Abstract

The literature reviews have been made to understand the impact of the knowledge management in the advancement of nurse organization in this study.

Disaster indicates loss of human lives or property due to natural causes such as weather or man-made accidents (Wikipedia), and the number and damage scale of disaster is increasing in the modern society. Along with earthquake, flood, storm and other natural disasters, the man-made disaster due to the development of humanity civilization are largely increasing, and the complicated disaster due to both human and nature is frequently occurring.

Knowledge management is a series of organization activities to create typical common knowledge considering the information, technology, knowhow, and so on of the organization members as the collective knowledge, to organize the culture of sharing the created knowledge with the organization members or organizations, and to facilitate the interactions.

Knowledge management in the nurse organization is to provide with the best nursing services by facilitating the acquisition, creation, sharing, and utilization of the nursing knowledge. Nurse intellectual has been defined as the nurse who enhances the added values by seamless improvement, development, and innovation on his or her nursing job in the clinical practices, transmits and shares the new created knowledge based on the nursing experiences with nursing unit like ward or the other nurses in Nursing Department to maximize the productivity not only of the nursing department but also the whole hospital.

To improve the nursing practice capability by knowledge management, it is important to understand that knowledge is the base of qualitative nursing, to confirm what the core knowledge on nursing job is, and to learn job related topics continuously. In addition, it is required to help job practices and career development by the activations of nursing education programs, and to conduct the motivation policies for the individuals by active supports for the learning employees. The core components of knowledge management are correlated with nursing practice capabilities, therefore, it is important for the top leader in the hospital nursing to establish the knowledge management strategy and to seek its supports and utilizations to the practices.

Accordingly, there is a need for nursing education program about promotion and disaster nursing that can cope with disaster with specific measures. Also, the tool based on disaster nursing capability should be developed to objectively evaluate the knowledge and technology provided to patients from disaster.

[Keywords] Security, Knowledge Management, Nurse, Hospital, Nurse Organization

1. Introduction

Knowledge management is a series of organization activities to create typical common knowledge considering the information,
technology, knowhow, and so on of the organization members as the collective knowledge, to organize the culture of sharing the created knowledge with the organization members or organizations, and to facilitate the interactions. In this regard, the knowledge management in the nursing site means to make the individual knowledge of each nurse as the common knowledge, to organize the environment to share these with other nurses, and to facilitate these among the nurses. Since the nursing knowledge is considered as the organization asset, they consider the knowledge creation and sharing as the priority value, and the mutual interactions among the nurses are performed with the norms of knowledge management activities in the nurse organization where the knowledge management has been established, the nurses are motivated to share the nursing knowledge established in the organization, feel the needs to study the knowledge related to the practices, and have the opportunities to acquire more knowledge, so that they can concentrate the study processes of practical knowledge, information, technology, knowhow, and so on[1].

The needs of knowledge management are not the exception in the nurse organization. Nurse organization should pay attention to the knowledge management to meet the social trend and changes actively, and to survive in the fierce competition. Nurses are the representative collectors who acquire the most information on the various patients’ responses and needs being with them for 24 hours in the frontline with the patients that are the customers. In addition, they are not only knowledge users who provide the patients with direct nursing services or indirect healthcare services applying with nursing theories as well as related professional knowledge, but also knowledge creators who create the new practical knowledge and experiences while they take care of the patients under the changing environment. Therefore, with the contribution on the differentiations in the nursing and healthcare services by strategic management of the nurses’ individualized information and knowledge in the organization, it can play a significant role to create the competitive advantage of the hospital[2]. However, it has not been reported on the study results to investigate the relations between the knowledge management and the learning concentration yet. Up to now, the studies on the knowledge management have been reported in the subjects of the company organizations focusing on the cases of knowledge management practices, success factors of knowledge management, and the process of knowledge management[3], as well as the relationship between knowledge management and organization efficacy or performances[4].

