# Relationship between Nurse Managers' Innovation and Crisis Management at Healthcare Organizations

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# ABSTRACT

Background: Innovation strategies improve health outcomes, addresses health crisis, leads to higher-quality care, and boosts productivity for healthcare organizations as well as patients. Additionally, healthcare organizations must concentrate on innovation to lessen the negative effects of economic and health crises. Aimed to examine the relationship between nurse managers' innovation and crisis management at healthcare organizations. Subjects and methods: Design: A correlational research design was utilized in this study. Setting: the study was carried out at Belkas Central Hospital. Subjects: the study sample consisted of all nurse managers working in the study setting (63). Tools: two tools were used for data collection: Tool I: consisted of two parts: Part 1: Personal data, and Part 2: Innovative work behavior scale. Tool II: Crisis management questionnaire. Results: The findings indicated that less than half of the nurse managers under examination exhibited highly innovative work behavior. In comparison, approximately half of them demonstrated moderate innovation. However, all nurse managers have exceptional crisis management abilities across various stages of crisis management, particularly in the latter two stages. Conclusion: The analysis revealed no statistically significant association between the degree of creativity exhibited by nurse managers and their proficiency in crisis management. **Recommendations:** It is necessary to provide nurse managers with guidelines and training courses to improve their innovation ability. More research is recommended.

Keywords: Crisis management, health care organizations, innovation, nurse managers.

# **INTRODUCTION**

Most institutions nowadays focus on organizational learning, knowledge management, and innovation to increase organizational efficiency and effectiveness (Fitriastuti, Sujoko, Herawan & Vemberi, 2020). Innovation is primarily regarded as the most important instrument for enhancing nursing care standards and guaranteeing their sustainability, enhancing the quality of life in the community (Kara, 2015).

Everyone wants to use the keyword "innovation," but few people know what it implies (Singh & Lillrank, 2018). According to Kelly and Young (2017), innovation is a new concept, idea, product, service, or method of providing care that offers distinct advantages over the status quo. Additionally, innovations enable organizations to attain competitive advantage and organizational success and are necessary to maintain an edge in highly competitive environments (Afsar, Al-Ghazali, Cheema & Javed, 2021).

Innovative work behavior is defined by Slåtten, Mutonyi and Lien (2020) as creative behavior focused on whole service improvements and introducing new approaches for increasing service quality. A further definition of innovative work behavior of nurses is the successful practical implementation of new ideas in line with organizational objectives (Xerri & Reid, 2018).

Innovative nurses can create new methods, technologies and working tools that lead to discoveries of new strategies and techniques to improve outcomes and experience, enhance value, promote health, and prevent harm (Day et al., 2018). Therefore, nurse innovation is defined as the capacity to actively seek out and develop new technologies, new methods, and new tools; to prevent diseases, improve patient care, promote health, and apply innovation to organizational work through reasonable support channels and teamwork (Yan, Yang, Jiang, Zhao & Wang, 2018).

According to Cianelli, Clipper, Freeman, Goldstein, and Wyatt (2016), healthcare leaders must demonstrate, cultivate, encourage, and reward five essential traits for promoting the culture of healthcare innovation: divergent thinking, failure tolerance, risk-taking, agility/flexibility, and autonomy/freedom. Therefore, an organization's leader is one of the essential components for the hospital's future growth and significantly impacts the organization's success or failure (Harlianto & Rudi, 2018).

Innovations in healthcare might result from offering new services or using new technology to enhance currently available services (Ancarani, Di Mauro, Gitto, Mancuso & Ayach, 2016). Nowadays, healthcare has received major attention to technological innovation, which plays a vital role in periods of significant economic and health crises (Akinwale, 2021). To lessen the pandemic's harmful effects, the health crisis has unavoidably sparked innovations in healthcare solutions and practices (Sharma, Kraus, Srivastava, Chopra & Kallmuenzer, 2022).

The crisis is an unforeseen, unplanned incident that is expected to cause a dangerous situation and endanger the profitability of organizational activities (Khanna, 2020). Furthermore, the term "crisis" is more inclusive than "emergency" or "disaster," and it refers to a vital occurrence or choice that, if managed incorrectly or inadequately (or not handled at all), might lead to disaster or catastrophe (Bly, 2021). Moreover, Aljamal (2018) found that crisis management is a method that hospital administrators use to deal with and respond to unexpected, challenging events.

