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The challenges that head nurses confront on financial management today: A qualitative study



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ABSTRACT

Aim: To explore challenges that Chinese head nurses confront on financial management from the perspective of different levels of nursing and non-nursing managers and to provide contemporary nurse managers with suitable supports.

Methods: Eighteen nursing leaders in different levels were divided into two groups: Junior Leadership Group (head nurses) and Senior Leadership Group (nurse coordinator, nurse executive, and vice-president of the hospital). All the subjects were invited to participate in a semi-structured interview. The interviews were audio-taped and transcribed, and data were analyzed using a comparative content approach.

Results: The four following challenges that head nurses confront on financial management practice were identified from the research findings: 1) lack of intrinsic motivation; 2) insufficient training and education on financial management and nursing economics; 3) desires for cross-uniting communication and cooperation; 4) insufficient reference managerial tool.

Conclusions: The confusion confronted by head nurses in Changsha include three aspects: managerial roles, managerial training, and managerial tools. Cooperative management model, evidence-based management training, and data-driven tools will contribute to improving the financial management capacity of nurse managers.

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A new round of health care reform in China was released by the Chinese government in 2009 [1]. The goal of this reform is to establish a system that provides safe, effective, convenient, and affordable services that can satisfy the basic health care needs of the 1.3 billion people [2,3]. Public hospitals in China are expanding clinical services and improving delivery efficiency while controlling costs to keep pace with modernized health care delivery system [4].

Nurses are often seen as one of the largest cost components of any health care system because of their large numbers compared with other staff [5]. According to Shi et al. [6], nursing activity funding accounts for approximately one-third of the total budget of the hospital. Head nurses, who are the leaders of each nursing unit,

control labor costs, which are the largest part of the labor budget of a hospital. Therefore, as middle managers of nurses, the head nurse plays a defining role in achieving cost savings and contributing to the financial stability of hospitals [7]. Consequently, hospital nurses are being increasingly confronted with business administration tasks.

Currently, in the top three general public hospitals (all hospitals are ranked as 1, 2, 3B, and 3A progressively), relevant institutions are going to conduct physician multi-site profession pilot policy (physicians work on medical treatment activities in more than two medical establishments) because of insufficiency in general practitioners and basic medical institution staff [8]. With the advent of doctor multi-sited license, the reform of hospital cost accounting is imperative [9]. Head nurses, as active or key team members involved to deal with financial management, are being increasingly confronted with business administration tasks [10].

In the 1990s, Flarey [11] and Sullivan [12] forecasted that the role and responsibility of the nurse manager will be expanded to confront future developments in nursing and management practice. Financial management and business skills are gradually seen

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as crucial competencies that are necessary to be a successful leader [13–15]. Fennimore et al. [16] reported that frontline managers are often the least prepared to handle these challenges. A considerable amount of research emerged in the early 21st century in the United States, focusing on the nursing financial management component and relevant supports, such as leadership development programs and information system [17].

However, a few studies focused on the perceptions concerning the financial management of the nurse manager population in China. Yuan [18] summarized the roles of the nurse manager in cost accounting ranging from resource manager, charge supervisor, cost inspector, to bonuses member. Zhao [19] reported that a number of nurse managers in China still view financial management as the work of the financial management office. Data, research evidence, and actions are scarce to close the gap with regard to Chinese nurse managers confronted by financial management work; hence, more information is necessary.

In this study, the qualitative methodology is chosen to obtain data from two separate groups, which could provide a comprehensive examination of the issue in a unique cultural context. The aim of this study is to explore the challenges that Chinese head nurses deal with today and provide potential solutions to develop financial competencies for them. The findings of this study are expected to provide evidence for data-driven, evidence-based management tools and training programs in the future.

1. Method

1.1. Research design

The study was a part of a large research project, which collected qualitative and quantitative data on financial management among the nursing and non-nursing administrators who are working in central south China. The financial management practice of frontline head nurses was one of the themes of this large research project. The semi-structured individual interview was used to collect qualitative data.

In Chinese medical system, nursing administrators are divided into three levels: head nurse, nurse coordinator, and nurse executive. Head nurses are the direct managers of units and nursing staff. Nurse coordinators are responsible for several departments, such as the management of surgical departments system. Nurse executives manage the entire nursing work in the hospital.

