## Knowledge Sharing Behavior and its Relation to Innovative Work among Nurses at Intensive Care Units

## Lamiaa Ahmed Hegazy Ghazy <sup>1</sup>, Safaa Mohammed Eldemerdash<sup>2</sup>, Seham Ali Mahmoud<sup>3</sup>

<sup>1</sup> Nurse specialist at Itay El-Baroud General Hospital, Egypt.

<sup>2</sup> Professor, Nursing Administration, Faculty of Nursing, Tanta University, Egypt.

<sup>3</sup> Lecturer, Nursing Administration, Faculty of Nursing, Tanta University, Egypt.

#### Abstract

Background: Profession of nursing reacts with patients in healthcare organizations, so nurses should demonstrate high level of knowledge sharing behavior as they are the most active health care providers and area of innovation to intervene high quality of care. Aim: Assess knowledge sharing behavior and its relation to innovative work among nurses at intensive care units. Design: A descriptive correlational research design. Setting: The study was conducted at Tanta University Hospitals in intensive care units. Subjects: The study subjects consisted of all nurses (n=390). Tools: Data were collected by using knowledge sharing behavior, knowledge sharing behavior engagement and innovative work behavior questionnaire. Results: More than half of staff nurses had a high level of knowledge sharing behavior. More than half of intensive care unit nurses had a low level of overall knowledge sharing behavior engagement. Majority of intensive care unit nurses had a high level of overall innovative work behavior. Conclusion: There was a statistically significant positive correlation between knowledge sharing behavior and innovative work behavior. Also, there was a statistically significant positive correlation between knowledge sharing behavior engagement and innovative work behavior. Recommendations: Hospital administrator and nursing managers have to focus on the continuous estimate of knowledge-sharing behavior by rewarding good performance, encouraging competitive spirit among nurses, paying attention to staff satisfaction, and promoting nurses 'innovation by encouraging trying using new ideas, technique, and a new style of doing things and sharing their knowledge with their colleagues and superiors at work.

**Keywords**: Intensive care unit, Innovative work Behavior, Knowledge sharing behavior, Knowledge sharing behavior engagement.

#### Introduction

Intensive care unit (ICU) nurses practice in settings where patients require complex assessment, high-intensity therapies, and interventions. ICU nurses rely upon a specialized body of knowledge, skills, and experience to meet the needs of the critically ill. There is increasing pressure on ICU nurses to provide high-quality care which can be achieved through improved communication and increased knowledge sharing. This can be done when ICU nurses maximize their abilities to share knowledge which help to meet those needs and generate solutions and efficiencies that provide a competitive advantage.<sup>(1,2)</sup>

Knowledge sharing is an interactive practice of disseminating reliable knowledge to the right people at the right time, in an intelligible way that allows them to act carefully and to enrich the organization's knowledge base. Also, it can be regarded as a systematically planned and managed activity involving a group of like-minded individuals engaged in sharing their knowledge resources, Insights, and experiences for a defined objective. The objective of knowledge sharing may span from organizational learning to collaborative problem solving, to peer support to capacity building. These objectives entail the explication of knowledge and facilitating its flow throughout a community of practice.<sup>(3)</sup>

Knowledge sharing behavior consists of several constructs namely enjoyment in helping others, Top management support, information and communication technology use, knowledge donating and knowledge collecting.<sup>(4)</sup> As well as intensive care unit nurses can share their knowledge in different ways such as written contributions as contribute to the development of protocols to improve care, personal interaction as use their own experience in informal contexts to help colleagues avoid accidents. And knowledge sharing through organizational communication as participate in problemsolving during department meetings.<sup>(5)</sup>

Knowledge sharing has been found to be a key mediator through which social exchange influences individual innovativeness. It helps ICU nurses to develop creative and innovative strategies that help them to perform their duties include evaluating the patient's administering treatment, and conditions. providing constant support during recovery that make new differences in the life of patient and client. Therefore, innovative behavior is considered to use nurses' findings, suggestions, and implementation of these ideas on job-related tasks which benefit the organization's performance. Organizations

that stimulate knowledge sharing within and outside the organizational boundaries are more likely to develop innovations and improve their performance.<sup>(6)</sup>

