WJARR

World Journal of Advanced Research and Reviews

World Journal Series INDIA

(RESEARCH ARTICLE)

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Assessment of nurses' knowledge regarding myocardial infarction in Basrah Teaching Hospitals

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Abstract

The recent study was conducted on University of Basrah College of nursing and aimed to assess the nursing knowledge regarding myocardial infarction. Fifty nurses from both gender (male and female) with different educational level and experience as well as work field participate the assessment which include the demographic information and items corresponding myocardial infarction. The result showed that 68 % of the participants female, and most of them with diplomat degree, nurses have 1-5 year of work experience were (50%), also the results showed that their knowledge (correct answer extend from 10-78%) with significant total mean of score (2.2). The study concluded the participant's nurses have a knowledge regarding myocardial infarction but the scientific support for this disease is important to raise the scientific and professional competence of nurse.

Keywords: Nurses; MCI; Basrah; Knowledge

1. Introduction

Cardiovascular disease (CVD) is the number one cause of death worldwide. Cardiovascular disease covers a wide range of disorders, including diseases of the heart muscle and the blood vessels that supply the heart, brain, and other vital organ[1]. The beginning of the 20th century, cardiovascular disease was responsible for less than 10% of all deaths worldwide. Today, that number is around 30%, with over 80% of the burden now occurring in developing countries. In 2001, cardiovascular disease was the number one cause of death worldwide [2]. Myocardial infarction (MI), colloquially known as 'heart attack', has occurred due to lack or complete cessation of blood flow to part of the heart muscle [3]. Myocardial ischemia may be associated with ECG changes and elevated biochemical markers such as cardiac troponin [4,5].

An acute myocardial infarction (MI), known as a 'heart attack', results in the death of the heart muscle. AMI occurs as a result of a partial or complete blockage of a coronary artery, reducing the blood supply to heart cells fed by a blocked coronary artery or necrosis. The extent of heart damage afterward varies depending on the location of the blockage and the amount of blockage in the coronary artery [6].

Modifiable risk markers for myocardial infarction are smoking blood pressure, normal blood pressure, abdominal blood pressure, psychological factors (depression), loss of control, stress, stress, financial stress, events including marital separation and job loss. Consumption of normal consumption of fruits or vegetables, daily consumption [7,8]. Pressure, tightness, pain, or a squeezing or aching sensation in chest or arms that may spread to neck, jaw or back [9]. Treatment

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for suspected acute myocardial infarction includes oxygen, aspirin, and sublingual glycerol trinitrate (colloquially referred to as nitroglycerin and abbreviated, Pain relief is also often given, classically morphine sulfate [10] .

Patient with myocardial infarction or at risk for infarction must understand the underlying mechanisms of infarction and recognize its subtle as well as more obvious signs. Rapid assessment and immidate response are essentially to recovery [11] . High-level thinking skills, such as the ability to digest and filter information and spot patterns, are fostered via concept-based curriculum and teaching (15). Teachers are the main caregivers and the first line of protection for school children. Their role complements that of parents. During school hours, school teachers are actually the first-respondent in cases of disasters or emergencies. They must be able to deal properly with health emergencies both in normal children, and those children with special health care needs [16].

2. Methodology

This study conducted at college of nursing /Basrah University as across-sectional involving fifty nursing staff in Basra hospitals. To achieve the aim of the questionnaire was designed as Google form and translated to arabic language to assessment nurses knowledge corresponding myocardial infarction ,the project carried out in nursing collage- University of Basra- Basra hospitals (Al- Basra Teaching hospital and Al- sader Teaching hospital).Male female Nurses participated the assessment questionnaire to assess knowledge regarding myocardial infarction.

Acomprised of questions taken by written. Before Introduction this items distributed for teachers of college. It divided in to two parts, the first parts was to identify the socio- demographic characteristic include gender, education level, years of experience and work filed. And the second part include fifteen items and scientific knowledge myocardial infarction regarding statistical data analysis for data, Percentage. Frequency. And Mean of score. Were used.

