DISSERTATION ON
" A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO -THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL ,CHENNAI-03"

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In partial fulfillment of the requirement for the award of degree of
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CERTIFICATE

This is to certify that this dissertation titled **"A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL ,CHENNAI-03."** is a bonafide work done by RATHI. M, M.Sc. (N) II year student, College of Nursing, Madras Medical College, Chennai-03, submitted to The Tamil Nadu DR.M.G.R Medical University, Chennai. In partial fulfillment of the requirements for the award of degree of Master of Science in Nursing, Branch I- MEDICAL SURGICAL NURSING, under our guidance and supervision during the academic period from 2017 – 2019.

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ABSTRACT

Valvular heart disease is one of the significant and increasing global health problem in the developing world. The prevalence differs regarding gender and different societies. Rheumatic heart disease is caused by group A beta haemolytic streptococcus bacterial infection, if the patient does not take proper medication, also increase the prevalence of degenerative valve disease. Heart valve replacement is the second most type of heart surgery after coronary artery bypass graft surgery, different post -operative complication are associated with valve replacement surgery having **Globally 7.1 million** people died due to various complication after valve replacement in each year**. In India 1.3 million** people are affected various complication after valve replacement surgery, functional impairment and quality of life also decreased due to various causes.

TITLE: "A study to evaluate the effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone heart valve replacement in cardio thoracic surgery post-operative wards, Rajiv Gandhi Government General hospital ,Chennai-03"

OBJECTIVE: To assess the pre -test level of knowledge on home care management among patients undergone heart valve replacement. To evaluate the effectiveness of focused teaching programme (post-test) on knowledge regarding home care management among patients undergone heart valve replacement .To compare the pre-test and post-test level of knowledge regarding home care management among patients undergone heart valve replacement. To associate the post -test level of knowledge on home care management with selected demographic variables.

METHODS AND MATERIALS: This study was conducted with 60 (heart valve replacement) samples in quantitative approach, Pre experimental one group pre-test and post-test design by non-probability convenient sampling method sampling technique. To assess the knowledge level regarding Home care management after heart valve replacement surgery .After pre test focused teaching educational programme related to home care management was given to valve replacement patient. After 5 days post-test was conducted using the same tool in same groups.

RESULTS: In pre- test mean knowledge score were11.88 after focused teaching programme post- test the mean knowledge score were 19.65 and the difference is 7.77 which is statistically significant calculated by students paired t -test

CONCLUSION: Hence, Focused Teaching Program is appropriate and feasible to implement to all settings I would help the valve replacement patients to improve their knowledge about home care management after heart valve replacement surgery, and improve their health status and quality of life.

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LIST OF ABREVIATION

Abbreviation	Expansion
RF	Rheumatic fever
RHD	Rheumatic heart disease
WHO	World health organization
TAVR	Trans catheter aortic valve replacement
LV	Left ventricle
CI	Confidential interval
ECG	Electro cardiogram
ECHO	Echo cardiogram
FTP	Focused teaching programme
RGGGH	Rajiv Gandhi Government General Hospital

CHAPTER-I
INTRODUCTION

As water reflects the face so one's life reflects the heart.
— Proverb 27:2

Heart is a vital organ in our body. In every beat, heart pumped adequate blood from the ventricle to every parts of the body without interrupting the flow heart valves and muscles are important for the ejection of the blood thought out the body . Heart valves plays an pivoted role to maintain adequate blood pumping to systemic circulation and prevent back flow of the blood in same direction. There are four main valves present in our body. They are structurally different from each oneanother, they are called Aortic ,Pulmonary Tricuspid , and Mitral valves.

Heart valve incompetence means, regurgitation or stenosis of valves due to infection or weakness causes inadequate blood flow to the systemic circulation. Rheumatic fever or Rheumatic heart disease is one of the triggered factors to develop valvular heart disease response by a group of beta haemolytic streptococcal bacterial infection. The primary factor is determined by the Host ,Agent and Environmental factors.Primarily it produce recurrent respiratory or throat infection .Especially children and low immunity adult affected.If it is not treated properly or undiagnosed ,the organisms enter the blood circulation and affect the heart muscles layer finally entire the entire heart muscle layers,and inflammatory process occurs.It is followed by formation of vegetation leading to scaring and deformity of valves.

Valvular heart disease is one of the significant and increasing global health problems in the developing world. The prevalence differs regarding gender and different societies.. Heart valve replacement is the second most type of heart surgery after coronary artery bypass graft surgery.Following by different post -operative complication are associated with valve replacement surgery.

World Health Organization (2018) reported,that the prevalence of heart valve disease increases day by day in general population living and working in industrial areas. Today the incidence is higher in the age group of more than 75 years affecting 10 to 15% of them. Successful management of elderly patients with valvular heart disease provide the quality of life, functionally and reduce the mortality. Severe symptoms is managed by through administration of oral anti coagulation therapy and antiplatelet therapy, especially to reduce the bleeding complication.

The European society of cardiology (2018) explained that rheumatic heart disease and heart failure was the second most prevalent predisposing condition of North countries. Its prevalence ranged from Americans. (27.7%) in **India (64.6%)** in Africa (17.7%). According to the American Heart Association, reported each year 5 million Americans peoples are diagnosed valvular heart disease. **Globally 7.1 million people died due to various complication after valve replacement in each year.** The proportion of patients with heart failure associated with valvular heart disease was **highest in India** and Africa and lowest in Western and Eastern Europe. In our country highest number of young valvular heart patients affected single or both valve affectd.

World Health Organization executive board director (2017) verbalized that rheumatic fever and rheumatic heart disease is a serious public health problem in the world, not only low socio economic countries, it is also affect middle income countries and high income countries even though indigenous population. In world around 30 million people are currently affected in 2015and 305000 peoples dead prematurel +60% (before the age of 70 years) in **India south 84% of prevalent** cases 80% of estimated deaths due to rheumatic heart disease. Rheumatic heart disease affect disproportionately women and girls. The risk developing most occur two times higher males than females. **WHO global action plan for 2013-2020** prevention and control of non-

communicable disease 2030 reduce the premature death due to rheumatic heart disease.

P.C.Negi, et al. (2019) had conducted a current status of rheumatic heart disease in India depending upon the socioeconomic status and state of health system. The burden of RF/RHD in developing countries, because of poor standards of living conditions, and over crowing. The Indian council of medical research initiated community control and prevention of RF/RHD through hospital based passive surveillance under **Jai-vigyan mission model project from 2000 to 2010, t**he study summarized, India having **more than 1.3 billion population** with wide social and economic disparities. RF/RHD will continue a major health problem. .

Valve replacement surgery is the choice for severe valvular disorder it is replaced by either mechanical or biological valve. Mechanical valve replacement produced Thrombotic and haemorrhage complication and mortality and morbidity more common. After the surgical intervention followed by decreased the activity of daily living, discomfort of the chest ,palpitation ,irregular heart- beat ,shortness of breath, swelling of the angle and feet. Following surgical intervention Approximately 60% patients developed of late mortality due to valve replacement surgery,20% patients prone to Immediately complication occur 20% patients developed non-cardiac complication stroke, renal failure occur after heart valve replacement surgery. Following the surgical correction of valve replacement 15-20%patients sudden death occur due to arrhythmias.

To conclude, educational awareness must be needed for the valvular replaced patients. This is also often perceived as an effective is an active lifestyle strategy that provides prevention from complications and promotes life expectancy and quality of life

1.1 BACKGROUND OF THE STUDY

Valve replacement surgery is a big event for most patients in the world. Globally 250,000 heart valve repair and heart valve replacement operations are performed in each year, including stenosis, regurgitation, prolapsed, bacterial infections and aneurysm.

American Heart Association 2017, reported every year 5 million Americans are diagnosed with valvular heart disease, followed by 7.1 million people died globally in each year. The gobal structural heart device market 2016 reported about almost 60 million American defects in their in heart, this represents around 20% to 25% of people affected among the total population.
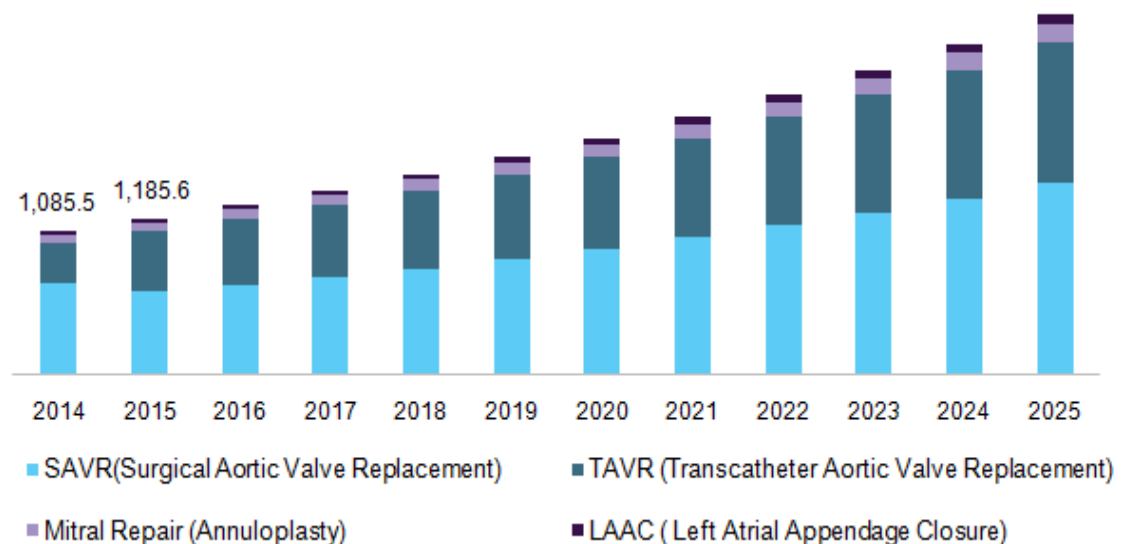
FIGURE : 1.1 HEART VALVE REPLACEMENT SURGERY

Valvular heart disease today (201 8)reported that ,the prevalence of heart valve disease in the general population around 30 million people are affected industrialized countries, most of the patients were the age group of above 75 years.

In India, more than one billion people, will likely account for 60 per cent of heart disease patients worldwide.According to WHO(2015) reported that 20 million people died from valvular heart disease is exceptionally prevalent in the sub-Indian continent.

WHO reported that during the year of 2030 almost 23.6 million people will die from heart disease and the largest increase in number of deaths will occur in the South-East Asia region.Significant valvular heart disease has a national prevalence of 2.5% and affects 13% of patients> 75 years old. This trend is particularly alarming because India is developing country,By 2050, it is anticipated that 80% of stroke events will occur due to valvular heart disease in people living in developing regions of the world.

European society of cardiology(2011) reported that , heart failure was the second most prevalent predisposing condition, present in 27.6% of North Americans. Its prevalence ranged from 17.7% in India to 64.6% in Africa. The proportion of patients with heart failure associated with valvular heart disease was highest in India and Africa and lowest in Western and Eastern Europe.

A cross-sectional study was carried out in rural areas of Jawan Block, District Aligarh, Uttar Pradesh, India, covering a total population of 3760 drawn from 11 villages. The total number of confirmed cases of valvular heart disease was 24 with a prevalence rate of 6.4 per 1000 of

the general rural population. The study revealed that The prevalence of valvular heart disease increased with age until the age of 25 years. Females were more prone to rheumatic heart disease compared to males. Socio-economic class had a direct impact on the occurrence of rheumatic heart disease.

1.2 NEED FOR THE STUDY

Valvular heart disease patients after valve implantation are at risk of thromboembolic events .Follow up care of patients with valve replacement surgery has a paramount role in reducing the morbidity and mortlity.in India ,there is quintessential need to stream line the follow up care of the prosthetic valve patients

According to the society of Thoracic surgeons database (2016) Each year, globally over 250,000 heart valve repair and heart valve replacement operations are performed including stenosis, regurgitation, prolapsed, bacterial infections and aneurysm. the stroke is the immediate complication after valve replacement due to thrombotic formation. Heart valve replacement is necessary who require surgical therapy for valvular heart disease. The potential complication of valvular heart surgery is mortality and morbidity rate is too high. Post operative period most of the patient prone to develop complications such as, dyspnoea ,pulmonary embolism valve mismatch (some patients), wound complications, prosthetic valve leakage and thrombocytopenia ,anaemia, renal failure and followed by thromboembolic stroke is most common and valve failure also occur.

In our Rajiv Gandhi government general hospital is a major state owned hospital including all departments .The hospital with 3000 beds is founded and managed by state government of Tamilnadu. *(The*

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deacon chronicle 2014) The Hindu news reported about Rajiv Gandhi government general hospital has joined the league of hospital performing minimally invasive cardiothoracic surgery in this city .

R.Jeyanthi (2019) Dean reported around 10 lakhs people suffered from this valvular disease in our country. In our hospital TAVR procedure done without open heart surgery.250 patients are undergone this TAVR surgery in our country. In our Rajiv Gandhi government general hospital annually more than 250 valve replacement surgery performed in cardiothoracic surgical department under chief minister comprehensive health care insurance scheme. Most of the patient came with low socio economic condition and inadequate knowledge about post care of valve replacement surgery. Most of the patients readmitted with the complaints of surgical site infection ,fever ,palpitation ,dyspnoea and thrombus formation, and unawareness about oral anticoagulation (warfarin) drugs along with vitamin k diet interaction.

G.Jayagovarthanan et al (2018) conducted a comparative study (2012-2015) in Cardiac Thoracic surgical department, RGGGH – Chennai -03, regarding bi-leaflet and tilting disk aortic mechanical valve prosthesis complications .The researcher selected sample 150 post valve replacement surgery over the period of 6 months. The study summarized male patient for high LV dysfunction than female clients. Most of the patients develop valve thrombosis and dyspnoea is developing past 6 months.

Zeinab Taha Ali et al (2018) wrote a article about innovation Trans catheter Aortic Valve Replacement And Nursing Role ,after TAVR procedure,   most of the patients (One-third) experience complications . The nursing care focuses mainly on patient monitoring and assessment and on educating patients about activity, diet, medications, and pain management .The study explained about post

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procedure   monitoring after the patient transferred to Cardiac Surgical Intensive Care Unit) nurse   carefully monitored for the first 24 hours after TAVI procedure Observe the heart rate and rhythm changes ,nurse checking vital signs and perform   neurovascular assessment including colour temperature, pulse, numbness, tingling, and swelling bleeding, hematoma, and infection   about activity, diet ,follow up and cardiac rehabilitation nurses are educated the patients to prevent complication and improve the quality of life after heart valve replacement surgical procedure.

Rokeia ethane et al (2017)   carried out a quasi -experimental study about a nurse –led patient education programme for oral anticoagulation therapy after surgical heart valve replacement   The investigator selected a control group pn=100(usual education on oral anticoagulation)and intervention group p=100   provided education booklet . Patients who received nurse-led education on oral anticoagulant therapy had a significantly lower 3-month incidence of haemorrhagic episodes compared with controls (1% vs. 14%, p<0.0001). The study revealed the education programme significantly lower occurrence of haemorrhagic episodes.

Scott A Lear et al (2001) suggested Cardiac rehabilitation model explained all the cardio vascular disorder (medical and surgical treatment) they needed rehabilitation programme for increase the life expectancy and quality of life. As well as cardiac surgery either open heart surgery or valve related surgery, they must know about the rehabilitation for reduction of cardiac mortality and, morbidity.   This model represents various core components about diet, exercise, smoking cessation, behaviour, pharmacological therapy education, based upon this model the investigator select the components of health education including knowledge on basic information ,diet ,exercise rest, wound care, complication, medication , follow up, complication and prevention,

through focused teaching programme and improve the knowledge level and quality of life and prevention of complication early as possible.
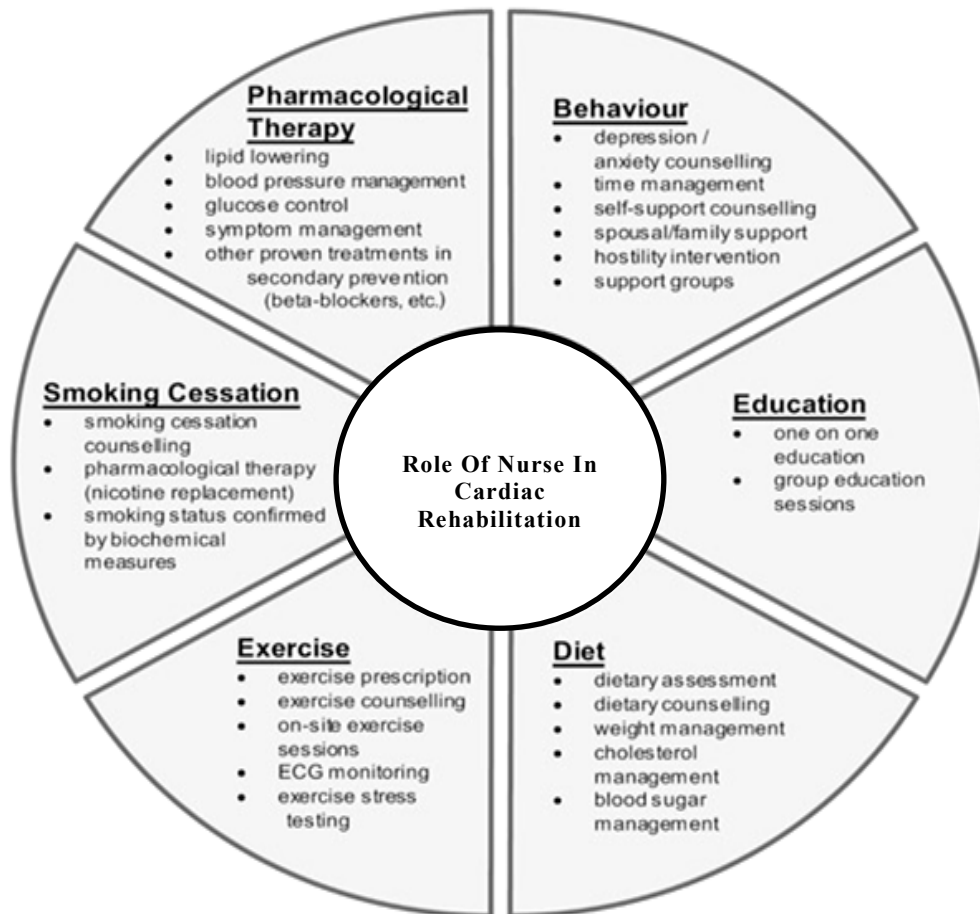
Figure-I.2 .Cardiac Rehabilitation Model

In the post-operative period Nurses plays an important role in providing comprehensive health care to the client in management of pain control measures, administration of medication as well as providing psychological support to the client .The nurse educate the client in early mobilization, mild exercise, nutritional advice, wound care, stress reduction, rehabilitation and also focus on home care management in cardiac rehabilitation. The care provided is able to identify the early complication through- out the post –operative periods and save the patient's life. The major type of morbidity include valve failure,

thromboembolism, oral anticoagulant related bleeding, bacterial endocarditis, heart failure, presence of new murmur sound, dyspnoea according to the clinical examination the care giver early assess the client conditions.

The investigator working as a staff nurse in cardiothoracic surgical post -operative wards, most of the valve replacement patient readmitted in hospital for breathlessness, palpitation ,pericardial effusion, swelling of the angle ,wound infections Peri valvular leakage, prosthetic valve endocarditis. They have inadequate knowledge about vitamin K rich diet, prophylactic antibiotic treatment during any dental procedure and recurrent upper respiratory tract infection. The international Normalized Ratio(INR) values of most of the patients were not in the normal range. Rich vitamin K diet , affect warfarin and aggravate the bleeding problem prevention of complication, ,From the clinical experience the investigator felt that most of the patient have inadequate knowledge regarding home care management after valve replacement surgery and planned to conduct a focused teaching programme among valve replacement patient to enhance the knowledge.