Participants of the individual interviews were divided into two groups: junior leadership group (J group), which comprised respondents who were head nurses; senior leadership group (S group), which included respondents with the following job titles: nurse coordinator, nurse executive, and vice-president of the hospital. The interviews of the two groups were conducted to obtain the perceptions of financial management from different nursing administration levels.

1.2. Participants

Participants were recruited using purposive sampling, and 18 participants from the top three hospitals of Changsha were identified. The junior leadership group comprised 11 head nurses, numbered from 1 to 11. Meanwhile, the senior leadership group included 3 nurse coordinators, 2 nurse executives, and 2 vice presidents, which were numbered from 12 to 18. The participants were all female with age ranging from 36 to 56. The mean age of the junior group is 42, and the mean age of the senior group is 49. The work time in a leadership position varied from 3 years to 20 years, with a mean 7 years for the J group and 11 years for the S group. The professional education time of the informants varied from 3 years

to 10 years, with a mean of 4.8 years for junior leaders and 7.6 for senior leaders.

1.3. Data collection

Data were collected by an in-depth interview in a two-month period from December 2015 to January 2016.

The participants of the two groups were individually interviewed in the office of their workplace, wherein confidentiality and privacy were ensured, with an alternating cross order (e.g., one participant from the J group, then one participant from the S group, then one participant from the J group). The interviews lasted 30–60 min for the J group and 20–30 min for the S group. Two different semi-structured interview schedules were employed to separately collect data from the J and S groups (see Table 1 for examples of the questions used). During the interview, the investigators adjusted the questions related to the responses of the participants and the information provided by the other group. The interviews were all audio-taped and immediately transcribed.

1.4. Data analysis

Data analysis immediately commenced after the first interview and continuously proceeded with data collection using conventional content analysis [20]. Analytic process (see Fig. 1) is represented as three main phases: preparation, organization, and reporting [21].

In the process of coding, the first author and another investigator independently read and reread the transcriptions to conduct open coding and compared them to come to an agreement of codes. Chinese research literature on financial management are limited; therefore, we followed the inductive approach to develop the categories to describe the phenomenon in a conceptual form [22]. Then, the various codes of the junior nursing leadership group and senior leadership group were compared, and the differences and similarities (concepts) between the two groups were analyzed and sorted into four challenges themes. All the authors participated in this process and discussed the development of the categories and sub-categories. After several modifications, the categories were finally mapped on the conceptual system.

1.5. Ethical considerations

Each participant was provided with an information sheet that explained the objectives and procedures of this study. Written consents were obtained from all participants. They were informed that participating in this study was voluntary and refusing to participate would have no impact on their work and daily life. The anonymity of the participants was maintained by removing all names from our record. All data were locked and only accessed by the researchers.

2. Results

The present report focused on J and S group perceptions on working experiences, viewpoint, and attitude regarding financial management work, and they confronted four challenges: insufficiencies in intrinsic motivation, training and education, cooperation and communication, and reference managerial tool.

2.1. Challenge one: lack of intrinsic motivation

2.1.1. Junior leadership group

Most of the participants in the J group perceived that financial management practice is of great importance in managing a

Table 1
Example questions of individual interviews.

| Example interview questions for junior nursing leaders | Example interview questions for senior nursing and non-nursing leaders |
|--|--|
| *How do you think about financial management competencies of nurse managers? | *How do you and our hospital about economic administration ability of nurse managers? |
| *What contents associated with financial management are involved in your work?(material management/utility bills/human resource/nursing accident control) | *If nurse manager has a high level ability to manage economic, what benefit can this bring? |
| *Do you have some ways to increase revenue/reduce cost? | *What kinds of supports have our hospital provided to nurse managers in economic administration? |
| *How do you think about your ability to manage economic in your department? | *How do you think the level of nursing economic administration ability in you your hospital? Do you have some evaluation system to evaluate the ability of nurse managers? |
| *How do you think about staff nurses' ability to manage economic in your department? | *Is there any need to add Nursing Economics course in the study career of nurses? If necessary, which stage is appropriate? (Non-university tertiary/undergraduate course/postgraduate course/continue education course) |
| *Do you need some help/study in the process of nursing economic administration? If you have chance learn about the course of nursing economics, when do you think is appropriate? (Non-University tertiary/undergraduate course/postgraduate course/continue education course) | *Do you think there it is necessary to set up a full-time stuff to manage/assist economic administration? |

