

A STUDY TO ASSESS THE EFFECTIVENESS OF INFORMATION BOOKLET ON KNOWLEDGE REGARDING THE MANAGEMENT OF MODIFIABLE RISK FACTORS OF CORONARY ARTERY DISEASE AMONG THE STAFF NURSES IN SELECTED HOSPITALS OF KOTA

SURYA PRAKASH NAGAR

Ph.D Scholar, JJT University, Jhunjhunu, Rajasthan.

ABSTRACT

A quasi-experimental study to determine the effectiveness of information booklet on knowledge regarding the management of modifiable risk factors of coronary artery disease among staff nurses in selected hospital. This study was undertaken with the following objectives

To assess the level of knowledge regarding the management of modifiable risk factors for coronary artery disease among the experimental group before giving the information booklet.

To assess the level of knowledge regarding the management of modifiable risk factors for coronary artery disease among the control group.

To assess the effectiveness of information booklet on the level of gain in knowledge regarding management of modifiable risk factors for coronary artery disease among the experimental group.

To assess the posttest level of knowledge regarding the management of modifiable risk factors for coronary artery disease among the control group.

To find out the association between post test knowledge with the selected demographic variables of the experimental group.

The Conceptual framework adopted for the study was based on Imogene King's goal attainment theories. A quasi-experimental research approach was adopted for the study. The independent variable of the study was the Information booklet regarding the management of modifiable risk factors for coronary artery Disease and the dependent variable was knowledge of staff nurses.

The study was conducted at gov. medical college kota. Non-Probability convenient sampling technique was used to obtain an adequate size of sample subjects. The sample comprised of 100 staff Nurses in each experimental and control group. A total of 200 samples were taken for the study.

The tools used for data collection are a structured questionnaire used to find out the knowledge level of the subjects.

INTRODUCTION

A predictable 17 million world die of CADs, in the main attack and strokes, each year arterial blood vessel illness is that the most typical class of upset in adults. For this motivation, it's imperative for the nurse to grow to be common with the assortment of manifestation and administration of the unwellness.

CAD happens once the arteries that deliver blood to the wall of heart grow to be hard-boiled and pointed. This can be thanks to the gathering of sterol and different substance that is named pill, on their central fortifications. This can be referred to as arteriosclerosis. As it grows, less blood will stream from aspect to aspect the arteries. As a consequence, the guts muscle doesn't get smart blood offer or it desires. This might cause hurting (angina) or an attack. Most heart attacks happen once a blood suddenly cuts off the hearts' blood offer, inflicting permanent heart harm. Over the time, thanks to this the guts muscle becomes weak and contributes to heart disease and arrhythmias. Heart disease reveals that the guts cannot pump adequate blood to the body.

Indians have the simple best rates of CAD wherever the planet. It's 2-4 times higher even a tiny bit ages and 5-10 times higher in those beneath 40 years more seasoned. The surplus weight of CAD in Indians is on account of the mix of nature and support. Because of produce and a dynamical component of financial circumstance, the frequencies of CAD are ascending inside the creating nations likewise pervasiveness of CAD in India is 3 to 4 overlap more than in America and Europe.

2. NEED FOR THE STUDY

According to existing information, this fatal condition is basically preventable. For instance, CAD mortality has fallen third to common fraction within the last 3 decades in the majority of developed countries. The explanations for the accelerated decline in CAD mortality from 1980-

1990 were analyzed. They found that 25th of the declines were thanks to primary hindrance, 29th thanks to secondary hindrance and 43 was thanks to enhancements in treatments of patients. This demonstrates that modification of modifiable risk factors of arterial blood vessel un-wellness instead of advances in the management of few with unconcealed CAD is essentially to blame for the dramatic decline of CAD mortality within the developed countries. This can be clear proof that the common of CAD reduced with acceptable measures. AN increasing range of Indians, even among the younger age teams are at risk of getting heart diseases thanks to their health-damaging style.