Especially for the subjects with nurses, only the results of the followings have been reported; the impacts of the knowledge management activities, job satisfaction, organization concentration, job performance, and organization efficacy to the job satisfaction or organization concentration[5]. Hence, the literature reviews have been made to understand the impact of the knowledge management in the advancement of nurse organization in this study.

2. Background

2.1. Concept of knowledge management

Nonaka[6] defined knowledge management as to create the new knowledge within the organization, to expand this into the whole organization, and to formalize it into the goods, services, and systems. That meant knowledge management was to share the knowledge within the organization and to add values with the shared knowledge as the organization assets. In the nurse organization, the information on the patients that acquires during nursing for 365 days, knowhow that the experienced nurse shall get which is hard to express with the words, experiences and knowhow of the head nurses who operate the wards can be knowledge and these are knowledge management of the nurses to make assets with these so as to utilize them as the important assets in the nurse organization or among the nurses <Table 1>.
Table 1. Amendment and supplement of the case studies on the success factors of knowledge management.

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<thead>
<tr>
<th>Type</th>
<th>Investigator</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Creation of knowledge</td>
<td>Nonaka (1998)</td>
<td>Management activity to secure the organization competitiveness through sharing, elevating, and formalizing unspoken knowledge which cannot externalize and objectify, and recycling it into unspoken knowledge again with newly created formal knowledge[6].</td>
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<td></td>
<td>Ruggles (1998)</td>
<td>Approaching method to add or create values by more active utilization of knowhow, experiences, and decisions in and out of organization[7].</td>
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<td>Knowledge management</td>
<td>Bechman (1997)</td>
<td>To create new organization competency, to enable high performance of the organization members, and to facilitate the innovative activities, as well as to formalize the experiences, knowledge, and professionalism of the organization members so as to enhance the customer values[8][9].</td>
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<td></td>
<td>Quintas (1997)</td>
<td>Not simply to store and process the data and information but to recognize the knowledge which is the internalized asset of the individuals and to computerize it so as for the organization members to use this on the decision making process, and so on[10].</td>
</tr>
<tr>
<td>Intellectual properties</td>
<td>Sveiby (1997)</td>
<td>To create new values using intangible assets at maximum such as hiring and maintaining talents, inviting customers and meeting their needs with the company competency[11].</td>
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<tr>
<td></td>
<td>O’Leary (1998)</td>
<td>It is the process to change the knowledge to be used as the source of people and organization which link to the knowledge, and defines to focus on the final utilization of knowledge management[12].</td>
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<td>Utilization of IT</td>
<td>McElrory (2005)</td>
<td>Management activities to pursue to expand the knowledge process[13].</td>
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<td></td>
<td>Davenport et al (1998)</td>
<td>To establish knowledge warehouse, to access it easily, to provide with knowledge environment to facilitate creation, transfer, and utilization of knowledge, and to manage it as the asset[14].</td>
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2.1.1. Core components of knowledge management

Core components to consist of knowledge management should be prepared to perform it effectively. Core components of knowledge management are six including strategy, leadership, knowledge worker, process, information technology, culture, and evaluation and compensation. The diagnosis results according to the diagnosis index for knowledge management level of Maekyoung-Arthur Anderson described in detail to suggest the objective items including knowledge management strategy, performance measurement and compensation system for knowledge management, official procedure to share the knowledge, culture and system for knowledge management, learning knowledge management, IT of knowledge management, and knowledge contents. Knowledge Management Team, POSCO Construction classified knowledge management with five components.

First regarding contents, they performed the systemic classification of the required knowledge for the organization related to the knowledge of working process, vision of the organization, and business direction.

Second on IT, they reviewed knowledge management system and related technologies, stable infrastructure, and security technology with the existing system.

Third with respect to the culture, they reviewed strengthening knowledge management mind, system establishment on knowledge management, PR and education for response and activation of knowledge
management, motivation policy and incentive for knowledge management activities, compensation, and evaluation.

Fourth on leadership, they established the firm strategy of knowledge management, induced continuous participation and sponsorship of CEO, and organized knowledge management support team. Fifth on the process, they considered the knowledge creation and sharing by working process, standardization of knowledge management policy, making the rules, evaluation of knowledge and protection system and so on[15].