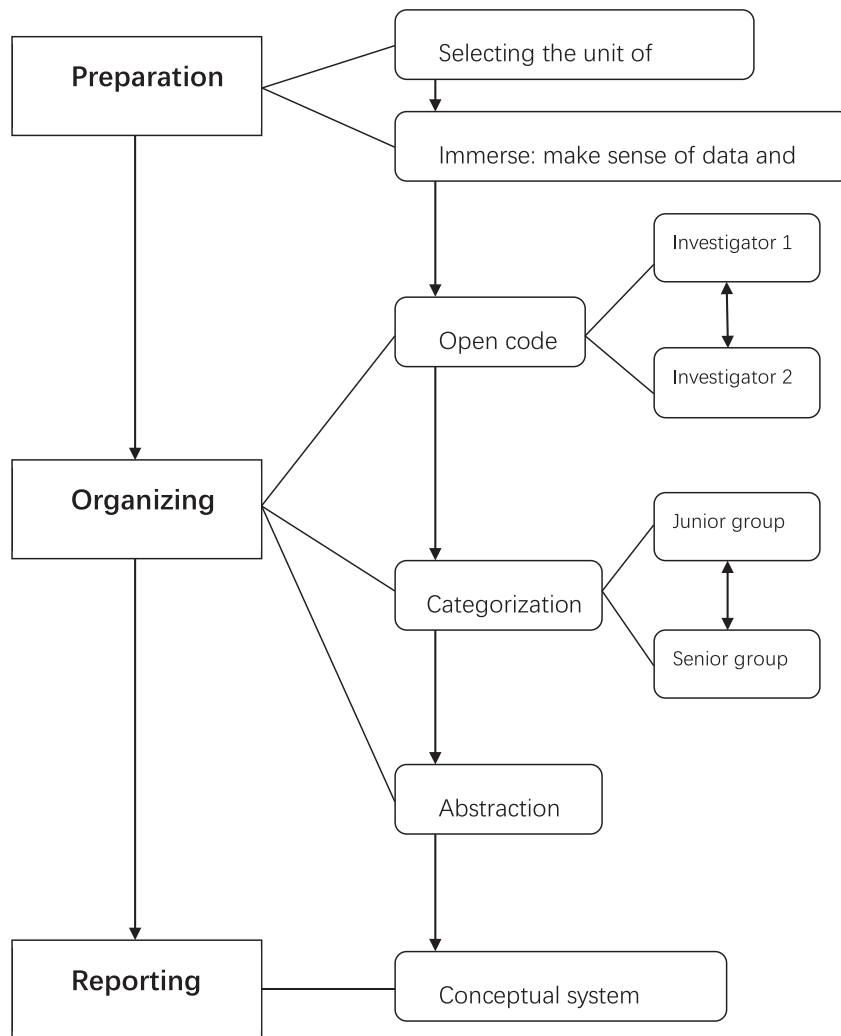


Fig. 1. Analysis process.

department; however, the feeling always comes from the hospital. When talking regarding financial management, they tend to define themselves as performers under the leadership of the department head:

“Hospitals always attach great importance to this part. Economics is always a focus of attention.” (05, junior member)

“I do think financial management is very important for department development.” (03, junior member)

“In the financial management aspect, I am mainly responsible for cost management, including consumable items plan making and managing, water and electricity bills, and equipment maintenance. I think I play the performer role in the department managerial group.” (06, junior member)

“The management authority of the head nurse is limited. I need to do these details management to avoid wasting under the department head leadership.” (08, junior member)

While a few provided different voices, such as:

“Financial management is not that important for us; maybe management by the full-time staff is more appropriate.” (04, junior member)

2.1.2. Senior leadership group

All senior nursing leaders argued that financial management is one of the key competencies to be a successful nursing leader. Moreover, they defined the role of the head nurse in department financial management work as follows:

*“Head nurse is a key **decision-making team member** in the department, and financial management is one of the essential skills for them.”* (12, senior member)