Innovation in nursing refers to the generation, introduction, and/or application (within a role, group, or organization) of ideas, processes, products, or procedures, new to the relevant unit of adoption that supposedly significantly benefit the relevant unit of adoption. Nursing innovation encompasses the formulation and advancement of new and current nursing care techniques. Innovative behavior is the result of a comprehensive set of behaviors associated with idea creation, idea support and idea implementation. Likewise, it is a multi-stage process by which an individual faces a problem and then generates an idea which leads to a solution to the specific problem with innovation and required support from the work force. Also, it is important in order to improve the quality of care delivered, to ensure patient safety and also to reduce the cost of health care.(7, 8)

Innovative work behavior is not part of the nurses' job. It is extra role behavior which refers to open behavior that is not specified in the job description for attempts to organization benefit. Nurses' innovative work behavior is essential in management such as suggestion programs and continuous improvement. Innovative work consists of five dimensions which include idea exploration, idea generation, idea championing, idea implementation and innovative output. In the idea exploration, innovation problem is started by identification, defining problem, and finding a solution to solve the problem.  $^{(9)}$ 

Finding the solution based on a new concept or a new arrangement of existing concepts that happened in idea generation. In the idea championing, the innovator looks for support his ideas. The innovator needs to support his

idea because the innovation goes along with changes and resistance to change. The promoter of the innovation will have to create commitment for the innovation and often build coalitions. In the idea implementation, the innovation must be implemented. The implementation needs an approach of perseverance. The final step in the innovative process is to develop support for the new ideas and solutions, so they become embedded within the organization. For the different phases to create innovative solutions the nurses need different kinds of attitude and skills.<sup>(7)</sup>

#### Significance of study:

ICU-nurse has been facing challenges in recent years to respond more effectively to the increasing patients' demands for better quality care. ICU nurses need to be equipped with essential knowledge and skills to deal with these challenges. Additionally, Knowledge is considered as the major and valuable asset in innovative competitive environment, since knowledge is the only factor, which can suggest change and innovation in work. Recognition of dynamics that stimulate individuals to share knowledge for the advantage of other individuals and the organization is considered as a high priority subject for work.<sup>(9)</sup>

Moreover, previous studies have highlighted the need for planning nursing practice, submission, and evaluation of the use of innovative strategies to achieve care quality. So, this study aimed to assess knowledge sharing behavior and its relation to innovative work among nurses at intensive care units.

**Aim of the Study:** Assess Knowledge Sharing Behavior and its Relation to Innovative Work among Nurses at Intensive Care Units.

#### **Research Questions:**

- 1. What are the intensive care unit nurses' knowledge sharing behavior and innovative work?
- 2. What are the intensive care unit nurses' knowledge sharing behavior engagement and innovative work?
- **3.** What is the relation between knowledge sharing behavior and innovative work?

#### Subjects and Method

**Study design:** Descriptive-correlation research study design was used.

**Study setting:** The present study was conducted in intensive care units at Tanta university hospitals including, Tanta Main University Hospital and Emergency Hospital. The setting is a specialized section where comprehensive and continuous care is provided for critical ill patients who can benefit from treatment.

Subject: The study subjects will consist of all (n=390) from the previously nurses mentioned setting available at time of data collection as follows: Emergency Anesthesia ICU(n=60), Emergency Medical ICU(n=53), Intensive Care Unit (n=89), Neonatal Pediatric ICU (n=40), Neurological ICU (n=52), Cardiac ICU(n=25), Ophthalmology Anesthesia ICU (n=20), Chest ICU(n=16), and General Medical ICU(n=35).

#### **Tools of data collection**

Data were collected by using two tools:

# ToolI:NursesKnowledgeSharingBehaviorsStructuredQuestionnaire:

This tool was developed by the researcher based on recent related literature.<sup>(10-19)</sup> It was used to assess knowledge sharing behaviors among intensive care unit nurses. It consisted of three parts as follow;

**Part I:** Personal data of intensive care unit nurses as age, gender, marital status, unit name, education level, years of experience, training programs and hospital name. **Part II:** Intensive care unit nurses' knowledge sharing behaviors questionnaire. It consisted of five dimensions as follow: It consisted of five dimensions as follow: Enjoyment in helping others, 2items, top management support, 3items, information and communication technology, 3 items, Knowledge donating, 4items and Knowledge collecting, 4 items.

