ORIGINAL ARTICLE

Effect of Knowledge Management on Health Entrepreneurship through Organizational Learning Capacity in Hospitals of Guilan Province

Reza Sepahvand¹, Ali

¹Department of Business

management, Faculty of

Administrative Science,

management, Faculty of

Administrative Science,

Lorestan University

Khorramabad, Iran

*Lorestan University,

Khorramabad road to

Tel: +98-66-33120106 Fax: +98-66-33120104

aliemba90@gmail.com

Email:

Khorramabad, 44316-68151

5th kilometers of

Lorestan University,

Khorramabad, Iran

²PhD Candidate, Department of Business

Economics and

Hozni²

Background: Because of the importance of community health and the growing need for health care Health organizations have expanded their scope and with an entrepreneurial approach seeking to upgrade their performance. Knowledge is the most important capital of organizations and key factor in economics. The purpose of this study was to investigate the effect of knowledge management on organizational entrepreneurship through learning capacity.

Methods: This research was an applied type, and in terms of method, it was a descriptive survey. The statistical population of the research was the Hospital health staff of Guilan province in 2016, the statistical sample estimated 370 by Morgan table. This research was conducted with three standard knowledge management questionnaires, organizational entrepreneurship and learning capacity with structural equation modeling and smartpls2 software. The reliability of the research tools were calculated Organizational Entrepreneurship 0.88, Knowledge Management 0.93, and Learning Capacity 0.85, respectively. Results: Knowledge management 0.46 and organizational learning capacity have positive effect on organizational entrepreneurship. Also, knowledge distribution 0.94 and knowledge storage 90% and interaction with environment 0.84 and participatory decision-making 0.82 were identified as the most important factors of knowledge management and organizational learning capacity.

Conclusion: Managers are encouraged to pay attention to organizational learning capacity and knowledge management skills to increase organizational entrepreneurship. Improvement and attention to knowledge management and the expansion of organizational learning capacity can strengthen entrepreneurship. Therefore, health managers and policymakers should consider these issues.

Keywords: Hospital, Knowledge Management, Organizational Entrepreneurship, Organizational Learning

بررسی تاثیر مدیریت دانش برکار آفرینی سلامت از طریق ظرفیت یادگیری سازمانی در بیمارستانهای استان گیلان

زمینه و هدف: به دلیل اهمیت سلامت جامعه و نیازهای رو به رشد بهداشت و درمان ضروری است سازمانهای سلامت دامنه کاری خویش را وسعت بخشیده و با رویکرد کارآفرینی در پی ارتقا عملکرد خود باشند. یادگیری سازمانی برای پایداری موفقیت سازمانها در دنیای متغیر امروزی و کسب مزیت رقابتی ضروری است و دانش به عنوان مهمترین سرمایه و عامل برتری سازمانها و اقتصاد شناخته شده است. هدف این پژوهش بررسی تاثیر مدیریت دانش بر کارآفرینی سازمانی از طریق ظرفیت یادگیری می باشد.

روش: این پژوهش از بعد هدف، کاربردی و از لحاظ روش، توصیفی – پیمایشی می باشد. جامعه پژوهش کار کنان درمانی بیمارستانهای استان گیلان در سال ۱۳۹۵ بود که با جدول مورگان نمونه ۳۷۰ تعیین شد. این تحقیق با سه پرسشنامه استاندارد مدیریت دانش،کار آفرینی سازمانی و ظرفیت یادگیری با مدل معادلات ساختاری و نرم افزار smartpls2 انجام شد. پایایی ابزارهای تحقیق به تر تیب کار آفرینی سازمانی ۸۸/۰،مدیریت دانش ۹۰/۰۶ و ظرفیت یادگیری ۸/۸، به دست آمد.

یافته ها: مدیریت دانش با ضریب مسیر ۴۶/۰و ظرفیت یادگیری سازمانی ۰/۳۱ بر کارآفرینی سازمانی تاثیر مثبت دارند. همچنین توزیع دانش ۰/۹۴ ، ذخیره دانش ۰/۹۰ مهمترین عوامل مدیریت دانش و تعامل با محیط ۱/۸۴ و تصمیم گیری مشارکتی ۱/۸۲ مهمترین عوامل ظرفیت یادگیری سازمانی شناسایی شدند.