1.3. STATEMENT OF THE PROBLEMS:

"A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03"

1.4 OBJECTIVES

❖ To assess the pre -test level of knowledge on home care management among patient undergone heart valve replacement.

❖ To evaluate the effectiveness of focused teaching programme (post-test) on knowledge regarding home care management among patient undergone heart valve replacement.

❖ To compare the pre-test and post-test level of knowledge regarding home care management among patient undergone heart valve replacement.

❖ To associate the post -test level of knowledge on home care management with selected demographic variables.

1.5 OPERATIONAL DEFINITIONS

Evaluate:

In this study, it refers to the method of estimating and interpreting the effectiveness of focused teaching on level of knowledge regarding home care management among patient undergone heart valve replacement.

Effectiveness

In this study, it refers to the significant gain in knowledge scores among valve replacement patient regarding home care management after focused teaching which is determined by the difference between per-test and post-test knowledge scores.

Focused Teaching Programme

In this study, it refers to an organized and systematic group teaching to impart knowledge regarding significant aspects of home care management of heart valve replacement patient which includes general information such as healthy dietary Pattern, exercise, rest, quit smoking, stress reduction technique, Do and don'ts after heart valve replacement surgery.

Knowledge

In this study, it refers to the response from the respondent's regarding home care management as elicited through a focused knowledge questionnaire.

Home Care Management

In this study, it refers to strategies which involves healthy dietary pattern, exercise, rest, stress reduction technique, do and don'ts after heart valve replacement surgery.

Valve replacement Patients

In this study, it refers to a person who had valvular heart disease and has undergone valve replacement surgery.

Post-Operative Wards

It is a ward, post-operative care begins immediately after surgery

1.6 ASSUMPTIONS

It is assumed that

❖ The patient may have some knowledge regarding home care management after heart valve replacement.

❖ The patient who have adequate knowledge regarding home care management after heart valve replacement and improve the quality of life.

1.7 HYPOTHESIS

H1 There will be a significant difference in the knowledge regarding home care management after heart valve replacement.

H2 There will be a significant association between pre test and post test knowledge regarding home care management after heart valve replacement with selected demographic variables.

1.8. DE LIMITATIONS

❖ The sample size of 60 patients

❖ Who undergone heart valve replacement surgery.

❖ The period of data collection is 4 weeks.

1.9 CONCEPTUAL FRAMEWORK

A conceptual frame work is broadly presents an understanding of the phenomena of the investigator interest and reflects the assumption and philosophic views of the model designer a conceptual frame work is the theoretical approach of the study of problems that are significantly based upon emphasis and selection arrangements and classification on its concept .The study has intended the effectiveness of focused teaching programme . in terms of increasing knowledge on home care management.

This conceptual framework focusing the goal of the study structure and function   resource and decision making The current study aim to evaluate the effectiveness of focused teaching programme on knowledge regarding home care management after heart valve replacement surgery among patients undergone valve replacement surgery. The conceptual framework of this study based upon the general system theory.It is presented by a biologist Ludwig von bertalanffy in 1968 with input ,through put ,output and feed back.

According to Ludwig's system is a group of elements that interact with one another to order to achieve the goal. An individual is a system because he /she receive a input from the environment . the input where proceed provides an output. This system is cyclical in nature and continue to be so as long as the input, throughput, output and feed- back keep interacting, if there are changes in any of the parts, there will be changes in all parts ,feed back from the system or from the environment

provides information ,which helps the system to determine whether its need the goal .

In the present study these concepts can be explained as followers

INPUT

The input consists of information material or energy that entries the system. for a system to work well the input should concentrate in achieving the purpose of the system. The patients with valve replacement admitted in cardiothoracic post operative wards at Rajiv Gandhi Government General Hospital, Chennai is have a system of input itself and acquired from the environment.

In this study the input process includes

❖ Demographic variables like age ,sex ,age, educational status, occupational status and religion and monthly income and habits and place of living.

❖ Assessment of knowledge of patients undergone heart valve replacement regarding knowledge on basis information diet, exercise, rest, wound care, medication follow-up ,complication, prevention of complication of using questionnaires

THROUGH PUT/PROCESS

It refers to the action needed to accomplish derived to take achieve the desired output .e/g effectiveness of focused teaching programme on knowledge regarding home care management after heart valve replacement patient undergone heart valve replacement in cardiothoracic post operative wards.

❖ Administration of structured teaching programme.

❖ Review the FTP by slide show during this break.

❖ Provided booklet for further reference.

OUTPUT

An output is the improved response of the patients with valve replacement followed by the implementation of focused teaching programme .in the present study out put is the gain knowledge scores. The system achieved through a comparison between mean pre-test and post test knowledge score of the sample.

FEED BACK

It is a process which .By which information received at the stage of the system output and its redirection to input .accordingly to the higher knowledge obtained by the patients with valve replacement indicate the focused teaching programme was effective and increasing t he knowledge regarding the management of home care after heart valve replacement surgery.

INPUT

THROUGH PUT

OUTPUT

Demographic Variables
- Age
- Sex
- Occupational status
- Educational status
- Monthly income
- Habits
- Place of living
- Marrital status
- Dietry habitus

Administration of focused teaching programme regarding
- Knowledge on basic information
- Diet
- Exercise
- Rest
- Wound care
- Medication
- Follow up
- Complication
- Prevention.
- Through flash cards

Provide booklet or further reference

Post test

Improved knowledge

Inadequate knowledge

Moderate knowledge

Adequate Knowledge

Feed back

FIGURE:1.2 CONCEPTUAL FRAMEWORK BASED ON MODIFIED GENERAL SYSTEM THEORY

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CHAPTER-II
REVIEW OF LITERATURE

Review of literature is a key step in the research process .review of literature refers to an extensive , exhaustive and systematic examination of the publications relevant to the research project. Before any research can be started whether it is a single study. A literature review of previous studies and experience related to the proposed investigations should to be done.one of the most satisfying aspect of the literature review is the contribution it makes the new knowledge, insight and general scholarship of the researcher.

The sources of information obtained from the selected publication journal books review and unpublished thesis and website. For the research purpose the chapter is divided in to logical sequence

❖ Studies related to rheumatic heart disease

❖ Studies related to complication of valve replacement surgery

❖ Studies related to home care management after valve replacement surgery.

I.STUDY RELATED TO RHEUMATIC HEART DISEASE

Russell, et al (2018) were conducted a systemic review of the evidence through medical management of RHD from the year of 1990to 2016 selected article reference .From this study they discussed about anticoagulation indicate major embolism, atrial fibrillation, spontaneous left atrial contrast, and mechanical prosthetic valves. While warfarin remained the agent of choice for mechanical valve implantation, non-vitamin K antagonist oral anticoagulants may have a role in RHD-related AF, particularly with valvular regurgitation. They suggest the Evidence for anticoagulation after bio-prosthetic valve implantation or

mitral valve repair was limited. RHD patients are at increased risk of endocarditis, the evidence supporting oral antibiotic prophylaxis before any procedures that may prevent complication.

Richweed, et at (2018) investigated a Cochrane study that including the effect of prophylaxis outcome rheumatic heart disease before proceeding dental procedure they conducted the study from 1946 and 2013 collected 2000 data from various patients they followed AHA/ACC guidelines   for antibiotic prophylaxis high risk groups to prevent infective endocarditis. They found in this study the trans aortic valve replacement and open aortic valve replacement is more prone to getting infective endocarditis ,they suggested infective endocarditis one of the complication of heart valve replacement surgery due to poor self care and increase of morbidity.

Clovisnkole, et al (2018) had carried-out a   descriptive study about rheumatic heart disease assess the awareness of early diagnosis and treatment of Group A streptococcal throat infection in the primary prevention of acute rheumatic fever and rheumatic heart disease. The investigator selected 256 participants in which70(27.3%)males and 34.4+_ 11.9 years (males: 36.2 ± 12.7 years versus females: 33.7 ± 11.6 years, $p = 0.129$). Most of the participants were in the 20 to 29 year old group (37.9%). More than two thirds (71.1%) they are reported sore throat at least once time. More than70% clients have sore throat associated with heart disease. Only 1% have adequate knowledge about RHD. After adjusting for age, post-secondary education (OR: 9, [95% C: 1.2–67.5], $p = 0.019$), and having heard of RHD (OR: 18.1, [95% CI: 4.7–70.3], p<0.001) were still associated with a fair knowledge. The study summarized the level of knowledge is very low.

Jeffrey Cannon, et al (2017) had conducted a cohort study about RHD diagnosis between the age group of 5 to 24 years in the time period

1999–2012 used multistate model, the researcher selected 591 patients to find out the severity of disease condition among the total population of 591 .The study revealed 96 (16.2%) patients diagnosis with severe RHD, (50%) clients underwent valvular surgery with in 2 years, within 6 years (10%) dead, among . the population 131 surgeries were performed in 97 patients; 83 valve repairs (63.4%), and 46 valve replacements (35.1%); surgery type was not specified in 2 cases.

David, et al (2017) investigated a study on global ,national , regional burden of disease from the year of 1990to 2015 . The researcher selected Two Global Burden of Disease analytic tools data on fatal and nonfatal rheumatic heart disease for the period from 1990 through 2015.the study summarized 319,400 (95%) deaths due to rheumatic heart disease in 2015,and during this period 9.6 million to 11.5 million) disability-adjusted life-years due to rheumatic heart disease globally.

Pontusandell, et al (2017) ruled-out a study about spectrum of valvular heart disease under the developing countries fromt2003to2010 in Swedish hospital. The investigator selected population (n=10 164 211), the incidence of VHD was 63.9 per 100 000 person-years, with aortic stenosis (AS; 47.2%), mitral regurgitation (MR; 24.2%) and aortic regurgitation (AR; 18.0%) contributing most of the VHD diagnoses. The majority of VHDs were diagnosed in the elderly more than 65 years age group. (68.9% in subjects aged ≥65 years), pulmonary valve disease higher in new born. Aortic and mitral valve disorder is common in male than female, aortic stenosis is more common in female than man.

Aliou Alaskans, et al (2015) investigated a cross sectional study from 9 August to 24 December 2011 selected school people between the age group of 5 to 10 years from 16 dares.. About 60.1% of the pupils were men and the mean age was 9.7±3.3 years. 10 cases of definite RHD

were detected, prevalence being 4.96 per 1000 (95% CI 2.4 to 9.1). This study found the prevalence five times higher with echocardiographic screening compared with clinical screening. 23 cases (11.4 per 1000) of borderline forms were detected. The populations at risk of definite RHD identified in our study were children over 14 years (p<0.001), those who are suffering with recurrent throat infection they are prone to develop rheumatic heart disease

II. STUDIES RELATED TO COMPLICATION OF VALVULAR REPLACEMENT SURGERY

Mihofufui, et al (2019) had conducted a cohort study about functional cardiac changes clients underwent aortic valve replacement selected 689 patients underwent trans catheter aortic valve replacement, the study summarized based upon the Risk of Mortality score, the symptoms are classified, stages are as follows: stage 1 (left ventricle changes − increased left ventricular mass index; early mitral inflow to early diastolic mitral annulus velocity (E/e′) >14; and left ventricular ejection fraction <50%), stage 2 (left atrial or mitral changes − left atrial volume index >34 mL/m^2; moderate to severe mitral regurgitation; and atrial fibrillation), stage 3 (pulmonary artery or tricuspid changes − pulmonary artery systolic pressure ≥60 mm Hg; moderate to severe tricuspid regurgitation), and stage 4 (right ventricle changes − moderate to severe right ventricle dysfunction). The study revealed most of the post operative complications are acquired after valve replacement surgery.

Fabian wurschin, et al (2018) compared a study about the pre-, intra and postoperative (perioperative) complications were recorded A total of 853 transfemoral- and transapical-TAVI patients were included in the study. All patients underwent general anaesthesia. The ASA classifications were primarily 3–4. The average logistic EuroScores for the transfemoral- and transapical-TAVI patients were 18 ± 12% and 21

± 15% (p = 0.002), respectively. The anaesthesia coverage time was 170 ± 49 min., including 37 ± 12 minutes for anaesthetic management. Overall, 458 complications were recorded; with pneumonia, acute renal failure, indication for a permanent pacemaker and non-extubation in the operating theatre the most frequently recorded

Devendra Saksena, et al (2018) conducted a study about Prosthetic valve implantation requires anticoagulation to prevent thrombotic events. The study taken from review Literature from PubMed, Embase, Medline and Google Scholar were searched using the terms "valvular heart disease with long term oral anticoagulation. The researcher found in this study risk of thromboembolic events is observed during the first three months after surgery for both mechanical and bioprosthetic devices...

Sharaf-Eldin Shahabad, et al (2018) carried-out a comparison study with the review of systemic and meta analysis trans catheter versus surgical aortic valve replacement previous cardiac surgery. The study summarized the outcome of aortic valve replacement surgery based upon the coherence central register among1148 patients found the Incidence of stroke (3.8 versus 7.9%,) and major bleeding (8.3 versus 15.3%,) was significantly lower in the TAVR group. Incidence of mild/severe para valvular leakage (14.4/10.9 versus 0%,) and pacemaker implantation (11.3 versus 3.9%,) was significantly higher in the TAVR group . there is no significant in the kidney injury

Michael J. Reardon, et al (2018) ruled-out a descriptive study about immediate risk for surgical or aortic valve replacement selected 1746 patients in 87centers followed by 24 months observation. Among 600 patients developed intermediate risk for mortality Surgery was associated with higher rates of acute kidney injury, atrial fibrillation,

and transfusion requirements, whereas TAVR had higher rates of residual aortic regurgitation and need for pacemaker implantation.

John A. Dodson, et al (2017) were conducted cohort study about Trans catheter Valve Therapy assessing the readmission the investigator selected 18 568 trans catheter aortic valve replacement patients at 329 US hospitals, as whereas 69% were discharged directly home. Among this group to use femoral access (75.2% versus 60.1%, *P*<0.001), had fewer patients receiving transfusion (26.4% versus 40.9%, *P*<0.001), Median 30‑day readmission rate was 17.9%. There was no significant difference in 30‑day readmissions among quartiles (*P*=0.14), even after multivariable adjustment (odds ratio Q4 versus Q1=0.89, 95%CI 0.76‑1.04; *P*=0.15). Factors most strongly associated with 30‑day readmission were glomerular filtration rate, in‑hospital stroke or transient ischemic attack, and non femoral access There was no statistically significant association between hospital practice of direct home discharge post–trans catheter aortic valve replacement and 30‑day readmission. The researcher recommended Further research is needed to understand regional variations and optimum strategies for post discharge care.

Andreas aunnsen, et al (2017), had conducted a cohort study mild to moderate operative risk, about surgical aortic valve replacement They selected 1500 samples. The main aim this study to know the knowledge of postsurgical outcomes, and mortality after surgical intervention. The study summarized all the patient 6 minutes‑ walk test New York Heart Association class (NYHA) and Canadian association score to health related to quality of life .The study reported 442 patients referred for severe AS; 351 had undergone SAVR, with the remainder (91) not operated in the post operative period among the 442 patients among 92 patients developed dyspnoea palpitation, occur.

Manju Gupt, et al (2017) had conducted a study was to identify Peri operative care among the patients underwent double valve replacement surgery the ratio of mortality and morbidity rate . The researcher selected.150 patients, 107 were male (71.3%) and 43 were female (28.6%) The study revealed revealed a high mortality rate among female patient undergoing DVR surgery than males, post operatively low cardiac output syndrome in 9.3% (n=14), bleeding leading to exploration was 8% (n=12), refractory arrhythmias in 3% (n=5), sepsis in 4% (n=6) and acute renal failure in 2% (n=3). Inter mediate post-operative complications (7 to 30 days of surgery) were wound infection in 26 patients (17.3%). There was no incidence of stuck valve or pulmonary thrombus embolism Overall mortality was 8% (12 patients) all within 30 days of operation. There was no statistical difference between the outcome and the types of prostheses used, either biological or metallic (p=0.219).the study summarized there is a increased risk of complication immediate post valve replacement surgery.

John, et al (2016) investigated a cohort study about the long term anticoagulation therapy after valve replacement surgery. The investigator selected 18,113 patients and give the dosage of tab.Dabigram 150 mg twice daily, and warfarin dose gives according to the INR level. The study followed the year of 2 years. The investigator summarized this study major bleeding were 3.11% per year in the dabigatran 150-mg-twice-daily group In the primary publication of the RE-LY study, rates of (relative risk 0.93; 95% confidence interval [CI], 0.81-1.07; $P = .31$) and 2.71% per year in the dabigatran 110-mg-twice-daily group (relative risk 0.80; 95% CI, 0.69-0.93; $P = .003$) vs 3.36% per year in the warfarin group .Dabigatran 150 mg twice daily and 110 mg twice daily reduced the relative risk of intracranial bleeding(both doses $P <.001$), and only dabigatran 150 mg twice daily increased the relative risk of major gastrointestinal (GI) bleeding ($P <.001$) vs

warfarin. The study summarized   Oral anti coagulation therapy provide the increase risk for bleeding

III. STUDIES RELATED TO HOME CARE MANAGEMENT VALVE REPLACEMENT

Lizette Anayo, et al (2019) had conducted a study about Exercise-based cardiac rehabilitation for patients   undergone open and trans catheter aortic valve replacement surgery to evaluate the efficacy and safety exercise based cardiac rehabilitation. the investigator selected 300 patients RCTs and three non-RCTs (total of 27 TAVI, 99 SAVR and 129 mixed patients), with follow-up of 2–12 months. The study summarized There was an increase in pooled exercise capacity (standardised mean difference: 0.41, 95%CI 0.11 to 0.70; moderate certainty evidence as assessed by GRADE), with exercise-based rehabilitate ion compared with control. Data on other outcomes including quality of life and clinical events were limited. The study summarized -effectiveness of exercise-based programme provide better outcome after surgery.

Ujjiwal, et al (2018) carried out a study about thromboembolic and bleeding complication after mechanical valve replacement the researcher selected 217 samples between the year of January 2013 to december2017.mitral valve replacement (MVR; n=58), aortic valve replacement (AVR; n=68), and combined aortic and mitral valve replacements (DVR; n=91)   the study revealed 52 thromboembolic events occurred (DVR: n=22; MVR: n=15; AVR: n=15). Among the sample 7 clients admitted in hospitalization for transfusion. (AVR: n=1; MVR: n=2; DVR: n=4).25 patients (11.5% had prosthetic heart valve thrombosis. Eighteen (72%) patients had successful treatment, 5 (20%) patients had partially successful treatment, and 2 (8%) patients had unsuccessful thrombolysis. Five (2.3%) patients required reoperation due to failed thrombolysis of stuck valve (MVR: n=3; Aortic valve of

DVR group; n=2). Significant variability of INR values were observed in DVR and AVR groups (DVR: p=0.001; AVR: p=0.04) and accounted for higher mortality, thromboembolism and bleeding .The study conclude after mechanical valve replacement great risk of bleeding complication increased.

Aida ahmed, et al (2018) investigated a study about nursing role is after valve replacement surgery through observational studies .The researcher select 30,000 patients monitor the activity, and provide information booklet. The nurse informs the patient that for the first four hours after the implant procedure, to keep both legs straight. This is very important to prevent bleeding from the insertion sites in groin. Activity will begin gradually and increase depending on patient progress. The nurse should explain the diet activities post -operative care the client to prevent complications as well as well- being of the quality of life. Every day the client can able to walk and do activities. 1-2 weeks they return to normal activities .

Sarah Tubina, et al (2017) ruled-out antibiotic Prophylaxis dental procedure with prosthetic heart valve significant increased rate of oral streptococcal infective endocarditis was e (relative rate 1.25, 95% confidence interval 0.82 to 1.82; P=0.26) and after an invasive dental procedure without antibiotic prophylaxis (1.57, 0.90 to 2.53; P=0.08) . The study revealed antibiotic therapy education before dental procedure reduced the prosthetic valve infection level.