Healthcare crisis might result from reputational damage, organizational database destruction, terrorist attack, escape of hazardous materials, unethical or illegal employee behavior, financial collapse, infrastructure damage/loss, pandemic/epidemic, human errors, staff shortage, the rapid evolution of technology, high rate of turnover, conflict, fire, high rate of infection, exaggerated workplace violence, and decline the quality of care (Coombs & Holladay, 2014; Coccia, 2020).

The continuity of performance during a crisis depends on effective leadership, and the leadership style employed in hospitals may substantially impact the crisis response procedure and the level of care provided (Aljamal, 2018). The capacity of the leader to analyze the crisis, comprehend its components, plan a scientific solution, and intervene to control the crisis are all traits that impact crisis management (Al Eid & Arnout, 2020).

### Significance of the study

Currently, crisis phenomena are considered a significant part of the expansion of any system worldwide (Zvarych & Tysh 2020). Particularly the healthcare system, which is seen as a high-stakes sector that is prone to crises (Lei & Palm, 2019). Furthermore, healthcare facilities should have qualified leaders who can manage and lead the hospital's response to crises (Aljamal, 2018)—promoting innovative learning and decision-making during crises (Sharma et al., 2022). So, in today's highly sensitive and modern world, innovation is a feasible aspect of the health sector's survival and sustained competitive advantage (Carlucci, Mura & Schiuma, 2020). Therefore, this study aims to determine the relationship between nurse managers' innovation and crisis management.

# AIM OF THE STUDY

Examines the relationship between nurse managers' innovation and crisis management at healthcare organizations.

### Objectives

- 1. Measure the nurse managers' innovation level at healthcare organizations.
- **2.** Identify nurse managers' level of crisis management skills at healthcare organizations.
- **3.** Determine the relationship between nurse managers' personal characteristics with their innovative work behavior and their crisis management skills at healthcare organizations.
- **4.** Find a relationship between nurse managers' innovation and crisis management at healthcare organizations.

#### **Research questions**

- 1. What is the degree of nurse managers' innovation at healthcare organizations?
- 2. Are nurse managers have crisis management skills at healthcare organizations?
- 3. Is there a relationship between nurse managers' personal characteristics, innovative work behavior, and crisis management skills?
- 4. Is there a relationship between nurse managers' innovation and crisis management at healthcare organizations?

# SUBJECT AND METHOD

### A. Technical Design

#### Study design

A correlational research design was utilized in this study.

### Study setting

The research was conducted at Belkas Central Hospital, affiliated with the Ministry of Health in Dakahlia Governorate. It has nine buildings with 187 beds for healthcare patients with various diseases. All 18 hospital departments were included in the study.

#### **Study subjects**

All nurse managers working at Belkas Central Hospital during data collection (63) were involved in the study. The study sample included the nurse director, assistant nurse director, supervisors, head nurses, and charge nurses (alternative head nurses on afternoon and night shifts).

### **Data collection tools**

The data was gathered using two tools: an innovative work behavior scale (IWB) and a crisis management questionnaire.

### **Tool I: Innovative Work Behavior Tool**

It was split up into two distinct parts:

- Part 1: This part included the personnel and job characteristics of nurse managers, including their age, gender, level of education, position title, marital status, and years of expertise.
- Part 2: Innovative Work Behavior Scale (IWB):

This scale was used to assess the innovativeness of nurse managers. The scale was created in English by Lambriex-Schmitz, Van der Klink, Beausaert, Bijker and Segers (2020). It was composed of 44 items subcategorized into five dimensions: 1) opportunity exploration (4 items), 2) idea generation (7 items), 3) idea promotion (7 items), 4) idea realization including criterion-based implementation and learning-based communication (9 items), and 5) idea sustainability include internal embedding and external dissemination (17 items).

# Scoring system

According to Lambriex-Schmitz et al. (2020), responses for each item were rated on a 6-point Likert scale (1 = strongly disagree, 2 = disagree, 3=neither agree nor disagree, 4=agree, 5=mostly agree, 6 = strongly agree). The total score of nurse managers' innovative work behavior was considered low if less than 65%, moderate from 65 % to less than 75%, and high if equal to 75% or more.