It is shown that the measure of information concerning vessel wellbeing among the Indian populace has not been obviously evaluated. a shortage of vessel wellbeing data inside the all-inclusive community is incontestable by an investigation that reports confined data of modifiable hazard elements of cardiopathy in patients World Health Organization had completely fledged an intense infarct, data of the possible factors is a critical advance inside the adjustment of style practices adding to ideal vessel wellbeing in creating nations.

Cardiopathy and stroke will be bypassed through improvements in style practices and demise will be maintained a strategic distance from, and tending to the financial and social conditions that impact the strength of individuals and networks. Unfortunate style practices like tobacco utilize, insufficient physical

activity, less than stellar eating routine, and over the top liquor utilize including uncontrolled cardiovascular ailment, lifted sterol, and avoirdupois represents eightieth of weakness cardiopathy mortality.

OBJECTIVES

To assess the level of knowledge regarding management of modifiable risk factors of coronary artery disease among the experimental group before giving the information booklet.

To assess the level of knowledge regarding management of modifiable risk factors of coronary artery disease among the control group.

To assess the effectiveness of information booklet on level of gain in knowledge regarding management of modifiable risk factors of coronary artery disease among the experimental group.

To assess the post test level of knowledge regarding management of modifiable risk factors of coronary artery disease among the control group.

4. HYPOTHESES

H1- There will be significant increase in the level of knowledge regarding the management of modifiable risk factors of coronary artery disease among the staff nurses.

H2- There will not be any specific significant association between the pre-test knowledge score with the selected demographic variable.

5. ASSUMPTION

It is assumed that

1. Staffs have some knowledge regarding the risk factors of coronary artery disease.
2. Information Booklet is an effective Self learning material to aware the staffs about risk factors of coronary artery disease.

6. REVIEW OF LITERATURE

(Hansson, 2005). This causes dynamic narrowing and moreover impediment of the coronary supply courses (Copstead and Banasik, 2010; McCance et al., 2010). Tenacious iron insufficiency or the entire impediment of the vein from coronary-supply course spoiling wounds causes veritable coronary issue, which may comprehend a hazardous (MI) (McCance et al., 2010).

Atherosclerotic wounds or plaque contains cells, connective-tissue parts, lipids, and waste (Stary et al., 1995) in any case basically lipids (Copstead and Banasik, 2010; Hansson, 2005). Lipids square measure made out of lipoproteins conjointly called chylomicrons, required by most cells for the pass on and fix of plasma films (McCance et al., 2010).

Dyslipidemia Abnormal blood serum LDL-C, HDL-C, and lipid levels partner to inherent and in like manner dietary parts are agents for coronary-vein disorder. Lifted blood serum LDL-C level could be a vivacious marker of CHD (Brunzel et al., 2008; Chhatriwalla et al., 2009; Garg and Simba, 2007; Hansson, 2005). Swelled LDL-C causes plaque make inside the vein dividers. examination shows that diminish in blood serum LDL-C, with eating routine and cholesterol-passing on experts are showed up down to reduce the headway of coronary-course sickness (Brunzel et al., 2008; Chhatriwalla et al., 2009; Garg and Simha, 2007; Glassberg& Rader, 2008; Grundy, 2007; Grundy et. al., 2004; Tannock,2008).

High triglycerides and low HDL-C levels are sufficient related with CHD. Lifted triglycerides are related to epithelial tissue disfunction (Le, 2007). The cardio secures some piece of HDL-C is said to its switch steroid alcohol transport, subterranean insect oxidative, course of action, antithrombotic and endothelium-subordinate vasorelaxant impacts (Link, Rohatgi, and De Lemos, 2007). Low dimensions of HDL-C adjust this framework golf shot the individual in hazard for CHD (Verges, 2009).

