Determination of the Cardiac Patients Knowledge toward Using Anticoagulant Medications at Missan Governorate Hospitals

تحديد معارف مرضى القلب باتجاه استعمال أدوية مضادات التخثر في مستشفيات محافظة ميسان

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الخلاصة

اهداف الدراسة:تهدف الدراسة الى تحديد معارف مرضى القلب حول استخدام ادويه مضادات التخثر وعلاقته بالخصائص الديموغرافية.
منهجيه الدراسة - تم اعتماد التصميم الكمي(دراسة وصفيه مترابطة) في هذه الدراسة التي انجزت لمعرفه مستوى المعارف لمرضى القلب اتجاه استعمال ادويه مضادات التخثر للفترة بين 1حزيران ولغايه٥ تشرين الثاني ٢٠١٨ ، ولتحقيق أهداف الدراسة اختيرت عينة عشوائية غرضية مكونة من(٣٠) مريض. وجمعت البيانات الخاصة بالدراسة من خلال استخدام استمارة الاختبار المتعلقة بتحديد معارف مرضى القلب اتجاه استعمال ادويه مضادات التخثر . وتم جمع المعلومات من خلال المقابلة التي اجريت للمرضى في مستشفى الصدر التعليمي ومركز امراض القلب في ميسان في العناية المركزة والاستشارية الباطنية وتم حصول الموافقات. وقد تم بناؤها وتصميمها من قبل الباحث لأغراض الدراسة الحالية. تم تحقيق ثبات أدوات القياس من خلال استخدام الفا كرون باخ والذي كانت(٠،٨٥)(p<0.001) أما مصداقية أدوات القياس فقد تحققت من خلال عرضها على مجموعة من الخبراء لغرض مراجعتها وتقويم درجة مصداقيتها. قام الباحث باستخدام الإحصاء الوصفي (التوزيع التكراري والنسبة المئوية. والإحصاء الاستنتاجي (الاختبار التائي واختبار تحليل التباين) لغرض تحليل بيانات الدراسة.
النتائج-عند استخدام (mean of score) اظهرت النتائج الى قله المستوى المعرفي لدى مرضى القلب لبعض الفقرات الخاصة بمعارف مرضى القلب حول استعمال ادويه مضادات التخثر واظهرت النتائج للفقرات الاخرى بمستوى معرفي متوسط حيث كان المستوى المعرفي(قليل 0.0-0.33)(متوسط 0.34-0.76) (0.67-1.0عالي) .كما واظهرت النتائج الى عدم وجود علاقه ذات دلاله إحصائية بين (العمر. الجنس. الوظيفة. المستوى التعليمي)وبين معارف مرضى القلب باستعمال ادويه مضادات التخثر
التوصيات – توصي الدراسة بتطبيق برامج تعليميه مستمرة لمرضى القلب حول اهميه استعمال ادوية مضادات التخثر
الكلمات المفتاحية: تقييم، مرضى القلب، المعارف، ادويه مضادات التخثر

Abstract

Objective- the study aim to determine the cardiac patient knowledge about anticoagulant medications using and its relationship with demographic data(age. gender. level of education. occupational). **Methodology**- A descriptive study(quasi-experimental)design was carried out to determine cardiac patient knowledge consider to using anticoagulant medications . Starting from(1th Jun 2017 to٥th October 2018).To achieve the objectives of the study, a non-probability sample (a purposive sample) consisted of random sample comprised of (30) patients were taken anticoagulant medications ..The measurement of patient knowledge were collected through the use of questionnaire which is related to patient knowledge toward using the anticoagulant medications. The questionnaire was interview with cardiac patients who were attended coronary care unit at Al-Sadder Teaching Hospital, and Missan Center of Cardiac Disease and in the Medical Consulting after obtaining agreement from the patients throughout using arabic version of questionnaire. The researcher conducted private meeting with each patient who spends about 25-30 minute to respond to the interview which were developed for the purpose of the study. Instrument validity was determined through content validity, by a panel of experts. Reliability of the instrument was determined through the use of Cronbach Alfa which was (0.85) which are strong acceptable for acute myocardial infarction patients'. Analysis of data was performed through the application of descriptive statistics (frequency, percentage) and inferential statistics (t-test and one way analysis of variance) .
Result. when we using mean of score the study showed that low level of knowledge for some items and moderate level of knowledge to other items when (Low 0.0-0.33) (Moderate 0.34-0.76) (0.67-1.0High).and the result study showed no significant differences between cardiac patient knowledge and demographic data (age, gender ,level of education, occupational) .
Recommendation-The researchers recommend the implementation of continuous education programs for cardiac patient about using anticoagulant drugs