Stoicean et al (2017) were found perspective of post acute transition of care of cardiac surgery models provided through patient centered programme. Through post acute care(PCA) options **skilled nursing facilities services** may include wound care, administration of medication, dietary counseling, physical, occupational, and speech therapy .**Home health care** wound care, physical and occupational

therapy, medical social work, as well as regular visits from physicians, nurse practitioners, or nurses throughout the patient recover .**long term acute care hospital this** Services include pain management, dialysis, occupational, speech and physical therapy, respiratory therapy, and head trauma treatment. **Nursing home** focuses on providing custodial care for their residents, including basic activities for daily living .**cardiac rehabilitation** programme incorporates patient assessment, exercise training, nutritional counseling, management of health issues, psychosocial support, and patient education. Services offered in inpatient, outpatient (nursing home/extended care facilities), and home-based settings. **Hospice /palliative care** end-of-life service that is focused on providing pain management, as well as physical, emotional, spiritual care, with the goal of making the patient's life as comfortable and dignified as possible until his or her passing.

Jignesh Kothari, et al (2016) had conducted prosthetic Valve replacement morbidity and mortality causes increase. The study revealed among the participants 100% dyspnoea developed, palpitation 57.88% fatigue 29.45%mortality was 29.2%.based upon this study 19/65Mortality rate were highly significant,14.74%   death occur due to low cardiac output 3.16%   sepsis developed 2.10% patient developed multiple organ failure and mortality rate highly significant according to the new york heart association p=0.002 level. In this study discuss after valve replacement most of the complication occur post operative period.

Francesco violin et al (2016) investigated after valve replacement patients under long time oral anticoagulation therapy(warfarin) patient took low amount of vitamin k rich diet, high amount of vitamin k >150ug. Body needed 150 ug/daily while warfarin therapy) In this study shows more amount of vitamin k increase INR level increase developed complication bleeding and atrial fibrillation. Unawareness vitamin k rich diet prone to increase complication post operatively.

Mariana Mirabel, et al(2015) carried-out a study on Infective endocarditis after valve replacement surgery .This study revealed among the 51 clients 66.7% patients developed infective prosthetic valve endocarditis3.9%re operated with- in 7 days21.6% patients died hospital 3.9% lost to follow up .In this study showed infective endocarditis highly post-operative complication in valve replacement clients. Those studies revealed post operatively valve replacement patients getting complication and mortality and morbidity rate increased and quality of life and life expectancy level decreased.

Selina kikkenborg berg et al (2013) were conducted a study about patient describe the experience of recovery at home after heart valve replacement and next by identifying patterns and **formulating units of significance (stressful complication, bodily attention, physical capability, physically affected) and themes** some experienced lack of rehabilitation .The overall concept that emerged from the analysis was *suffering weakness, struggling to resume normality*. Patients had felt weak since even before they needed the operation. Weakness was very present in a more physical form after the procedure, where some experienced extreme tiredness and deconditioning. Patients all struggled to resume normal living, both in regaining physical strength, and in re-establishing balance in overall living. This means that they struggle to re-establish their role in society and in their network and strive to regain emotional and physical balance.

CHAPTER –III
METHODOLOGY

"Methodology gives those with no ideas some- thing to do"

– Mascon Cooley

This chapter detail description of research methodology appropriate by the researcher blueprint is ordered representation of research problems and its solution. It is one of the guide to helps the researcher to better out- come of this study. Research methodology schematic procedure of the researcher- to find out the initial diagnosis and final conclusion of the out -of this study. This study methodology explain the general approach of arrange the technique for assemble justifiable and reliable data for the purpose of study. This detail description was undertaken to analysis the fruit fullness of focused- teaching programme on knowledge regarding home care management after heart valve replacement surgery clients post our hospital This methodology include chapter research approach, research design, settings of the study, population, sampling technique, criteria for selection of samples, sample size, description of the tool, validity of the tool, pilot study and procedure for data collection and plan for data analysis.

3.1 RESEARCH APPROACH

The research approach tells the researcher from where the data is collected ,what is to be collected ,how to collect and how analyse them .Research approach adopted for this study is an evaluate quantitative research approach.

3.2 RESEARCH DESIGN

In this study Used pre-experimental research design of one group pre-test and post-test design was selected in order to evaluate the

effectiveness of focused teaching programme. The research design is illustrative diagrammatically as follows.

O1 - Pre test

O2 – Post test

X   - Focused teaching programme on home care management after valve replacement patient

O1	x	02
Pre-test	Focused teaching programme	Post -test

3. 3 STUDY SETTINGS

The study was conducted in cardio thoracic post -operative wards in our Rajiv Gandhi Government General Hospital, Chennai-03.

3.4 DURATION OF THE STUDY

4 weeks.

3.5 STUDY POPULATION

Target population

Who are undergone heart valve replacement surgery in cardio thoracic surgery post- operative wards , Rajiv Gandhi Government Hospital, Chennai-03.

Accessible population

The heart valve replacement patients-undergone surgery during the period of data collection.in Rajiv Gandhi Government General Hospital,-Chennai-03.

3.6 SAMPLE

Sample refers to the subjects of a population selected to participate in a research study. Who meet the inclusion criteria, in this

study the sample who were undergone valve replacement surgery in cardio thoracic post -operative wards.

3.7 SAMPLE SIZE

A total number of 60 clients undergone heart valve replacement surgery were selected for the study.

3.8 SAMPLING CRITERIA

The sample was selected according to the following inclusion and exclusion criteria.

Inclusion criteria

❖ Patient who are subjected to valve replacement surgery for the first time.

❖ Both male and female patients are included for this study.

❖ Who will participate in this study.

❖ Patient can respond and understand English or Tamil.

❖ Whose post-operative day more than 5days.

Exclusion criteria

The study excludes heart valve replacement patient who are

❖ Patients in Critically ill.

❖ Patient undergone Other heart surgery procedure.

❖ Patient who are not willing to participate.

3.9 SAMPLING TECHNIQUE

The sampling technique used in this study was non-probability convenience sampling.

3.10 RESEARCH VARIABLES

Independent Variables : Knowledge about the level of knowledge about home care management after heart valve replacement surgery.

Dependent variables: Focused Teaching Programme.

3.11 DESCRIPTION OF DATA COLLECTION TOOL

The tool prepared by based upon information gathered from the literature review objectives of the study. The data was conducted by interview method.

3.12 DEVELOPMENT AND DESCRIPTION OF THE TOOL

The investigator prepared the tool based upon the objectives of the study, Tool was prepared after collective of literature review from various textbook journals, internets and discussion and opinion from the various experts in the field of nursing and medical experts in Rajiv Gandhi government general hospital and personal experience of investigator working field and statistician were consulted for the development of tool. The tool was prepared in English and translated in to Tamil. Consonance was maintained in translation.

TOOL CONSISTS OF TWO SECTIONS
SECTION - A

It consists of 10 questions with multiple option. The study participants had tick the appropriate boxes. It had questions related to age,   sex, religion, marital status, educational status, monthly income,dietry habits. Place of living status.

SECTION –B

ASSESSMENT OF KNOWLEDGE

It be composed of 25semi structured questions to appraise the knowledge based on   understanding disease condition,etiolgical factors diagnostic evaluation,dietry advice wound care ,compilation meaning, rest and exercise ,prophylaxis method .It including a multiple choice questions which consisted of four options was given, one is key and 3 are deflect

Categories of the semi structure Questionnaire

S. No	Categories	Total items	Percentage
1	Knowledge on Basic information	9	36%
2	Diet	1	4%
3	Exercise	2	8%
4	Rest	2	8%
5	Wound care	2	8%
6	Medication	3	12%
7	Follow up	1	4%
8	Complication	1	4%
9	Prevention	4	16%
	Total	25	100%

Scoring interpretation

An interview schedule was used to assess the knowledge on home care management after valve replacement patient among clients underwent valve replacement surgery. It consists of25 multiple choice questions, and scores was given features according to the ingredient wise given.

❖   Each correct choice carries 'l' mark.

❖   Incorrect choice carries '0' mark.

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Based on the outcome and section was calculated as bellow-

$$\text{Section} = \frac{\text{Obtained Score}}{\text{Total score}} \times 100$$

Based on the section, the level of knowledge was interpreted as Grade.

3.13 VALIDITY OF THE TOOL

Validity of the tool was assessed using content validity. Content validity was determined by experts from nursing-faculty. They suggested certain modifications in tool. After the modification they agreed this tool for assessing of focused teaching programme on knowledge regarding home care management among patient undergone heart valve replacement in cardiothoracic surgery postoperative wards ,Rajiv Gandhi government general hospital,Chennai-03

3.14 RELIABILITY OF THE TOOL

Reliability of the tool was assessed by using test retest method. Knowledge score reliability correlation coefficient value is 0.82. This correlation coefficient is very high and it is good tool for assessing effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone Heart Valve Replacement in cardio thoracic surgery post-operative wards, Rajiv Gandhi Government General Hospital ,Chennai-03.

3.15 HUMAN RIGHTS AND ETHICAL CONSIDERATIONS

Research proposal was approved by experts prior to the pilot study and permission for the main study was obtained from the ethical committee, Head of the department, Department of cardiothoracic, Madras Medical College, Chennai-03.Awritten consent of each study subject was obtained before starting the data collection, assurance was given to the subjects that confidentiality and privacy would be maintained.

3.16 PILOT STUDY

After obtaining permission from the Director Clinical and Academic affairs. The pilot study was conducted at Rajiv Gandhi Government General Hospital, Chennai-03 from 6.8.2018 to 12.8.2018 Totally 10 heart valve replacement patient who were all fulfilled the inclusion criteria were included for the pilot study samples. After establishing rapport with samples, self- introduction was given. The purpose of the study was explained and the consent was obtained from the participants. Interview was conducted by the investigator using interview schedule to assess the knowledge regarding home care management after heart valve replacement surgery.. It took approximately 25 minutes for the investigator to complete the interview with one sample. The results revealed that the tool was feasible and easy to administer.

3.17 PILOT STUDY RECOMMENDATIONS

The tool was feasible and main study was carried out without any modification after pilot study. Pilot study is a trial run for the main study, to test the reliability, practicability and feasibility of the study. The samples on which the pilot study was conducted were excluded in the main study.

3.18 DATA COLLECTION PROCEDURE

Authoritative approval to conduct the pilot study and main study was get from the Dean and Director of cardiothoracic surgery department in Rajiv Gandhi government general hospital, Chennai. The period of the study for four weeks, the detail particulars was collected from Monday to Saturday 8am to 4 pm. manipulate non probability convenience sampling technique 60 samples were selected who placid the selection criteria.

The researcher initiate her to the nominate sample of the heart valve replacement patient and written concurrence was obtained from each sample after giving affirmation of confidentiality. Then the heart valve replacement patient were assessed about the knowledge of home care management after heart valve replacement surgery by use of semi structure questionnaire. Everyday detail particulars was collected from available samples and the samples of 4 or 5 samples were gathered as a small-group.

The pre- test detail particulars were possessed for 25 minutes. The focused teaching programme was implemented on the same day for 45 minutes using lecture and discussion method with lap top, flip cards, booklets which was prepared by the investigator after consulting with the specialist. The heart valve replacement patients participated with interest and they were alert and enthusiastic. Certain points were repeated for better understanding and doubts were clarified and a booklet was given to each heart valve replacement patient at the end of the discussion.

After 5days of interval post test was conducted for 25 minutes among the same samples using the same questionnaire and evaluated the effectiveness of focused teaching programme Rajiv Gandhi government general hospital .Chennai.

3.19 PLAN FOR DATA ANALYSIS

Descriptive and inferential statistics were used for data analysis.

STATISTICAL ANALYSIS

Descriptive Statistics

1) Frequency and percentage distribution was used to assess demographic variables and level knowledge on home care management after heart valve replacement surgery.

2)   Frequency, percentage distribution, mean and standard deviation was used to assess level of knowledge on home care management after heart valve replacement surgery.

Inferential Statistics

1)   Quantitative knowledge score in pre-test and post-test were compared using student's paired t-test.

2)   Qualitative level of knowledge in pre-test and post-test were compared using Stuart-Maxwell test /extended Mc Nemar test.

3)   Association between knowledge gain score and demographic variables are assessed using one way ANOVA F-test and student independent t –test.

4)   Effectiveness and generalization was given using mean with 95% CI and Percentage with 95%.

FIGURE 3.1: SCHEMATIC REPRESENTATION OF METHODOLOGY

RESEARCH APPROACH
Quantitative Research Approach

RESEARCH DESIGN
Pre Experimental One Group Pre Test Post Test-design

SETTING OF THE STUDY
Rajiv Gandhi Government General Hospital, Chenna-03

TARGET POPULATION
Patient Undergone Heart Valve Replacement Surgery In Rajiv Gandhi Government General Hospital Chennai-03

SAMPLING AND SAMPLING TECHNIQUE
60 patients undergone heart valve replacement in Rajiv Gandhi government general hospital, non-Probability convenience sampling Technique

DATA ANALYSIS
Descriptive (frequency distribution& percentage, mean SD) and inferential statistics (person chi-square test,Stuart-Maxwell test /extended McNamara test)

DATA COLLECTION METHOD&TOOL
INTERVIEW METHOD: INTERVIEW SECHDULE:
demographic data / semi structured knowledge questionnaire to assess the knowledge

STUDY FINDINGS AND CONCLUSION

CHAPTER –IV
DATA ANALYSIS AND INTERPRETATION

Detail description survey and inference is the main step in research process. The significance of detail description survey and inference and clarification of the gathered detail description is to fully arrange, divided and conclusion it, so that the outcome can be inference and assimilate to provide all the answers that activated the research. This division deals with survey and inference of detail description gathered from 60patient underwent heart valve replacement in our hospital. The detail description gathered were oversee arrange, inference and elucidate ,the findings were presented in the forms of tables and figures.

ORGANIZATION OF DATA

The data has been tabulated and analysed according to the objectives and interpreted in the following sections.

Section- A: Distribution of the demographic variables of patients undergone heart valve replacement in Rajiv Gandhi Government General Hospital, Chennai-03

Section-B: Assessment of pre- test level of knowledge of patient undergone heart valve replacement in Rajiv Gandhi Government General Hospital, Chennai-03

Section-C: comparison of pre-test and post- test knowledge of patient undergone heart valve replacement in Rajiv Gandhi Government General Hospital, Chennai-03

Section-D: Assessment of the effectiveness of the focused teaching programme regarding home care management of patients undergone heart valve replacement.

Section-E: Association between levels of knowledge on home care management with selected demographic variables of valve replacement patient.

SECTION- A: DEMOGRAPHIC VARIABLES OF HEART VALVE REPLACEMENT PATIENTS IN CARDIO THORACIC SURGERY WARDS IN RAJIV GANDHI GOVERNMENT GENERAL HOAPITAL ,CHENNAI-03

Table-4.1: .Frequency and percentage distribution of demographic variables of heart valve replacement patients

Demographic variables		No. of patients	Percentage (%)
Age in years	< 20 years	4	6.67%
	21- 30 year	8	13.33%
	31-40 years	13	21.67%
	41-50 years	18	30.00%
	>50 years	17	28.33%
Gender	Male	35	58.33%
	Female	25	41.67%
Educational status	Illiterate	10	16.67%
	Primary school	15	25.00%
	Middle school	16	26.67%
	High school	9	15.00%
	Diploma	5	8.33%
	Graduate	3	5.00%
	Profession	2	3.33%
Occupational status	Legislators ,senior officials& managers	0	0.00%
	Professionals	2	3.33%
	Technicians and associate professionals	7	11.67%
	Clerks	7	11.67%
	Skilled workers	7	11.67%
	Skilled agricultural and fishery workers	6	10.00%
	Craft& Related trade workers	14	23.33%
	Plant &Machine operators	8	13.33%
	Elementary occupation	7	11.67%
	Unemployed	2	3.33%

Demographic variables		No. of patients	Percentage (%)
Monthly income	< Rs.5000	21	35.00%
	Rs 5001-1000	16	26.67%
	Rs 10001-15000	14	23.33%
	Rs 15001-20000	6	10.00%
	> Rs 25000	3	5.00%
Religion	Hindu	49	81.67%
	Muslim	9	15.00%
	Christian	2	3.33%
Marital status	Single	16	26.67%
	Married	44	73.33%
	Widower	0	0.00%
	Separated	0	0.00%
Dietary habits	Vegetarian	14	23.33%
	Non Vegetarian	46	76.67%
Habits	Alcoholic	4	6.67%
	Smoker	6	10.00%
	Drug abuse	2	3.33%
	None	48	80.00%
Place of living	Urban	28	46.67%
	Rural	23	38.33%
	Sub urban	9	15.00%

Analysis of demographic variables presented in tables and explicated in different plots. Table 4.1 shows the frequency and percentage distribution of the demographic variables of health care personnel.

The heart valve replacement patients age was divide five age groups. It reveals distribute age from < 20 years is 4(6.67%), the age from 20-30 years is 8(03.33%), the age from 31-40 years is 13(21.67%). The age from 41-50 years is 18(30.00%) above 50 years 17(28.33%)

The heart valve replacement patients divided in gender two groups male 35(58.33%) and female 25(41.67%)

Educational status divided into seven groups. With respect to the education 10(16.67%) had illiterate,15 (25.00%) had primary school

education and 9(15.00%) had high school 5(8.33%) had diploma education 3(5.00%) had Graduation. 2(3.33%) had profession.

The heart valve replacement patients based upon the occupational status none of them have legislations ,senior officials and managers professions 2(3.33%) professionals , 7(11.67%) had Technicians and associate professionals 7(11.67%(had clerk's 7(11.67%)skilled workers 6(10.00%) Skilled agricultural and fishery workers14(23.33%) had Craft& Related trade workers8(13.33%) Plant &Machine operators7(11.67%) had Elementary occupation2(3.33%) had un employment.

The heart valve replacement patient divided according to the monthly income 5 categories <5000 Rs 21(35.00%) Rs 5001-100016(26.67%)Rs 10001-15000 14(23.33%) and Rs15000-20000 6(10.00%) above Rs 25000 3(5.00%) most of them have less than 5000 Rs.

The heart valve replacement patients divided into three groups based on their religion Hindu, Christian and Muslims. With respect to religion, 49(81.67%) belongs to Hinduism, 9(15.00%) belongs to Muslims and 2(3.33%) belongs to Christian.

Considering the marital status of the heart valve replacement patients 16(26.67%) were single ,44(73.33%) were married and none of them were widow or divorced. But majority of them married.

On the basis of the diet pattern divided into two groups vegetarian and Non vegetarian. In that 14(23.33%) were belongs to vegetarian and 46(76.67%) were belongs to non-vegetarian.