Weight and stomach fat (in like way called instinctual control) are thought about fundamental hazard factors for CHD (AHA, 2010; National Heart, Lung, and Blood Institute (NHLBI), 2008). Each fat and stomach fat are caused byobtained science, debilitate, and lacking improvement (McCance et al., 2010). oil is outlined out by the NHLBI (2008) as a weight list (BMI), weight in kilograms separated by stature in sq. meters, between 30.0-39.99. Stomach fat could be a parcel around ≥ 35 creeps for ladies and ≥ 40 grouches for men (NHLBI, 2008). Examination demonstrates that fat is decidedly related to CHD, DM, and dyslipidemia (Rader, 2007; Yologlu et al., 2005).

Physical Inactivity

Physical dormancy is to a phenomenal degree related to fat, stomach fat, dyslipidemia, HTN, and lifted blood serum aldohexose, widening the shot of CHD (Lloyd-Jones et al., 2008). Ahead of schedule with the Physical Activity tips for Americans, standard physical headway lessens the likelihood of CHD and choice endless infections (USDHHS, 2008).

Smoking

Cigarette smoking, either smart or uninvolved, will store up the likelihood of CHD pine box nail smoking has been seemed to cause epithelial tissue hurt, achieving epithelial tissue brokenness and impedance of endothelium-subordinate dilatation (Yuksel et al., 2004; Yusuf et al., 2004) vasoconstrictor enables the passage of catecholamine, that will make heartbeat and causes periphery covering (McCance et al., 2010). Extended heartbeat and edges covering end in swelled inside organ work and gas ask pine box nail smoking has conjointly been found to confirm a synergistic result on people with factor polymorphism, growing their CHD risk (Niemic, Zak, and Wita, 2008).

Physical Inactivity or sit way It is particularly revealed that physical dormancy (i.e. nonappearance of movement) is relates degree free danger issue for CHD (AHA, 2009). Everything considered, sit without moving way and nonattendance of movement has conjointly been accounted for as a regular burden for FAs diverse examinations found that FAs World Health Organization didn't rehearse had a more essential probability of getting DMT2, HTN, and dyslipidemia (Araneta et al., 2002; NHLBI, 2000; Dela Cruz.

7. METHODOLOGY

This investigation is a non-exploratory research. To inspect CHD learning, CHD hazard factors, socio-statistic, and financial qualities of FAs, enlightening insights and frequencies were used for information investigation. To decide the connections between CHD information and CHD chance elements, Pearson relationships and t-tests were directed. To depict the connections between CHD information, socio-statistic and financial qualities, engaging measurements, Pearson relationship, t-tests, and examination of change (ANOVA) were utilized to break down the information. To analyze if socio-statistic and financial trademark factors foresee CHD information, numerous direct relapses was used for information examination. Different direct relapses were likewise used to break down, which of the previously mentioned factors best foresee CHD information.

8. ANALYSIS AND INTERPRETATION

TABLE NO. 1
DISTRIBUTION OF CONTROL GROUP SUBJECTS ACCORDING TO DEMOGRAPHIC VARIABLES

S. No.	Demographic Variables	No.	Percentage
1.	Age in years		
	a. 20-25 years	57	57.0
	b. 26-30 years	32	32.0
	c. 31-35 years	10	10.0
	d. 36-45 years	1	1.0
2.	Gender		
	a. Male	43	43.0
	b. Female	57	57.0
3.	Education		
	a. GNM	36	36.0
	b. Post-Basic B.Sc. Nursing	14	14.0
	c. Basic B.Sc. Nursing	50	50.0
	d. M.Sc. Nursing	0	0.0

4.	Experience in critical care unit		
	a. More than 2 years	44	44.0
	b. More than 4 years	29	29.0
	c. More than 6 years	20	20.0
	d. More than 10 years	7	7.0
5.	Income		
	a. 10-20	49	49.0
	b. 20-30	30	30.0
	c. 30-40	19	19.0
	d. 40-50	2	2.0

The higher than table shows the distribution of participants consistent with the demographic variables of the management cluster participants.