Keyword – evaluation, cardiac patient, knowledge ,anticoagulant medications:

Introduction

Anticoagulation therapy has been used in clinical practice for many decades now for the prevention and treatment of thromboembolic diseases. in spite of its immense clinical convenience over the years, this therapy still has a relatively high risk/safety profile . Oral anticoagulation therapy (OAT) is affected by numerous factors related to the drug used, intensity of anticoagulation achieved, the physician's experience with the therapy and patient compliance. It also incorporates different physician, lab Furthermore tolerant related elements such as incessant lab testing, strict measurement regulation, distinguishment and prompt medication from claiming thrombotic also hemorrhagic difficulties Furthermore tolerant instruction[(1)].

With many patients being prescribed oral anticoagulation for months or for life, The part of tolerant instruction may be extremely critical in this medication for An limited restorative window. Tolerant training will be currently recognized on make a standout amongst those key Components for upgrading medicine Furthermore diminishing muddling Around patients for oral anticoagulant treatment.[(2)].

The successful therapy depends on a patient's understanding of the treatment. However, patients' information of oral anticoagulation treatment may be needing. A percentage investigations discovered that more than. A large portion from claiming patients ahead anticoagulants needed poor information of the help.[(3)] .

The lack of adequate knowledge among the patients has been recognized as a risk factor for the development of adverse effects, including hemorrhages of the most feared adverse events associated with the use of oral anticoagulants is bleeding. That fear is shared both by doctors and patients, which sometimes leads to under treatment of patients in whom their use is indicated [(4)].

Nurse-led practice has develop in many areas in health care, including anticoagulant services. Traditionally, anticoagulant clinics has been manage by consultant hematologists but recently other health professionals have become involved this trend has been largely in response to several factors; an increase in demand for anticoagulant services. The role of staff managing anticoagulant clinics is to initiate patients onto oral anticoagulant therapy and to continually monitor and manage their international normalized ratio (INR). This practice is the recommended method for reporting prothrombin time results for control of oral anticoagulation[(5)].

The importance of an adequate education in patients who receive oral anticoagulants to favor better treatment control has been demonstrated. Some reports refer to patients who have to self-control their coagulation level and the oral anticoagulant dose. Those proposals for instruction for patients under anticoagulant treatment, as an component to streamline medication quality, have been suggested since a few A long time prior by different investigate groups, and also by establishments centered ahead guaranteeing social insurance instruction Also would substantial should this day. However, the results of educational strategies in patients not self-controlling their medications' doses have been considered inconclusive in some reports.[(6)].

Methodology

Design of the Study: A descriptive-analytic study designed to evaluate cardiac patient knowledge about using anticoagulant medications at missan governorate hospitals from 1th June 2018 to 5th October 2018.

Setting of the Study: The study was conducted in in al-sader hospital teaching and missan cardiac center .

Sample of the Study: A non-probability sample consist of (30) patient selected randomly from both hospitals.were we taking from Cardiac Care Unite and the Medical consulting

Instrument : A questionnaire was conducted by the researchers based on review of literatures and relevant references to evaluate cardiac patient knowledge which consist of three parts

First part: regarding patient' demographic data that include (Gender, Age, level of education, Occupational stat)

Second Part; about clinical characteristics for patient that Using Anticoagulant Medications that included (3 items).

Third Part: items related cardiac patient knowledge that contain (27)items. contain five domain including(General information, medications taking ,cautions while using medications ,Dose and investigation, Complications or side effect)

Validity: the questionnaire was examined by 10 experts from different scientific branches having at least 9 years' experience in their field of work .

Reliability of the questionnaire Items: The reliability had been evaluated through applying Cronbach's Alpha for (34) items, the results was (0.85).

Statistical Methods: A statistical program such as SPSS (Statistical Package for Social Science)version 19 was used to analyze the data through descriptive data analysis that included frequencies, percentages, and arithmetic mean as well as inferential analysis, person correlation coefficient and T-test

Results:

Table (1): Distribution of Socio- Demographic characteristics for Patients in Study Sample Regarding using Anticoagulant Medications in the Research sample (n=30 patient)

Variables	Groups	Samples n=30 patient	
		Freq.	%
Age	> 40 years	3	10.0
	40-49 years	6	20.0
	50-59 years	16	53.3
	60-69 years	3	10.0
	70-79 years	2	6.7
	Total	30	100.0
Gender	Male	20	66.7
	Female	10	33.3
	Total	30	100.0
Level of Education	Read and Write	10	33.4
	Primary school graduate	12	40.0
	Intermediate school graduate	6	20.0
	Secondary school graduate	1	3.3
	College graduate	1	3.3
	Total	30	100.0
Occupational Status	Employee	3	10.0
	Unemployed	7	23.3
	Retired	11	36.7
	Housewife	6	20.0
	Free businessman	3	10.0
	Total	30	100.0

n=sample size, Freq.=Frequencies, %=Percentages, > = More than, < = Less than

Table -3- revealed that (53.3%) and (40%) for the age of patients for sample were within the age group (50-59 years).While the gender show that majority were male with percentage (66.7%). Concerning the level of education show that the patients (40.0%) were primary school graduate. Occupational status with percentage (36.7%) of patients in the patient were retired..