2.2. Knowledge management in the nurse organization

Knowledge management in the nurse organization is to provide with the best nursing services by facilitating the acquisition, creation, sharing, and utilization of the nursing knowledge. Nurse intellectual has been defined as the nurse who enhances the added values by seamless improvement, development, and innovation on his or her nursing job in the clinical practices, transmits and shares the new created knowledge based on the nursing experiences with nursing unit like ward or the other nurses in Nursing Department to maximize the productivity not only of the nursing department but also the whole hospital[2].

To improve the performance of nursing and its productivity like this, it is required to practice.

Knowledge management and the following should be considered as the approaching methods for creation, sharing, and utilization of nursing knowledge. First, it is necessary of the improvement, standardization, and documentation for the processes of nursing service provisions. Second, the core competency on nursing should be secured by the best nursing practices. Third, learning opportunity for changing facilitation into the intellectuals should be provided. Fourth, it is required to develop the knowledge warehouse using intranet. Fifth, it is important to suggest the incentive strategy by knowledge sharing and utilization.

The trend of nursing informationization has resulted in many changes not only in the nursing job but also in the methods of nursing education. Web-based education, cyber training, e-learning, and so on have been performed for the development of nurses’ capabilities, new employee training, continuous training of the existing employees. Korean Nurses Association accepted various training demands and specialized learning requests from the nurses timely, and opened to conduct cyber continuous education programs for the expansion of education opportunities through cyber training which does not limit the time and the space for the nurses who require seamless self-developments[16].

Education and learning methods such as E-learning, cyber training, web-based education, and so on are parts of organization learning among the core components of knowledge management. For knowledge management in the field of nursing, it is necessary to have and express the knowledge, to share it with other nurses, to standardize it, to create new knowledge by knowledge based clinical study activities, to share it again, and to re-apply it into the clinical practices. Nursing knowledge can enhance the capability of nursing services and nursing job performances by the process of knowledge transformation such as socialization, externalization, integration, and internalization, and contribute to the competitiveness of the hospital. To do so, it is crucial for the top managements and the heads of nursing department to make multidimensional efforts such as knowledge management strategy, on/offline training and learning, IT utilization for storage and processing of the knowledge, efficient communication style, and the development of community mind.

3. Conclusion

So far, literature reviews were performed on the understanding of knowledge management and its introduction strategies to secure nursing competitiveness by the integration of knowledge management and clinical nursing. We should understand that knowledge man-
management has not become the choice of the individuals, organizations, and countries, but become the tool for the survival. The source of competitiveness in the 21st century comes from the people regardless of the fields, and they are based on the knowledge. Therefore, the key point is to lower the gap of knowledge.

According to the results of Myung Hee Hwang’s study[17], organization learning was found as the component to impact the nursing practice capability among the core components of knowledge management. To improve the nursing practice capability by knowledge management, it is important to understand that knowledge is the base of qualitative nursing, to confirm what the core knowledge on nursing job is, and to learn job related topics continuously. In addition, it is required to help job practices and career development by the activations of nursing education programs, and to conduct the motivation policies for the individuals by active supports for the learning employees. The core components of knowledge management are correlated with nursing practice capabilities, therefore, it is important for the top leader in the hospital nursing to establish the knowledge management strategy and to seek its supports and utilizations to the practices. Finally, it should be lessened to close the gap in the nursing organization by realization of knowledge management.

4. Reference

4.1. Journal articles


4.2. Thesis degree


4.3. Books


4.4. Conference proceedings


4.5. Additional references

<table>
<thead>
<tr>
<th>Author</th>
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<td>Korea University</td>
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Research field
- Impact of Parents Attachment Behaviors on Stress Coping Ability and Suicidal Impulse Control among College Students, Crisisonomy, 12(3) (2016).

Major career
- 2013~present. The Korean Association for Comparative Government, Academic Director
- 2015~present. Crisis and Emergency Management Theory and Practice, Academic Director