نتیجه گیری: بهبود و توجه به مدیریت دانش و گسترش ظرفیت یادگیری سازمانی میتواند باعث تقویت کارآفرینی گردد. لذا مدیران و سیاست گزاران بخش سلامت

واژههای کلیدی: بیمارستان، کارآفرینی سازمانی، مدیریت دانش، یادگیری سازمانی

تقييم تأثير إدارة البعرفة فى ريادة أعبال الصعة عن طريق القدرة على التعلم البنظم فى مشافى معافظة كيلان فى الجسهورية الإبلامية الإيرانية

الأرضية والمهدف: بسبب أهبية السلامة الصحية للمجتمع وبسبب المنظلبات المتزايدة للصحة والعلاج لذلك فإنه من الضرورى أن تزيد البؤسسات المرتبطة بالصحة والسلامة فعاليتها وأن تقوم بتعديث مستواها من خلال ريادة الأعمال الصحية ، يعتبر التعلم التنظيمي ضرورياً من أجل استمكام ونجاع المؤسسات ومن أجل كسب المنافسة في عالمنا المحاضر وتعتبر المعرفة أهم ثروة والعامل الأفضل في المؤسسات والإقتصاد ، الهدف من هذه الدرامة تقويم تأثير إدارة العلم و المعرفة على ريادة الأعمل .

الطريقة: تعتبر هذه الدرامة من حيث الهدف عبلية ومن حيث الطريقة توصيفية مسحية . الأفراد الداخلين في الدرامة هم العاملون في مشافي محافظة كيلان في البميورية الإسلامية الإيرانية في العام ٢٠١٦ . بحسب جدول موركان تست الاستفاده من ٣٠٠ عينة . ولقد استفدم في هذا التحقيق تملات أوراق أمثلة إستفسارية تتعلق بإدارة المعرفة ، وريادة الأعمال التنظيمية ، والقدرة التعليمية . مع معادلات تنظيمية وبرنامج Smart pls2 . وكانت نهية وسائل التحقيق كالتالي مع معادلات تنظيمية مه. . وادارة المعرفة عهد ، القدرة على التعلم ٨٥٠ . . المناتج : إدارة المعرفة مع ضريب مسير ٤٠٠ . و قدرة على التعلم التنظيمي ٢٠٠ لقد كان ليم تأثير مثبت على ريادة الأعمال التنظيمي ، وكان توزيع المعرفة عهد، و صنع المحيطة ٨٠٠ . و صنع الغرفة .٥٠ و التطابق مع المحيطة ٨٠٠ . و صنع الغرار التشاركي ٨٥٠ . أهم عوامل قدرة التعلم التنظيمي .

التتيجة : الانتعاش و التوجه إلى إدارة المعرفة و وسعة قدرة التعلم التنظيمي يؤدى إلى تقوية ريادة الأعمال . لذلك يجب على الرؤساء وصائعي قرار قسم الصعة أن ينتبهوا إلى هذا الأمر .

الكلمات الدليلية: مشفى ، ريادة الأعمال التنظيمي ، إدارة المعرفة ، التعلم التنظيمي

صوبہ گیلان میں میڈیکل شعبوں میں روز گار فراہم کرنے کے عمل پر نالج مینجمینٹ کے اثرات، نالج مینجمینٹ آرگنائزیشنل سہولتوں کے ذریعے انجام دیاجاتا ہے

بیک گراونڈ: معاشرے کی صحت و سلامتی کی نہایت اہمیت کے پیش نظر روز بروز بڑھتی ہوئی صحت و معالجاتی ضرورتوں کو پورا کرنا بھی بنیادی اہمیت کا حامل ہے۔ یہ ضرورتیں میڈیکل شعبوں میں روزگار فراہم کرکے پوری کی جاسکتی ہیں،آرگنائزیشنل تعلیم، اداروں اور آرگنائزیشنوں کے کامیاب ہونے کے لئے بنیادی اہمیت رکھتی ہے۔اس سے میڈیکل شعبوں میں کمپیٹیشن بھی بڑھتا ہے۔علم یا نالج آرگنائزیشنز اور اداروں نیز معیشت کا سب سے بڑا سرمایہ ہے۔اس تحقیق کا هدف آرگنائزیشنل سہولتوں سے تعلیمی حاصل کرنے کے راستے روزگار فراہم کئےجانے پر نالج مینجمنٹ کے اثرات ہیں۔

روش: یہ ایک عملی تحقیق ہے، یہ تحقیق دوہزار سولہ میں صوبہ گیلان کے اسپتالوں میں انجام دی گئی تھی، تحقیق میں شرکت کرنے والوں کے لئے سوالنامہ بنایا گیا تھا، یہ سوالنامہ مارگن ماڈل پر بنایا گیا تھا۔اس میں نالج مینجمینٹ، روزگار کی فراہمی اسٹرکچرل اور سافٹ ویر ماڈلز اسمارٹ پی ایل ایس ٹو کے ذریعے تعلیم حاصل کرنے کے بارے میں سوالات پوچھے گئے تھے۔

