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Patient's Information Toward Some Modifiable Risk Factors of Ischemic Heart Disease

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ABSTRACT

Ischemic heart disease (IHD), , is the condition of heart problems, caused by narrowed coronary arteries that supply oxygenated blood to the heart muscle. There is a shortage of study of bachelor students. The goal of this research was directed to assess level of patient's information toward some modifiable risk factors of IHD at Rania teaching hospital in Kurdistan region of Iraq during the period of (20th October 2019 - 10th February 2020). A non- probability purposive sample of (143) patients; the study instrument was constructed of total (42) items for the purpose of data collection. The content validity of the instrument was determined through a panel of (12) experts. Reliability of the instrument was determined through the use of internal consistency reliability (split half) approach which was estimated as r = (0.83) the data were collected through the use of interview technique (face to face approach), the computer files is used to organizing and coding it. The data analyzed by Statistical approaches which includes: descriptive and inferential statistical and chi-square, data analysis (SPSS version 25). The outcome showed that most of the sample rang from the age (25-40) years and most of them were male from urban, more than half of them were unemployed but nearly half of them were graduated from primary school. 32.2% of them diagnosed by cardiovascular disease. However more than half of them had a high level of information about IHD as a general, and the TV was the first source of their information but more than half

of them were overweight, 65% did not do regular exercise, 52.4% were relatively stressful. Also, the study demonstrated that there is no significant association between socio demographic data and level of patient's information toward some modifiable risk factors of IHD, with age, gender, educational level and occupation with IHD, at p value greater than 0.05. The study recommended to ministry of health and directorate of health in Rania city to develop and supervise the center of dietary regimen and halls of exercise for the people to implement their information and practice it.

1. INTRODUCTION

Ischemic heart disease or coronary heart disease is a coronary blood flow reduction caused by coronary artery atherosclerosis, also it often used to describe this syndrome and it is the leading cause of death and disability worldwide. Cardiovascular diseases (CVD) are one of the most serious problems of modern times [1]. According to the European Society of Cardiology (ESC) coronary artery disease (CAD) is defined as an episode of a reversible condition between the nutrient needs of the cardiac muscle and its demand that is associated with ischemia or hypoxia [2]. Aging of the population is one of the high occurrence frequency of predisposing factors for IHD, also it still the most frequent cause of deaths in the world. According to the World Health Organization (WHO), the number of deaths that return to IHD will increase from seven millions and two hundred thousand in 2002 to nearly eleven millions in 2020 [3]. Modifiable risk factor which collect the most frequent factors that can be eliminated or minimized by changing the lifestyle such as stressful situation, smoking cigarette, elevated glucose, hypertension, visceral obesity, lipid disorders and thrombotic conditions [4]. Both of traditional and non-traditional risk factors are contribute to developing of IHD in female and male [5]. Overweight or obesity, physical inactivity; unhealthy diet and stressful condition are other risk factors of IHD [6]. Healthy lifestyle and continuous interventions for prevention, is useful to reduce occurrence of CAD event rates greatly [7]. Healthy dietary pattern that emphasizes nutrient dense foods will significantly benefit public health; because high amount of sugars, sodium and Cholesterol in daily food lead to increasing CVD risk [8]. The higher consume of fruit and vegetable during young adulthood was associated with lower odds of prevalent coronary artery calcium [9]. Obesity, hypertension, dyslipidemia, and type 2 diabetes mellitus in humans are affected by excessive sugar consumption because it is playing a significant role in the epidemics of insulin resistance. Evidence on the relationship between eating of sugar and cardiovascular health has emerged since the last American heart association (AHA) scientific statement was published [10]. An expansion in cardiovascular yield with physical exercise and expanded skeletal muscle perfusion brings about increased myocardial oxygen request. Since myocardial oxygen extraction from the blood is as of now nearly seventy to eighty percent at resting conditions, the support of myocardial oxygen and supplement supply transcendently relies upon coronary blood stream. It has been demonstrated that customary exercise preparing prompts useful and morphologic changes of the vascular tree related with decreased coronary vascular obstruction [11]. Ischemic heart disease is a pathophysiological condition caused by the disproportion between the myocardial oxygen demand and its supply. Nutrition of the myocardium depends on the oxygen capacity of the blood and the amount of coronary flow [12]. The mortality from IHD has radically reduced throughout the last decades in western nations with greater focus on primary prevention and enhanced possible diagnosis and management of this disease,