## Scoring system

Nurses' responses measured on three points Likert scale ranging from 1= disagree, 2=neutral and 3= agree. The total score was calculated by summing scores of all categories. The total scores represent varying levels as follows <sup>(20)</sup>:

- Low knowledge sharing behavior <65%.</li>
- Moderate knowledge sharing behavior 65-80%.
- High knowledge sharing behavior >80%.
  - Part III: Knowledge sharing behavior engagement questionnaire. It consisted of statements that indicate how often intensive care unit nurses' engaged in knowledge sharing behavior. It consisted of three dimensions as follow: It consisted of three dimensions as follow: Written contributions, 3 items, Organizational communication, 6 items and Personal interactions, 5 items.

**Scoring system:** Intensive care unit nurses' responses were measured on three points Likert scale ranging from 1= never, 2= sometimes and 3= always. The total score was calculated by cutoff point and summing scores of all categories. The total scores represent varying levels as follow:

- Low level of knowledge sharing engagement <65%</li>
- Moderate level of knowledge sharing engagement 65-80%
- High level of knowledge sharing engagement >80%

#### Tool II: Innovative work questionnaire:

This tool was modified by the researcher based on recent related literature.<sup>(20-22)</sup> To assess intensive care unit nurses' innovative work behavior. It consisted of (14) items on five subscales: Idea exploration, 2items, Idea generation, 4items, Idea championing, 2items, Idea implementation, 2items and Innovative output, 4 items.

**Scoring system:** Intensive care unit nurses' responses were measured on three points Likert scale ranging from 1= never, 2=sometimes and 3= always. The total was calculated by summing scores of all categories. The total scores represent varying levels as follows <sup>(20)</sup>:

- Low level of innovative work behavior <65%</li>
- Moderate level of innovative work behavior 65-80%
- High level of innovative work behavior >80%
  Method:
- 1. Official permission to conduct the study was obtained from the Dean of faculty of nursing to Tanta University Main Hospital and submitted to the responsible authorities of the selected setting.

## 2. Ethical and legal consideration:

- a. Consent of the ethical committee of the Faculty of Nursing was obtained.
- b. Nature of the study didn't cause any harm or pain to the staff nurses.
- c. Staff Nurses consent to participate in the study was obtained after explanation of informing them about the privacy and the confidentiality of information obtained from them, nature of the study and their right to withdraw from the study at any time.
- d. Confidentiality and privacy was taken into consideration regarding data collection. A code number used instead of names.
- 3. Tools I and II were translated into Arabic and presented to a jury of five experts in the area

of specialty to check their content validity and clarity of questionnaire. The experts were; three Professors of nursing services administration and two assistant professors of nursing services administration from Faculty of Nursing, Tanta University.

4. The experts' responses were represented in four points rating scale ranging from (1-4); 4= strongly relevant, 3= relevant, 2= little relevant, and 1= not relevant. Necessary modifications were done including; clarification, omission of certain items and adding others and simplifying work related words.

- The face validity value of tool (I) part (I) was: Knowledge sharing behavior questionnaire 94.38%, tool (I) part (II): Knowledge sharing engagement questionnaire 90%, tool (II): Innovative work behavior questionnaire 97.86%.

5. A pilot study was carried out on a sample (10%) of nurses (n=39) nurses, and they excluded from the main study sample during the actual collection of data. A pilot study was carried out after the experts' opinion and before starting the actual data collection. The pilot study was done to test clarity, sequence of items, applicability, and relevance of the questions and to determine the needed time to complete the questionnaire. According to feedback from pilot study, the tool was modified by the researcher. The estimated time needed to complete the questionnaire items from head nurses and their staff nurses was (20 -30) minutes.

6. Reliability of tools was tested using Cronbach Alpha Coefficient test. Reliability of **tool (I)** knowledge sharing behavior questionnaire was = 0.779 and reliability of **tool (II)** innovative work behavior questionnaire =0.858.

7. Knowledge sharing behavior, Knowledge sharing engagement questionnaire and Innovative work behavior questionnaires were used to collect data from nursing staff.

8. **Data collection phase**: the data were collected from nurses by the researcher. The researcher met the respondents' nurses in different areas under study during working hours to distribute the questionnaire. The subjects recorded the answer in the presence of the researcher to ascertain that all questions were answered. The data was collected over period of three months started from December 2021 until February 2022.

## Statistical analysis:

Data were fed to the computer and analyzed using IBM SPSS software package version 20.0. (Armonk, NY: IBM Corp) Qualitative data were described using number and percent. The KolmogorovSmirnov test was used to verify the normality of distribution Quantitative data were described using range (minimum and maximum), mean, standard deviation, median. Significance of the obtained results was judged at the 5% level.