تعیجے: نالج مینجمینٹ اور آرگنائزیشن کی سہولتوں سے تعلیم حاصل کرنے کے فیکٹوس نے روزگار کی فراہمی پر کافی مثبت اثرات چھوڑے ہیں، اس کے علاوہ علم کو کتابی اور دیگر شکلوں میں محفوظ رکھنے کے طریقے نالج مینجمینٹ میں موثر رہے ہیں۔اس کےعلاوہ تعلیم کا ماحول اور گروہی شکل میں تعلیمی سرگرمیوں میں شرکت کرنا بھی آرگنائزیشنل سہولتوں سے استفادہ کرنے میں موثر رہے ہیں۔

سفارش:چونکہ نالج مینجمینٹ اور آرگنائزیشنل سہولتوں سے استفادہ کرنے سے روزگار فراہم کرنے میں مدد ملتی ہے لھذا میڈیکل شعبوں کے ذمہ داروں کو ان امور پرتوجہ کرنی چاہیے۔

كليدى الفاظ: اسيتال،مينجمينت، آرگنائزيشنل، روزگار

باید این موارد را مد نظر قرار دهند.

INTRODUCTION

Hospitals as one of the most important and complex organizations that play an important role in the development of any country and the medical staff are the most important source for achieving transcendental goals. Also, knowledge management and organizational entrepreneurship are important areas that can play an important role in promoting organizations, especially hospitals (1). Health entrepreneurs are recognized as business owners who provide important services such as direct care, education and research, executive works, and counseling (2). Health is a sustainable industry, and people's need for health services is permanent and the role of entrepreneurship in the field of health means the development of the application of new ideas that has become more valuable in the context of leading organizations. So that the position of the entrepreneurship concept in the health field has become remarkable (3).

Today, entrepreneurship and knowledge management are new and popular concepts and help organizations for identification, selection, organization, and distribution of important information and expertise that is part of the organization's memory that usually have an unstructured state in organizations (4). Today's developments in the world have led that smart organizations to seek recruitment and maintenance, creative and entrepreneur people. Today, organizations with a few creative and entrepreneur staff can compete on the global stage by implementing an entrepreneurial plan. (5)

Considering that knowledge management activities are infrastructural for entrepreneurship, therefore, creating an entrepreneurship development model requires knowledge management (6). Today, in the field of health services, due to wide variations, the opportunities and the number of entrepreneurial businesses that can be launched are significantly increasing. Also, important factors such as cost of health, the increasing availability of services, competitive pricing, expensive technology, aging populations, and high cultural diversity have affected the health services. mentioned challenges. Confronting the healthcare organizations try to look for their long-term solutions that are innovation and entrepreneurship (7). There is no choice but the need to invest in humans and provide the opportunity for creative and entrepreneurial personals to use their brains more efficiently and produce knowledge which is the most important factor in development (8). Lin (2010) said Knowledge management includes creation, acquisition, processing, storage and dissemination of knowledge and its application (9). One of the major problems of Iranian organizations is the weakness of knowledge management. Due to the weakness in the creation, maintenance, and transfer of knowledge, which leads to a wide gap between the existing and required knowledge in the organizations and causing repeated mistakes, rework, rising costs, dropping the quality of products and services, and dissatisfaction with both internal and external customers (10). Failure to pay attention to the production and transfer of knowledge in the healthcare sector can have adverse consequences for society, especially

patients. Despite the expansion of research in the country, especially in the clinical field, failure to transfer knowledge lead to waste of time and money and it becomes useless for the community (11). Over the past ten years, although the publication of scientific articles in the field of health has become more than doubled, but in practice, the gap between the production and use of knowledge is about 10 to 15 years. In Iran, the major problem in health system is the lack of use of research results and knowledge sharing (12). Organizational learning can be considered as an organization's ability to discover errors and modify them, as well as changing the knowledge and values of the organization in a way that new skills and capabilities of problem solving are created. Organizational learning is a process that allows us to take advantage of past experiences to adapt the organization by the environment and help the organization. One of the organizational learning outcomes is a competitive advantage. Organizational learning capacity refers to the internal organization's ability to create, enrich, and apply knowledge to work better than competitors in terms of performance and competitiveness. (13, 14). Hospital environments are one of the most interactive working environments that includes interactions between nurses, patients, doctors and other professional factors. And all these interactions can lead to learning (15). In our country, the high unemployment rate of young people, especially among academic health graduates, has become serious challenge for policymakers and planners, and has high economic costs (16).