#### **Tool II: Crisis Management Questionnaire**

The researchers devised this tool based on a review of the relevant literature (Al-Gedely, 2006; Corbaley, 2010; Aljamal, 2018). Aimed to identify nurse managers' crisis management skills from their perspective. This tool consisted of 68 statements grouped under five main categories, as follows: 1) early detection of warning signals stage (18 statements), 2) preparation and prevention stage (21 statements), 3) damage containment stage (16 statements), 4) recovery stage (7 statements), and 5) learning stage (6 statements).

#### Scoring system

On a five-point Likert scale, answers ranged from (1) strongly disagree to (5) strongly agree. The overall crisis management skills score for nurse managers was 340, ranging from 68 to 340. The subscale item scores were totaled and divided by the number of items to produce a mean score for each component. Using the cut-off points, a high score of 60% or more indicates that nurse managers have a high level of crisis management skills, whereas a low score of less than 60% reveals a low level of crisis management skills (Al-Gedely, 2006).

#### **B.** Operational Design

#### **Tools' validity**

The researchers translated an innovative work behavior scale (IWB) and crisis management tool into Arabic and retranslated it into English by a language expert. Then the two tools were submitted and revised by a jury committee composed of seven experts (five experts in nursing administration and two experts in medical surgical nursing) at the faculty of nursing in Port Said and Mansoura University for testing the validation of the tools. Minor changes were made in response to their feedback. From the standpoint of experts, the tools were deemed valid.

# **Tools' reliability**

The instruments' internal consistency was determined using Cronbach's alpha coefficient reliability test. A high Cronbach's alpha coefficient indicated that the tool was reliable (0.96 for an IWB scale and 0.95 for a crisis management questionnaire).

#### **Field work**

To carry out the study, approval was obtained from the nursing director and the director of the whole hospital to collect the needed data. A letter was issued to them from the Faculty of Nursing - Port Said University explaining the purpose of the study to obtain permission and cooperation to conduct the study. The researcher collected the needed data from nurse managers. Data collection took about two months (from the beginning of August 2022 and was completed by the end of September 2022).

### **Pilot study**

Conducted on 10% of the study sample (7) participated in a pilot study to evaluate the instruments' clarity, feasibility, applicability, and completion time. To ensure the consistency of the responses, the pilot study participants were excluded from the primary study sample. Consequently, the data obtained from the pilot study were analyzed, and the required modifications were made. Also pilot study was necessary to identify obstacles and problems that may be encountered during data collection and estimate the time needed (15-20 min) to complete the questionnaire.

### C. Administrative Design

Before conducting the study, an official letter from the vice president for graduate studies and researcher and the dean of the faculty of nursing was sent to the selected area of the study. The hospital director was contacted and informed to obtain permission to include all levels of nurse managers in the present study.

# **Ethical considerations**

Approval was taken from the Faculty of Nursing's Research Ethics Committee (Ref. No. NUR 8/8/2021 (5)) Port-Said University. Administrators at the targeted hospital granted permission to conduct the study. In addition, informed written consent was obtained from all nursing managers following an explanation of the study's purpose and nature. Participants in the study were informed that their participation was voluntary and that they could disengage at any time. The anonymity of the participants was guaranteed and maintained. No coercion or pressure was applied to the participants, and they were not subjected to any risk or burden to participate in the study. The collected information was strictly discreet and will only be used for research purposes.

#### **D. Statistical Design**

The SPSS version 22 statistical software was used for data analysis. A one-sample Kolmogorov-Smirnov test was performed to determine the normality of the data. To identify qualitative data, numbers and percentages were used. The means and standard deviations of continuous variables are displayed. Also, one-way ANOVA is used for comparing more than two groups, while the t-test is used for comparing two groups. The Bivariate Person correlation test was used; significance was considered if the p-value was less than 0.05, and high significance was considered if the p-value was less than 0.001.

# RESULTS

**Table (1)** displays that the most studied nurse managers were female and married (93.7% and 82.5%, respectively); about three-quarters of nurse managers had baccalaureate degrees and were aged 30 to less than 40 years (76.2% and 77.8%, respectively). Meanwhile, more than one-third of nurse managers studied have 10 to less than 15 years of experience and an appointment as head nurses (36.5% and 38.1%, respectively).

