strictly adhered to 100%. All data are compared to 100%.

**Table 6** Analysis of Nursing Three-Level Ward Rounds in 14 Hospitals (n=14)

Item		The “System” with the “Key Points” is consistent (hospital)	The “System” with the “Key Points” is inconsistent (hospital)	p
Level I rounds	Personal	4 (28.6%)	10 (71.4%)	<0.001
	Object	3 (21.4%)	11 (78.6%)	<0.001
	Content	4 (28.6%)	10 (71.4%)	<0.001
	Frequency	4 (28.6%)	10 (71.4%)	<0.001
	Record	4 (28.6%)	10 (71.4%)	<0.001
Level II rounds	Personal	4 (28.6%)	10 (71.4%)	<0.001
	Object	3 (21.4%)	11 (78.6%)	<0.001
	Content	4 (28.6%)	10 (71.4%)	<0.001
	Frequency	5 (35.7%)	9 (64.3%)	<0.001
	Record	4 (28.6%)	10 (71.4%)	<0.001
Level III rounds	Personal	5 (35.7%)	9 (64.3%)	<0.001
	Object	4 (28.6%)	10 (71.4%)	<0.001
	Content	5 (35.7%)	9 (64.3%)	<0.001
	Frequency	5 (35.7%)	9 (64.3%)	<0.001
	Record	2 (14.3%)	12 (85.7%)	<0.001

**Notes:** The core system should be compliant with the Key Points to 100%. All data are compared to 100%.

Additionally, compared with the “Key Points”, the P of “System” and “Key Points” was  $< 0.05$ , which is statistically significant, indicated that “System” and “Key Points” were inconsistent.

## Discussion

### Not All Tertiary Hospitals in the Shanxi Province Implemented Nursing Three-Level Ward Rounds

Notably, only 20.9% of hospitals carried out nursing three-level ward rounds after the promulgation of the “Key Points”, which does not meet the requirements of the “Key Points” and the Evaluation Standards for Tertiary Hospitals (Table 1).<sup>2,4,5</sup> Different countries adopt different forms of ward rounds to plan and review patients to ensure patient safety.<sup>14–17</sup> The latest version of Measures<sup>3</sup> has been implemented since 2016 in China, in which the original “Three-level Physician Rounds System” was changed to “Three-level Ward Rounds System”,<sup>18</sup> but the content of the two remained same, with no mention of the guidelines to carry out nursing three-level rounds, rendering the change ineffective. Nursing managers may ignore the profound meaning of the change in the name of the system, and only pay attention to the literal meaning of the content of the system. The nursing department pays more attention to the hierarchical care, handover, emergency and critical patient resuscitation, checking, surgical safety verification, critical value reporting, and the medical record management systems.<sup>19</sup> The “Key Points” promulgated by the National Health Commission in April 2018, mentioned that “nursing and pharmacist rounds can be carried out with reference to the above provisions”, and even though the hospitals carried out training, they may not have presented key points in the training, so even if 53.73% of hospitals have trained the “Key Points”, they have not carried out nursing three-level ward rounds. This study provides a reminder to nursing managers, especially nursing departments, to pay attention to the following points: first, read the relevant specifications issued by the superior department verbatim, followed by timely consulting with the authoritative department/personnel to ensure that the understanding is in place, even if subtle changes are found; second, adult training focusing on presenting key points, such as when training on the “Key Points” and the “Measures”, the current revision and the reasons for the revision should be presented so that they can be understood and implemented easily; and third, the system in the hospital should be revised timely after the training to supervise the implementation of the staff. Herein, 53.73% of the hospitals trained the “Key Points”, but only 20.9% of the hospitals implemented nursing three-level ward rounds, and the reason for the disconnection between training and implementation may be that the content of the training is not included in the system, and it is difficult to implement the content of the training. Finally, nursing managers should be good at drawing inference about other case from one instance, the new “Tertiary Hospital Evaluation Standards” issued in 2020,<sup>4</sup> even if they have not paid attention to the promulgation of the “Key Points” and changes in its content early-on, if they have seen the nursing rounds with reference to the Key Points of the core system of Medical Quality and safety in the evaluation standards, they should also carefully consult and implement the “Key Points”.