Research results show that entrepreneurship training programs have positive impact on students' entrepreneurial intent, encouraging them to start business activities. But the general trend in Iran show that the situation in the Iranian organizations is traditional and non-entrepreneurial (17). However, it is believed that because of the diversity and variety of activities in the services sector, in particular health services it can make a profit from individual, group and organizational entrepreneurship, and increases the efficiency of resources and the effectiveness of the activity and ultimately improves the quality and improves productivity. However, in our country, there are a lot of job applicants in medical careers, such as medicine, nursing, midwifery, health experts, healthcare management, etc., entrepreneurship that can play a positive role in the development of health and treatment (18). Raesi (2010) studied relationship between personality traits of managers and entrepreneurship by 161 employees in health care organizations of Tabriz University of Medical Sciences. The findings of this research showed that there is a direct and significant relationship between managerial personality traits and organizational entrepreneurship. Among the personality traits Personal attraction, and appropriate opportunities for the organization had the greatest impact on entrepreneurship (19). Dehghan (2012) designed a three-branch model of entrepreneurship for factors influencing organizational innovation and entrepreneurship in Iran's medical sciences universities. The findings of this study showed that three groups of behavioral, contextual and structural factors affect organizational innovation and entrepreneurship in the

medical sciences universities of the country, that overall their score was moderate. In this research, it is recommended that managers should try to change the attitude towards the administrative system and reforming structures based on new strategies such as decentralization, reforming systems and working methods to improve the status of organizational innovation and entrepreneurship in the administrative system of the University of Medical Sciences (20). Salariyah and Kiajouri (2016) conducted a research entitled Relationship between Knowledge Management and Organizational Entrepreneurship in the Ports and Maritime Administration. The results showed that there was a positive significant relationship between knowledge management and its components such as acquisition, creation, and transfer and its application by organizational entrepreneurship (21). Aghjani and Samadi (2015) investigated the relationship between organizational entrepreneurship and the characteristics of a learning organization in West Azarbaijan private banks. They surveyed 244 staff and found that there is a positive relationship between learning organization and entrepreneurship (22). Nadi and Farahmandpour (2000) conducted a research on the relationship between knowledge management and organizational learning and organizational climate at Isfahan University. The results showed that there is a significant and positive relationship between all components of knowledge management and organizational learning (23). Marashian and Safarzadeh (2012) indicated the role of organizational learning and job motivation by job self-employment and organizational entrepreneurship. Findings showed that organizational learning has a direct impact on entrepreneurship (24). Each conceptual model is the starting point and the basis for studies and researches. In such a way determine the variables of research and the relationships between them (25).

Considering the mentioned points and the mission of the University of Medical Sciences on education and preservation and promotion of health in the community, this study aimed to investigate the process of implementation of knowledge management in Guilan University of Medical Sciences hospitals and its effect on organizational learning and entrepreneurship from the perspective of the medical staff. The main purpose of this research is to identify the impact of knowledge management dimensions on

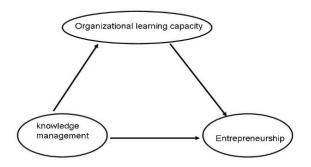


Figure 1. Conceptual model of research

entrepreneurship and organizational learning capacity using structural equation modeling. So far, such a study has not been carried out in the province of Guilan hospitals. This research seeks to answer the question of how can we increase organizational learning and entrepreneurship through knowledge management? In order to answer the research question, the research hypotheses are:

Hypothesis1: Knowledge management has a significant effect on learning capability.

Hypothesis2: Knowledge management has a significant effect on entrepreneurship.

Hypothesis3: Organizational learning capacity has a significant effect on organizational entrepreneurship. The independent variable of this research model is knowledge management. The mediating variable of this research is organizational learning capacity and dependent variable of research model, is entrepreneurship. The theoretical framework for research is presented in Figure 1.

METHODS

The method of this research was applied in terms of purpose and in collecting data, was descriptive survey. Data collection tools were 3 standard questionnaires.

The information analysis method was the structural equation modeling based on partial least squares method. The statistical population included 5000 Guilan medical sciences hospital staff that according to the Morgan table, 360 people were selected randomly in Rasht, fall of 2017. Having a twoyear work experience in the hospital was a necessary condition for the participants. Before distribution of the questionnaires, the ethnics were considered. Furthermore, it was explained that the results will be confidential. All questionnaires were without name and completed with satisfaction. The instruments used were 3 kinds of standardized questionnaires. The data gathering tools were 3 standardized questionnaires and included 74 questions for measuring the variables of the research. Questionnaire related to line entrepreneurship skill with 21 questions (26). Questionnaire related to Chiva's learning capacity with 16 questions include five dimensions of testing, risk, interaction with the external environment, participatory decision making and discourse (27). And Fong Knowledge Management Questionnaire with 37 questions has five dimensions of knowledge acquisition, creation of a climate of change, knowledge storage, knowledge distribution and knowledge maintenance (28). The data collection tools are questionnaire that their validity and reliability have been proven in the past research. Nonetheless, all questionnaires were reviewed by Medical professionals and researchers and they confirmed the validity. The validity of the questionnaire was verified by 10 faculty Department of Management members at the University of Lorestan. This research was conducted using the path analysis using Smart PLS2 software. Structural equation modeling is a comprehensive approach for testing assumptions about the relationships between observed and latent variables. The Smart PLS2 software focuses on maximizing variances and has superior advantages over similar soft wares, especially when models are complicated. Also, it is not sensitive to data normality