There were 67 (57.0%) participants within the cohort 20-25 years, 32 (32.0%) participants within the cohort 26-30 years, 10 (10.0%) participants were within the cohort 31-35 years and (1.0%) participant within the cohort 36-45 years.

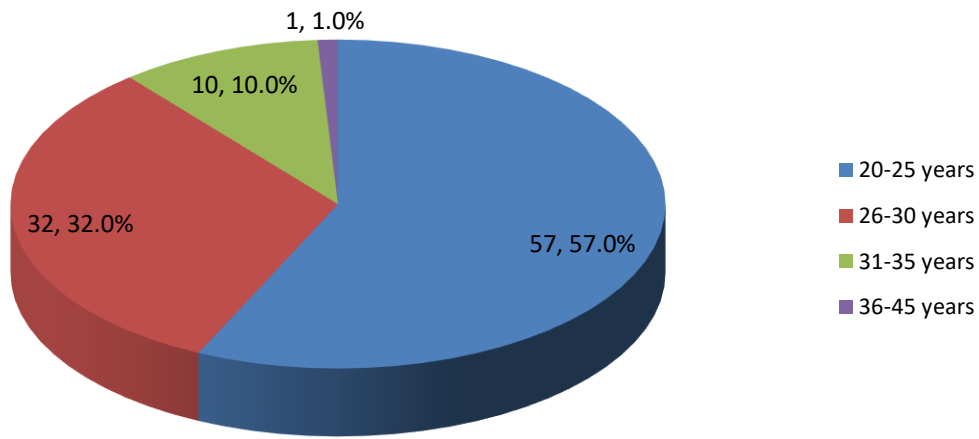
There were (43.0%) males and (57.0%) females in our study, showing a feminine preponderance as compared to the males.

Distribution consistent with the education showed that (36.0%) participants had completed their GNM, 14 (14.0%) participants had completed their Post-Basic B.Sc. Nursing and (50.0%) participants had completed their Basic B.Sc. Nursing. Majority of the participants had done their Basic B.Sc. Nursing.

Distribution consistent with the expertise in vital care unit showed (44.0%) participants had over a pair of years of expertise, 29 (29.0%) participants had over 4 years of expertise, 20 (20.0%) participants had over 6years of expertise and (7.0%) participants had over 10 years of expertise. Majority of the participants had over a pair of years of expertise.

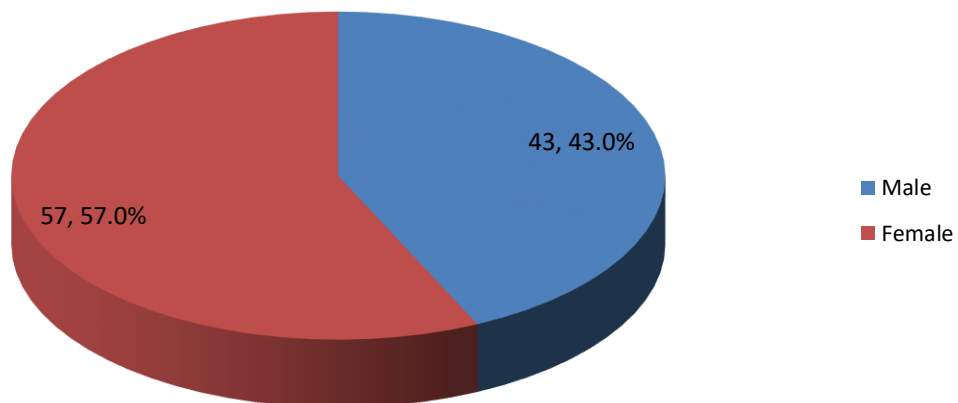
There were (49.0%) participants whose financial gain was between Rs. 10-20, 30 (30.0%) participants had financial gain between Rs. 20-30, 19 (19.0%) participants had financial gain between Rs. 30-40 and a pair of (2.0%) participants had financial gain between Rs. 40-50. Majority of the participants had financial gain between Rs. 10-20.