**Table (2)** shows nurse managers' innovative work behavior levels. An examination of that table indicated that less than half of the studied nurse managers had a high level of innovative work behavior, and nearly half had moderate (42.9% and 49.2%, respectively). The highest percentage of nurse managers with a high level of innovative

work behavior present with opportunity exploration followed by idea generation (58.7% and 52.4%, respectively).

**Table (3)** shows nurse managers' crisis management skills. It revealed that all nurse managers had high crisis management skills in all crisis management stages, mainly in the last two stages (recovery and learning).

**Table (4)** illustrates nurse managers' personal characteristics concerning their innovative work behavior and their crisis management skills. It illustrated no statistically significant relationship between nurse managers' personal characteristics and their innovative work behavior. Also, there was no statically significant relation between nurse managers' personal characteristics and their crisis management skills.

**Table (5)** revealed a correlation matrix between nurse managers' innovative work behavior and their crisis management role. This table shows no statistically significant correlation between nurse managers' innovative work behavior and their crisis management role. At the same time, a statistically significant correlation is present only between idea realization as a dimension of innovative work behavior and preparation and prevention stage as a dimension of crisis management (P value= .032).

Personal Characteristics	Ν	%		
Age groups				
< 30 years	8	12.7		
30 : < 40 years	49	77.8		
40 : < 50 years	5	7.9		
$\geq$ 50 years	1	1.6		
Mean age ± SD	34.37	±4.591		
Range	25	5-50		
Gender				
Female	59	93.7		
Male	4	6.3		
Educational levels				
Bachelor	48	76.2		
Master	2	3.2		
Diploma	13	20.6		
Years of experience				
< 5 years	1	1.6		
5 : < 10 years	20	31.7		
10: < 15 years	23	36.5		
$\geq$ 15 years	19	30.2		
Mean age ± SD	11.95±4.664			
Marital status				
Single	5	7.9		
Married	52	82.5		
Widow	1	1.6		
Divorced	5	7.9		
Job position				
Nurse director	1	1,6		
Assistant nurse director	2	3.2		
Supervisor	3	4.8		
Team leader	13	20.6		
Head nurse	24	38.1		
Senior (charge nurse)	20	31.7		

**Table (1):** Frequency distribution of nurse managers' personal characteristics (N = 63)

Nurse managers' level of innovative work behavior	N	%			
Opportunity exploration					
Low	1	1.6			
Moderate	25	39.7			
High	37	58.7			
Idea generation					
Low	1	1.6			
Moderate	29	46.0			
High	33	52.4			
Idea promotion					
Low	7	11.1			
Moderate	25	39.7			
High	31	49.2			
Idea realization					
Low	5	7.9			
Moderate	36	57.1			
High	22	34.9			
Idea sustainability					
Low	11	17.5			
Moderate	27	42.9			
High	25	39.7			
Total innovative work behavior levels					
Low	5	7.9			
Moderate	31	49.2			
High	27	42.9			

Nurse managers' crises management skills levels	N	%				
Early detection of warning signals stage						
Low	2	3.2				
High	61	96.8				
Preparation and prevention stage						
Low	1	1.6				
High	62	98.4				
Damage containment stage						
Low	1	1.6				
High	62	98.4				
Recovery stage						
High	63	100.0				
Learning stage						
High	63	100.0				
Total crises management						
High	63	100.0				

Table (3): Nurse Managers'	level of crises management	nt skills $(N = 63)$

Perso

innovative work behavior and their crisis management skills (N=63)								
onal Characteristics Innovative work behavior Crisis manageme	Crisis management skills							
	t of P ficant							
$\begin{array}{c c} \underline{Gender} \\ \hline Male \end{array} \begin{array}{c c} 191.25 \pm 8.539 & t \\ .336 & .738 \end{array} \begin{array}{c c} 283.00 \pm 14.445 \\ .8 \end{array}$	<b>t</b> 38 .405	j						