### The Implementation of Nursing Three Levels Ward Rounds Carried Out in the 14 Hospitals Was Inconsistent

The results presented in Tables 2–4 show that the implemented of nursing three-level ward rounds in hospitals was inconsistent, and the implementation of some hospitals was even inconsistent with the “Key Points”. First, regarding the ward rounds personnel, in some hospitals, the nursing department was used as the rounds personnel for level III ward rounds, which is inconsistent with the core idea of the “Key Points”, which require that “every hospitalized patient must have three levels of medical personnel to carry out ward rounds”, and it is clear that the nursing department cannot meet this requirement. Second, regarding the objects of the ward rounds, requirements in the “Key Points” require that ward rounds should be carried out for all patients, but in some hospitals, the ward rounds are either for difficult and critically ill patients or for nurses. Third, regarding the contents of the ward rounds, in the “Key Points”, the core of the rounds is to “examine and assess the patient, and to analyze the information related to the patient’s disease”, however, some hospitals presented the contents of the ward rounds to be “accountable holistic care”, “graded care” and “specialized care”, which may not be implemented in the ward rounds without specific direction. Fourth, regarding the frequency of ward rounds, in some



hospitals, level I ward rounds were conducted once a month, level II ward rounds were conducted once a month, and level III ward rounds were conducted once a month/year, whereas the average hospitalization day in most hospitals was approximately 10 days,<sup>20</sup> a nursing ward round a month or even once a year would make it impossible for every patient to receive three-level ward rounds during their hospitalization. Fifth, regarding the records of ward rounds, only two hospitals in this survey recorded all the results of the ward rounds in the medical record, whereas the remaining hospitals either did not record them or recorded them in the quality control record book/quality control system or in the ward rounds record book. The “Key Points” require that “the ward rounds records should be reflected in the medical records”. Moreover, in specific work, each hospital or department may develop an implementation system according to its situation, but it should be consistent with the core ideas in the “Key Points”, which include: first, the object of the ward rounds is all patients; second, each patient should be subjected to the three-level ward rounds during the hospitalization period; third, the ward rounds should reflect the three levels of personnel; fourth, the frequency of level I, II, and III ward rounds can satisfy the need for each patient to receive three-level ward rounds during hospitalization even if the frequency of round decreases; and fifth, all the results of ward rounds should be recorded in the medical records.

## The Implementation of Nursing Three-Level Rounds Carried Out in the 14 Hospitals Was Inconsistent with the “System” of Their Respective Hospitals

The results show that the implementation of the 14 hospitals carried out nursing three-level ward rounds was inconsistent with the description in the “System” (Table 5). The nursing three-level ward round system is a core system that requires medical institutions and their medical staff to strictly comply with 100%.<sup>2</sup> The inconsistency between the implementation and the “System” in this study may be because of the following reasons: first, the existing “System” had not been updated timely and could not meet the current status quo; second, the “System” is not practical, and its requirements are too high, which makes it difficult for employees to meet; third, some hospitals copy the “System” of other hospitals, which is inconsistent with the actual situation; fourth, the feasibility of the “System” is not strong, making implementation difficult; fifth, employees do not grasp the content of the “System” and cannot implement it in their workplace; and sixth, improper supervision by the competent department. There are often inconsistencies between the system and the implementation in the workplace, prompting inspections on the implementation of the infectious disease management system,<sup>21</sup> the implementation of the disinfection and isolation system,<sup>22,23</sup> and the implementation rate of the infectious disease management system;<sup>21</sup> therefore, most experts emphasize on “write what you do and do what you write”.<sup>24</sup> To achieve full implementation in accordance with the system, all hospitals need to pay attention to the following points: first, keep abreast of the latest requirements of the superior departments and timely update the system; second, fully investigate and formulate a system based on the characteristics of each hospital; third, learn from the system of other hospitals, but not copy their workflow, as it may lead to inefficiency; fourth, the system should be formulated and implemented in combination with the characteristics of nursing work, such as nurses working in three shifts and needing to be in the ward 24 hours a day; fifth, the system should be consistent with other core systems, such as the “graded nursing system” is the primary core system of nursing, which requires responsible nurses to conduct different frequencies of inspections according to the different levels of conditions and self-care ability of the patient, so the personnel and frequency of I-Level ward rounds should be consistent with the system; sixth, the content of the system should be clear, such as sorting out according to 5W1H<sup>25</sup> to facilitate the implementation by the employees; seventh, after formulating the system, training should be carried out for key points, which can not only save training time but also facilitate employees to master; eighth, the nursing department should assess the mastery of the situation for correct implementation; and ninth, the nursing department should supervise the implementation in a timely manner, correct the deviation of the staff and ensure that all the content can be strictly implemented.