Based on their habits divided into four groups those who drinks alcoholic 4(6.67%) smoker 6(10.00%) drug abuse 2(3.33%) none of them 48(80.00%)

Regarding the place of living divided in three groups 28(46.67%) living in urban area 23(38.33%) belongs to the Rural area 9(15.00%) belongs to the sub urban area.
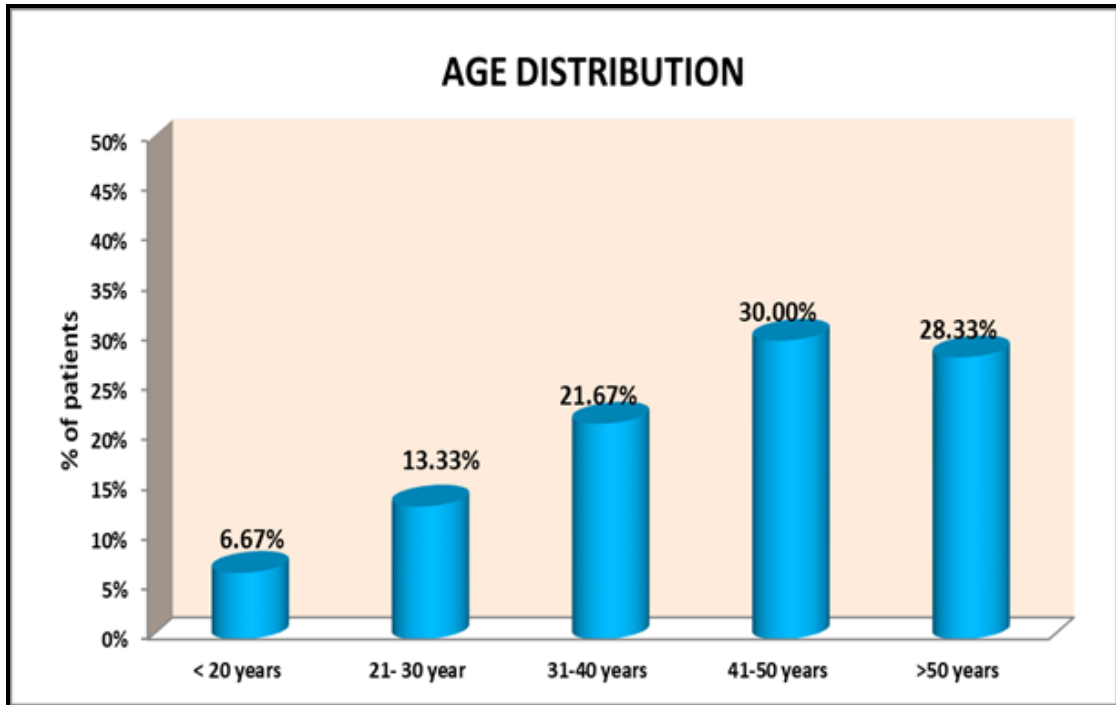
Figure:4.1Age wise distribution of heart valve replacement patients
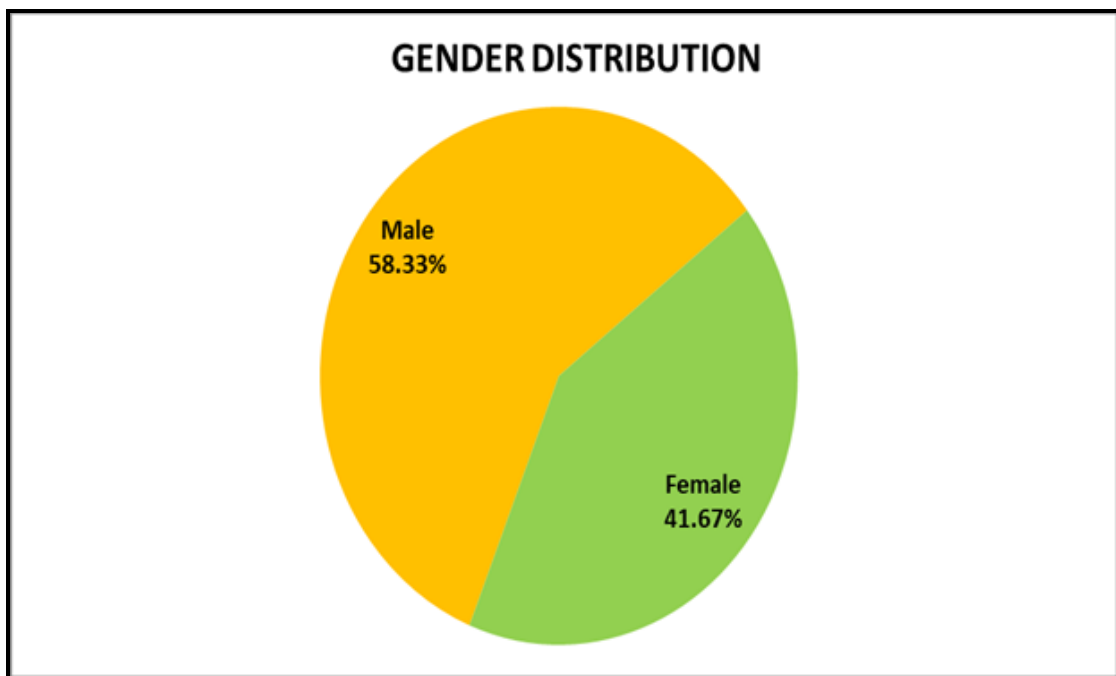
Figure:4.2 Gender wise distribution of heart valve replacement patients

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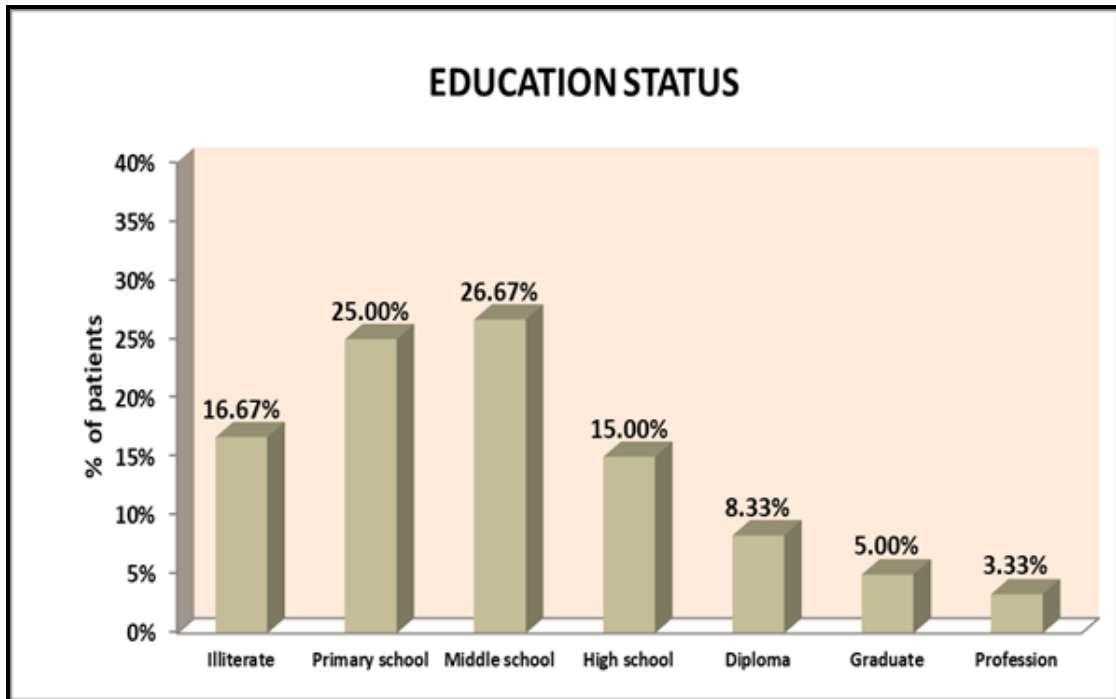
EDUCATION STATUS

Figure: 4.3 Shows the education status the heart valve replacement patients.
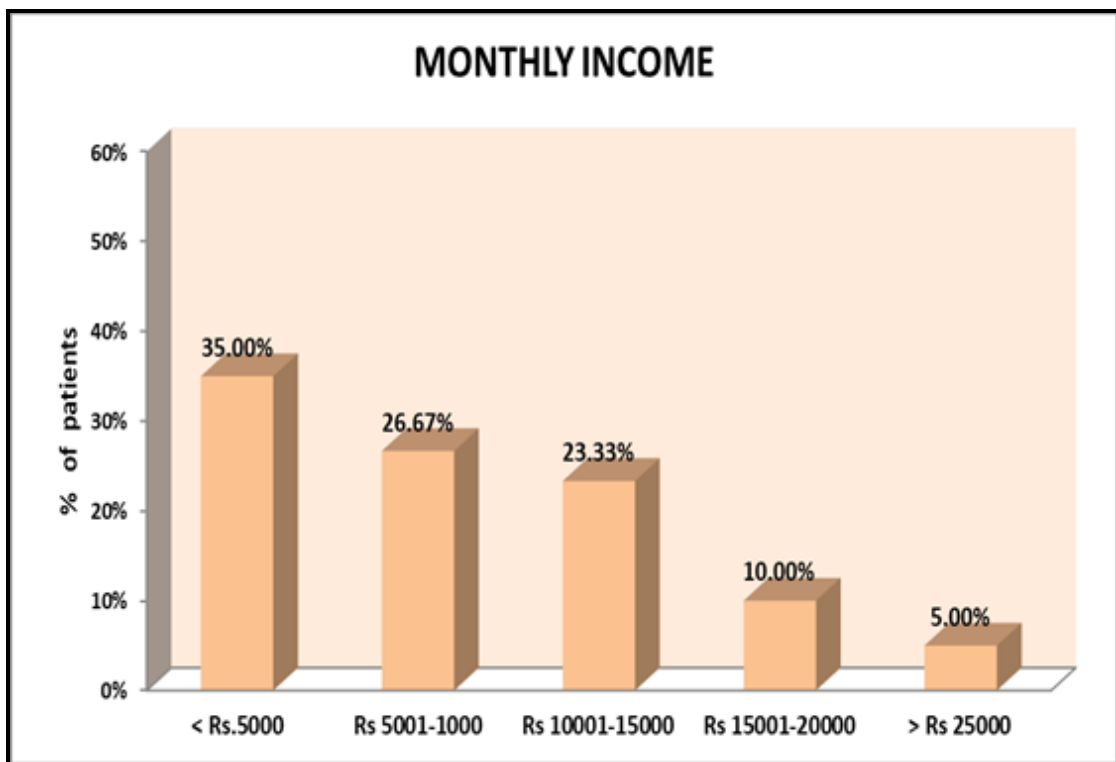
MONTHLY INCOME

Figure:4.4 shows about the monthly income of the heart valve replacement patients.
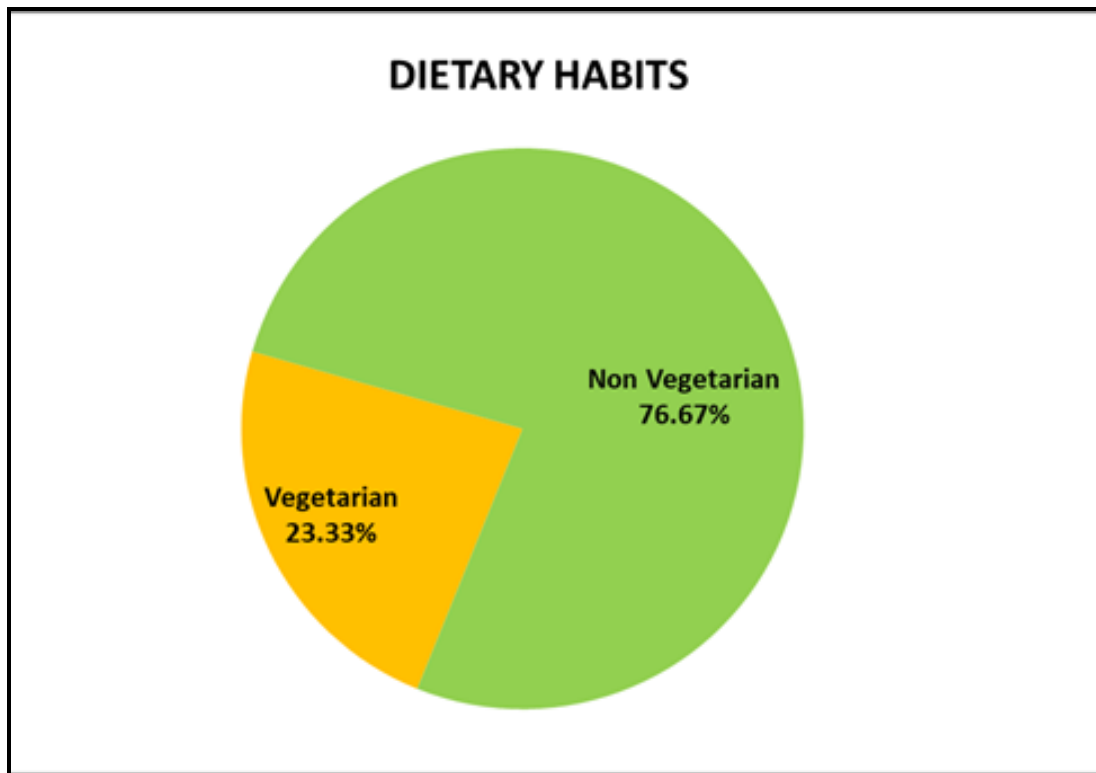
Figure: 7 Shows about the dietary pattern of heart valve replacement patients.
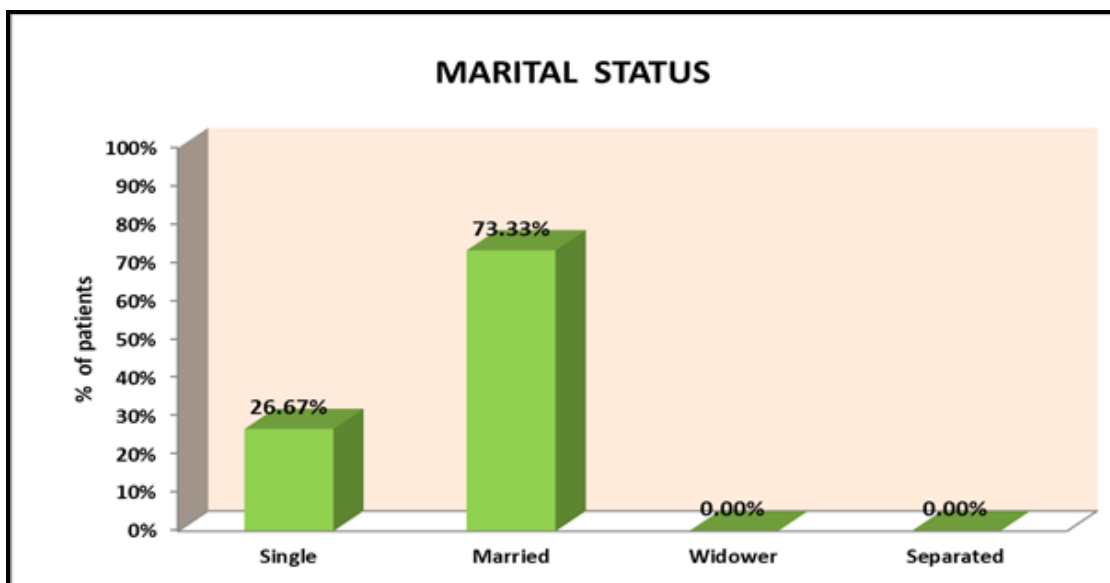
Figure :4.5 Marital wise distribution of heart valve replacement patient

44
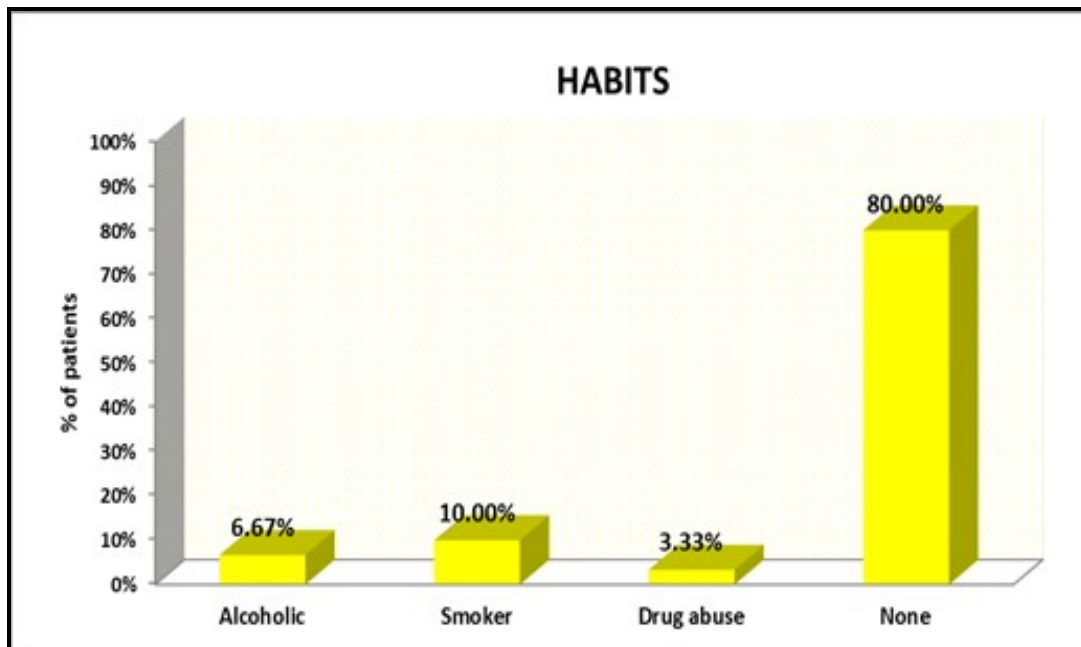
Figure   : 4.6 Shows Habits wise distribution of heart valve replacement patient.
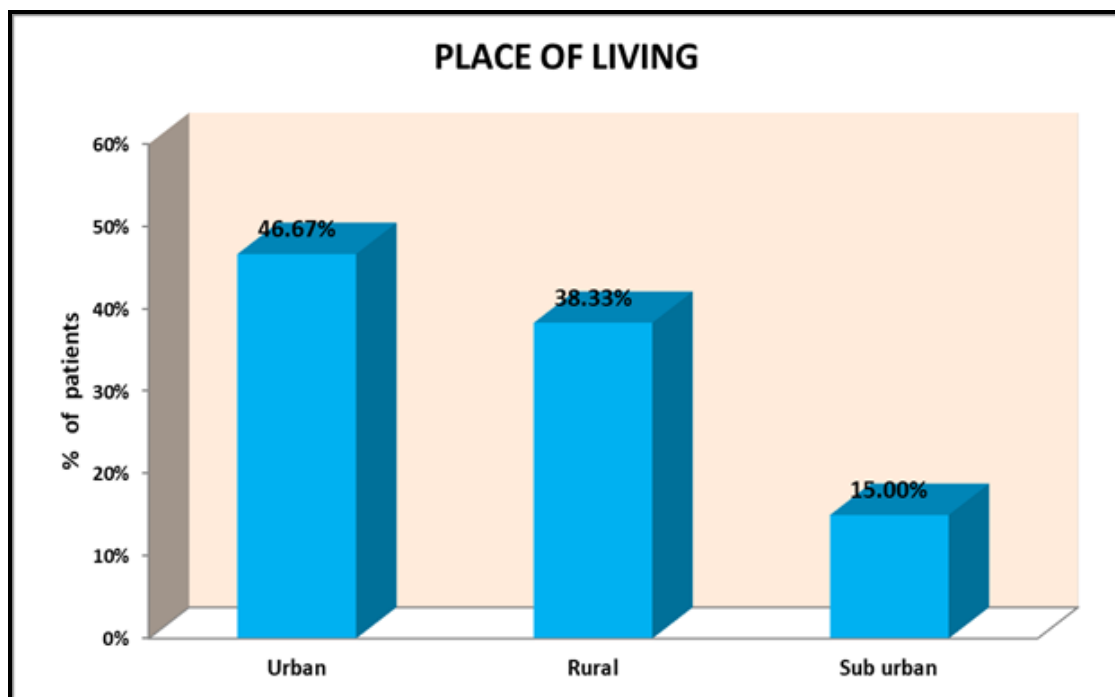
Figure : 4.8 Place wise distribution of heart valve replacement patient.