the western lifestyles due to higher prevalence of cardiovascular risk factors while health care systems globalization often improved the adoption and still it is the main global cause of death according to the estimation of World health organization (WHO) and it accounted more than nine million deaths in 2016 especially in developing countries [13]. Epidemiological studies showed that smoking cigarette, lack of physical activity, unhealthy and irregular nutrition, stress, influences the behavior of health to a greater extent than genetic factors, quality of medical care or environmental conditions are considered as the elimination of harmful risk factors [14]. Excellent patient's information can assist with treating numerous patients' issues. Without great data forthright, it is exceptionally hard for any patient to settle on the correct choice with regards to their wellbeing and what treatment plan that best suits for them. In any case, when included, a well-educated patient is bound to stay with their concurred treatment plan than one who does not [15]. The ability of patients to read and understand the words and numbers they come across in a healthcare setting, is the term used to describe Health literacy. Most adults are comfortable reading healthy information written in language that could be understood by a typical twelve years old, but one in every five adults finds this difficult. More established individuals may have extra difficulties in the event that they have issues with seeing, hearing or thinking. Individuals with decreased wellbeing proficiency can benefit from outside intervention to comprehend complex thoughts if the specialist talks gradually, utilizing ordinary words, or if data is given in short areas instead of at the same time [16]. The support of nursing in cardiovascular recovery patients can improve wellbeing results and diminish the danger of another heart occasion. the most consequence for medical caretakers to meet the rehabilitative consideration requirements of clients through instruction, backing, observation and fortification, Recovering from heart issues mentally and genuinely is a perplexing procedure that the patients need proceed with care after release from the emergency clinic; and here and there after the cardiovascular sickness occasions the patients experience numerous issues concerning the consequence of the ailment or restoration, remembering worry about the arrival for their ordinary life. So the upsides of enough nursing help and the executives in cardiovascular restoration patients can improve wellbeing results and diminish the danger of another heart occasion. One of the most essential apparatus to meet the rehabilitative consideration needs of patients through guidance, backing, guideline and fortification is nursing practice [17]. The nurse plays a vital role in detecting and helping the patient's discomfort on a regular basis; that is the reason it is significant for attendants to apply clinical rules to the consideration of heart patients so as to lessen their suffering [18]. Additionally the expert or professional nurses assume a huge job in diminishing the worldwide weight and taking an interest to improving the result of the individual and networks, so the nurses also need knowledge and skill or practices that will help them to function as the contributor in a multidisciplinary team in solving cardiovascular disease [19].

2. METHODS AND MATERIALS

The present study was carried out through the application of quantitative design, a descriptive study and it was conducted patients at Rania teaching hospital in Rania city that has been implemented to assess Patient's Information toward some modifiable risk factors of Ischemic Heart Disease at Rania teaching hospital during the period of 20th October 2019 to 10th February 2020.

Administrative Arrangements

An approval was issued for the instrument of the study, permission was granted from the College of Nursing/ University of Raparin, and Rania Directorate of Health to carry out this study at the Rania teaching Hospital in Rania district.

Study setting

The study was approved from Rania teaching Hospital (medical, surgical, coronary care unit and consultant unit for outpatients) in Rania city which are the main wards of this hospital.

Sample of the Study

Non-probability (purposive sample) of (143) patients, (93) males and (50) females who were visited consultant unit and admitted in the medical, surgical and coronary care unit at Rania teaching Hospital.

Criteria of including the study sample

Both adult genders, males and females patients who were visited consultant unit and admitted in to medical, surgical and coronary care unit in Rania teaching hospital.

Criteria for excluding the study sample

Patients who refused to be interviewed or could not participate in the study.

Tool of the study

For the purpose of data collection, the study tool was constructed and based on extensive review of related literature and studies to assess patient's level of information regarding ischemic heart disease.

The study tool is composed of two parts which were distributed through the followings:

(Part 1): Socio Demographic and clinical characteristics of the study

This part consists of age, gender, marital status, monthly income, occupation, level of educational, residential area, body mass index

(Part2): patient's information and habit toward some modifiable risk factors of IHD, which include:

Patients' information and habit regarding exercise

This part include these items:

Information about relation of exercise and ischemic heart disease, doing regular exercise, time and type of it.