“If a nurse manager can do an excellent job of financial management, not only can they provide economic benefits, such as increase the salary of the staff but they can also make indirect administration benefits, such as improving the initiative and positivity.” (17, senior member)

2.2. Challenge two: insufficient training and education on financial management and nursing economics

2.2.1. Junior leadership group

Participants in the J group argued that nearly no chance exists for them to attend training or education programs on financial management. For example, two participants mentioned:

“We already have many clinical nursing management training; however, no existing courses focused on financial management.” (09, junior member)

“I think I need the further training on financial. Actually, when I do some nursing research, I do not know from whom I could obtain a few advices on financial indicators.” (11, junior member)

2.2.2. Senior leadership group

One respondent offered the reason why hospitals only provided one-time lectures or training administered by the finance section:

“The hospital can only provide poorly designed training because of the limitation of time and expenditure.” (13, senior member)

A few participants explained why the requirements of head nurses cannot be satisfied. A shortage of teachers who have the interdisciplinary background in nursing and economics exists. In addition, a few of them suggested that nursing economics courses should be added into degree programs.

“Nursing schools should add related courses. Through these courses, nursing staff can cultivate their cost management consciousness and ability.” (18, senior member)

2.3. Challenge three: desires for cross-uniting communication and cooperation

2.3.1. Junior leadership group

Most of the participants had no idea regarding their financial management performance because communication among parallel clinical departments is deficient:

“I do not know whether I did well or not on financial management work because I do not know the performance of other head nurses. We lack communication among parallel clinical departments for exchanging experience on financial management.” (10, junior member)

Head nurses expressed their desires for cross-unity cooperation and data support.

“Advanced management should be positive. For example, the property sector takes responsibility for electricity bills and knows the electricity consumption of different departments in the hospital. There are three gynecology departments in our hospital. If the property sector could provide the electricity bills and show differences of our three departments, then finding the problems and avoiding wasting time are beneficial for us.” (02, junior member)

“The positive communication between the ward and the assistant management department can help the administrator take advantage of the original data and effectively manage the cost.” (11, junior member)

“Related authorities who are in charge of the data of all departments should provide the results of the data analysis. For example, if the equipment section can provide the data regarding different departments in using machines, then we can determine whether we still have a few problems on maintenance of equipment, which would invisibly increase our costs.” (03, junior member)

2.3.2. Senior leadership group

Currently, we have not developed an assessment system of nursing financial management competencies. Also, one executive nurse supplied additional information as follows:

“Although we have not formulated the evaluation standard on financial management competencies of head nurses, the performance of the department can actually reflect the financial management competencies of nurse managers.” (16, senior member)

In addition, a few punishment indicators can be the guidance of the financial management practice.

“We have a few punishment indicators regarding financial management. For example, the surgical consumable is one of these indicators. If consumables were excessively used in the operation of one patient, then this means over-treatment, and we will have corresponding punishments on this department.” (13, senior member)

2.4. Challenge four: insufficient reference managerial tool

2.4.1. Junior leadership group

In addition, several participants were aware of their need of a few assistant tools, such as reference books and finance applications in their study and clinical management work. For example, when asked regarding how the nurse manager promotes their competency of financial management, one respondent argued that

when she was appointed as head nurse, she felt stranded and concluded:

“I cannot find relevant reading materials regarding financial management when I cannot solve a few problems. I can only have some communication with the other nurse leaders who had experience of that problem.” (O1, junior member)

3. Discussion

In this study, we finally selected four challenges through the contrast between the perceptions of two groups concerning financial management. The main challenges were concluded as follows: 1) lack of intrinsic motivation; 2) insufficient training and education on financial management and nursing economics; 3) desires for cross-uniting communication and cooperation; 4) insufficient reference managerial tool.

Intrinsic motivation significantly affects job performance [23]. Participants in J group were more inclined to describe financial management as an essential component in department management. This kind of value is originated from outside forces. For example, “hospitals highly value financial management” or “under the leadership of the department head.” They define themselves as performers in finishing these financial tasks, lacking intrinsic motivation that can positively inspire head nurses to make progress.

By contrast, financial management was emphasized as a very important component in leadership development of head nurses in the S group. In the entire department, the head nurse is a key factor in making organizational decisions that balance quality patient care and sound financial management [24]. In addition, senior leaders in the S group argued that head nurses act as the decision maker in the financial management team work, thereby motivating the head nurse to pursue self-improvement and make a change on their own initiative.