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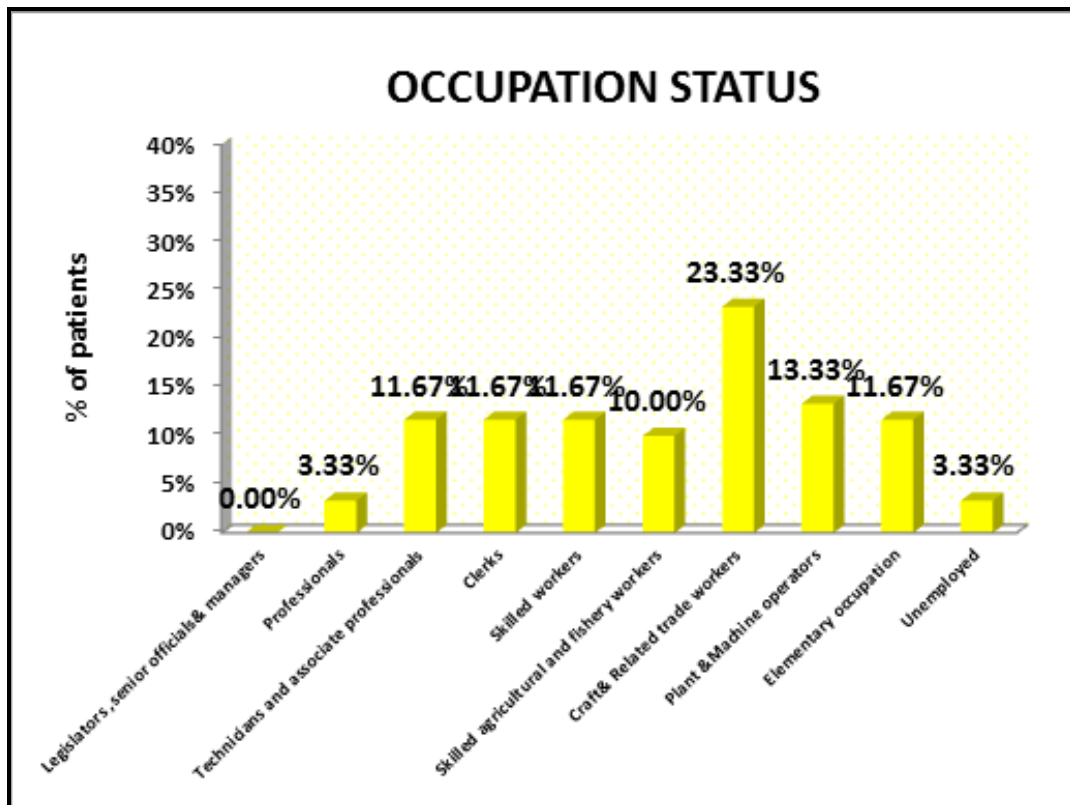
Figure:4.9 Distribution of demographic variables of samples according to occupational status
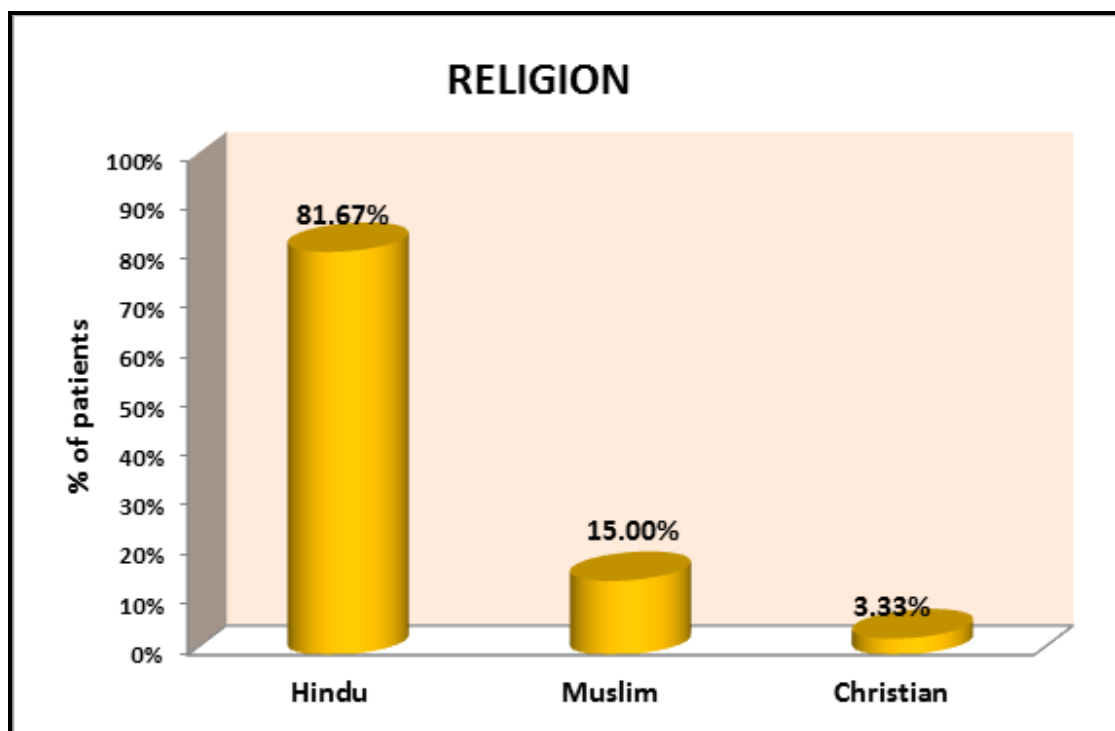
Figure: 4.10 Distribution of demographic variables of samples according to religion

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SECTION- B ASSESMENT OF PRE TEST LEVEL OF KNOWLEDGE OF VALVE REPLACEMENT PATIENTS TOWARDS HOME CARE MANAGEMENT

Table: 4.2   Frequency and percentage distribution of each domain wise pre -test level of knowledge score

S. No	Domains	No. of questions	Min – Max score	Pre- test knowledge score		
				Mean	SD	% of mean score
1	Knowledge on Basic information	9	0 -9	3.97	1.91	44.11%
2	Diet	1	0 - 1	.35	.48	35.00%
3	Exercise	2	0 - 2	1.08	.72	54.00%
4	Rest	2	0 - 2	83	.67	41.50%
5	Wound care	2	0 -2	1.13	.79	56.50%
6	Medication	3	0 -3	1.50	.83	50.00%
7	Follow-up	1	0 -1	.52	.50	52.00%
8	Complication	1	0 -1	.50	.50	50.00%
9	Prevention	4	0 -4	1.52	.87	38.00%
	Total	25	0 - 25	11.88	3.25	47.52%

Table   4.2   shows pre-test percentage of knowledge regarding Home care management among patients undergone heart valve replacement,having maximum Knowledge on basic information 44.11% diet 35.00% exercise 54.00% about Wound care (56.50%) and medication 50.00% follow up 52.00% complication50.00% prevention 38.00% minimum knowledge score in Knowledge about Diet (35.00%). Overall knowledge score is 47.52% respectively.

Table :4.3   Frequency and percentage distribution of each domain wise pre- test level of knowledge score

	No. of questions	Min – Max Score	knowledge score	
			Mean ±SD score	%
Overall score	25	0 -25	11.88±3.25	47.52%

Table :4.4 Frequency and percentage distribution of pre-test level of knowledge

Level of knowledge	No. of Patients	%
Inadequate knowledge	39	65.00%
Moderate knowledge	21	35.00%
Adequate knowledge	0	0.00%
Total	60	100%

FIGURE Table No.4 shows the pre-test level of knowledge on Home care management among patients undergone heart valve replacement..In Pre-test, 65.00% of patients are having inadequate knowledge and 35.00% of them having moderate level of knowledge and none of them are having adequate knowledge

Knowledge score interpretation

Min=0 Max=1 Total questions=25 Maximum marks= 25

S no.	Grade	Percentage	Marks
1.	Inadequate knowledge	0 – 50%	0-12
2.	Moderate knowledge	50 – 75%	13-19
3.	Adequate knowledge	76 – 100 %	20-25
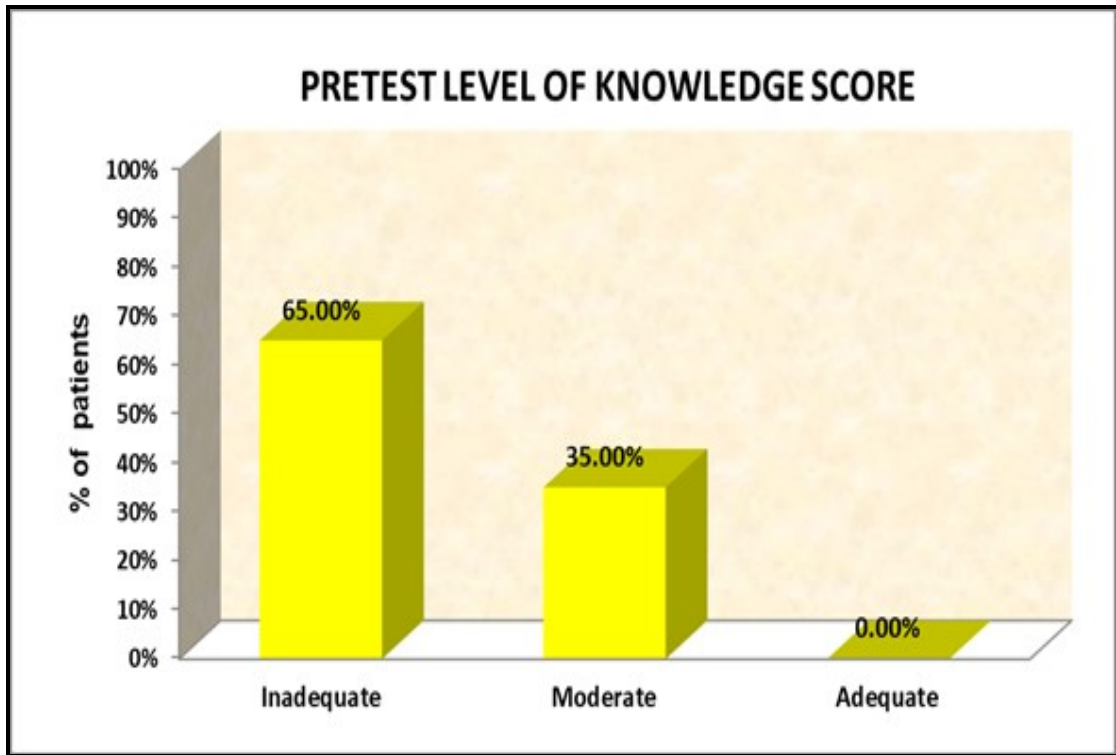
Figure4.11 distribution of pre test level of knowledge score

SECTION –C: COMPARISON OF PRETEST AND POST TEST KNOWLEDGE OFHOME CARE MANAGEMENT AFTER HEART VALVE REPLACEMENT.

Table 4.5 Frequency and percentage distribution of each domain wise Post -test level of knowledge on home care management after valve Replacement.

S. No	Knowledge on	No. of questions	Min – Max-score	Post-test knowledge score		
				Mean	SD	% of mean score
1	Knowledge on Basic information	9	0 -9	7.35	1.26	81.67%
2	Diet	1	0 - 1	.83	.38	83.00%
3	Exercise	2	0 - 2	1.52	.65	76.00%
4	Rest	2	0 - 2	1.45	.72	72.50%
5	Wound care	2	0 -2	1.70	.53	85.00%
6	Medication	3	0 -3	2.30	.83	76.67%
7	Follow-up	1	0 -1	.82	.39	82.00%
8	Complication	1	0 -1	.77	.43	77.00%
9	Prevention	4	0 -4	2.92	.79	73.00%
	TOTAL	25	0 - 25	19.65	2.05	78.60%

Table- 4.5 represents each domain wise post-test percentage of knowledge on home care after valve replacement surgery In this table it describes the response dents after attending focused teaching programme the percentage of mean score has increased and higher than the pre test level of knowledge. They are having most knowledge in basicinformation(81.67%),Diet(83.00%)exercise(76.00%),Rest(41.50%), woundcare(85.00%),Medicaions (76.67%) and follow up (82.00%) complication (77.00%) prevention 73.00%)it shows knowledge gain up to 78.60%from 47.52%)in the pre test value.

TABLE 4.6 Frequency and percentage distribution of Post- test level of knowledge on home care management after heart valve replacement surgery.

POSTTEST LEVEL OF KNOWLEDGE

Level of knowledge	No. of Patients	%
Inadequate knowledge	0	0.00%
Moderate knowledge	14	23.33%
Adequate knowledge	46	76.67%
Total	60	100%

Table no 4.6 depicts the post-test level of knowledge about home care management patients undergone valve replacement surgery. After attending the focused teaching programme assessment of the level of knowledge of home care management reveals that 46(76.67%) are having adequate knowledge ,14(23.33%) of them having moderate level of knowledge score and none of them are having inadequate level of knowledge about home care management.

Table :4.7 Overall Post Test Knowledge Score

	No. of questions	Min – Max score	Knowledge score	
			Mean ±SD score	%
Overall score	25	0 -25	19.65±2.05	78.60%

Table 4.7 shows post-test percentage of knowledge regarding home care management after valve replacement patient. Overall post-test percentage of knowledge score is 78.60% among valve replacement patient.

Table 4.8 : Frequency and percentage distribution of each domain wise pre-test and post-test percentage of knowledge gain score.

S. No	Domains	Pre-test knowledge	Post-test knowledge	%of knowledge gain
1	Knowledge on Basic information	44.11%	81.67%	37.56%
2	Diet	35.00%	83.00%	48.00%
3	Exercise	54.00%	76.00%	22.00%
4	Rest	41.50%	72.50%	31.00%
5	Wound care	56.50%	85.00%	28.50%
6	Medication	50.00%	76.67%	26.67%
7	Follow-up	52.00%	82.00%	30.00%
8	Complication	50.00%	77.00%	27.00%
9	Prevention	38.00%	73.00%	35.00%

Table 4.8 shows each domain wise knowledge gain score among valve replacement patients. This table shows that the purpose of the study is to merge the knowledge of practices to followed to home care management after valve replacement surgery. Significance of difference between pretest and post test score calculated using student paired t-test.

Knowledge on basic information , in pretest , valve replacement patients are having 3.97score since in post test they are having 7.35score. Difference is 3.38. This difference is large and it is statistically significant difference.

Knowledge about **Diet**, in pretest, valve replacement patients having0 .35score where in post test they are having 0.83 score. Difference is 0.48. This difference is large and it is statistically significant difference.

Knowledge on **Exercise,** in pretest, valve replacement patients having score 1.08 whereas in post test they are having 1.52 score. Difference is 0.44. This difference is large and it is statistically significant difference.

Knowledge on **Rest,** in pretest, valve replacement patients having .0.83 score since in post test they are having 1.45 score. Difference is 0.62.This difference is large and it is statistically significant difference.

Knowledge on **wound care**, in pretest, valve replacement patients having 1.13score whereas in post test they are having 1.70score. Difference is 0.57. This difference is large and it is statistically significant difference.

Knowledge on **Medication** in pretest ,valve replacement patients having 1.50score whereas in post test they are having 2.30 score. Difference is 0.8 This difference is large and it is statistically significant difference.

Knowledge on **Follow up**, in pretest having valve replacement patients pre test 0.52 score where in post- test they are having 0.82 score. Difference is 0.3 This difference is large and it is statistically significant difference.

Knowledge on **complications,** in pretest having valve replacement patients pre test 0.50 score where in post test they are having 0.07score. Difference is 2.35. This difference is large and it is statistically significant difference.

Knowledge on **prevention,** in pre-test having valve replacement patients pre test 0.8score where in post test they are having 2.92 score. Difference is 2.12 This difference is large and it is statistically significant difference.

Table4.9: frequency and percentage distribution comparison of the pre-test and post test level of knowledge score

Level of knowledge	Pre-test		Post-test		Generalized McNemar's test
	n	%	n	%	
Inadequate knowledge	39	65.00%	0	0.00%	
Moderate knowledge	21	35.00%	14	23.33%	$\chi2=36.13$ P=0.001***(S)
Adequate knowledge	0	0.00%	46	76.67%	
Total	60	100%	60	100%	

Before focused teaching programme, 65.00% of the valve replacement patients having inadequate level of knowledge score, 35.00% of them having moderate level of knowledge score and none of them are having adequate level of knowledge score.

After focused teaching programme, none of the valve replacement patient having inadequate level of knowledge score, 23.33% of them having moderate level of knowledge score and 76.67% of them are having adequate level of knowledge score.