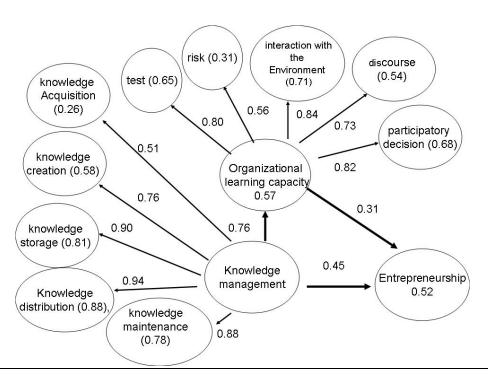


Figure 2. Structural model with standard coefficient

and the sample size. Reliability and validity in Smart PLS2 software are measured by three indicators. Cronbach's Alpha higher than 0.7, composite reliability higher than 0.7, coefficients of factor loads higher than 0.4 were appropriate. Convergent Validity (AVE) is an indicator that shows the correlation of a structure with its own indicators, the greater correlation provide better proportion. Values above 0.5 are suitable for this index. The GOF criterion is related to the general section of the structural equations model and represents the general proportion of the model, which has three values of 0.01 and 0.25 and 0.36 are considered as weak, moderate and strong values. In testing the hypotheses, according to the data analysis algorithm in the partial least squares method, after examining the fitting of the measurement models and the structural model and the general model, it turns to examine the research hypotheses which consists of two parts: Review of z significant coefficients and the values of t-values, if the coefficients of the path are higher than 1.96, at the confidence level of 0.95, can accept the assumptions and model and The study of standardized coefficients according to the coefficient of the paths is shown in Figure 2 (29).

RESULTS

In this research, for information analysis considering the relationships between the research structures that are causal, Structural equations modeling using Smart PLS2 software has been used. In addition to confirmatory factor analysis, the measurement models of each of the variables were performed to eliminate questions with lower factor load. So 8 questions were deleted. Table 1 shows the factor load of questionnaire questions.

All variables have an acceptable Cronbach alpha of over 0.7. Therefore, the research questionnaire has the necessary reliability. Also, the communality and the average of the variance explained (AVE) were also very good. Table 2 summarizes the indicators of the variables of the questionnaire.

In the following, we use the Smart PLS2 software to test the research hypotheses and structural model. To achieve this, the first factor analysis was conducted for each of the variables of the questionnaire. Finally, the model related to the research hypotheses has been implemented. After testing the measurement models, a structural model that represents the relationship between the variables of the research is presented. Using the structural model, research hypotheses can be considered. In Fig. 2, the structural model of research is shown in the standard state.

The findings indicated that all five factors of knowledge storage (0.90), knowledge distribution (0.94), knowledge acquisition (51.0), knowledge creation (0.76), and knowledge maintenance (0.88) had important role in determining of knowledge management. Also, testing (0.80), risk (0.56), interaction with the environment (0.84), discourse (0.73) and participatory decision (0.82) contribute to the definition of learning capacity. Also, the coefficient of determination of learning capacity and entrepreneurship (R2) was 0.57 and 0.52, respectively, which indicated that 57.0 changes in learning capacity with knowledge management. Also, 0.52 entrepreneurship is explained by two variables of knowledge management and learning capacity. Table 3 summarizes the results of the inferential statistics of the research. The GOF also has a strong fit on the whole model

$$GOF = \sqrt{Communalities \times R^2} = \sqrt{0.59 \times 0.54} = 0.56$$

Table 1. Factor load questionnaire questions							
Question	Factor load	Question	Factor load	Question	Factor load	Question	Factor load
1	0/44	19	0.71	42	0.79	65	0.82
2	0.49	20	0.62	43	0.49	66	0.80
3	deleted	21	0.70	44	0.59	67	0.75
4	0.72	22	deleted	45	0.72	68	deleted
5	0.55	23	0.53	46	0.65	69	0.84
6	deleted	24	0.43	47	0.59	70	0.84
7	0.41	25	0.45	48	0.50	71	0.79
8	deleted	26	0.70	49	0.66	72	0.82
9	0.52	27	0.92	50	0.71	73	0.82
10	0.67	28	0.47	51	deleted	74	0.88
11	0.61	29	0.40	52	0.79	75	
12	0.71	30	0.84	53	0.86	76	
13	deleted	31	0.89	54	0.71	77	
14	0.52	32	0.49	55	0.82	78	
15	0.47	33	0.82	56	0.75	79	
16	0.70	34	0.78	57	0.75		
17	0.73	35	0.82	58	0.82		
18	0.80	36	0.73	59	0.83		
14	0.71	37	0.43	60	0.81		
15	0.62	38	0.83	61	0.94		
16	0.52	39	0.77	62	0.93		
17	0.47	40	0.62	63	0.99		
18	0.70	41	0.66	64	deleted		