3. Results and discussion

Table 1 The frequent and percentage regarding Demographic information

	F	%
Gender		
Male	16	32%
Female	34	68%
Education level		
Nursing secondary school	11	22%
Diploma	27	54%
BSc	9	18%
MSc	2	4%
Years of experience		
1-5	25	50%
6-10	6	12%
11-15	5	10%
20- 30	14	28%
Work filed		
Surgery	10	20%
ICU	11	22%
Emergency	10	20%
Other departments	19	38%

Table 2 Nurses have good knowledge of hypertension, diabetes and its effect on myocardial infarction

NO	Questionnaire	yes		No correct		Not sure		MS	S
		F	%	F	%	F	%		
1	Avoid exercises for heart disease patients	21	42%	19	38%	10	20%	2.2	S
2	Myocardial infarction may happen without symptoms	14	28%	27	54%	9	18%	2.2	S
3	Diabetes contributes to myocardial infarction	33	66%	6	12%	11	22%	2.4	S
4	People can be born with heart disease	47	94%	1	2%	2	4%	2.9	S
5	High flow oxygen recommended for all patients with myocardial infarction	18	36%	17	34%	15	30%	2.06	S
6	Rehabilitation programs don't reduce heart disease mortality	5	10%	36	72%	9	18%	1.9	N
7	The term "heart failure" mean the heart has stopped working completely	6	12%	40	80%	4	8%	2.04	S
8	Weather can effect on myocardial infarction	25	50%	10	20%	15	30%	2.2	S
9	All people who have myocardial infarction experience the same symptoms	10	20%	33	66%	7	14%	2.06	S
10	Females at age 50 increased risk of heart disease than younger females	37	74%	7	14%	6	12%	2.6	S

Table 2 Nurses knowledge regarding myocardial infarction

NO	Questionnaire	yes		No correct		Not sure		MS	S
		F	%	F	%	F	%		
11	Avoid excessive weight gain during pregnancy is a primary prevention for reducing a female patient's risk of developing coronary heart disease	38	76%	8	16%	4	8%	2.6	S
12	If cardiac ischemia lasts too long, the heart tissue dies	39	78%	1	2%	10	20%	2.5	S
13	Covid-19 disease may also damage heart in ways that lead to a heart attack	31	62%	7	14%	12	24%	2.3	S
14	A female hormone estrogen, may offer protection against heart disease	19	38%	8	16%	22	44%	1.9	N
15	Meditation may aggravate the condition of the myocardial infarction	8	16%	25	50%	17	34%	1.8	N
16	Hypertension reduce the incidence of coronary heart disease	10	20%	35	70%	5	10%	2.1	S
17	Cholesterol is one of the risk factors that can't be modified	30	60%	15	30%	5	10%	2.5	S
Total MS		**2.2 significant**							

Knowledge and awareness of nurses about diseases is very important, realizing the significant effects of pain physiology. Pain management in myocardial infarction is a major responsibility of nurses. Consequently, nurse's knowledge about

pain management can influence the final treatment outcomes [12] Results showed differences in knowledge in regard with level education and years of experience. According to table (1) the majority of nurses were female (68%) and male (32%). This is related to acceptation of female student more than male in nursing secondary schools as well as in nursing college. Also, the results showed that the level of education the result showed a high percentage of nurses (54%) were diploma graduates, demonstrated that there is a significant association between level of education and the nurses' knowledge.

Regarding years of experience, nurses with experience from 1-5 years (50%) , 6-10 years (12%) , 11-15 years (10%) and 20-30 years (28%).this may be due toRecruitment of fresh graduate nurses in hospitals. Work field (20%) in surgery, (20 %) in emergency, (22%) in ICU and (38%) in other departments.

Meditation improves health and reduces symptoms of myocardial infarction, may be extremely useful in secondary prevention of coronary heart disease and may reduce cardiovascular events by 48 % over a 5-year period [13].

Smoking, through its basic ingredient's nicotine and CO, increases oxidative stress, endothelial damage and dysfunction, is associated with significantly higher serum concentrations of total cholesterol and triglycerides, reduces the cardio-protective HDL, and by promoting intravascular inflammation represents a significant risk factor for the development of atherosclerosis and cardiovascular disease [14].

4. Conclusion

Study results show different levels in nurse knowledge. Years of experience have impact on knowledge of nurses about Myocardial Infarction, Rehabilitation programs and exercises are important to maintain improved heart health.

Compliance with ethical standards

Disclosure of conflict of interest

There are no conflicts of interest and all researchers are compatible.

Statement of informed consent

The present research work does not contain any studies performed on animals/humans' subjects by any of the authors.

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