Level of knowledge gain between pretest and post test estimated by using Generalised Mc Nemar's chi square test. Since the P value estimated projects as p=0.001 which is statistically significant at p<0.05 level, the hypothesis accepted.
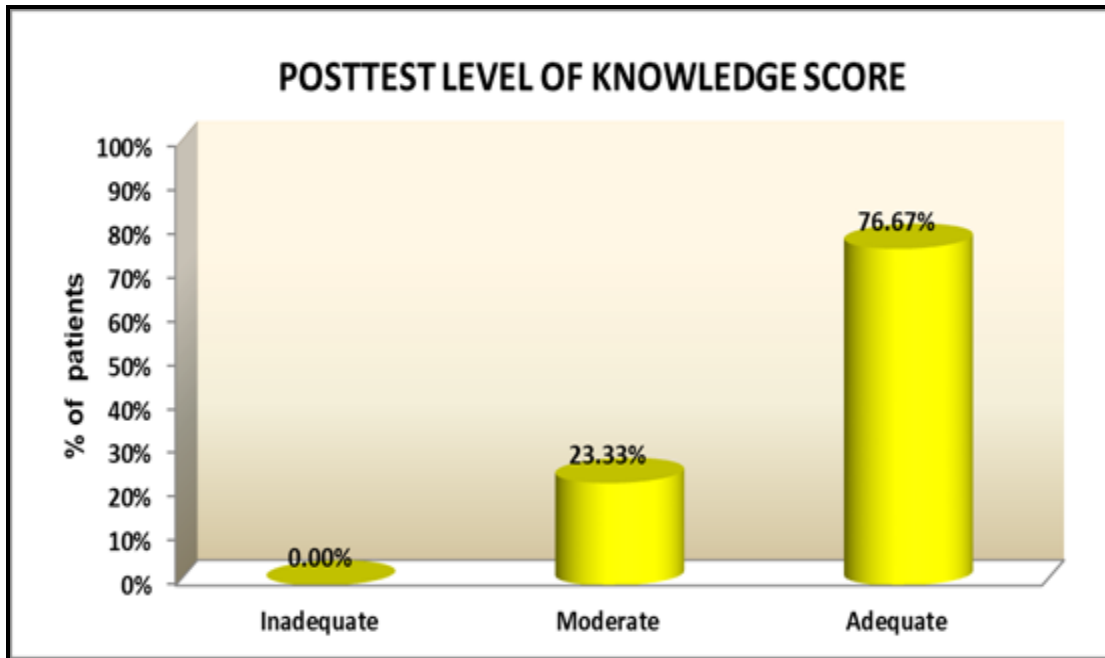
Table 4.12 :Distribution of post test level of knowledge towards home care management
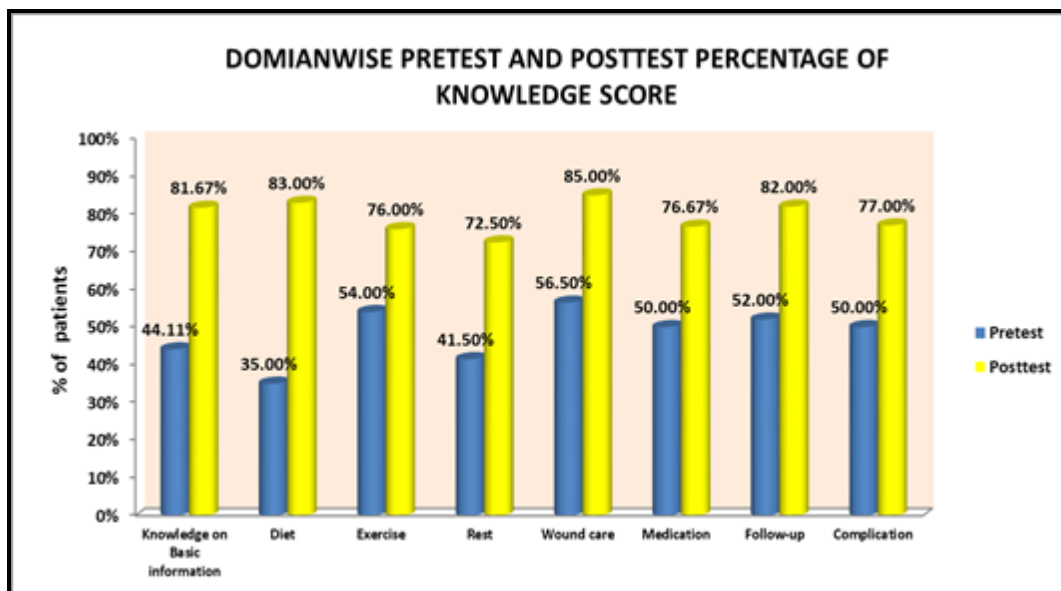
Figure:4. 13 Distribution of domain wise percentage of knowledge gain score of home caremenegement.score
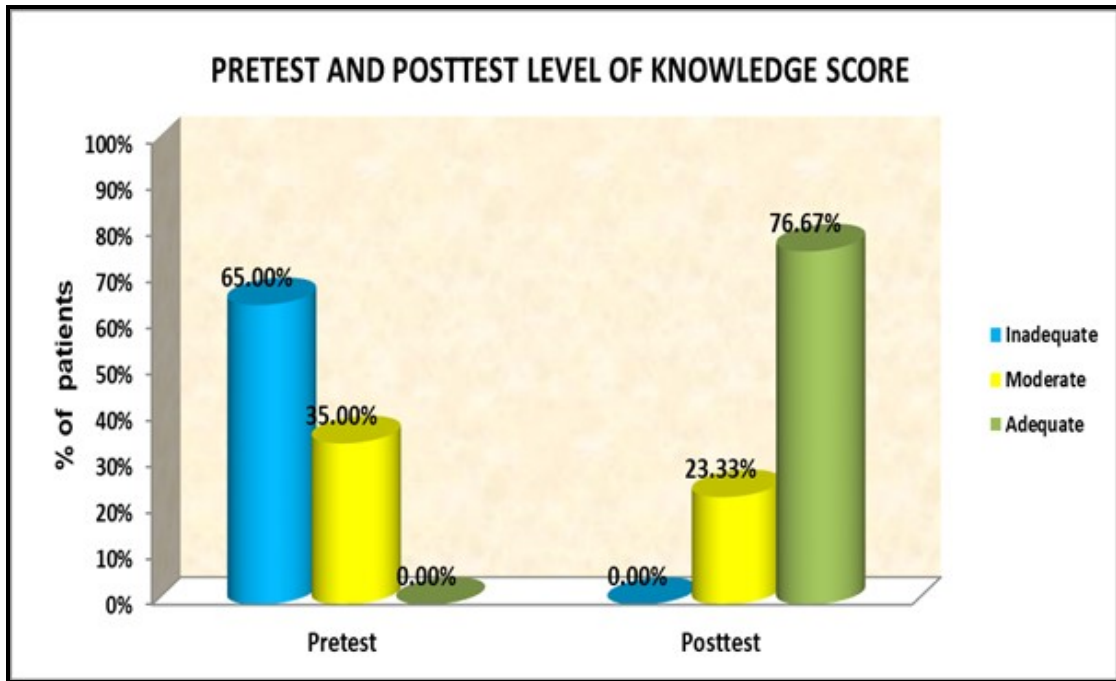
Figure:4.14overallpreandposttestlevelofknowledgescore
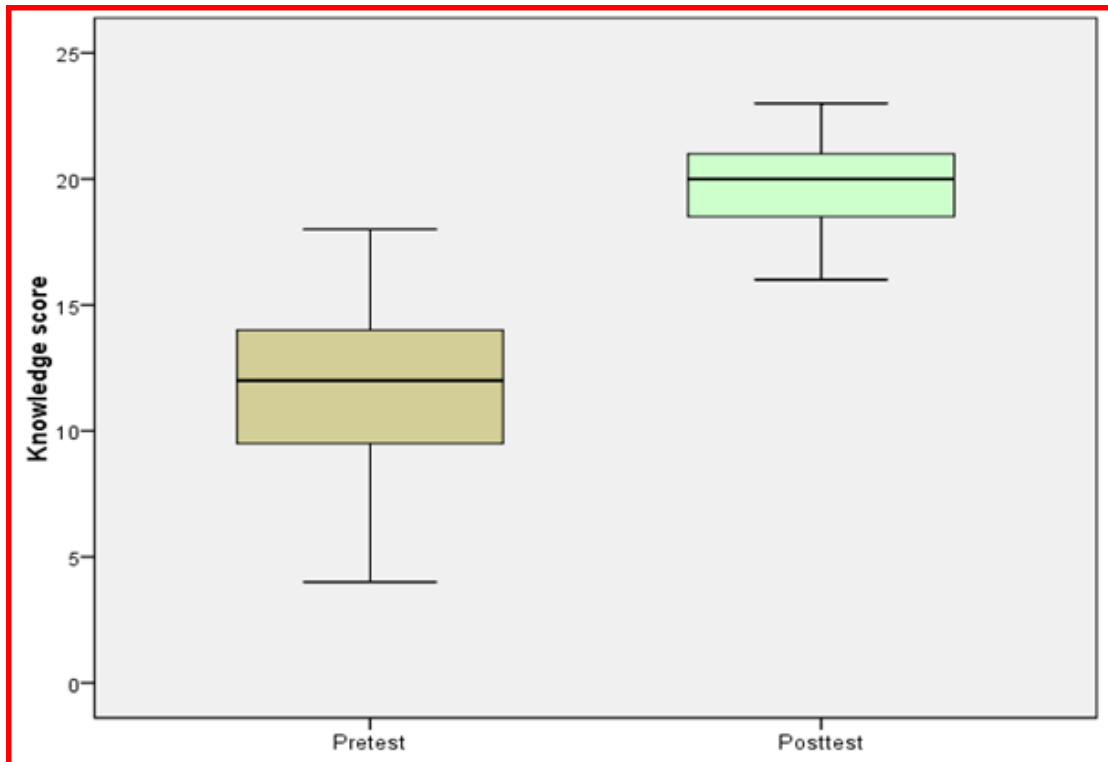
Figure:4.15 box plat diagrampretest and post test overall knowledge score

SECTION-D: ASSESSMENT OF THE EFFECTIVENESS OF THE FOCUSED TEACHING PROGRAMME REGARDING KNOWLEDGE ON HOME CARE MANAGEMENT

Table 4.16 Frequency and percentage distribution of effectiveness and generalization of knowledge score.

	Max score	Mean score	Mean Difference of knowledge gain score with 95% Confidence interval	Percentage Difference of knowledge gain score with 95% Confidence interval
Pre-test	25	11.88	7.77(6.84 – 8.69)	31.08% (27.36% –44.76%)
Post-test	25	19.65		

Table no 4.16 depicts the effectiveness of focused teaching program among valve replacement patients .On an average, in post test, after having focused teaching program , valve replacement patient having31.08 % more knowledge score than pre-test score.

Differences and generalization of knowledge gain score between pre-test and post test score calculated using and mean difference with 95% Confidential interval and   proportion with 95% Confidential interval. The Figure 18 is the Box pictorial representation of pre test and post test level of knowledge score.

Table: 4.17 Frequency distribution of comparison of overall knowledge score regarding home care management after valve replacement surgery

Domain	No. of Patients	Pre test Mean ±SD	Post-test Mean ±SD	Mean differ-rence Mean	Student's paired t-test
Knowledge on Basic information	60	3.97 ± 1.91	7.35 ± 1.26	3.38	t=11.04 P=0.001*** DF = 59, significant
Home care management after prostatic valve replacement surgery	60	7.91 ± 2.06	12.30 ± 1.78	4.38	t=14.01 P=0.001*** DF = 59, significant
Overall	60	11.88 ± 3.25	19.65 ± 2.05	7.77	t=16.84 P=0.001*** DF = 59, significant

*** very high significant at   P≤0.001

Table no 4.11 shows the comparison of overall knowledge before and after the administration of focused teaching programme.On an average, valve replacement patient are improved their knowledge from 11.88to 19.65 after the administration of focused teaching programme. Or we can say, in pre test they are able to answer only 12 questions before administration of focused teaching programme, after FTP, they are able to answer up to 25questions. Due to focused teaching programme they are able to answer 12 more questions correctly. This difference is statistically significant. Statistical significance was calculated by using student's paired 't'test. The above table shows that the results of application of student's paired 't'test to area wise pre test and post test knowledge scores. The computed 't' values (16.84) between the mean of pre test and post test was more than the critical 't'

value obtained from 't' table at a level of significance of 0.05%. the result of 't' test shows that the improvement of mean knowledge score of post test when compared with lesser value of pre test were not by chance but due to the gain in knowledge because of focused teaching programme was effective at a level of very high significance of 0.05.

TABLE   4.12Association between patients post-test level of knowledge and their demographic variables

Demographic variables		Post-test level of knowledge score							Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%	N	
Age	< 20 years	0	0.00%	2	50.00%	2	50.00%	4	$\chi2=4.22$ P=0.37(NS)
	21- 30 year	0	0.00%	0	0.00%	8	100.00%	8	
	31-40 years	0	0.00%	3	23.08%	10	76.92%	13	
	41-50 years	0	0.00%	5	27.78%	13	72.22%	18	
	50 years	0	0.00%	4	23.53%	13	76.47%	17	
Gender	Male	0	0.00%	12	34.28%	23	65.72%	35	$\chi2=5.63$ P=0.02*(S)
	Female	0	0.00%	2	8.00%	23	92.00%	25	
Educational status	Illiterate	0	0.00%	5	27.78%	13	72.22%	10	$\chi2=2.29$ P=0.89(NS)
	Primary school	0	0.00%	4	30.77%	9	69.23%	15	
	Middle school	0	0.00%	2	14.29%	12	85.71%	16	
	High school	0	0.00%	2	28.57%	5	71.43%	9	
	Diploma	0	0.00%	1	20.00%	4	80.00%	5	
	Graduate	0	0.00%	0	0.00%	2	100%	3	
	Profession	0	0.00%	0	0.00%	1	100%	2	

Demographic variables		Post-test level of knowledge score							Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%	N	
Occupational status	Legislators ,senior officials& managers	0	0.00%	0	0.00%	1	100.%	0	χ2=5.64 P=0.58(NS)
	Professionals	0	0.00%	1	16.67%	5	83.33%	2	
	Technicians	0	0.00%	0	0.00%	3	100%	7	
	Clerks	0	0.00%	0	0.00%	1	100%	7	
	Skilled workers	0	0.00%	1	16.67%	5	83.33%	7	
	Skilled agricultural and fishery workers	0	0.00%	3	60.00%	2	40.00%	6	
	Craft& Related trade workers	0	0.00%	6	25.00%	18	75.00%	14	
	Plant &Machine operators	0	0.00%	3	21.43%	11	78.57%	8	
	Elementary occupation	0	0.00%	0	0.00%	0	0.00%	9	
	Unemployed	0	0.00%	0	0.00%	0	0.00%	0	
Monthly income	< Rs.5000	0	0.00%	5	19.23%	21	80.77%	21	χ2=1.62 P=0.65(NS)
	Rs 5001-1000	0	0.00%	5	35.71%	9	64.29%	16	
	Rs 10001-15000	0	0.00%	3	21.43%	11	78.57%	14	
	Rs 15001-20000	0	0.00%	1	16.67%	5	83.33%	6	
	> Rs 25000	0	0.00%	0	0.00%	0	0.00%	3	

Demographic variables		Post-test level of knowledge score							Chi square test
		Inadequate		Moderate		Adequate			
		n	%	n	%	n	%	N	
Religion	Hindu	0	0.00%	12	24.49%	37	75.51%	49	χ2=0.65 P=0.72(NS)
	Muslim	0	0.00%	2	22.22%	7	77.78%	9	
	Christian	0	0.00%	0	0.00%	2	100.00%	2	
Marital status	single	0	0.00%	7	43.75%	9	56.25%	16	χ2=5.08 P=0.02*(S)
	Married	0	0.00%	7	15.90%	37	84.10%	44	
	Seperated	0	0.00%	0	0.00%	0	0.00%	0	
	Diversed	0	0.00%	0	0.00%	0	0.00%	0	
Dietary habits	Non Vegetrarian	0	0.00%	7	50.00%	7	50.00%	14	χ2=7.25 P=0.01**(S)
	Vegetarian	0	0.00%	7	15.22%	39	84.78%	46	
Habits	Alcoholic	0	0.00%	3	75.00%	1	25.00%	4	χ2=6.89 P=0.07(NS)
	Smoking	0	0.00%	1	16.67%	5	83.33%	6	
	Drug abuse	0	0.00%	0	0.00%	2	100.00%	2	
	None	0	0.00%	10	20.83%	38	79.17%	48	
Place of living	Urban	0	0.00%	2	7.14%	26	92.86%	28	χ2=7.81 P=0.02*(S)
	Rural	0	0.00%	9	39.13%	14	60.87%	23	
	Sub urban	0	0.00%	3	33.33%	6	66.67%	9	

Table no. 4.13 depicts that there was a significant association in post test level of knowledge with the selected demographic variables like gender, arital status ,dietary habits and place of loving and there is no significant association with respect to other demographic variables. Pearson chi square test used to calculate the Statistical significance.
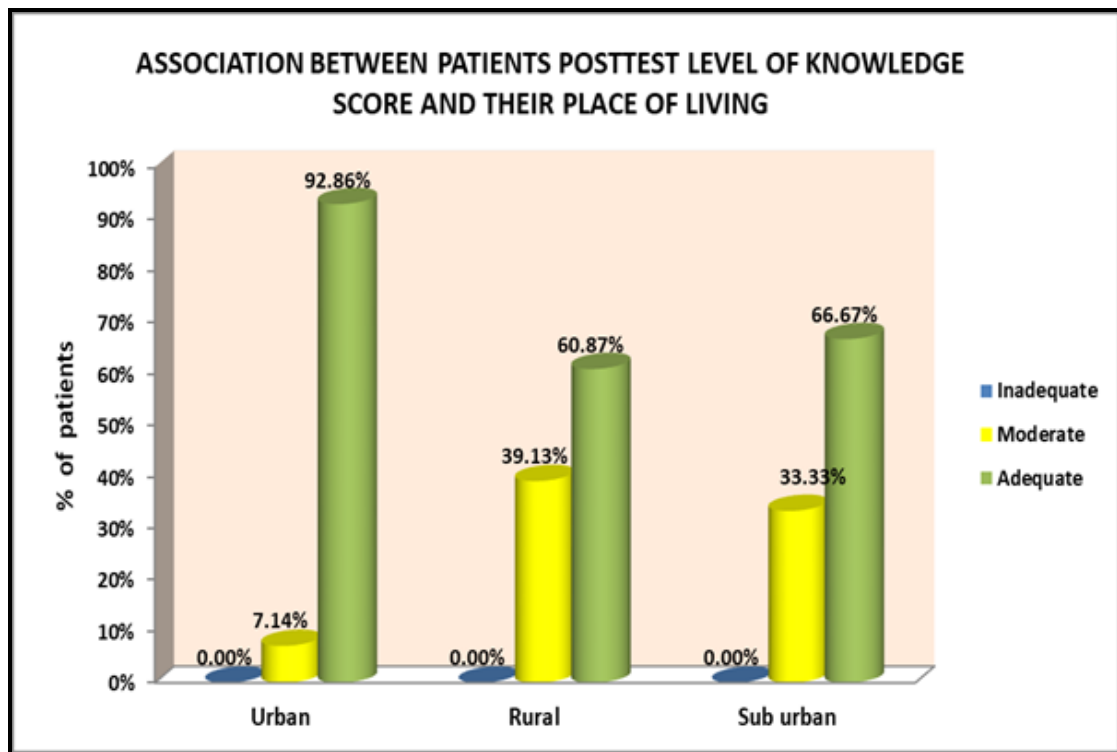
Figure: 4.16 shows of association between post test level of knowledge gain score and their place of living

Table:4.13 Frequency and percentage distribution of association between patient's knowledge and score and their demographic variables.

Demographic variables		Knowledge gain score						N	One-way ANOVAF-test/t-test
		Pre-test		Post-test		Gain score= post-pre			
		Mean	SD	Mean	SD	Mean	SD		
Age	< 20 years	14.00	5.42	18.50	2.89	4.50	5.80	4	F=0.96 P=0.43(NS)
	21- 30 year	12.38	3.74	20.63	1.41	8.25	3.49	8	
	31-40 years	12.23	4.21	19.77	1.59	7.54	3.53	13	
	41-50 years	11.61	2.43	19.78	2.21	8.17	3.57	18	
	50 years	11.18	2.40	19.24	2.22	8.06	3.07	17	
Gender	Male	11.91	2.91	18.93	2.44	7.02	3.57	35	t=2.03 P=0.05*(S)
	Female	11.84	3.73	20.77	1.29	8.93	3.61	25	
Educational status	Illiterate	11.11	3.94	19.17	2.53	8.06	4.71	10	F=4.51 P=0.48(NS)
	Primary school	10.62	1.80	19.46	2.15	8.85	2.85	15	
	Middle school	12.07	3.65	19.93	1.54	7.86	2.96	16	
	High school	14.43	1.27	20.14	1.86	5.71	1.98	9	
	Diploma	12.60	2.97	19.60	2.07	7.00	4.36	5	
	Graduate	15.00	1.41	20.50	0.71	5.50	0.71	3	
	Profession	12.00	0.00	22.00	0.00	10.00	0.00	2	

Demographic variables		Knowledge gain score						N	One-way ANOVAF-test/t-test
		Pre-test		Post-test		Gain score= post-pre			
		Mean	SD	Mean	SD	Mean	SD		
Occupational status	Legislators ,senior officials& managers	8.00	0.00	21.00	0.00	13.00	0.00	0	F=0.56 P=0.78(NS)
	Professionals	11.00	3.16	20.00	1.90	9.00	2.19	2	
	Technicians and associate professionals	12.67	4.16	20.33	.58	7.67	3.79	7	
	Clerks	13.00	0.00	21.00	0.00	8.00	0.00	7	
	Skilled workers	11.67	3.50	19.50	1.64	7.83	3.37	7	
	Skilled agricultural and fishery workers	12.00	2.24	18.00	2.92	6.00	4.64	6	
	Craft& Related trade workers	12.13	2.86	19.83	2.20	7.71	3.10	14	
	Plant &Machine operators	11.93	4.32	19.50	1.95	7.57	4.67	8	
	Elementary occupation	0.00	0.00	0.00	0.00	0.00	0.00	9	
	Unemployed	0.00	0.00	0.00	0.00	0.00	0.00	0	
Monthly income	< Rs.5000	11.92	3.36	19.85	1.71	7.92	3.74	21	F=0.06 P=0.98(NS)
	Rs 5001-1000	11.36	3.18	18.79	2.29	7.43	3.80	16	
	Rs 10001-15000	12.36	2.82	20.21	2.36	7.86	3.18	14	
	Rs 15001-20000	11.83	4.45	19.50	1.87	7.67	4.03	6	
	> Rs 25000	0.00	0.00	0.00	0.00	0.00	0.00	3	