Source of information.

Patients' information and habit regarding daily nutrition:

This part consists of these items:

Information and the main sources of healthy food that prevent IHD and eating healthy food daily.

Patients' information and habit concerning cigarette smoke

This part consist these items:

Information and source about relation of smoking and IHD, number and years of cigarette smoking, question about ex-smoker and if the patient past smoker, when did he or she quit smoking.

Patient's daily stress

This part deals with level and the situation of stress.

Patients' information toward some modifiable risk factors of Coronary heart disease

This part includes consist of the following: obesity, physical inactivity, very stressful situation, Hypertension, Diabetic Mellitus, Dyslipidemia, abdominal fat and smoking cigarette.

Patient's information toward the relation between the nutrition and IHD

This part includes these items: excessive eating sweet, salty and high saturated fatty food, eating a low amount of fish, vegetable and fruit.

Validity of the study tool

The content validity of the tool was determined through a panel of (12) experts with average years of experience of 12.6 years, (mean= 12.6 years), in various field of science (Nursing, and Medicine) to investigate the clarity, relevancy and adequacy of the items of the tool. Experts were provided the instrument by their opinions about the suitability of the items included in the form. The majority of the experts agreed upon the items of the study with some comments and suggestions. In addition the experts' suggestions have been taken into consideration. So far, the modifications are employed and the final copy of the instrument is completed and become valid to be an appropriate tool for data collection.

Pilot Study

A pilot study was conducted on (15) male and female patients during the period of 20th October up to the 25th of October 2019.

Reliability of the questionnaire

Reliability was conducted by the application of internal consistency reliability (split half), which was conducted at Rania teaching hospital from 15 patients of (medical, surgical, coronary care unit and consultant unit) were gathered for such reliability estimation. The reliability of the current study was (r= 0.83) for some risk factors of ischemic heart disease that put someone to developing coronary heart disease which indicated an acceptable reliability for the questionnaire.

Rating and Scoring

The items were rated and scored according to the following patterns:

The three point types Likert scale Yes, No and Uncertain is scored as (2) for Yes,(1) for Uncertain and (0) for No.

The two point Semantic scale Yes and No (2) for Yes, and (0) for No.

Methods of data collection

The data were collected through the utilization of adopted and constructed tool, interview technique. The data collection process was performed from the period of 26th November up to 14th of December 2019. Interviewing by the use of the questionnaire for demographic data and knowledge took about 10-15 minutes for each patient. Ten patients were dropped out from the study sample because they refused participate in the study, for this reason the total study sample remaining only 143 patients.

Body Mass Index

By using a tape measure and same weight scale for all patients, the researchers find out the BMI through formula:

Weight by kilogram divided to height by $(m)]^2$

Statistical Analysis

The data were organized and coded into computer files, by using the Statistical Package for Social Science (SPSS, version 25).

The two statistical approaches were used for data analysis, which include:

Descriptive statistical data analysis:

Such analysis was performed through the following:

Frequency distribution

Percentage

% = Frequency / sample size × 100

Mean = $\Sigma xi / n$

Inferential statistical data analysis

Such analysis was performed through the application of the following procedure:

Cronbach Alpha Correlation Coefficient was employed for the determination of the instrument reliability.

3. RESULTS

Table (1) Showed that highest age of the patients were between (25-40 years) (45.5%), (65.0%) of them were male, (28.0%) were graduated from primary school, (65.0%) were unemployed, (91.6%) from urban area but (51.7%) of them were overweight and (16.8%) were obese.