Table (4): Relation between nurse managers' personal characteristics with their

Female	194.07±16.509			275.14±18.333			
Age groups < 30 years	196.88±8.132			275.50±13.016	_	• 10	
30 : < 40 years	193.78±16.650	F .215	.886	277.12±17.921	F 1.120	.348	
40 : < 50 years	189.60±22.985			261.60±25.755			
$\geq$ 50 years	197.00			274.00			
Educational levels Bachelor	193.73±16.174	F .502	.608	277.15±16.967	F		
Master	205.00±2.828			293.50±.707	2.646	.079	
Diploma	192.77±17.050			267.31±20.758			
Years of experience < 5 years	198.00			276.00			
5 : < 10 years	195.65±8.833	F .252	.860	277.05±11.297	F 1.894	.140	
10: < 15 years	194.26±17.163	.232		280.78±17.853			
$\geq$ 15 years	191.37±20.937			267.89±22.516			
<u>Marital status</u> Single	193.80±11.367	_		280.60±14.553			
Married	194.23±16.211	F .408 .748		F .748	274.35±19.041	F	.646
Widow	206.00	.408		276.00	.556	.040	
Divorced	188.00±21.272			284.00±10.654			
Job position Nurse director	201.00			282.00			
Assistant nurse director	190.00±9.899			277.00±4.243	_		
Team member	191.92±18.044	F	.725	270.38±22.470	F	.114	
Supervisor	182.67±25.968	.566		250.67±27.099	1.867		
Head nurse	197.04±18.317			280.54±17.806			
Senior (charge nurse)	193.10±10.823			276.45±11.808	]		
*Significant (P<0.05). $F = One Way ANOVA.$ t-test for an independent group							

Table (5): Correlation matrix between nurse managers' level of innovative work
behavior and their crises management skills (N=63)

Study variables	Sig	Early detection of warning signals stage	Preparation and prevention stage	Damage containment stage	Recover y stage	Learning stage	Total crisis management
Opportunity	R	.142	.185	.074	.158	014-	.170
exploration	Р	.268	.146	.564	.219	.915	.184
Idea generation	R	.184	.097	108-	.076	070-	.087
	Р	.149	.451	.401	.556	.583	.500
Idea promotion	R	.234	.086	047-	.162	.052	.143
	Р	.065	.502	.712	.210	.683	.265
Idea realization	R	.235	.271*	.021	.189	.077	.240
	Р	.064	.032	.868	.140	.551	.058
Idea	R	.138	.154	005-	.143	.111	.146
sustainability	Р	.282	.228	.969	.266	.386	.254
Total innovative	R	.231	.204	018-	.190	.078	.202
work behavior	Р	.069	.109	.889	.138	.545	.112

Bivariate Person correlation test, Significance is considered if  $p < 0.05^*$ , highly considered if  $p < 0.001^{**}$ 

# DISCUSSION

Raising the standard of nursing care and increasing the favorable results for the healthcare organization could be achieved by using innovative behavior, a crucial notion to consider in nursing (Asurakkody & Shin, 2018). Additionally, innovation could be applied to crisis management to improve crisis management-related operations and address difficulties that arise from crises (Gajda & Zaplatynskyi, 2017).

Moreover, healthcare organizations that want to apply crisis management should focus on developing managerial abilities, exchanging information quickly, and supporting healthcare teams in their performance (Jankelová, Joniaková, Blštáková, Skorková & Procházková, 2021). So, the present study aims to determine the relationship between nurse managers' innovation and crisis management by measuring the nurse managers' innovation level, identifying the nurse managers' crisis management skills and finding a relationship between nurse managers' innovation and crisis management.

Regarding the nurse managers' innovation level, the current study findings illustrated that lower than half of the studied nurse managers had high innovative work behavior levels, and nearly half had moderate innovative work behavior levels. High nurse managers' innovative work behavior level present mostly with opportunity exploration followed by idea generation and then idea promotion. This result may be because of the time of data collection following the COVID-19 epidemic, which make them think innovatively to face such an epidemic and prevent the spread of infection.

This result was supported by Lambriex-Schmitz, Van der Klink, Beausaert, Bijker & Segers (2020, b), who illustrated that the level of innovative work behavior was higher in the first stages of innovative work behavior (opportunity exploration, idea promotion, and idea generation) than in the implementation stages (idea realization and idea sustainability). At the same time, this result contradicts the study of Wardan, Ghandour and Elghabbour (2020), who found that most nurse managers haven't been innovative at work.