Demographic variables		Knowledge gain score						N	One-way ANOVAF-test/t-test
		Pre-test		Post-test		Gain score= post-pre			
		Mean	SD	Mean	SD	Mean	SD		
Religion	hindu	11.76	3.41	19.69	1.91	7.94	3.69	49	F=0.32 P=0.73(NS)
	musim	12.33	2.65	19.44	3.00	7.11	3.37	9	
	1christian	13.00	1.41	19.50	.71	6.50	.71	2	
Marital status	single	11.55	3.78	18.32	1.97	6.77	3.81	16	t=2.38 P=0.02*(S)
	Married	12.08	2.94	21.32	2.11	9.24	3.45	44	
	Seperated	0.00	0.00	0.00	0.00	0.00	0.00	0	
	Diversed	0.00	0.00	0.00	0.00	0.00	0.00	0	
Dietary habits	Non Vegetrarian	12.64	3.10	18.57	1.87	5.93	4.27	14	t=5.17 P=0.02*(S)
	Vegetarian	11.65	3.29	19.98	2.01	8.33	3.18	46	
Habits	Alcoholic	12.50	2.52	18.25	1.26	5.75	3.77	4	F=1.34 P=0.27(NS)
	Smoking	10.17	2.93	19.67	1.21	9.50	3.67	6	
	Drug abuse	10.50	3.54	21.00	2.83	10.50	0.71	2	
	None	12.10	3.33	19.71	2.14	7.60	3.55	48	
Place of living	Urban	11.75	3.01	21.09	1.99	9.34	3.16	28	F=4.03 P=0.02*(S)
	Rural	12.00	3.62	18.74	1.99	6.74	4.00	23	
	Sub urban	13.00	2.00.	20.20	2.00	7.20	2.00	9	

* P<0.05 significant and   ** P<0.01 highly significant

Table no.4.12 shows the association between knowledge gain score and their demographic variables. Statistical significance was calculated using one way ANOVA   F-test and student independent t-test. test in **gender t=2.03 P=0.05*(**S) according to the marital status married have significant **t=2.38   P=0.02*(S) habitus   t=5.17 P=0.02*(S)** place of living **F=4.03   P=0.02*(S)**. In heart valve replacement patients are gained more knowledge score than others. Hence the stated hypothesis was accepted.
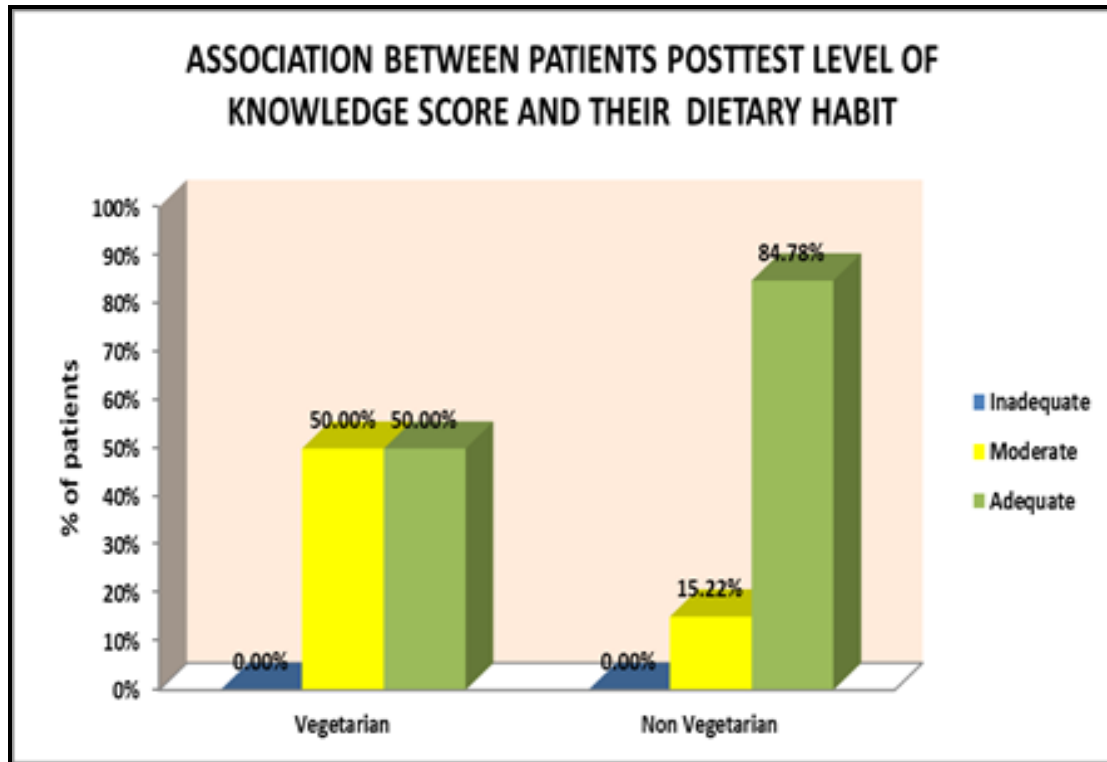
Figure:4.17 distribution of association between post test level of knowledge gain score and their dietary habit.

CHAPTER – V
DISCUSSION

Assessment of knowledge level ,among clients undergone valve replacement to improve the level of knowledge in post operatively ,most of the patient develop complication like anticoagulation drugs related to bleeding ,anemia, Peri prosthetic valve leakage ,infective endocarditis, thromboembolic stroke ,dyspnea and palpitation.Most of the clients unawareness about diet advice(vitamin k rich diet) while taking oral anticoagulation drugs. Prophylactic antibodies before dental procedure, warning sign of valve complication as early as medical advice clients before leaving from the hospital for improve the knowledge level and quality of life.

The present study was intended to assess the effectiveness of focused teaching programme on knowledge regarding home care management after heart valve replacement surgery patients undergone heart valve replacement surgery in Rajiv Gandhi Government General Hospital, chennai-03. "A total of 60 clients undergone heart valve replacement surgery selected by non- probability convenience sampling technique

A structure questionnaire was used to collect the data. A pre-experimental one-group pre-test post-test design was used to evaluate the knowledge on home care management among patient undergone heart valve replacement surgery. The pretest was followed by implementation of focused teaching programme and post-test was conducted after 5days to evaluate the effectiveness of teaching programme. The data was analyzed by using descriptive and inferential statistics.

FINDINGS BASED ON DEMOGRAPHIC CHARACTERISTICS

❖ 30% of patients belong to age group of 41-50 years.

❖ 58.38% of patients were male.

❖ 26.67% of patients educational qualification were middle school.

❖ 13.33% of patients occupation were plant, machine and graft workers.

❖ 81.67% of patients belong to Hinduism.

❖ 73.33% of patients were married.

❖ 35.00% of patients monthly income comes under Rs < 5000/month.

❖ 76.67% of patients diet pattern were non-vegetarian.

❖ 80% of patients doesn't have any bad habits

❖ 46.67% of patients belong to urban area of living.

The findings of the study based on the objectives are:

The first objective was to assess the pre-test level of knowledge on home care management among patient undergone heart valve replacement surgery.

The present study revealed that the pretest mean valve(11.88) with SD(3.25)Where it shows majority (65.00%) of valve replacement clients had inadequate knowledge and (35.00%) had moderate knowledge on home care management. None of them have adequate knowledge about home care management.

The above study findings were supported by another following study conducted by ***Tayebeth amrirabath et al (2012)*** in their study found that educational needs of patients with heart valve replacement surgery investigator selected 55 patients to assess the knowledge level of patient conducted four domane , (including disease condition ,types

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of valve, drugs and nutritional diet) between the age group of 18to 50 years the study revealed among the **participants 50%patient had inadequate knowledge** about 4 domane**. Fatma Demir Korkmaz (2015**) in their study found that knowledge level regarding warfarin therapy on patients with mechanical heart valve ,selected 114 patients between the age group of 18 to 80 years , received warfarin therapy at least   for 3 months, the study revealed **14.9% patient inadequate knowledge** about **warfarin therapy** and **81.6% inadequate knowledge** about **warfarin dosage. Annu alphonsa et al (2015**) in their study found the knowledge level patient regarding oral anticoagulation with stroke and thromboembolic events among 240 patients undergone valve replacement surgery the study revealed among the **participants** they had   **inadequate knowledge (62.9%)** about PT/**INR level, 50%** patient had a **poor knowledge** about **stoke and thromboembolic events** after valve replacement surgery. Those above studies finding revealed valve replacement patient had   inadequate knowledge about home care after valve replacement.

In general, it was observed that patients undergone valve replacement surgery are having inadequate knowledge regarding home care management , which suggest that there is a need for special attention on imparting knowledge on home care of valve replacement among patients undergone valve replacement surgery.

The second objective to evaluate the effectiveness of focused teaching programme (Post-test) on knowledge regarding home care management among patient undergone heart valve replacement   .

The   present study revealed after attending focused teaching programme the overall   gained post- test level is **adequate knowledge (76.67 %) moderate knowledge(23.33%)** in present study .post -test mean   mean(19.65) with SD 2.05   and the t value **is t=16.84 it is statically significant.**

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The above study findings supported by following studies conducted by **lidiastella et al ,(2015)** in their study found that evaluate the **practice of self- care** of patients with mechanical heart valve patient the sample consists of 127 patients age group >18 years, and conduced structured interview method based on the Theory **of Orem's Self-Care and practice of personal hygiene** most patients performed the actions related to this practice. After the teaching **post test patient performed independently washed hair (97.6**%) and **daily bath (92.1%)** were the most frequently performed. In **87.4% brushed their teeth before bed** and right dose **(95.2%). Had medication taken in correct time** the study revealed through this educational programme motivate the client to early ambulation and prevention of complication early as possible . **Rokela eltheni**. **Et al (2017) in their study f**ound that **effect of nurse led education programme** for oral anticoagulation therapy and the incidence of hemorroghic episode and thromboembolic events after valve replacement. A quasi-experimental study was conducted among (n=100) **control group usual education** on oral anticoagulation education given (n= 100 **) intervention group nurse – led education booklet** material given .in **post test** Patients who received nurse-led education book let significantly **reduce** the incidence of **hemorrhagic episodes compared with control groups. (1% vs. 14%, p<0.001)** significant to their study **.Jess Thomson et al,(2013)** in their study found anticoagulation after mechanical valve replacement improved management with self testing group and usual care group in **self care group provide education booklet for INR testing** in **coagulometer** after discharge from the hospital through education programme **, in post test** among the 30 participants **21 patients are able to perform the INR level with coagulometer testing** the above study findings revealed after the teaching programme the clients gained adequate knowledge about home care after valve replacement surgery.

The study findings suggest that focused teaching programme is found to be effective in improving knowledge of the patients undergone valve replacement surgery and helps them in providing quality care by preventing complications among the clients undergone valve replacement surgery.

Hence, the investigator's first hypothesis of the valve replacement patients will gain adequate knowledge after they attend the focuded teaching program in implementing adequate knowledge in home care management after valve replacement surgery .H1 was accepted.

The third objective of the study to compare the pretest and post test level of knowledge on home care management after heart valve replacement.

The study represents comparison of domain wise pre-test and post -test percentage of knowledge score compare pre- test   mean 11.88 and SD 3.25 and the post- test mean 19.65 and SD 2.05 ,mean difference 7.77 overall t=16.84=p0.001 significant this study

❖ **Diet:** Pre- test 35.00 %post- test 83.00 % gained knowledge 48.00%.

❖ **Exercise:** Pretest 54.00% post- test 76.00% gained knowledge 22.00%.

❖ **Rest:** Pre- test 54.00% post test72.50% gained knowledge 31.00%.

❖ **Wound Care:** Pre- test 56.50% post -test 85.00% gained knowledge28.50%

❖ **Medication:** Pre -test 50.00% post- test 76.67% gained knowledge26.67%

❖ **Follow up:** Pre- test 5200% post- test 82.00% gained knowledge 30.00%

❖ **Complication:** Pretest 50.00% post- test 77.00% gained knowledge 27.00.%

❖ **Prevention:** Pretest38.00% post test73.00 gained knowledge 35.00%

The above study findings supported by another following study by Masoumeh et al 2018. In their study found that effect on discharge training and post discharge counseling for improve the quality of life with structured questionaries' undergone heart valve replacement clients ,selected control and intervention group. The result concluded that the total increased knowledge scores level 47.00 ± 13.43; than the pretest mean scores respectively 46.89 ± 11.91 and 46.53 ± 15.04, so information and education programme improve the knowledge level of the client. Souse et al(2015) in their study found that knowledge and practice of intensive care nurses regarding oral anticoagulation therapy receiving patient in intensive care unit before and after planned teaching programme The mean pre-test and post-test knowledge scores were 13.73 and 21.77. The calculated 't' value (12.68) was greater than the table value of 2.04, which suggests that the planned teaching was effective Distribution of sample according to knowledge score JayasreeS(2007) in their study was found that home care management after mechanical valve replacement surgery among 30 mechanical valve replacement surgery through 12 structured questionaries' A paired t test proved that there is difference in the mean pre test score and mean post-test score (P value- 0.000). a statistically significant .those above study finding reveled after the teaching programme clients are gained knowledge than pre test level of knowledge .

Hence this present study revealed after focused teaching programme clients gained adequate knowledge about Home care after valve replacement surgery.

The fourth objective the association of knowledge regarding home care selected demographic variables

According to the distribution of demographic variables The heart valve replacement patient most of the participants belongs to the age group of 41-50 years (30.00%) they are male 35(58.33%)and are also married 44(73.33%).most of the study participants religion is Hindu49(81.67%) according educational qualification high middle school only (26.67%) illiterate 10(16.67%) many valve replacement patients belongs to the non- vegetarian pattern 46(76.67%)according to the occupational status Craft related trade workers 14(23.33%) monthly income21 <5000 (35.00%) are participated . when comparing to place of living urban (46.67%) people are highly prone to heart valve replacement surgery.

There exists a significant in gender ,post test (x^2=5.63, p=0.02) knowledge level of respondents marriage status post test (x^2=5.8, P=0.02) respondent's dietary habits significant post test [X2 = 7.25, p= 0.01] between the place of living and significant post test [X2 = 7.81 p= 0.02.

Ting-yu wang et al (2018) were regarding gender difference surgical aortic valve replacement surgery. Among the 41,089 majority of the male clients under gone valve replacement surgery.The study revealed total of 41,089 patients,, including 22,894 men and 18,195 women. The study summarized men's are highly prone for valve replacement procedure. ***William M. Schultz et al (2017)*** were found that the relationship between the marital status and primary outcome of cardiovascular death .This study revealed that the married participants

are highly getting cardiovascular valve replacement surgery *Lakshmana Gowda Krishnappa et al. 2014* were found that community based beta hemolytic streptococcal infection school children age group of 5 to 15 years ,the study concludes that people living in overcrowding area are more prone for infection. The research findings have shown that patients with male gender, marital status and living condition have association in the home care management of heart valve replacement surgery.

The present study results highlight the effectiveness of focused teaching programme on home care management patient undergone valve replacement surgery.it is also evident that FTP is effective in patients with adequate knowledge and helps them in providing quality of care by preventing complication among heart valve replacement patient.

CHAPTER –VI
SUMMARY, CONCLUSION, IMPLICATIONS RECOMMENDATION AND LIMITATION

SUMMARY

The objective of the study was to assess the effectiveness of focused teaching programme on knowledge about home care management among patient undergone heart valve replacement surgery in Rajiv Gandhi Government General Hospital, chennai.03

A pre experimental study was used to assess the level of knowledge on home care management among patient undergone heart valve replacement surgery The review of literature provided the base and in depth way knowledge for the development of tools such as semi structured questionnaire to collect demographic data and to assess the level of knowledge about home care management after heart valve replacement surgery. Data was collected by interview schedule. A total of 60 clients selected from Rajiv Gandhi Government General Hospital, Chennai -03, by using non probability convenience sampling technique. The content validity of the tool on assessment of knowledge was obtained from experts and the pilot study was conducted.

The study was conducted at Rajiv Gandhi Government General Hospital, Chennai-03 . Prior permission from the head of the institution was obtained. Fulfilled the inclusion criteria were selected as samples.

The major findings of the study were as following:

❖ Majority of the valve replacement clients (30.00%) were in the age group of 41-50 years and (28.33%) valve replacement clients were in the age group of > 50 years.

❖ Majority of the valve replacement clients (58.33%) were male gender and (41.67%) are female .

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- ❖ Majority of the valve replacement clients(81.67%) were belongs to Hinduism.

- ❖ Majority of the valve replacement client(26.67%) were belongs to middle school(25.00%) primary school education (16.67%) have illiterate .

- ❖ Majority of the valve replacement clients(35.00%) were having monthly income below Rs5000.

- ❖ Majority of the valve replacement clients (76.67%) were non vegetarian.

- ❖ Majority of the valve replacement clients(10.00%) were having alcoholic.

- ❖ Majority of the valve replacement clients (76.67%) were having non vegetarian.

- ❖ Majority of the valve replacement clients (46.67%) were living urban areas.

- ❖ The assessment of the overall pretest level of knowledge on home care management after valve replacement surgery that majority (65.00%) had inadequate knowledge and (35.00%) had moderate knowledge on home care management..

- ❖ The analysis of mean and standard deviation of pre -test level of knowledge on home care management after valve replacement clients revealed that the mean value of 11.88 with SD. It is statistically not significant.

- ❖ The assessment of the overall post- test level of knowledge on home care management after valve replacement clients that majority of (76.67%) had adequate knowledge and(23.33%) had

moderate knowledge after attending the focused teaching program.`

❖ There is significant differences between pretest and post test score was obtained with mean difference of 95% CI and proportion with 95%.

❖ There is a statistically significant in improving after valve replacement clients health personnel knowledge from 11.88to 19.65 after the administration of focused teaching programme. Or we can say in pretest they are able to answer only 12 questions before administration of focused teaching programme, after FTP, they are able to answer up to 24 questions. Due to focused teaching programme they are able to answer 12 more questions correctly. This difference is statistically significant.

❖ There was a significant association found between the level of knowledge gained towards home care management after heart valve replacement and demographic variables such as male, marital status, dietary habits, place of living.

EFFECTIVENESS OF THIS STUDY

❖ According to the association between the knowledge between the demographic variables gender$\chi2$=5.63 **Marital status $\chi2$=5.08 P=0.02*(S)Dietary habitus $\chi2$=7.25 P=0.01**(S)** place of living $\chi2$=7.81 **P=0.02*(S)** have significant of this study.

❖ Frequency and percentage distribution knowledge score and according to the one way ANOVA/t-test test in **Gender t=2.03 P=0.05*(S)** according to the marital status married have significant **t=2.38 P=0.02*(S) Habitus t=5.17 P=0.02*(S) place of living F=4.03 P=0.02*(S)**

IMPLICATION OF THE STUDY

The study findings have its implication in several branches of nursing education, nursing practice, nursing administration and nursing research.

Implication for nursing practice

❖ Validated forms for assessing the risk for early detected warning sign of valve replacement can be incorporated into nursing cares a routine or early detection and prevent complication measure.

❖ Nurses can organize the health educational programs regularly in post- operative wards for discharge clients to play an important role in enhancing home care management.. .

❖ Nurses can organize guidance and counseling programme for a regular improve the quality of life and preventing complication in various aspects..

❖ A video teaching programme regarding life style modifications can be prepared.

❖ Nurses can create awareness among student nurses regarding warning signs of oral anticoagulation complication.

Implication for nursing education

❖ Nurse educator can arrange regular continuing education program for all the other department nursing personnel to update the knowledge regarding valvular replacement complication and warning sign..

❖ Nurse educator can encourage the nursing personnel and student nurse to attend various national health conference, workshops, campaigns to elaborate the knowledge regarding the prevention complication after valve replacement surgery and implementation of nursing curriculum.

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Implication for nursing administration

❖ Nurse manager can develop and disseminate quality improvement programs to improve initiation of   quality of life and improve the life expectancy after valve replacement surgery.

❖ Nurse administrator can plan and organize continuing nursing education programme to educate staff nurses improve knowledge regarding vitamin k rich diet interaction while the clients on oral anticoagulation therapy.

❖ Nurse administrator can encourage the nurses to conduct research studies on various aspects of valve replacement patients risk factors of early complication.