Table1: Demographic and clinical characteristics of study participants (n = 143)

Variables	Categories	F	(%)
Age (Years)	25 - 40	65	45.5
	41 - 55	48	33.5
	56 and more	30	21.0
Gender	Male	93	65.0
	Female	50	35.0
Marital Status	Single	17	11.9
	Married	115	80.4
	Widow/er	11	7.7

Educational Level	Illiterate	32	22.4
	Read and Write	27	18.9
	primary school graduate	40	28.0
	Intermediate and high school	22	15.4
	College and Institute	22	15.4
Occupation	Employed	52	36.4
	Unemployed	85	59.4
	Retired	6	4.2
Monthly Income	Sufficient	55	38.5
	Barely sufficient	57	39.9
	Insufficient	31	21.7
Residential Area	Urban	131	91.6
	Rural	12	8.4
Body Mass Index	Underweight	3	2.1
	Normal weight	42	29.4
	Overweight	74	51.7
	Obese	24	16.8

Table (2) showed that (58%) of the participants had information about ischemic heart disease, and their source of information was TV (14%) but only (32.2%) of them was diagnosed by IHD.

Table 2: Patient's information about ischemic heart disease as a general

Questions regarding ischemic heart disease	**Categories**	**F**	**%**
Do you have any information about ischemic heart disease as a general?	No	60	42.0
	Yes	83	58.0
If yes, which one is the most source of your information?	Physician	41	28.7
	My relatives	7	4.9
	TV	20	14.0
	Reading books	7	4.9
	Internet	8	5.6
Are you diagnosed by cardiovascular disease?	No	97	67.8
	Yes	46	32.2
How many years do you diagnosed by cardiovascular disease?	1 - 4	18	12.6
	5 - 9	19	13.3
	≥ 10	9	6.3

Table (3) demonstrated that (79.7%) of them had information regarding relation of cigarette smoking and IHD and TV was their source of information (32.9%) but only (28.7%) of them were current smoker and (14%) of them were smoked 20 cigarette daily within (11-20) years.

Table 3: Patient's information and habit regarding the relation of cigarette smoking and ischemic heart disease

Questions regarding cigarette smoking	**Categories**	**F**	**(%)**
Do you have any information about the relation of smoking and ischemic heart disease?	No	29	20.3
	Yes	114	79.7
If yes, which one is the most source of your information?	Physician	45	31.5
	My relatives	6	4.2
	TV	47	32.9
	Reading books	3	2.1
	Internet	13	9.1

Are you a smoker?	No	102	71.3
	Yes	41	28.7
If Yes, how many years do you smoke?	1 - 10	8	5.6
	11 - 20	9	6.3
	21 - 30	6	4.2
	31 ≤	18	12.6
How many cigarettes do you smoke per day?	1- 10	10	7.0
	11 - 20	20	14.0
	21 ≤	10	7.0
If No, are you:	EX- Smoker	21	14.7
	Passive Smoker	23	16.1
	Never smoker	58	40.6
If you are an EX-smoker, when did you quit smoking?	1 - 7	10	7.0
	8 - 14	5	3.5
	15 ≤	6	4.2

Table (4) demonstrated that (69.2%) of patients had information regarding relation of exercise and IHD and TV was their source of information (31.5%) but only (35%) had a regular exercise and (21.7%) of them walked.

Table 4: Patient's information and habit regarding relation of physical exercise and ischemic heart disease

Questions regarding exercise	Categories	F	(%)
Do you have any information about relation of exercise and ischemic heart disease?	No	44	30.8
	Yes	99	69.2
If yes, which one is the most source of your information?	Physician	32	22.4
	My Relatives	4	2.8
	TV	45	31.5
	Reading book	4	2.8
	Internet	14	9.8
Do you do exercise?	No	93	65.0
	Yes	50	35.0
How many times do you do exercise weekly, at least five days and at least 30 minutes for each day?	1-2 times	23	16.1
	3-5 times	16	11.2
	more than 5 times	11	7.7
Which of this exercise do you do?	Walking	31	21.7
	Running	8	5.6
	Gym	8	5.6
	Football	3	2.1

Table (5) showed that (74.1%) of patients had information regarding relation of healthy food that prevent IHD, and TV is the main source of their information (30.8%) but (89.5%) of them did not eat a healthy food.

Table 5: Patient's information and habit regarding healthy food

Questions regarding healthy food	Categories	F	(%)
Do you have any information about healthy food that prevents ischemic heart disease?	No	37	25.9
	Yes	106	74.1
If yes, which one is the most source of your information?	Physician	36	25.2
	My Relatives	6	4.2
	TV	44	30.8
	Reading books	4	2.8
	Internet	16	11.2
How often do you eat healthy food daily? (Plenty of fruits and vegetables, foods low in saturated fat,	Not everyday	128	89.5
	Everyday	15	10.5

cholesterol, salt, sugar and high in fibre)

Table (6) indicated that (52.4%) of patients was relatively stressful and (42.7%) of them were very stressful, but only (4.9%) of them were free from stress.