Table 2. Indicators of the variables of the questionnaire							
Variable	AVE	Composite Reliability	R Square	Cronbach's Alpha	Communality		
Test	0.88	0.93	0.65	0.87	0.88		
Knowledge acquisition	0.56	0.75	0.26	0.63	0.36		
Discourse	0.53	0.80	0.54	0.68	0.53		
Knowledge creation	0.51	0.80	0.58	0.77	0.51		
Entrepreneurship	0.51	0.90	0.58	0.88	0.38		
Knowledge management	0.65	0.94	-	0.93	0.34		
Knowledge maintenance	0.61	0.89	0.78	0.85	0.63		
Risk	0.95	0.95	0.31	0.98	0.97		
Interacting with the environment	0.63	0.83	0.71	0.70	0.63		
Participatory Decision	0.71	0.88	0.68	0.80	0.71		
Knowledge Distribution	0.50	0.91	0.88	0.88	0.50		
Organizational learning capacity	0.57	0.88	0.57	0.85	0.38		
Knowledge storage	0.46	0.88	0.81	0.85	0.46		

Also, the Vaf test obtained 0.33. It can be interpreted that about one third of the total knowledge management have influence on the entrepreneurship that was done through an

intermediary variable. Also, by performing the Soubel test, for a meaningful intermediate variable, 23 was obtained, which means that it was greater than 1.96 and had statistical

Table	Table 3. A summary of the inferential statistics of the research							
Number	Hypothesis	Standard coefficient	Significance factor	result				
1	The hypothesis 1 of knowledge management has a significant effect on learning capacity	0.75	16.47	Confirm				
2	The hypothesis 2 of knowledge management has a significant effect on job performance	0.45	3.47	Confirm				
3	The hypothesis 3 of organizational learning has a significant effect on organizational entrepreneurship	0.31	2.19	Confirm				

creation. According to the results of the first, second and third hypotheses (level of confidence0/95) were confirmed.

DISCUSSION

This research was designed to examine the effect of knowledge management on organizational entrepreneurship through organizational learning capacity. The study was conducted in 2017 at the Guilan Hospitals. The structural model of the research based on the indicators showed that the overall structure of the research model was confirmed. In other words, the developed model is consistent with reality based on theoretical literature and experimental data (conceptual model of research) and has been supported by gathered field data. Considering the software output and the significant levels 0.95 for verifiable factor analysis, the model of all factors has a good load factor and their relationship with the variables has been confirmed (the significance level of all variables is equal to zero and less than 0.05). Confirmation of knowledge management factors indicates that knowledge management has a positive impact on organizational learning and organizational entrepreneurship capacity with 5 dimensions. Research on entrepreneurship and knowledge management reveals that there is strong correlation between entrepreneurship and knowledge management components (sharing, learning, organizational creativity). In the past research, knowledge management status was in good status in investigating organizations (30, 31). Ideas and innovation are both the cornerstone of entrepreneurship. Therefore, it can be said that knowledge management plays a crucial role in supporting and creating entrepreneurial organizational (5). Nawaski (2016) said knowledge management affects organizational performance and entrepreneurship (32), which is consistent with this research. Sabouri (2012), in his dissertation in Tehran Shahdad milk Company, identified that there is a direct and significant relationship between knowledge management and organizational entrepreneurship (33). In the past research, it has been proved that organizational learning requires the foundation of knowledge management (34). Knowledge management and organizational learning have a two-way relationship so that the learning organization creates new knowledge for competitive advantage.