## Results

Table (1): Shows distribution of intensive care unit nurses according to their personal data. As indicated from this table, more than half (51.5%) of intensive care unit nurses were within age of 30-45 years, and majority (61.0%) were females and married. Regarding their department 22.8% and 15.4% of staff nurses distributed in Neonatal intensive care unit and Emergency anesthesia ICU, respectively. While, only 5.1% and 4.1% of them were distributed in Ophthalmology anesthesia ICU and Chest ICU, respectively. As regarding their level of education, more than half (50.3%) of intensive care unit nurses had bachelor's degree and 43.1% had an associate degree of nursing. More than half (55.4%) of intensive care unit nurses had 5-10 years of experience and 71.0% of them were distributed in Main hospital while 28.0% in

Emergency hospital. Finally, all staff nurses (100%) at both hospitals had been attended previous training programs.

**Figure (1):** Demonstrates overall intensive care nurses' levels of Knowledge sharing behaviors. This figure revealed that that more than half (53.8%) of intensive care nurses had a high level of overall Knowledge sharing behavior. While, nearly half (46.2%) of them had a moderate level of overall Knowledge sharing behavior.

**Figure (2):** Demonstrates overall intensive care nurses' level of Knowledge sharing behavior engagement. As evident from figure, more than half (51.3%) of intensive care unit nurses had a low level of overall knowledge sharing behavior engagement. While, minority (2.6%) of them had a high level of overall knowledge sharing behavior engagement.

**Figure (3):** Demonstrates overall intensive care unit nurses' levels of innovative work behavior. The figure illustrates that majority (97.4%) of intensive care unit nurses had a high level of overall innovative work behavior. While, minority (2.6%) of them had a low level of overall innovative work behavior.

**Table (2):** Illustrates correlation between intensive care nurses' knowledge sharing behavior, their knowledge sharing behavior engagement and innovative work behavior. The table represents that a positive correlation was found between overall knowledge sharing behavior, overall knowledge sharing behavior engagement and innovative work behavior at P < 0.001.

Personal data	No.	%
Age		
<30	189	48.5
30-45	201	51.5
Gender		
Male	152	39.0
Female	238	61.0
Marital Status		
Single	136	34.9
Married	238	61.0
Divorced	16	4.1
Widow	0	0.0
Unit Name		
Emergency anesthesia ICU	60	15.4
Emergency medical ICU	53	13.6
Neurological ICU	52	13.3
Chest ICU	16	4.1
Ophthalmology anesthesia ICU	20	5.1
General medical ICU	35	9.0
Cardiac ICU	25	6.4
Neonatal intensive care ICU	89	22.8
Pediatric ICU	40	10.3
Educational qualification		
Bachelor degree of Nursing	196	50.3
Associate degree of nursing	168	43.1
Diploma degree of nursing	26	6.7
Other qualification	0	0.0
Years of experience		
<5	30	7.7
5-10	216	55.4
≥10	144	36.9
Hospital name Main		
	277	71.0
Emergency	113	29.0
Training programs		
Yes	390	100.0
No	0	0.0

## Table (1): Distribution of intensive care unit nurses according to their personal data (n = 390).



Figure (I): Overall Intensive care nurses' levels of knowledge sharing behaviors



Figure (2): Overall intensive care nurses' level of Knowledge sharing behavior engagement



Figure (3): Overall Intensive care nurses' levels of innovative work behavior.

Table	(2):	Correlation	between	intensive	care	nurses'	knowledge	sharing	behaviors,
Knowledge sharing behavior engagement and their innovative work behavior									

		Knowledge sharing behaviors	Knowledge sharing behavior engagement	Innovative work behavior
Knowledge sharing	R			
behaviors	Р			
Knowledge sharing behavior	R	$0.860^{*}$		
engagement	Р	< 0.001*		
<b>Tool II: Innovative work</b>	R	0.519*	0.445*	
behavior	Р	< 0.001*	< 0.001*	

#### r: Pearson coefficient

\*: Statistically significant at  $p \le 0.05$ 

#### Discussion

Nurses play an important role in providing optimum healthcare mainly in intensive care units and to do their best, they need to provide the necessary organizational support and a suitable work environment. In the current rapidly changing environment, hospitals face greater challenges. It needs to foster nurses' innovative behaviors to create and deliver their products and services, remain competitive, lead the change process itself and to accomplish their mission.<sup>(24)</sup>