Table 6: Patient's daily stress

Question regarding daily stress	Categories	F	(%)
How do you describe your daily psycho state?	Very Stressful	61	42.7
	Relatively stressful	75	52.4
	Free from stress	7	4.9

Table (7) demonstrated that the highest level of patient's information toward some modifiable risk factors of ischemic heart disease and information about ischemic heart disease as a general were (74.8%), and (79%)respectively.

Table 7: level of patient's information toward ischemic heart disease and it modifiable risk factors

Variables	Level of Information			
	Low (%)	Medium (%)	High (%)	Mean (SD)
Level of Patients' information about ischemic heart disease as a general	3 (2.1)	33 (23.1)	107 (74.8)	2.73 (.492)
Level of Patients' information toward some modifiable risk factors of Coronary heart disease	4 (2.8)	26(18.2)	113 (79.0)	2.76 (.489)

Table (8) showed that the participants believe that obesity, physical Inactivity, very stressful situation, Hypertension, diabetic mellitus, dyslipidemia, abdominal fat, smoking cigarette, excessive eating high saturated fatty food, excessive eating high sweaty food, excessive eating high salty food, eating low amount of fish, eating low amount of vegetable, eating low amount of fruit (87.4%, 86.7%, 93.0%, 78.3%, 57.3%, 90.2%, 51.0%, 83.9%, 92.3%,73.4%, 77.6%,39.2%, 72.0%) respectively are lead to coronary heart disease and can put someone at high risk of developing coronary heart disease.

Table 8: Patient's response rate regarding some modifiable risk factors of ischemic heart disease that can put someone at high risk of developing it

Are the following leads to coronary heart disease and can put someone at high risk of developing coronary heart disease?	Yes		Uncertain		No	
	F	%	F	%	F	%
Obesity	125	87.4	10	7.0	8	5.6
Physical Inactivity	124	86.7	14	9.8	5	3.5
Very stressful situation	133	93.0	9	6.3	1	.7
Hypertension	112	78.3	25	17.5	6	4.2
Diabetic Mellitus	82	57.3	48	33.6	13	9.1
Dyslipidemia	129	90.2	10	7.0	4	2.8
Abdominal fat	73	51.0	45	31.5	25	17.5
Smoking cigarette	120	83.9	17	11.9	6	4.2
Excessive eating high saturated fatty food.	132	92.3	7	4.9	4	2.8
Excessive eating high sweaty food.	105	73.4	26	18.2	12	8.4
Excessive eating high salty food.	111	77.6	22	15.4	111	77.6
Eating a low amount of fish.	56	39.2	53	37.1	34	23.8
Eating a low amount of vegetable.	103	72.0	25	17.5	15	10.5
Eating a low amount of fruit.	105	73.4%	25	17.5	13	9.1

Table (9) indicated that there was no significant relationship between levels of Patients' information toward some modifiable risk factors of ischemic heart disease with age, gender, educational level, occupation and diagnostic and non-diagnostic patients with ischemic heart disease, at p value greater than 0.05.

Table 9: Association between some socio-demographic data and level of Patients' information toward some modifiable risk factors of ischemic heart disease

Variables	Low		Medium		High		Total		
	F	(%)	F	(%)	F	(%)	F	(%)	*p- value*
Age									
25 - 40	4	2.8	13	9.1	48	33.6	65	45.5	.401
41 - 55	0	0.0	8	5.6	40	28.0	48	33.6	
≥ 56	0	0.0	5	3.5	25	17.5	30	21.0	
Gender									
Male	3	2.1	19	13.3	71	49.7	93	65.0	.596
Female	1	0.7	7	4.9	42	29.4	50	35.0	
Educational Level									
Illiterate	0	0.0	5	3.5	27	18.9	32	22.4	.261
Read and Write	1	0.7	5	3.5	21	14.7	27	18.9	
primary school graduate	3	2.1	5	3.5	32	22.4	40	28.0	
Intermediate and high school	0	0.0%	3	2.1	19	13.3	22	15.4	
College and Institute	0	0.0%	8	5.6%	14	9.8%	22	15.4%	
Occupation									
Employed	1	0.7%	13	9.1%	38	26.6%	52	36.4%	.487
Unemployed	3	2.1%	13	9.1%	69	48.3%	85	59.4%	
Retired	0	0.0%	0	0.0%	6	4.2%	6	4.2%	
By Fisher's exact test									

4. DISCUSSION

This chapter presents and discusses the results of the study with feasible support of the available literatures and related studies.