In fact, knowledge management ensures that the organization's environment is ready and organizational learning will work well (9), which is similar with our research. One of the important and effective factor on the

entrepreneurship is the creation of growth centers and research units in medical science universities. Many managers of these centers believe that the organizational structure of the existing entrepreneurship centers is commensurate with the universities goals and tasks. It is also necessary to design an organizational structure that is appropriate to the organization's goals and maintains dynamism and the more important point is: the proper organizational structure prevents rework, differences, and loss of forces and responds to the environment changes by providing flexibility which is consistent with the results of this research. Considering the size of the structure of the medical universities as a super organization and the allocation of one-way management posts to doctors, it seems that enough attention is not paid to managerial concepts such as knowledge management and organizational learning capacity (35). Also, in many organizations, organic structure and participatory space have a positive effect on organizational entrepreneurship. And this is due to the participation that makes people present their knowledge and creativity in a team type, thereby increasing organizational entrepreneurship. Organic and flexible structures, while enhancing entrepreneurial behaviors, also increase risktaking behavior. This requires low hierarchy, reduced layers of management, garneting employees' free time to think about innovative projects, and emphasizing open communication and team working that makes the flow of knowledge and information in the organization faster and better. Moreover, managers should also open the doors of the organization to the environment, and their strategies and orientations will actively seek market opportunities. In addition, in order to encourage the staff, it is possible to design a payment for risk and innovation (2, 3, 5). Risk taking in entrepreneurial organizations is regarded as a positive feature, as it forces employees to seek out the best opportunities to advance the organization's goals and be responsible for solving problems (21, 30).

Therefore, it is important for policy makers and managers at the Ministry of Health to seriously address the issue of knowledge management and strategies for developing organizational learning capacity in order to enhance health entrepreneurship and health services promotion. Because the mission of health organizations is not merely serving but to improve the quality of services, we must use knowledge. Always learn and encourage learning within the organization staff. According to the mission of the University of Medical

Sciences in preserving health in the community and in the light of the findings of the research on the impact of knowledge management and learning capacity on organizational entrepreneurship, managers should pay attention to the distribution and storage of knowledge and experience of employees. In this regard, it is useful to hold Educational and Occupational Workshop. Furthermore, the collaborative space, the provision of empowerment and the protection of personnel logical risks in the areas of education and research, which are important components of organizational learning. It is important to work and consult with different universities, scientific centers, and identifying and documenting the experiences of

individuals. Holding a regular and up-to-date startup and introduction of entrepreneurial individuals have a significant impact on promoting entrepreneurial culture. It is also recommended that respected researchers pursue other factors that engage in corporate entrepreneurship at a wider level in the country.

ACKNOWLEDGMENTS

Thanks to all of the medical staff of Guilan University of Medical Sciences who have helped us to complete our questionnaires.

Conflict of interest: None declared

REFERENCES

- 1. Kavosi Z, Khammarnia M, Ghanbari Jahromi M, Haghayeghi F, Kassani A. The relationship between organizational climate and employee entrepreneurship in Motahari Hospital, Jahrom, 2013. Sadra medical sciences journal 2014; 2(4): 369-78. [In Persian].
- 2. Jahani S, Abedi A, Fallahi Khoshknab M, Elahi N. Perceived entrepreneurial motivators by Iranian nurse entrepreneurs: a qualitative study. Quarterly journal of nursing management 2014; 3(3): 68-77. [In Persian].
- 3. Moodi F, Arbabi Sarju A, Nastiezaie N. The gap between the perceptions and expectations of faculty members of entrepreneurship culture development (Case study: Zahedan University of Medical Sciences). Journal of Medical Education Development, Zanjan University of Medical Sciences 2017; 10: 82-92. [In Persian].
- 4. Askaripour H, Gargij M, Hasanzadeh F. The relationship between knowledge management and entrepreneurship in entrepreneurship organizations. 2012. National Conference on Entrepreneurship and Knowledge Management Business Mazandaran, 2012. [In Persian].
- 5. Zampetakis LA. Entrepreneurial behavior in the Greek Public Sector. Int J Entrepreneurial Behav Res 2007; 13: 2.
- 6. Matviuk SGA. Study of Peruvian entrepreneurs leadership expectations. J Am Acad Business 2010; 16(1): 65-70.
- 7. Salminen L, Lindberg E, Gustafsson ML, Heinonen J, Leino-Kilpi H. Entrepreneurship education in health care education. Educ Res Int 2014; Article ID 312810: 1-8.
- 8. Ebrahimy S, Zare H, Jowkar A. A survey on the relationship between corporate entrepreneurship and knowledge management information science specialists working at Shiraz University libraries. Journal of dentistry 2015; 2(9): 17-26.
- 9. Lin HF. Contextual factors affecting knowledge management diffusion in SMEs.