This difference of the role definition showed different concerns of different leadership levels. Moreover, this difference is also a good explanation why a few different voices exist in the J group, stating that financial management work is not that important to head nurses. Even financial management is of great importance to the department because administration authority is limited and their sense of job control related to finance is weak. Head nurses did not correspond their financial management competency with the financial condition of the department; thus, they were unable to positively seek personal development support. The role of a decision maker can increase the inherent capacity of the head nurse to critically think and make autonomous and informed decisions regarding the improvement of their financial management competency. Hospital and department leaders should use a variety of empowerment strategies that are important to the intrinsic motivation of head nurses and potentially to the quality of financial management work.

Chinese nurse managers are always selected from front-line staff nurse based on their clinical expertise [25]. The head nurses that we interviewed argued that they did not receive related finance courses before transitioning into their first leadership roles. Previous studies on the approach for developing nurse management had described the same result in which nurse managers frequently felt less prepared and unequipped to manage the business activities than the clinical activities [26].

Participants in the J group showed a strong desire to acquire a few in-service training on financial management. However, one study [27] ($n = 424$) assessing the requirements of nurse managers for managerial training found that the demand for health economics is relatively small (9.8%). The completely different results showed that even head nurses showed a strong will to participate

in financial management training. When faced with diverse training, their will appeared slightly weak. This phenomenon also reflected that financial management skills have not been considered as essential components in leadership development among head nurses. The design of training and degree courses should be more incentive.

In the 2000s, several researchers have asserted the necessity and possibility of combining nursing economics into Chinese traditional undergraduate and graduate courses [28,29]. However, only a few colleges are currently offering nursing economics courses in their degree programs. Preparing nurses to influence the financial performance of organizations on a daily basis is essential [30] because financial management not only promotes department benefit but also effectively reduces medical cost and alleviates the shortage of medical resources. Good training and degree courses not only help head nurses gain insight on using leadership skills to manage budgets, formulate business plans, and write grant proposals but also help in ensuring the delivery of quality and affordable health care.

Our findings showed that head nurses were not satisfied with the current communication and cooperation of teamwork in hospital institutions. A few felt the need to communicate more with parallel nursing departments. Hospital institutions should provide departments with a platform to study the success of optimizing resources across units and promote experience communication among parallel nursing departments. A few highlighted the necessary data cooperation. Nursing must be responsible for and manage its own financial performance, thus making the relationship between nursing and finance to be independent but collaborative [31]. Head nurses argued that they want to know their water and electricity bills, usage of equipment, cost, and benefit compared with other nursing departments. If finance departments, property sections, facility sections, and other administration assistant departments provide horizontal and longitudinal comparison feedback data, then this can help head nurses develop a broader view of financial management. We should provide the necessary analytical support to nursing to sustain data-driven discussions by building strong relationships between the nursing and finance departments to promote data cooperation. Nursing staffs must learn the language of finance and be seen as credible financial managers to achieve this. Finance education on key concepts related to the delivery of care is also a necessity.

A few head nurses stated their needs regarding information system or APPs for supporting financial management work. Information technology in health care can have a strong impact on the process and the quality of health outcomes and can assist hospital managers in financial management, resource allocation, and activity planning [32,33]. These supportive managerial tools can offer opportunities to develop big data set and support big data analytics, evaluating the effectiveness of nursing services for cost and quality.

4. Conclusion

Head nurses in a pivotal position contribute to the financial management work. Qualitative description of their attitude, practice, and evaluation provided a picture of the current demands and challenges of nursing financial management. The results of this study will serve as a basis for further K-A-P research regarding the financial management of head nurses.

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Conflict of interest

No conflicts of interest had been declared by authors.

Author contributions

Study design: BY, CQR, GC, TSY, LD.

Data collection: BY, CQR, XJN, LD.

Data analysis: BY, CQR.

Study supervision: TSY, LD.

Manuscript writing: BY, GC, CQR, XJN, LD, TSY.

Critical revisions for important intellectual content: GC, LD.

Appendix A. Supplementary data

Supplementary data related to this article can be found at <http://dx.doi.org/10.1016/j.ijnss.2017.03.007>.

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