The first part of the data analysis of the current study is about demographic and clinical characteristics, it showed that the highest age of patients were between 25-40 years old, more than half of them were male, level of education represented that highest level were graduated from primary school, and the majority of them were married and more than quarter of them were barely sufficient, most of patient's residential area were lived from urban area, more than half of them were unemployed, more than half of them were overweight. Only marital status and employment in this outcome are agreement with the study done by Almalki in Saudi Arabia which reported that more half of their participants were unemployed married but disagree with level of education because the university was highest level of education of their population[20].

Also it is agree with the study done by (Fahs, et al., 2017) among the Lebanese population in 2017 which indicated that nearly half of their participants were overweight, more than three quarter were married and the male participants were more than female [21].

Concerning Patient's information about ischemic heart disease as a general, more than half of the patients responded that they had information about ischemic heart disease as a general and TV was the first source of their information. Less than half of them diagnosed by cardiovascular disease for five to nine years. The researchers noted that the participant's information regarding risk factors of ischemic heart disease was varied in the present study for

example some lifestyle factors that cause IHD, such as stressful situation, smoking cigarette, overweight and obesity, diabetic mellitus, hypertension, abdominal fat, dyslipidemia and unhealthy diet, was the baseline subject of the current topic amongst community members, but the researchers surprised by the skill and lack of the application of this information during their lives, and there are large number of people were on way to grow CVD, and in keeping with the evidence on the increasing occurrence of CVD that related to urbanization. Patient's information regarding cigarette smoking, nearly three a quarter of the participants were not smoked cigarette but 16.1% of them were passive smoker and 7% were ex-smoker and they quit smoking between one to seven years, but nearly half of them were smoked eleven to twenty cigarette per day for more than thirty years. More than three a quarter of the patients had information about the relation of smoking and ischemic heart disease, the TV was the first and Physician was the second source of their information. The finding of the current study aggresses with the study done by (kirchberger et al., 2015) in Germany who mentioned that the current smoker was (30.9%) [22]. Regarding smoking the finding of the present study is agree with the study done by (Kumara, and Samarawickrama) in 2016 which done at medical clinics in teaching hospital Karapitiya, who mentioned that most of their participants had information about that the cigarette smoking is one of risk factors of IHD [23]. Induces oxidative stress, endothelial damage and dysfunction, is associated with significantly higher serum concentrations of total cholesterol and triglycerides, reduces the cardio protective HDL are related to basic ingredients of cigarette the nicotine and carbon monoxide, also promoting intravascular inflammation represents a significant risk factor for the development of atherosclerosis and cardiovascular disease.

Also nicotine is responsible of deregulates cardiac autonomic function, boosts sympathetic activity, and increase heart rate.

World health organization(WHO) reported tobacco continues lead to death of more than five millions people every year including more than six hundred thousand passive smokers people by cardiac disease, lung cancer, and other illnesses (Papathanasiou,et al.,2014) [24]. The results of the current study showed that participants who had information regarding relation of exercise and ischemic heart disease were more than half and the first source of their information was TV and physician was the second one 31.5%, 22.4% respectively. More than half of them did not do physical exercise but 11.2% of them were regularly walked. The result of the present study is agree with the study done by (Almalki,et al., 2019) in Saudi Arabia which indicated that 61.1% of their participants did not perform a regular exercise [20].