DISTRIBUTION OF PARTICIPANTS ACCORDING TO AGE



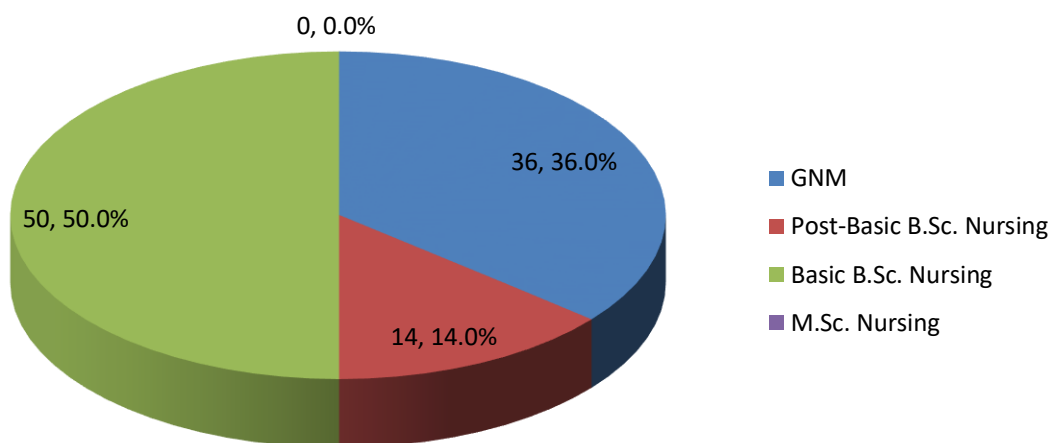
Pie diagram showing distribution of participants according to age

DISTRIBUTION OF PARTICIPANTS ACCORDING TO GENDER



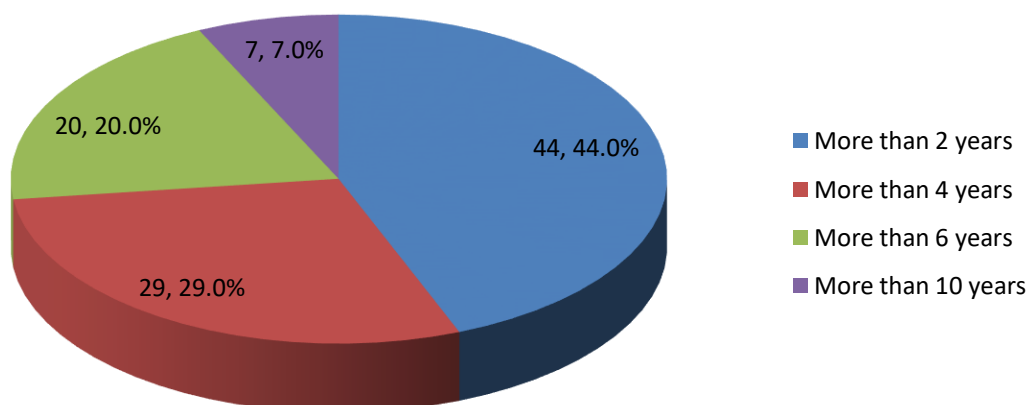
Pie diagram showing distribution of participants according to gender