## The Nursing Three-Level Ward Rounds System in the 14 Hospitals was Inconsistent with the “Key Points”

The “System” of 14 hospitals that carried out nursing three-level ward rounds showed inconsistency with the “Key Points” (Table 6). The “Key Points” are an authoritative guide for formulating the system, as it is prepared by the Department of Medical Affairs of the National Health Commission. The reasons for the inconsistency between the “System” and the “Key Points” may be the following: first, most hospitals are led by the Ministry of Medical Affairs in

the implementation and interpretation of the “Key Points”,<sup>26</sup> and the nursing department may not pay attention to the promulgation of the “Key Points”; second, the nursing department may not pay attention to the “Key Points” related to nursing work; third, the nursing department may not properly understand the core idea of the “Key Points”; fourth, the nursing department may not jump out of the existing three types of ward rounds,<sup>7</sup> which have their own emphasis, such as nursing administrative rounds equivalent to quality supervision,<sup>7,11</sup> nursing business rounds to solve difficult and complex cases,<sup>8,10</sup> and nursing teaching rounds for interns,<sup>9,12</sup> all of them do not meet the requirements of the “Key Points”; and fifth, those who formulated the “System” may not be the ones who mastered them, and they may not be reviewed and checked by authoritative personnel after the draft is completed. The nursing department of each hospital should pay attention to the following points when formulating the work system: first, broaden the channels for understanding the policies of the superiors, in addition to receiving the relevant specifications issued by the superiors, proper attention should also be paid to the website of the authority, the content published by the superior department and peers; second, deeply understand the spiritual connotation of the norms and requirements issued by the Medical and Health Department, because the nursing department is the top-level designer of the nursing work of the whole hospital, and the nursing work involves many aspects of the hospital, and understanding the spiritual connotation is convenient for better development/cooperation work; third, proper reading of the document, documents related to the relevance to nursing work should be properly studied and ideas and directions for work may be retrieved from them, such as the National Medical Quality and Safety Improvement Goals continuously released from 2021 to 2024,<sup>27–30</sup> although most of them are medical indicators, almost every goal is related to nursing; fourth, fully grasp the core requirements of higher-level policies and reflect them in the formulation of systems; fifth, formulation of the system by personnel who understand the core requirements of the superior policy; and sixth, inspection by experts to ensure the authority and correctness of the formulated system.

## Conclusion

The results show that only 14 of the 67 tertiary public hospitals in the Shanxi Province carried out nursing three-level ward rounds after the promulgation of the “Key Points”. However, the implementation of nursing three-level ward rounds in the 14 hospitals was not completely consistent and showed inconsistency with the “System” formulated by each hospital, and the “System” of each hospital is inconsistent with the “Key Points”. Nursing managers need to pay attention to the newly promulgated norms and requirements in their workplace, formulate relevant systems according to the norms, and strictly implement various systems. Although there are items with a high percentage in I, II, and III level ward rounds in this study, the items with a high percentage cannot be used as a reference basis for all hospitals. The future investigation needs to focus on formulating the relevant standards for the nursing three-level ward rounds.

## Data Sharing Statement

The data that support the findings of this study are available from the corresponding author upon reasonable request.

## Ethical Approval

This study was approved by the Institutional Review Board of Shanxi Bethune Hospital of China (YXLL-2024-021) and conducted in accordance with the Declaration of Helsinki. All nurses provided informed consent.

## Author Contributions

All authors made a significant contribution to the work reported, whether that is in the conception, study design, execution, acquisition of data, analysis and interpretation, or in all these areas; took part in drafting, revising or critically reviewing the article; gave final approval of the version to be published; have agreed on the journal to which the article has been submitted; and agree to be accountable for all aspects of the work.

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