#### Part I: Knowledge sharing behavior:

According to the results of the present study more than half of nurses perceived a high level of knowledge sharing behavior. These findings may be due to the nature of work in intensive care units that create life threatening situations for patients, enforces nurses to work in teams, so they have to share knowledge among them. In addition, nurses want to apply quality standards by sharing knowledge. Moreover, nurses may wish to gain co-workers' attention, trust and love, feel good factor and valued so share knowledge with their colleagues. Furthermore, nurses may search to find better ways to do things, develop their experience and self-confidence at work, make better vital decisions, update and enrich resources with additional updates and information, and learn new techniques to improve patients care, all of these can't happen without sharing knowledge.

This finding was in the same line with **Elsiad et al, (2020)** <sup>(25)</sup> who revealed that staff nurses had a high level of total knowledge sharing. In addition, **Castaneda and Durán (2018)**<sup>(26)</sup> who measured knowledge sharing behavior among participants and found workers had a high mean score of knowledge sharing behavior. As well as **Ibrahim et al., (2022)**<sup>(27)</sup> who found the majority of staff nurses had a high perception level regarding knowledge sharing.

On the opposite, the result of the present study was contradicted with the result of a study conducted by **Diab and El-deeb** (2020)<sup>(24)</sup> who found that more than half of nurses perceived a moderate level of knowledge sharing behavior. Moreover, **Yoo** et al., (2019)<sup>(28)</sup> who stated that nurses perceived their level of knowledge sharing to be above average. Also, the present study result disagreed with **Al-Dalaien et al.**, (2020)<sup>(29)</sup> they showed that staff nurses' perception level regarding knowledge sharing was moderate.

#### Part II: Knowledge sharing engagement:

Concerning nurses' perception of knowledge sharing behavior engagement, the present study illustrated that more than half of intensive care unit nurses had a low level of overall knowledge sharing behavior engagement. This may be related to nurses suffer from workload felt that they had little time to share knowledge because they had to perform their job well first. Also, little new knowledge and expertise were shared in nursing lectures, nursing training and nursing forums in some hospitals may be a cause.

Also, it may be due to lack of awareness, inadequate evaluation and communication of previous mistakes that may improve the individual and organizational learning influences, differences in experience level, lack of interaction, social network, poor communications and interpersonal skills, and little trust in the accuracy and credibility of knowledge.

## Part III: Innovative work behavior:

According to the results of the present study majority of intensive care nurses had a high level of overall innovative work behavior. This may be because health care organizations have based on ongoing innovations to make services and treatment procedures more effective and efficient. Nurses who innovate, suggest, implement, and impose new ideas within an organization are the sources of sustainability for the organization. To deal with environmental challenges organizations rely heavily on their nurses' innovative capabilities and the resulting behavior.

The result of the present study was in the same line with the result of a study conducted by **Kamel and Aref (2017)**<sup>(8)</sup> who found that

half of the staff nurses have a high levels of innovative work behavior. Also, Asurakkody and Kim (2020)<sup>(6)</sup>who found a high level of innovative work behavior among the nursing staff in Sri Lanka. Additionally, Mahgoub et al., (2019)<sup>(7)</sup> who revealed that staff nurses have a high level of the agreement upon innovative behavior. Also, the result of the present study was consistent with the American Association of American Association of **Critical-Care** Nurses  $(2015)^{(30)}$  who emphasized that nurses work in critical areas are creative, support lifelong learning, search for information, and long-run become more innovative.

On the opposite, the result of the current study was contradicted with Abd El-Fattah  $(2017)^{(31)}$  who assured that more than half of nurses had scored a moderate percentage as regards the perceived innovation behavior. Besides, the study conducted by Jung and **Yoon**  $(2018)^{(32)}$  revealed that participants showed a moderate level of innovative behavior. In addition, Diab and El-deeb  $(2020)^{(24)}$ , they revealed that less than half of the study subjects perceived a moderate level of innovative behavior, the possible explanation for this finding could be ascribed to the fact that the concept of innovation behavior is a relatively new and unfamiliar concept.