Also, the present study findings revealed that nurse managers' personal characteristics hadn't statically significant relation with their innovative work behavior. This may be because the study was conducted only with nurse managers, and all were highly educated. This result agreed with Lambriex-Schmitz et al. (2020, b), who mention

that the prior education level had no significant relationship with any of the phases of IWB.

This result contradicted Lambriex-Schmitz et al. (2020), who found a significant and negative correlation between the participant's age and the idea of external sustainability dissemination. Also, being women had a significant positive correlation with the creative IWB dimensions: opportunity exploration, idea promotion, idea generation, and idea realization (learning-based communication). Additionally, a higher previous level of education had a significant and positive relationship with all dimensions of idea realization and idea sustainability.

Regarding nurse managers' crisis management skills, the current study results illustrated that all nurse managers had high total crisis management roles in all crisis management stages, mainly in the last three stages. This result may be because of the time of data collection following the COVID-19 epidemic, which makes them receive more training on how to face such crises and improve their crisis management role. In this time of fear and uncertainty, nurse managers play a crucial role in the fight against the pandemic. They are in charge of supporting and educating the nursing staff to provide high-quality care.

This result is supported by Jackson and Nowell (2021), who studied the experiences of nurse managers' during the COVID-19 pandemic and found that during the crisis, nurse managers promoted high-quality care continuously and experienced a range of experiences that were affected by changes to their positions and the assistance they received. Hence, nurse managers' roles have changed or expanded during health crises. Also, Aydogdu (2023) stated that nurse managers play a crucial role during the crisis, supporting and educating the nursing staff to provide quality care and perform their work duties in times of fear and uncertainty. Moreover, KULA (2023) found that nurses will be successful in crisis management to the extent that they can cope with stress.

This result is contradicted by Ozmen and Havva (2022), whose study found difficulties in nurse managers' crisis management roles, despite the fact they also regarded the crisis as an opportunity since it allowed them to identify management deficiencies at all levels. Additionally, the study of Reedy, Zedreck, Ren, Warburton and

Fennimore (2022) revealed that nursing managers don't have sufficient education that prepares them for disaster and emergency management.

Moreover, the present study findings revealed no statistically significant relationship between nurse managers' personal characteristics and their crisis management role. This might be because all study samples were in management positions and might be due to effective crisis management depending on guidelines and training they receive, not depending on personal characteristics.

This result contradicts the study of Hodge, Miller and Skaggs (2017), who found that higher scores of nurse managers may be associated with showing leadership qualities in crises based on their experiences, increasing their sense of competence. Similar to the findings of Taskiran and Baykal (2019), nurses' positions, professional experience, and age significantly influenced how they perceived the core skills scale for responding to disasters.

Concerning the relationship between nurse managers' level of innovation and crisis management skills, nurse managers' innovation did not have a statistically significant correlation with their crisis management. At the same time, a statistically significant correlation is present between idea realization as a dimension of innovative work behavior and the preparation and prevention stage of crisis management. Most nurse managers had high crisis management skills, despite the highest percentage having moderate innovation. This result may be because nurse managers depend on guidelines and training courses which they receive to be able to effectively manage crises with a moderate focus on their innovation level.

This result is supported by Teo, Lee and Lim (2017), who stated that innovative solutions are not a magic cure to successfully overcome and handle a crisis. Still, leaders needed it in the organization to develop and execute new practices, procedures, equipment, and safety tools; it is a critical resource for success in terms of resilience. Also, Lyng, Ree, Wibe and Wiig (2021) mentioned that to manage the crisis, there is a need for creative ideas (idea realization) to deal with and innovatively solve the crisis.

This result disagreed with Pring, Malietzis, Kendall, Jenkins and Athanasiou (2021), who found that crisis breeds innovation and advancement and provides impetus without training program implementation. Also, Akinwale (2021) illustrated a

relationship between innovation and crisis management, which focus healthcare organization attention on technological innovation that could play a critical role in health and economic crises.

# CONCLUSION

Based on the findings derived from the key outcomes of the present research, it was shown that a mere 42.9% of the nurse managers under examination exhibited a high degree of innovative work behavior. Approximately half of them (49.2%) demonstrated moderate innovation. Furthermore, it is noteworthy that all nurse managers have shown a commendable level of proficiency in crisis management. Additionally, no statistically significant association was observed between nurse managers' innovative work behavior and their crisis management skills.