DISTRIBUTION OF PARTICIPANTS ACCORDING TO EDUCATION

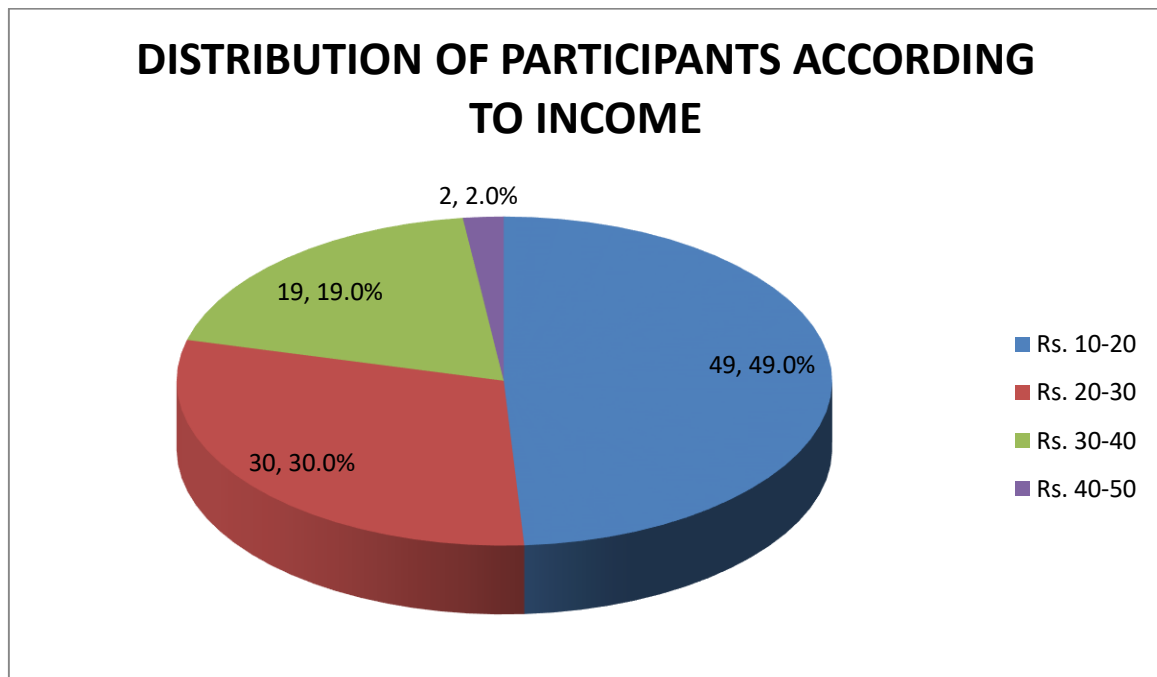


Pie diagram showing distribution of participants according to education

DISTRIBUTION OF PARTICIPANTS ACCORDING TO EXPERIENCE IN CRITICAL CARE UNIT



Pie diagram showing distribution of participants according to experience in critical care unit



Pie diagram showing distribution of participants according to income

9. MAJOR FINDINGS OF THE STUDY

The findings concerning sample characteristics disclosed that

There were (81.0%) participants within the people 20-25 years, 18 (18.0%) participants within the people 26-30 years, 1 (1.0%) participants were within the people 31-35 years and none of the participants were within the people 36-45 years.

There were (62.0%) males and (38.0%) females in our study, showing male's preponderance compared to the females.

Distribution in line with the education showed that (43.0%) participants had completed their GNM, 9 (9.0%) participants had completed their Post-Basic B.Sc. Nursing and (48.0%) participants had completed their Basic B.Sc. Nursing. Majority of the participants had done their Basic B.Sc. Nursing.

Distribution in line with the expertise in essential care unit showed (80.0%) participants had quite a pair of years of expertise, 20 (20.0%) participants had quite 4 years of expertise, and none of the participants had quite half-dozen years of expertise. Majority of the participants had quite a pair of years of expertise.

There were (80.0%) participants whose financial gain was between Rs. 10-20, 20 (20.0%) participants had a financial gain between Rs. 20-30, none of the participants had financial gain had quite Rs. 30. Majority of the participants had a financial gain between Rs. 10-20.

10. CONCLUSION

On the premise of findings of the current study, the subsequent conclusion is often drawn After the implementation data} through information leaflet, there's a big increase in information of employee's nurses concerning the management of modifiable risk factors for artery sickness. There was no important

association between information of employee's nurses concerning the management of modifiable risk factors for artery sickness and elect demographic variables.