- Indust Manag Data Syst 2014; 114(9): 1415-37.
- Amirkhani T, Aghaz A, Abdollahpour M.
 The impact of knowledge management on organizational entrepreneurship (A case study): Ministry of Industries and Mines.
 Business strategies 2011; 1: 295-308. [In Persian].
- 11. Badsar M, Rezaei R, Salahi Moghadam N. The effect of emotional intelligence on students' entrepreneurship competencies in agricultural majors (case study: University of Zanjan). Entrepreneurship development 2014; 7: 407-25. [In Persian].
- 12. Rahmatiniya K, Rahmati M. The relationship between knowledge management and organizational climate in universities in Torbat-e-Jam. Journal of educational management innovations 2014; 8(3): 55-67. [In Persian].
- 13. Santesso N, Tugwell P. Knowledge translation in developing countries. J Contin Educ Health Prof 2006; 26(1): 87-96.
- 14. Yaghoubi M, Javadi M. Relationship between knowledge management and team learning in selected hospitals of Isfahan University of Medical Sciences. Iranian journal of medical education 2012; 11(9): 1083-90. Iln Persiani.
- 15. Ghasemzadeh A. The role of intellectual capital and learning organization culture on organizational learning capability. Journal of Urmia Nursing and Midwifery Faculty 2015; 13(3): 180-8. [In Persian].
- 16. Chavoshi Z, Nikbakht M, Mokhtare H, Akbari A, Mirbazegh F. Relationship between levels of group and individual learning in clinical nurses' organizational learning: a case study. Nursing management journal 2016; 4(4): 18-27. [In Persian].
- 17. Farzaneh F, Taheri F. The effect of social capital on organizational entrepreneurship. Journal of social-cultural development studies 2015; 4: 111-32. [In Persian].
- 18. Hoseyni Dana HR, Mir Esmaieli BS, Boland Hemat A. The role of media in

- promoting a culture of entrepreneurship. Media studies 2013; 8: 1-18. [In Persian].
- 19. Raesi P, Nasiripour AM, Rostami L, Khalesei N. The relationship between managerial personality characteristics and entrepreneurship in Tabriz University of Medical Sciences. Health management 2010; 11(3): 57-62. [In Persian].
- 20. Dehghan R, Talebi K, Arabioun A. Organizational entrepreneurship and innovation at medical sciences universities of Iran. Payavard 2012; 6(1): 22-33. [In Persian].
- 21. Salariyan M, Kiajouri D. relationship between knowledge management and organizational entrepreneurship (Case study of the General Office of Shipping and Marine Affairs of Mazandaran Province). Maritime transportation magazine 2016; 1(2): 64-73. [In Persian].
- 22. Aghajani HA, Mohamadi H, Samadi H. An investigation of the relationship between organizational entrepreneurship and learning organization's features. Productivity management 2015; 9: 33-43. [In Persian].
- 23. Nadi M, Nasrabadi H, Farahmandpour. Analysis of the relationship between knowledge management dimensions and organizational learning levels among faculty members of Isfahan University. Training and evaluation journal 2011; 3: 107-30. [In Persian].
- 24. Marashiyan F, Safarzadeh S. The role of organizational learning and job motivation in predicting self-efficacy and organizational entrepreneurship of employees, journal of Social Psychology 2012; 8: 85-94.
- Chih-Wen W, Kun-Huang H. Global entrepreneurship and innovation in management. J Busin Res 2015; 68(4): 743-
- Moghimi M, Ramazan N. Manaegment research. Second edition. Negah Danesh, Tehran, 2014. [In Persian].
- 27. Moghimi M, Ramazan N. Manaegment

FUTURE of MEDICAL EDUCATION JOURNAL

- research. Second edition. Negah danesh, Tehran, 2014; 1 (113). [In Persian].
- 28. Moghimi M, Ramazan N. Manaegment research. Second edition. Negah danesh, Tehran, 2014; 10(70). [In Persian].
- 29. Davari A, Rezazadeh A. Structural equation modeling with PLS software. Tehran, Jahad Daneshgahi; 2013. [In Persian].
- 30. Alamzadeh M, Pirasteh M, Hoseinipak A, Mirzayee H, Jadidi M. The relationship between knowledge management and organizational learning levels in selected banks branches in Lorestan Province.
- Monetary and banking research journal 2015; 4: 97-114. [In Persian].
- 31. Dehghani H. The role of knowledge management in the innovation of organizations. Quarterly journal of growth and technology 2012; 10: 44-52. [In Persian].

 32. Nowacki S, Bachnik K. Innovations within knowledge management. J Busin Res 2016; 69(5): 1577-81.
- 33. Saburi H. Investigating the relationship between organizational organizations of KM and organizational entrepreneurship: A case study: Shahdad Milk Industries Co. MS.
- Dissertation. Payam-e-Noor University, 2012. [In Persian].
- 34. Soleiman M, Dehghan H, Naser A. The effect of knowledge management on organizational innovation through organizational learning. International Conference on Management and Industrial Engineering, 2015. [In Persian].
- 35. Barati Marnani A, Tourani S, Zahiri M. Designing organizational structure for entrepreneurship centers in medical sciences universities. Jha, 2006; 9: 41-50. [In Persian].