Table (2): Distribution of Clinical characteristics for patient that Using Anticoagulant Medications

Variables	Groups	Sample n=30 patient	
		Freq.	%
How long ago was your present anticoagulant treatment started?	Less than 6 month	5	16.7
	Between 6-10 month	21	70.0
	Between 10-1year	4	13.3
	More than 1 year	0	0.0
	Total	**30**	**100.0**
As far as you know, which of the following are reasons for your present anticoagulant treatment.	Deep Venous Thrombosis	1	3.3
	Myocardial Infarction	12	40.0
	Atrial Fibrillation	2	6.7
	Valvular Heart Disease	2	6.7
	Stent or Balloon for Artery	13	43.3
	Total	**30**	**100.0**
Types of using the anticoagulant medications	Heparin	3	10.0
	Warfarin	24	80.0
	Enoxaparin	3	10.0
	Total	**30**	**100.0**

n=sample size, Freq.=Frequencies, %=Percentages,

The findings table -2- revealed that (70.0%)for group starting of anticoagulant treatment of patients the groups (between 6-10 month))., while the reasons for patients who administered anticoagulant treatment presented (43.3%) of patients in the patient were both due to stent or balloon for artery. In relation to the types of using the anticoagulant medications the majority of them were taking warfarin (80.0%) in the patient sample .

Table (3): Statistical Significant Related to Cardiac Patients' Knowledge Toward Using Anticoagulant Medications

No	Items Related To Patients' knowledge*		Sample n=30	
		M.S.	ASS	S.D.
1	What is the nature work of anticoagulants؟	0.23	L	0.430
2	anticoagulants medications need to get the therapeutic benefit for a period time?	0.20	L	0.407
3	in most cases continue taking anticoagulants for a while؟	0.17	L	0.379
4	The important tests that take place when taking drugs anticoagulants are؟	0.13	L	0.346
5	the (coagulation time) examination is necessary for؟	0.17	L	0.379
6	How many times a day should you take anticoagulants؟	0.20	L	0.407
7	When should you take anticoagulant Just I?	0.27	L	0.450
8	What happens if you do not take anticoagulants؟	0.37	L	0.490
9	Can anticoagulants be taken a few hours late؟	0.17	L	0.379
10	Which of the following vitamins interfere with the medication anticoagulants؟	0.20	L	0.407
11	vitamin K is ?	0.17	L	0.379
12	What are foods contain mostly vitamin K؟	0.23	L	0.430
13	Can you eat different daily amounts of vegetables	0.40	M	0.498
14	What happens if you take other drugs؟	0.13	L	0.346
15	intramuscular injection is permitted if you take anticoagulants؟	0.47	M	0.507
16	What happens after intramuscular injection?	0.43	M	0.504
17	Do you allowed to take off your teeth if you are taking anticoagulants؟	0.53	M	0.507
18	the risks when the percentage (time coagulation) is less than normal are?	0.10	L	0.305
19	Side effects of anticoagulants are؟	0.17	L	0.379
20	The aerobic exercise you are allowed to do is؟	0.33	L	0.479
21	Do you have periodic tests during treatment؟	0.47	M	0.507
22	the time that you will must be taken investigation when use the anticoagulant drugs is?	0.50	M	0.509

23	**What do you do if you forget your specific dose؟**	0.30	L	0.466
24	**Complications that appear when taking a dose more than Required?**	0.27	L	0.450
25	**Complications that appear when taking a dose less than required؟**	0.23	L	0.430
26	**The effect of laxatives and some antibiotics on anticoagulant treatments is؟**	0.20	L	0.407
27	**The aspirin and rheumatoid drugs and thyroid drugs work on؟**	0.33	L	0.479

No: number of item; n: number of sample, M.S.: Mean of score , S.D.: Standard Deviation, ASS-assessment level , Level of assessment(0.0-0.33 Low)(0.34-0.76 Moderate)(0.67-1.0 High)

The results of this table shows that there are showed that low level of knowledge for items(1,2,3,4,5,6,7,8,9,10,11,12,13,14,18,19,20,23,24,26,27) and moderate level of knowledge items(13,15,16,17,21,22). When (Low 0.0-0.33) (Moderate 0.34-0.76) (0.67-1.0High).