Hypothesis H1 created by the investigator that there was a big increase in information of the employee's nurses concerning the management of modifiable risk factors of artery sickness was accepted. The hypothesis R H2 made by the investigator that, there would be {an important a big a major} relationship between an elect demographic variable and pre-check information on the management of modifiable risk factors of the artery wasn't a lot of significant statistically. Activity can also lower your risk for kind two polygenic disorders. Everyone ought to attempt to participate in moderate-intensity cardiopulmonary exercise a minimum of 2 hours and a half-hour per week, or vigorous cardiopulmonary exercise for 1 hour and quarter-hour per week. Cardiopulmonary exercise, like brisk walking, is any exercise during which the center beats quicker and uses a lot of gas than usual. A lot of active you're, a lot of you'll profit. Participate in cardiopulmonary exercise for a minimum of 10 minutes at a time unfold throughout the week. Talk with the doctor before beginning a replacement exercise set up raise doctor what proportion and what sorts of physical activity square measure safe. Another way one will begin to extend the activity level is by reducing however long one sit at a given time folks that sit for long periods of your time are found to own higher rates of heart condition, diabetes, and death. Reducing inactive behaviour by breaking apart however long you sit can profit your overall health.

The many studies were conducted on prognosis in arterial blood vessel illness and therefore the results were intrinsically analysis of the results of surgery for arterial blood vessel illness needs information of the clinical course of patients not having this mode of treatment. to get such data the investigators performed a retrospective analysis of the fate of 266 patients with arteriographically documented important pathology following from one to 10 years. For the complete cluster, the 5-year survival was 73 divided into single, double or triple vessel illness classes the % 5-year survival rates were severally 92, 65 and 55. A history of heart condition or MI before roentgenography failed to have an effect on survival. However, high blood pressure, symptom heart condition, abnormal hemodynamics or left bodily pit a characteristic activity was altogether identified with a decreased multi-year survival, the qualities being severally 61, 38%, 62 and 58. These outcomes should be of import in evaluating the anticipation of non-carefully treated patients with blood vessel vein ailment.

Coronary conduit calcification is a component of the occasion of atherosclerosis; it happens exclusively in arteriosclerosis courses and is truant inside the customary vessel divider. Electron-pillar X-radiation (EBCT), the primary focus of this archive, might be a touchy method for analyst work blood vessel blood vessel atomic number 20 and is being utilized with expanding recurrence for the screening of symptomless people to survey those at high hazard for developing coronary heart condition (CHD) and interior organ occasions, moreover concerning the assignment of upsetting blood vessel vein sickness (CAD) in symptomatic patients. the usage of EBCT has the best potential for more assurance of hazard, fundamentally in age dsymptomless patient's et al at moderate hazard.

11. RECOMMENDATIONS

On the premise of the findings of the study, the subsequent recommendations area unit offered for future analysis

- On the premise of the similar study is also replicated on giant samples, thereby findings will be generalized for an outsized population
- A similar study is also conducted to envision the application of workers nurses.
- Similar reasonable studies will be below taken in numerous settings.
- A comparative study is also conducted between the worker's nurses of rural and concrete setting.
- A co-relative study might facilitate to spot the relationships between data and perspective, and data and practices/ability of nursing personnel are in the management of modifiable risk factors of artery malady.