# RECOMMENDATIONS

- Encourage nurse managers' participation in decision-making and problemsolving skills and appreciate the development of innovative ideas which raise the healthcare hospital's rank.
- Attend training programs, workshops and conferences about innovative work behavior and problem-solving to successfully face crises.
- Provide nurse managers with guidelines and tips to improve their crisis management skills.
- Hospitals should have crisis management committees for updating and assessing the crisis management guidelines regularly, monitoring the present situation continuously, and forecasting states of crises.
- More research was recommended in this area

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Zvarych, R., & Tysh, T. (2020). Crisis management and leadership in a coronary crisis. *Herald of Economics*, 2 (96), 135-147. العلاقة بين الإبتكار وإدارة الأزمات لمديري التمريض في مؤسسات الرعاية الصحية

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# الخسلاصية

تعمل استراتيجيات الابتكار على تحسين النتائج الصحية ومعالجة الأزمات الصحية وتؤدي إلى رعاية صحية عالية الجودة وتعزز الخدمات المقدمة لمؤسسات الرعاية الصحية وكذلك للمرضى. لذا، يجب على مؤسسات الرعاية الصحية التركيز على الابتكار لتقليل الأثار السلبية للأزمات الاقتصادية والصحية. الهدف: فحص العلاقة بين الإبتكار وإدارة الأزمات لمديري التمريض في مؤسسات الرعاية الصحية. **طرق البحث** :تم استخدام التصميم الوصفي الإبتكار وإدارة الأزمات لمديري التمريض في مؤسسات الرعاية الصحية. **طرق البحث** :تم استخدام التصميم الوصفي الارتباطى لاجراء هذه الدراسة. **المكان:**تم إجراء البحث بمستشفي بلقاس المركزي بمحافظة الدقهلية. **العينة**: قد الإرتباطى لاجراء هذه الدراسة. **المكان:**تم إجراء البحث بمستشفي بلقاس المركزي بمحافظة الدقهلية. العينة: قد أجريت الارتباطى لاجراء هذه الدراسة. **المكان:**تم إجراء البحث بمستشفي بلقاس المركزي بمحافظة الدقهلية. العينة: قد أجريت الارتباطى لاجراء هذه الدراسة. **المكان:**تم إجراء البحث بمستشفي بلقاس المركزي بمحافظة الدقهلية. العينة: قد أجريت الدراسة علي جميع مديري التمريض وعددهم ٢٣. أدوات جمع البيانات: تم إستخدام أداتين لجمع البيانات: أجريت الدراسة علي جميع مديري التمريض وعددهم ٢٣. أدوات جمع البيانات: تم إستخدام أداتين لجمع البيانات: المحاف من يواف مديري التمريض أطهروا سلوكا ماتين البيان الإدارة الأداة الأولي تتكون من جزئين (استبيان البيانات الشخصية ، ومقياس سلوك العمل المبتكر)، والأداة الثانية استبيان لإدارة الأزمات التمريض المري التمريض أطهروا سلوكا مبتكرا الغاية في الإدارة الأزمات المقارنة وجد أن نصفهم تقريبا لديهم مستوى متوسط من السلوك الابتكارى بالعمل. علي الرغم من تمتع جميع مديري التمريض بقدرات استثنائية في أدام مان علي وبالمقارنة وجد أن نصفهم تقريبا لديهم مستوى متوسط من السلوك الابتكارى الأزمات ، وخاصة في المرحلين الأمر مالي وبالمقارية بين مستوي ابتكري ماي مولي ما أطهروا ساوعم في المرحل وطام وخاصة في المرحل وبالمقارنة وجد أن نصفهم تقريبا لديهم مستوى متوسط من السلوك والمخارى الغيرة مان موا مومدات استثنائية في الأومات عبر المراحل المختلفة لإدارة الأزمات ، وخاصة في المرحلين الأخيرتين. الخلاصة : تم إستناج أنه لا يوجد ارتباط ذي دلالة إحصائية بين مستوي المريض المرحان ونوامة في يالمريض المالدي الوروات الأزمات. التوصيات أد

الكلمات المرشدة: إدارة الأزمات، مؤسسات الرعاية الصحية ، الإبتكار ، مديري التمريض.