## **Regarding correlation:**

Regarding Correlation between Innovative work behavior and overall knowledge sharing behaviors and knowledge sharing behavior engagement, a strong positive correlation was found. This may be due to critical-care nurses relying upon a specialized body of knowledge, skills, and experience to meet the needs of the critically ill. Also, there is increasing pressure on ICU nurses to provide high-quality care which can be achieved through improved communication and increased knowledge sharing. Nursing innovation encompasses the formulation and development of new and existing nursing care techniques that require complex assessment, high-intensity therapies, and interventions.

As well as knowledge sharing as an essential antecedent of IWB, Knowledge is "a fluid mix of framed experiences, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information" and play an important role in creating innovation.

This result was congruent with Asurakkody and Kim (2020)<sup>(6)</sup> who found a close between knowledge sharing correlation behavior and innovative work behavior. Also, Wang and Hu (2020)<sup>(33)</sup> claimed that knowledge sharing was a mediator between collaborative innovation and organizational performance. Additionally, Belso and Diez (2018)<sup>(34)</sup> organizations that increase their involvement in knowledge networks tend to increase their innovative capacity. Moreover, Hu and Zhao (2016)<sup>(35)</sup> recognized the positive effect of knowledge sharing behavior on innovative work behavior. In the same line with Li-Ying et al., (2016)<sup>(5)</sup> who found that knowledge sharing among ICU nurses was positively associated with individual nurse innovation.

Besides, Cheng (2012)<sup>(36)</sup> and Leung (2015)<sup>(37)</sup> both indicated that stimulating knowledge sharing practices by discussing work related topics, experiences, and skills, could boost innovation of process and product. The findings are also coinciding with Akram et al. (2018)<sup>(38)</sup>, who claimed that KS played a positive role in creating, encouraging, and applying novel ideas that benefit the organization. Further, the finding concurs with Alhady et al. (2011)<sup>(39)</sup> and Mura et al.  $(2013)^{(40)}$ , who argued that organizations that support their employees in sharing knowledge can expect to generate novel thoughts, thereby enabling innovative activities.

Furthermore, Kim and Park (2015)<sup>(41)</sup> found organizational knowledge that sharing affected nurses' innovative behaviors at general hospitals. The same two scientists conducted another study  $(2017)^{(42)}$  and demonstrated that employee knowledge sharing enhances their innovative work behavior. Else, Radaelli et al., (2014)<sup>(43)</sup> who revealed a direct and unmediated link between knowledge sharing behaviors and innovative work behavior and also, they reported that sharing knowledge enhances innovative work practices and their results provide original evidence that employees who share knowledge will engage more in creating, promoting and implementing innovations.

In the opposite of this study, **Shekh Zain et al (2019)**<sup>(44)</sup> who found that workers perceive their expertise, skill and knowledge and new ideas as sources of power, workers are reluctant to share and create their knowledge. That could be the reason knowledge sharing behavior and innovation behavior are hindered.

## Conclusion

In light of the current study findings, it was concluded that the intensive care nurses had perceived a high level of knowledge sharing behavior. knowledge sharing behavior engagement and the high percentage of them had perceived a high level of innovative work behavior. Moreover, there was a statistically positive significant correlation between knowledge sharing behavior and innovative work behavior. Also, there was a statistically significant positive correlation between

knowledge sharing behavior engagement and innovative work behavior. Additionally, there was a statistically significant positive between knowledge correlation sharing behavior and knowledge sharing behavior Furthermore, engagement. there was а statistically significant positive correlation between knowledge sharing behavior and knowledge sharing behavior engagement and innovative work behavior.

## Recommendations

On the line of the finding of the current study the following recommendation are suggested: **For hospital administration:** 

- 1- Integrate knowledge sharing dimensions in hospital policy.
- 2- Establish continuous training programs about knowledge sharing behavior and innovative behavior for ICU nurses.
- 3- Encourage establishment of professional telecommunication groups to share updating care guidelines and enhance nurses' knowledge.
- 4- Develop patient health education committee to maintain continuity of care.
- 5- Encourage nurses to generate innovative ideas, support application of these ideas, and follow barriers hinder its applicability.
  For nurse manger's
- 1- Design yearly training plans that cover all nursing staff to update ICU nurses' knowledge and practice.
- 2- Involve ICU nurses in solving unit problems, stimulate nurses to generate new ideas, and facilitate its applicability.
- 3- Provide support to staff nurses through open communication, problem solving, and shared decision making.

## **Further research**

 Investigate barriers affecting applicability of knowledge sharing dimensions in hospital.  Study relationship between continuous improvement and nurses' innovative behavior.

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