12. REFERENCE

1. A captive condition, "Childhood Obesity" Nursing Management. 2009 Feb; 25-29.
2. A study to develop and evaluate the effectiveness of an informational booklet on cancer risk factors [Nursing Journal of India, Oct 2002](#) by [Bairwa, K S](#)
3. Abhinav Vaidya, et al. "Cardiovascular health knowledge, attitude and practice/ behaviour in an urbanising \ community of Nepal", BMJ, 2013:10.1136.
4. Assiri A.S.et. Al. "Knowledge about coronary artery disease among patients admitted in aseer central hospital with acute coronary syndrome" WAJM, 2003: 314-317
5. [Assiri A. S.](#)et.el. Knowledge and Practice of Coronary Artery Disease Patients [West](#)2003: Dec; 22(4),314-7
6. Banerjee K, The heart of the matter, Jetwings 2006 Online Health
7. Bea J.H. et.al., "A Study about Dietetic Knowledge and Educational Needs in Patients with Coronary Artery Disease and their Families" Journal Korean Academic Adult Nurses, 1999: 11(2): 318-330.
8. Beda HS. et.al. "A Safer detour to a healthy heart", Community Medicine, 2005: Vol 21; No 1; Pg. 39-41.
9. Beda HS., A Safer detour to a healthy heart, 2005 Tribune India.
10. Bhattacharya et al., "Risk assessment of cardiovascular disease among bank employees. A biochemical approach", Journal of occupational medicine, 2012: 49(5):313-8.
11. Bhopal R., Is Coronary heart disease rising in India A systematic review based on ECG defined coronary heart disease, Heart, Jun 1:91(6):719-25.
12. Black. Joice, Jane Hokanson Hawks. Medical Surgical Nursing. 7th edition. NewDelhi: Elsevier India Publications; 2005. P. 1-2099.
13. Christopher Lindsell et.el. "Effect of family stress on CAD", [Preventive Medicine](#) , 2007: [44\(6\)](#); June 520-525

14. Chugh S.N. (2013) Textbook of Medical Surgical Nursing. New Delhi (1st ed., PP-301-312). Avichal Publishir ISBN: 978-81-7739-387-3.
15. Daniels Rick, Nosek Lawea, Nicoll Leslie. (2007). Contemporary Medical Surgical Nursing. Haryava (1st ed., PP-770-790) Thomson Delmau. ISBN: 81-315-0352-6.
16. Dannon P.N. et.al. “Psychoeducation in panic disorder patients: effect of a self-information booklet in a randomized, masked-rater stud”, Journal of Psychiatric Medicine, 2008: (16): 71 – 76
17. David Heaney et.al. “Assessment of impact of information booklets on use of healthcare services” British Medical Journal, 2001: (322) 1218-1220.
18. Deedwamia P. et.al., “Global risk assessment in the pre-symptomatic patient”, American Journal of Cardiology, 2001: 17J-22J.
19. Enas EA. et. al., “Conquering the epidemic of coronary artery disease among Indians: crucial role of cardiologists”, Indian Heart Journal, 2001: 54,156-7
20. Gokhroo Rahul et. al. “Coronary Artery Disease in Young Indian Patients” Indian Journal of Cardiology, 2009: 8(12): 8-15.
21. Gupta R. et.al. “Prevalence of coronary heart disease and risk factors in an urban Indian population Jaipur”, Heart, 2003:54(1):44-53.
22. Hato T. et.al, Effect if Educational video on risk factor modifications”, American Journal of Cardiology 1997:80, 1222-1224.
23. Hawks, Black Joyce M. Medical Surgical Nursing: Cliwical Management for Positive outcomes. Missowu. (7th ed., PP-323-1627-1648). Elsevier.
24. Hinkle JaniceL. et. al. “Medical Surgical Nursing”13th edition, Jaypee Brothers, 2014, pp.729-736.
25. Joseph Le Brunner, “Relation of Body Weight and development of Coronary Artery Diseases” Circulation, 2010: Vol 35; Pg 734-46.

JOURNALS

26. Julie Johnson Zerwic et.al. “Perceptions of patients with cardiovascular disease about the causes of coronary artery disease”, Online 21 June 2004.
27. Karen.O Devi Banerlee et.al. “Risk Factor Prevention and Lifestyle Modification.” The American heart journal, 2004:148: 7-15.
28. Kaur K. et.al., “report of National workshops on national rural health mission”, Indian journal of public health, 2006: Apr-Jun; 97-9.