Association between Enhancing Learning Needs and Demographic Characteristic of Patients with Myocardial Infarction

العلاقة بين تعزيز احتياجات التعلم والخصائص الديموغرافية لمرضى احتشاء عضلة القلب

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المستخلص

الهدف: معرفة العلاقة بين تعزيز احتياجات التعلم والخصائص الديموغرافية (الجنس، المستوى التعليمي، العمر).

المنهجية: اجريت هذه الدراسة على عينة غرضية تم اختيارها للحصول على بيانات تمثيلية ودقيقة تتكون من (90) مريضاً في حالة تعافي من احتشاء عضلة القلب في مركز ميسان لأمراض وجراحة القلب، وتم استبعاد (10) مرضى للدراسة التجريبية ، تم تحليل البيانات باستخدام نهج تحليل البيانات الإحصائية الوصفي للتكرار والنسبة المئوية وتحليل التباين (ANOVA).

النتائج: تظهر نتائج الدراسة ، أن هناك علاقة ذات دلالة إحصائية بين الجنس واحتياجات التعلم للمرضى في الاختبارين القبلي والبعدي عند قيمة (P> .000)، بينما لم يتم العثور على علاقة ذات دلالة إحصائية مع عمر المرضى ومستوى تعليمهم مع احتياجات التعلم الخاصة بهم.

الاستنتاجات: استنتجت الدراسة الى وجود علاقة ذات دلالة إحصائية في الاختبارين القبلي والبعدي بين (الجنس واحتياجات التعلم للمرضى) ، ولكن لم يتم العثور على علاقة ذات دلالة إحصائية بين عمر المرضى ومستوى التعليم واحتياجات التعلم الخاصة بهم.

التوصيات: أوصت الدراسة بأن البحث المستقبلي حول احتياجات التعلم المتصورة يمكن أن يركز على احتياجات المرضى من المجموعات الأخرى ، مثل اولئك الذين يعانون من امراض القلب ولكن ليس لديهم احتشاء عضلي.

الكلمات المفتاحية: الارتباط ، التعزيز ، احتياجات التعلم ، الخصائص الديموغرافية ، المرضى ، احتشاء عضلة القلب

Abstract

Objectives: To find out the association between enhancing learning needs and demographic characteristic of (gender, education level and age) after implementation of the interventional health education**.**

Methods: This study was conducted on A purposive sample of (90) patients recovering from a myocardial infarction at Missan Center for Cardiac Diseases and Surgery was chosen to obtain representative and accurate data; (10) patients were excluded for the pilot study. Data were analyzed using descriptive statistical data analysis approaches of frequency, percentage, and analysis of variance (ANOVA).

Results: The study finding shows, there significant relationship between learning needs for patients and gender in pretest and posttest at (P value > .000), while no significant relationship was found with patients' age and level of education with their learning needs.

Conclusions: The study concluded that In posttest and pretest, there is a significant relationship between (gender and patients' learning needs), but no significant relationship was found between patients' age and level of education and their learning needs.

Recommendations: The study recommend that the future research on perceived learning needs could concentrate on patients from other populations, such as those with heart disease but no MI.

Keywords: Myocardial infarction, Association ,Enhancing ,Learning Needs, Demographic Characteristic, Patients,

Introduction

The primary cause of coronary heart disease and mortality is myocardial infarction (MI) [1]. Myocardial infarction, is most commonly caused by complete coronary artery blockage caused by the rupture of an unstable atheromatous plaque. Occlusion frequently arises at the location of an atheromatous lesion that was previously only causing modest or moderate stenosis of the artery and, in the vast majority of instances, did not generate symptoms before disruption. If the occlusion lasts longer than 20–30 minutes, muscle necrosis develops. myocardial infarction is often accompanied by severe, long-lasting chest pain as well as sympathetic nerve excitation, which increases heart work. However, approximately 15% of infarctions may not cause pain and may go unnoticed [2].

The common reason of myocardial infarction is the rupture or bleeding into an atherosclerotic plaque, which results in the creation of a coronary-occluding clot at the plaque's location. When myocardial cells die, enzymes leak into the bloodstream, and detecting the rise is crucial in determining whether or not a MI [3].

The cornerstone of atherosclerotic cardiovascular disease prevention, both primary and secondary, is lifestyle management. The implementation of lifestyle control is subpar despite this. Changes in lifestyle include quitting smoking, losing weight, making dietary adjustments, getting more increased physical activities, and managing stress. [4].

Methodology

Study Design: a cross-sectional study is conducted to determine the association between enhancing learning needs and demographic characteristics of (gender, education level and age). The study is being conducted at the Missan Cardiac Diseases and Surgery Center

Study Sample: We chose a random sample of (90) patients who are recovering from a myocardial infarction, for the pilot study, (10) patients were excluded.

Ethical Considerations: The conduct of the study has been permitted by the committee of research ethics at the Baghdad's University College of Nursing. Everyone who participated in the study signed a accept form supported that they conscious of the rights that for them as human subjects.