The finding of the current study showed that nearly three a quarter of the participant had information regarding relation of healthy food that prevent Ischemic heart disease, and TV was the first and physician was the second source of their information, but nearly most of them did not eat a healthy food daily such as fruit, vegetable and foods low in saturated fat, salt and sugar. This result is disagree with the result of the study done by (Fahs, et al., 2017) which indicated that nearly three quarter of their participants were eating fruit one to three times and more than half of them were consumed vegetable one to two times daily [21]. On other hands, the result of present study is agree with the study done in Nairobi by (Wekesah,et al.,2019), which mentioned that their participants had a lack of exact way to cook a healthy foods, [25]. The researchers return this result regarding unhealthy food preparation and consumption to stigma among the Kurdish people and community because if they do not use much more oil on food, people do not taste it and become not delicious; also if use low amount of sugar and salt, the relatives will ask about any chronic disease that prefer these types of food, because the Kurdish people are not consume a healthy food until they get a specific chronic disease.

Also the result indicated that more than half of the participant had relatively stressful and less than half of the participant had very stressful but a lowest rate of them were free from stress, this result is disagree with the result of (Kurd,et al.,2014) while indicated that more than half of their participants had a high stress and less than quarter had relatively or moderate stress [26]. Also the current study demonstrated that nearly three quarter of patients had the high level of information about ischemic heart disease as general and nearly the majority of them

had the high level of information toward some modifiable predisposing factors of CHD. This result disagree with many studies such as (Boateng, et al.,2017) in Africa, (Khan, et al.,2006) and (Zuhaid,et al.,2014) which showed that the levels of awareness and information about CVD and risk factors of their studies were generally low [27,28, 29]. Most of patients believed that very stressful situations, dyslipidemia, excessive eating high saturated fatty food, the majority of them agree that obesity, physical inactivity and smoking cigarette, and nearly three quarter of patients believed that hypertension, excessive eating high salty and sweet food, eating a low amount of vegetable and fruit are put somebody at high risk and leads to increasing the chance of developing coronary heart disease. But a highest level of information regarding eating low amount of fish and person with abdominal fat were (39.2%, 51.0%) respectively, can put someone at high risk of developing coronary heart disease. The results of the current survey is agree with the study done in Dhaka, Bangladesh by (Mirza,et al., 2016) which informed that more than half of their participants recognized hypertension hyperlipidemia, fatty diet and smoking as possible risk factors for coronary artery disease [30];but disagree with the study done by (Awad,and Al-Nafisi,2014) in Kuwait which indicated that their participants knowledge concerning cardiovascular disease risk factors was moderate [31]. Also the current result is disagree with the study done by (Wartak, et al., 2011) in Western Massachusetts which showed that, one in five of the participants were not aware that the disease of diabetic mellitus is a predisposing factor for CVD [32].

However recognizing risk factors of cardiovascular disease is considered as significant first step in preventing heart disease , on other hands, the participants of the current study were more knowledgeable about cardiovascular disease in general, but the researchers believe that existing an information and understanding the risk of CVD alone without improving and practicing the information is not completely useful, Without best understanding of the risk factors about cardiovascular disease, the assessments may fail in this area so educational initiatives focused on improving knowledge of risk and the causal relationship between predisposing factors and CVD are needed. The result of the current study demonstrated that there are no significant association between level of patients information toward some modifiable risk factors of ischemic heart disease with age, gender, educational level, occupation, at P value greater than (0.05). A study done in Iraq by (Mohammad, et al., 2013) and was disagree with the current study and mentioned a significant associations between the risk factors of cardiovascular and the angiographic patients with IHD [33].

5. CONCLUSION

The findings of the present study highlighted a high level of information toward modifiable predisposing factors of IHD among participants while nearly most of them did not eat healthy diet and half of them overweight, relatively stressful and did not do physical exercise that considered as vital modifiable risk factors of ischemic cardiac disease. The findings of the current study targeted more modifying the relationship of knowledge and practice with modifiable risk factors toward IHD in particular is needed. The present study calls for efforts such as targeted public health education to increase the level of performing practices to protect the Kurdish people from risk factors of heart disease. Education can be provided to the public through the physicians and nurses before social media are need. Further study are needed in Kurdistan to assess the level of practice regarding modifiable risk factors of ischemic heart disease. Also the study recommended to the ministry of health and directorate of health in Rania city must supervise much more dependable center of dietary regimen, sport and fitness halls to implement people's information and to practice it. Also the current study recommended to the nurses to encourage the people to practice their useful information and understanding them that information alone is not sufficient to maintain human's healthy life.

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