Table (4): Distribution and Association of Patients' Knowledge with Their demographic data (age, gender, level of education, occupational)

No	Demographic data N=30	Variables	mean	ST-deviation	P-value	C.S
1	Age	50-59 years	0.29	0.085	0.557	**NS**
2	Gender	Male	0.26	0.092	0.794	**NS**
3	Level of education	Primary school graduate	0.26	0.096	0.756	**NS**
4	Occupational	Retired	0.23	0.089	0.177	**NS**

C.S-comparison significant ,NS-no significant at P value <0.05

The above table shows that there is no statistical significant association between cardiac patient knowledge and demographic data (Age, Gender, Level of education, occupational) at P value <0.05

Discussion

Part I: Demographic characteristic for sample

1. **Sample Age**

Through the data analysis distribution of demographic variables table (1) reports that most of the patients age are (50 -55 years old and more) for study sample. The finding of the present study supportive evidence is available in the study that showed the majority of patient's age that using the anticoagulant medications were (58 years) (7).

2. **Sample Gender**

The present results revealed more than using anticoagulant medications were male with percentage (66.7%) for patient. The finding of the present study supportive evidence is available in the study that showed in this study find out the most gender were male in study sample [8] .

3. **Level of Education**

. With regard to the level of education of cardiac patient that taken anticoagulant medications, it is demonstrated that most of the patients in sample were primary school with high percentage (40.0%). The finding of the present study supportive evidence is available in the study that showed the majority of cardiac patient knowledge were primary school [9]. But this study not agreement with other study that done by Kathleen M. M(2007) that suggest the majority of cardiac patient that taken anticoagulant medications were (high school or college) [10].

4. **Sample Occupational Status**

About the occupational state find out that the majority of sample were retired with high percentage (36.7).The finding of the present study supportive evidence is available in the study that showed that more than occupational state in sample with anticoagulant medications were retired [11]. And other relative study that suggest the majority of sample in were un employee [12].

Part II: Distribution of Clinical characteristics for patient that Using Anticoagulant Medications.

1. **Duration of anticoagulant medications for sample**

The data analysis in table 2- find out that the duration of anticoagulant medications for the study sample were started taken between six to ten month with high percentage (70.0%).. The finding of the present study supportive evidence is available in the study that showed the majority of anticoagulant medications will started between six to ten month [13].

2**. Most common anticoagulant medications that using by sample**

The most common anticoagulant medications that using by cardiac patient were warfarin with percentage of (80.0%). The finding of the present study supportive evidence is available in the study that showed in assessing anticoagulation knowledge in patients new to warfarin therapy that the more anticoagulant medications using were warfarin drugs [14].

3. Common indication using anticoagulant medications by sample

It appears from the present study that most common indication using the anticoagulant medications were stent or balloon for artery with high percentage (51.7).But this study disagrees with study of oral anticoagulant therapy antithrombotic therapy and prevention of thrombosis that find out the indicated for using the anticoagulant medications was atrial fibrillation [15] .

Part III: Items related to cardiac patient knowledge

Analysis of results, the researcher student noted in Table 3- that shows there are showed that low level of knowledge for items(1,2,3,4,5,6,7,8,9,10,11,12,13,14,18,19,20 ,23,24,26,27) and moderate level of knowledge items(13,15,16,17,21,22). The finding of the present study supportive evidence is available in the study that showed low level of knowledge all items related to using anticoagulant medications,(p = 0.234)[16]. The researcher believes that the low level of knowledge related to many causes such as there are not enough communication between patient with health care staff and patient may be can't to routine visited to cardiac care center or to the hospitals to achieved all information about using the anticoagulant medications

Part IV: Distribution and Association of Patients' Knowledge with Their demographic data (age, gender, level of education, occupational)

Table 4- in present study showed no significant between cardiac patient knowledge about using the anticoagulant medications and demographic data at P value (0.557 for age ,0.794 for gender ,0.756 for level of education and 0.177 for occupational state) . The finding of the present study supportive evidence is available in the study that showed no significant between cardiac patient knowledge about using the anticoagulant medications and demographic data at (P value =0.456)[17]

Recommendations

1. Due to poor the cardiac patient knowledge about using the anticoagulant medications we recommended to meeting between health staff to improvement using the anticoagulant drugs

2. Using efficient method of providing patient education as videos offer, and patients on long-term medications may benefit from periodic educational ‘‘refreshers’’ about appropriate medication use

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