The Study Instrument: There are two sections to the self-reported questionnaire used in the study: Age, gender, and educational attainment are among the (Three) items that make up Part I of the questionnaire, which is used to collect demographic information from the patients. Part II will correlation between Socio-demographic Variables with the learning needs of the study group (pre-and posttest) by ANOVA.

Validity of the questionnaire: The content validity is assessed through panel of (13) expert from different scientific branches.

Reliability of the Questionnaire: the reliability had been is determined using reliability had been evaluated through applying test-retest reliability analysis of the questionnaire.

Data collection: Data are gathered using the study questionnaire and a written questionnaire application.

Data Analysis: Studies of the data are conducted using approach of the descriptive statistical data analysis approach, while analyses of the data are conducted using approach of the inferential statistical data analysis approach.

Results

Table (1): Distribution According to the Demographic Data, Study Samples (Control and Study)

Variable	Groups	Study group		Control group	
		Freq.	%	Freq.	%
Age Groups	20 – 29 years	1	2.5	1	2.5
	30 – 39 years	2	5	2	5
	40 – 49 years	13	32.5	11	27.5
	50 years and more	24	60	26	65
	Total	40	100	40	100
Gender	Male	22	55	23	75.5
	Female	18	45	17	42.5
	Total	40	100	40	100
Educational level	Read and write	3	7.5	5	12.5
	Primary	6	15	5	12.5
	Intermediate	7	17.5	6	15
	Secondary	7	17.5	11	27.5
	Institute	9	22.5	6	15
	Colleague	6	15	4	10
	Postgraduate	2	5	3	7.5
	Total	40	100	40	100

Freq: frequency, %: Percentage

Table (1) Shown that sixty percent of the study group and sixty-five percent of the control group were shown to be 50 years of age or older. The study group had a male gender ratio of 55 percent, and the control group had a male gender ratio of 75.5 percent, according to the results. According to educational level, the highest percent in the study group was 22.5 percent from the institute graduate level, while the highest percent in the control group was 27.5 percent from the secondary level for graduate category.

Table (2): Correlation between Socio-demographic Variables with the Learning Needs of the Study Group (Pre-and Posttest) by ANOVA.

Socio-demographic variables		Study group (n=40)											
		Pretest						Posttest					
		Sum of squares	df	M.S	F	Sig.		Sum of squares	Df		M.S	F	Sig.
Age	Between groups	.706	3	.235	1.165	.336	N.S	.067	3	.022	.436	.728	N.S
	Within groups	7.269	36	.202				1.833	36	.051			
	Total	7.975	39					1.9	39				
Gender* t-Test	Mean	3.27	39			.000	H.S	4.95	39			.000	H.S
	S.D	.5						.22					
	t test	45.8						141					
Level of education	Between group	1.737	6	.289	1.53	.199	N.S	.178	6	.03	.568	.753	N.S
	Within groups	6.23	33	.189				1.722	33	.052			
	Total	7.975	39					1.9	39				

Table (2) revealed a significant connection between patients' learning needs and gender. in pretest and posttest at (P value > .000), while no significant relationship was found with patients' age and level of education with their learning needs.

Discussion

Discussion of the Social and demographic information of the study sample (Study and Control groups)

Table (1) shown that the results show more than a quarter of patients in the study group and more than half in control group were within age group 50 years and older. In addition, results revealed that more than half of patients in the study group and more than three quarters in control group were males. This finding is supported by a study, the majority of whom (68.3%) were men and older individuals (56.1 percent) [5].

Related to the education level, less than one quarter of patients in the study group were within institute graduate level, and more than one quarter in control group were within secondary school graduate.

Because older patients who were recovering from MI participated in the current study, the majority of them were either unable to read or write or could read and write due to their high education level, the researcher explains that the study excludes patients who cannot read or write and includes patients who can.

Discussion of Correlation between Socio-demographic Variables with the Learning Needs of the Study Group (pre and posttest).

Table (2) Showed Gender and patients' needs for learning had a significant relationship. in pretest and posttest at (P value > .000), while no significant relationship was found with patients' age and level of education with their learning needs.

This study is consistent with studies which report that there were differences between men's and women's perceived learning needs [10].

This study supports the findings of [11], who found no significant relationships as statistical between the age and cardiac patient learning needs inventory subscales.

As a result of his research, the researcher explain that there were no significant relationships as statistical between the level of education and cardiac patient learning needs inventory subscales in table (2). This resulted from the high effectiveness of interventional health education regarding patients' perceived learning needs across all patient educational levels. Patients of all educational levels are made aware of the significance of patients with myocardial infarction's learning needs through interventional health education.

Conclusions

Based on findings of this research, the researcher has reached the following conclusions: In the pretest and posttest, there is a significant relationship between learning needs of patients and gender, but no significant relationship was found between patients' level of education and learning needs, and their age.

Recommendations

The following recommendations are made by the researcher in light of the study's findings and conclusions. Future studies are encouraged to use larger

sample sizes. updating patient learning needs by inspiring and motivating them to take part in interventional health education on the perceived learning needs of patients with MI. Future research on perceived learning needs could focus at the learning needs of patients from other populations, such as individuals with heart disease but no MI

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