❖ Nurse administrator can involve in preparation and distribution of information   booklets to create awareness of home care management after valve replacement surgery in discharge advice.

❖ Nurse administrator should motivate the care giver as well as the clients to maintain post operative care to improve the quality of life.

❖ Nurse administrator should arrange for periodic joint discussion about home care management after heart valve replacement among patient pre operative

❖ Nurse administrator should provide the time,place ,and material for the nurse educate the subjects post operatively home care management after heart valve replacement surgery.

NURSING RESEARCH

❖ More research studies in India are needed to identify the home care management to improve the knowledge level specially after

heart valve replacement surgery improve the quality of life and prevention of complications.

❖ A study can be repeated for assessing the knowledge level of anticoagulation after mechanical valve replacement with a large sample size.

❖ The finding of the present study helps to prepare the study in particular vitamin k rich diet interaction while patient taking oral anti coagulation drugs.

❖ The present study stimulates, recommended, recognize ,support, research on physical , psychological and cultural aspects of heart valve replacement patient post gain knowledge and its transition in to practice.

❖ Extensive nursing research can be conducted to assess knowledge and attitude towards early detection and prevention of complication after heart valve replacement surgery..

❖ The findings of the study should be disseminated through conferences, seminars and journal publications.

RECOMMENDATIONS

The following recommendation are made in the basis of the present study

A study can be repeated for assessing the knowledge level of anticoagulation after mechanical valve replacement with a large sample size.

1) A similar study can be conducted a large sample to generalize findings.

2) A study can be conducted to find out the knowledge level of vitamin k rich diet and oral anticoagulation drugs interaction providing complication.

3) Further research can be done to assess the knowledge attitude and practice level of home care management among patient undergone heart valve surgery.

4) A comparative study can be conducted open heart valve replacement surgery and minimally invasive surgery personnel experience after valve replacement .

5) A study can be conducted the place of living(rural or urban) post prosthetic endocarditis complication after valve replacement surgery.

6) A study can be conducted to assess knowledge and attitude of patients towards life style modification after valve replacement surgery.

7) 7. A study can be conducted to explore the difficulties in adhering to life style

LIMITATIONS

❖ The study was confined to a small sample in a single setting which limits the study.

❖ The study did not assess the attitude and practice of the clients after heart valve replacement surgery.

❖ The number of samples is limited to 60 in the present study.

CONCLUSION

The statement also supported by these following studies. according to that patient undergoing aortic valve replacement surgery the Overall, we can state that the surgical experience confirms the influence of characteristics such as advanced age, renal insufficiency, low LVEF, indication for emergency surgery, heart surgery and others in the increased in-hospital mortality of patients with valvular heart diseases, and these must receive greater attention from physicians involved in their clinical and surgical management

After the heart valve replacement surgery post operatively patients may develop complication like, infective endocarditis, anticoagulation related bleeding, thromboembolic stroke, thrombocytopenia and anemia, prosthetic valve leak, valve failure, etc. Health education will help them to detect the early signs of complication and to prevent it. The present study shows that there is an increased knowledge score after health education and they all having decreased knowledge regarding medications such as anticoagulant after valve replacement. The present study assessed the effectiveness of focused teaching programme among clients undergone heart valve replacement surgery. The results revealed that specific education program had a significant effect in improving knowledge on home care after heart valve replacement surgery.

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DEMOGRAPHIC VARIABLE
PART – I
INSTRUCTIONS:

</div>

Read the following items carefully and select one correct response by placing appropriate tick mark on the space provided. Please be frank in answering it will be kept confidential and anonymity will be maintained. Choose the correct answer and mark ( )in the box provided

1. Age in years

   a) Less than 20 years

   b) 21-30 years

   c) 31-40 years
   d) 41-50 years

   e) Above 50 years

2. Gender

   a) Male
   b) Female

3. **Educational status**

   a) Illiterate
   b) Primary school
   c) Middle school
   d) High school
   e) Diploma
   f) f)Graduate

4.Occupational status

   a) Legislators ,senior officials& managers
   b) Professionals
   c) Technicians and associate professionals
   d) Clerks
   e) Skilled workers and shop & Market sales workers
   f) Skilled agricultural and fishery workers
   g) Craft& Related trade workers
   h) Plant &Machine operators and Assemblers
   i) Elementary occupation
   j) Unemployed

5 .Monthly income

   a) Less than 5000
   b) Rs 5000-10000
   c) Rs 10001-15000
   d) Rs 15001-20000
   e) Rs 20001-25000
   f) Rs 25001 and above

6. Religion

    a) Hindu
    b) b)Muslim
    c) Christian
    d) Others

7. Marital status

    a) Single
    b) Married
    c) Widower
    d) Diverse

8. Dietary habits

    a) Vegetarian
    b) Non vegetarian

9. Habits

    a) Alcoholic
    b) Smoking
    c) Drug abuse
    d) None

10. Place of living

    a) Urban
    b) Rural
    c) Semi urban

PART –B
KNOWLEDGE BASE QUESTIONAIRES

1. The heart contains _____ valves

    a) Three

    b) Four

    c) Two

    d) Don't know

2. The function of the heart valves are _____

    a) Regulate the blood flow of heart

    b) Supply oxygen to the heart

    c) Maintain the blood pressure

    d) Don't know

3. The most common causes of valvular heart disease are _____

    a) Congenital/ Rheumatic fever

    b) Heart failure

    c) Pain

    d) Don't know

. Early sign of valvular heart disease are_____

    a) Cough

    b) Palpitation

    c) Diaahoea

    d) Don't know

5. Valve replacement means_____

a) Replacing Heart Valves by other Material

b) Artificial pathway to heart

c) Heart transplantation

d) Don't know

6. Types of prosthetic valves

a)Mechanical valve

b)Biological valve

c)Don't know

7. The primary goal of valvular surgery _____

a)To increase the life expectancy

b) To promote better quality of life

c) To allow another required surgery

d) Don't know

8. Heart valve Stenosis indicated _____.

a) Blood is allowed to flow in the wrong direction

b) The heart valve tissue has thickened or become too stiff

c) The valve isn't closing properly

d) Don't know

9. Early valvular heart disease is detected by _____

a) Echo cardio gram

b) Blood test

c) Sputum test

d) Don't know

PART-III

HOME CARE MANAGEMENT AFTER PROSTETIC VALVE REPLACEENT SURGERY

10. The following vegetables can consumed by patient who received anticoagulation therapy, except _____

DIET

a)Cooked cabbage/   green leafy vegetables

b) Carrot

c) Beans/ Brinjal

d) Don't know

EXERCISE/ACTIVITY

11. The best exercise can be done after surgery

a) Swimming

b)Walking

c) Jogging

d) Don't know

12.The following activities should be avoid   after surgery _____

a) Strenuous activities like weight lifting

b) Quit smoking and alcohol

c) Swimming

d) All the above

REST

13. The preferable days should the client take rest after surgery

a) 6 to 8 Months

b)3 to 6 Months

c) 1 Month

d) Don't know

14. The Minimum sleeping hours during night

a) 4-6 hours

b)6-8 hours

c)8-10 hours

d) Don't know

WOUND CARE

15. The following steps should take care of wound after surgery

 a) Apply oil over the wound

b) Dry with a clean cloth

 c) Apply prescribed medication

d) Dry with clean cloth and apply medications

16. The wound Infection can be detected by_____

  a) Chest pain

b) Pus or watery discharge from the wound

c) Palpitation

d) Bleeding

MEDICATION

17. The ideal time for taking medications

   a) Empty stomach

   b) With fruit juice

  c) After food

  d) Don't know

18. Anticoagulant overdose can causes _____

a) Palpitation

b) Shivering

 c) Melena

d)Don't know

19. The preferable duration for checking Prothrombin Time _____

a) Weekly once

b) Monthly once

c) Six months once

d) Don't know

FOLLOW UP

20. The follow up should be last for months to days

a) 15 Days once

b) 30 Days once

c)1 Month once

d) 3 Months once

COMPLICATION

21. Dysfunction of the valve is identified by the episode of _____

a) Palpitation

b) Signs occur before surgery

c) Fatigue and fever

d) Don't know

PREVENTION

22. Prophylactic antibiotics is administered while_____

a) Suffering from fever and cold

b) Before dental procedure

c)Before any surgery

d) Don't know

23 .The most preferable reason to seeking medical attention _____

a)Bleeding

b)Chest pain

c) Dyspnoea

d) Don't know

24. The correct position for sleeping to prevent complication _____

a)Supine position

b)Side lying position

c)Prone position

d)Don't know

25. Recurrent infection can be avoided by_____

a)Healthy diet

b) Unclean environment

c) Regular exercise

d) Don't know

செவிலியர் கல்லூரி

சென்னை மருத்துவக் கல்லூரி, சென்னை-600 003.

<u>திட்டமிட்ட நேர்காணல் முறை தனிப்பட்ட விபரங்கள்</u>

பகுதி-அ

பங்கேற்பாளர்க்கு அறிவுறுத்துதல் தயவு செய்து கவனமாக படித்து பொருந்திய விடைகளை கொடுக்கப்பட்டுள்ள இடத்தில் பதில் அளிக்கவும். நீங்கள் வழங்கிய தகவல்கள் இரகசியமாக வைக்கப்பட்டு ஆராய்ச்சி வேலைக்கு மட்டுமே பயன்படுத்தப்படும்.

<u>சுய சமூக குறிப்பு</u>

1) வயது (ஆண்டுகளில்)
   - அ) 20 வயதுக்கு கீழ் ☐
   - ஆ) 21-30 ☐
   - இ) 31-40 ☐
   - ஈ) 41-50 ☐
   - உ) 50 வயதுக்கு மேல் ☐

2) பாலினம்
   - அ) ஆண் ☐
   - ஆ) பெண் ☐

3) கல்வி தகுதி
   - அ) படிப்பறிவின்மை ☐
   - ஆ) ஆரம்பக் கல்வி ☐
   - இ) நடுநிலை கல்வி ☐
   - ஈ) மேல்நிலை கல்வி ☐
   - உ) பட்டய படிப்பு ☐
   - ஊ) பட்டதாரி ☐
   - எ) தொழில் சார்ந்த படிப்பு ☐

4) தொழில்

அ) உயர் அதிகாரி– மேலாளர் ☐

ஆ) தொழில் செய்பவர் ☐

இ) தொழில் நுட்பவியலாளர் ☐

ஈ) எழுத்தர் ☐

உ) கடை மற்றும் சந்தை விற்பனை தொழிலாளர் ☐

ஊ) கைவினை மற்றும் இயந்திர ஆபரேட்டர்கள் ☐

எ) அடிப்படை தொழிலாளர்கள் ☐

ஏ) வேலையில்லாதவர்கள் ☐

5) மாத வருமானம் (ரூபாயில்)

அ) ரூ.5000க்கு கீழ் ☐

அ) ரூ.5000–ரூ.10000 ☐

ஆ) ரூ.10001–ரூ.15000 ☐

இ) ரூ.15001–ரூ.20000 ☐

ஈ) ரூ.20001–ரூ.25000 ☐

உ) ரூ.25000க்கு மேல் ☐

6) மதம்

அ) இந்து ☐

ஆ) இஸ்லாமியர் ☐

இ) கிறிஸ்தவர் ☐

ஈ) மற்றவை ☐

7) திருமண நிலை

அ) திருமணமாகாதவர் ☐

ஆ) திருமணமானவர் ☐

இ) விதவை ☐

ஈ) விவாகரத்தானவர் ☐

8) உணவு பழக்கவழக்கங்கள்

அ) சைவம் ☐

ஆ) அசைவம் ☐

9) பழக்கவழக்கங்கள்
    அ) மது அருந்துதல் ☐
    ஆ) புகை பிடித்தல் ☐
    இ) போதை பொருள் ☐
    ஈ) எதுவுமில்லை ☐

10) இருப்பிடம்
    அ) நகரம் ☐
    ஆ) கிராமம் ☐
    இ) பஞ்சாயத்து ☐

1) இதயத்தில் எத்தனை வால்வு உள்ளது?

அ) மூன்று ☐

ஆ) நான்கு ☐

இ) இரண்டு ☐

ஈ) தெரியாது ☐

2) இதய வால்வுகளின் வேலை என்ன?

அ) இருதயத்தில் இருந்து இரத்தம் செல்லுவதை ஒழுங்குபடுத்துதல் ☐

ஆ) இதயத்திற்கு ஆக்ஸிஜன் எடுத்துச் செல்லுதல் ☐

இ) இரத்த அழுத்துத்தை கட்டுப்படுத்துதல் ☐

ஈ) தெரியாது ☐

3) இதய வால்வு நோய் வருவதற்கான பொதுவான காரணம் எது?

அ) பிறவியிலேயே/ரூமேட்டிக் காய்ச்சல் ☐

ஆ) இதயம் செயலிழப்பு ☐

இ) வலி ☐

ஈ) தெரியாது ☐

4) இதய நோய்க்கான ஆரம்ப அறிகுறிகள்

அ) இருமல் ☐

ஆ) படபடப்பு ☐

இ) வயிற்றுப்போக்கு ☐

ஈ) தெரியாது ☐

5) இதய வால்வு நோய்க்கான சிகிச்சை முறை

அ) இதய வால்வு மாற்று முறை/ இதய வால்வு சரிசெய்வது ☐

ஆ) தசை சரி செய்வது ☐

இ) இதய மாற்று முறை ☐

ஈ) தெரியாது ☐

6) எத்தனை வகையான செயற்கை வால்வுகள் உள்ளன?

    அ) இயந்திர வால்வு/ உயிரியல் வால்வு ☐

    ஆ) பிளாஸ்டிக் வால்வு ☐

    இ) தெரியாது ☐

7) இதயவால்வு சிகிச்சை முதன்மையான நோக்கம்

    அ) வாழ்நாளை அதிகப்படுத்துவதற்கு ☐

    ஆ) நல்ல வாழ்க்கை நிலையை அதிகப்படுத்த ☐

    இ) மற்றொரு அறுவைசிகிச்சைக்காக ☐

    ஈ) தெரியாது ☐

8) இதய வால்வு சுருக்க நோய் என்பது

    அ) இரத்த ஓட்டம் சரியான பாதையில் செல்ல முடியாது ☐

    ஆ) இதய வால்வு சுருங்கி, உறுதித்தன்மையுடன் இருப்பது ☐

    இ) இதய வால்வு சரியாக சுருங்கி விரியாமை ☐

    ஈ) தெரியாது ☐

9) இதய வால்வு நோயை கண்டுபிடிப்பதற்கான வழிமுறை

    அ) இருதய ஊடுருவி கருவி மூலம் ☐

    ஆ) நடைப்பயிற்சி சோதனை மூலம் ☐

    இ) இதய வலி மூலமாக ☐

    ஈ) தெரியாது ☐

பகுதி-இ
நோக்கம்: இதய வால்வு மற்றும் அறுவை சிகிச்சைக்கு பின்பு பின்பற்ற வேண்டிய நடைமுறைகள் பற்றிய கேள்விகள்

10) கீழ்கண்ட உணவுகளில் எதனை தவிர்த்து மற்ற உணவுகளை எடுத்துக் கொள்ளலாம் இந்த உறையாமை சிகிச்சையின் போது

    அ) வேகவைத்த முட்டைகோஸ்/ பச்சை இலை காய்கறிகள் ☐

    ஆ) கேரட் ☐

    ஆ) பீன்ஸ்/ கத்தரிக்காய் ☐

    ஈ) தெரியாது ☐

11) வால்வு மாற்று சிகிச்சைக்கு பின்பு செய்ய வேண்டிய உடற்பயிற்சி

அ) நீச்சல் ☐

ஆ) நடைபயிற்சி ☐

இ) குதிப்பது ☐

ஈ) தெரியாது ☐

12) இதய வால்வு மாற்று அறுவை சிகிச்சைக்கு பின்பு எவ்வளவு நாட்கள் ஓய்வு எடுக்க வேண்டும்

அ) 6 முதல் 8 மாதம் வரை ☐

ஆ) 3 முதல் 6 மாதம் வரை ☐

இ) 1 மாதம் ☐

ஈ) தெரியாது ☐

13) கீழ்கண்ட பழக்க வழக்கங்கள் இதய வால்வு மாற்று அறுவை சிகிச்சைக்கு பின்பு தவிர்க்க வேண்டும்

அ) அதிவேக பயிற்சி, எடை தூக்குதல் ☐

ஆ) மது மற்றும் புகை பிடித்தலை தவிர்க்க வேண்டும் ☐

இ) நீச்சல் ☐

ஈ) மேற்கண்ட அனைத்தும் ☐

14) சிகிச்சைக்கு பின்பு இரவு எத்தனை மணி நேரம் தூங்க வேண்டும்

அ) 4 முதல் 6 மணி நேரம் ☐

ஆ) 6 முதல் 8 மணி நேரம் ☐

இ) 8 முதல் 10 மணி நேரம் ☐

ஈ) தெரியாது ☐

15) கீழ்கண்ட முறைகளில் அறுவை சிகிச்சைக்கு பின் காய சிகிச்சைக்கு எதை பின்பற்றக் கூடாது

அ) எண்ணெய் காயத்தின் மீது தடவலாம் ☐

ஆ) சுத்தமான துணியால் துடைக்க வேண்டும் ☐

இ) அனுமதிக்கப்பட்ட மருந்துகளை உபயோகிக்க வேண்டும் ☐

ஈ) தெரியாது ☐

16) காயம் தொற்று ஏற்படுதலை கீழ்கண்ட முறைகளின் மூலம் தெரிந்து கொள்ளலாம்

   அ) மார்பு வலி ☐

   ஆ) சீழ் மற்றும் தண்ணீர் போன்ற திரவம் வெளிப்படுதல் ☐

   இ) படபடப்பு ☐

   ஈ) இரத்தம் வெளியேறுதல் ☐

17) இரத்தம் உறையாமை மருந்து உட்கொள்வதற்கு ஏற்ற நேரம்

   அ) உணவு அருந்துவதற்கு முன் (மாலை) ☐

   ஆ) பழரசத்துடன் உட்கொள்ளுதல் ☐

   இ) உணவிற்கு பின் ☐

   ஈ) தெரியாது ☐

18) இரத்தம் உறையாமை மருந்து அதிகமாக எடுத்தால் ஏற்படுவது

   அ) படபடப்பு ☐

   ஆ) நடுக்கம் ☐

   இ) மலத்துடன் இரத்தம் வெளியேறுதல் ☐

   ஈ) தெரியாது ☐

19) இரத்தம் உறையாமை பரிசோதனை செய்வதற்கான சரியான நேரம்

   அ) வாரத்திற்கு ஒரு முறை ☐

   ஆ) மாதத்திற்கு ஒரு முறை ☐

   இ) 6 மாதத்திற்கு ஒருமுறை ☐

   ஈ) தெரியாது ☐

20) தொடர் சிகிச்சைக்கு எத்தனை நாட்களுக்கு ஒருமுறை வரவேண்டும்

   அ) 15 நாட்களுக்கு ஒருமுறை ☐

   ஆ) 30 நாட்களுக்கு ஒருமுறை ☐

   இ) 3 மாதத்திற்கு ஒருமுறை ☐

   ஈ) 6 மாதத்திற்கு ஒருமுறை ☐

21) இதய வால்வு மாற்று முறையாக செயல்படாததை எவ்வாறு கண்டறியலாம்

   அ) படபடப்பு/மூச்சுத் திணறல்/ மயக்கம் ☐

   ஆ) குளிருடன் கூடிய காய்ச்சல் ☐

   இ) இரத்தம் வெளிப்படுதல் ☐

   ஈ) தெரியாது ☐

22) முன்னெச்சரிக்கை மருந்துகள் எப்பொழுதெல்லாம் எடுத்துக்கொள்ள வேண்டும்

    அ) காய்ச்சல் மற்றும் சளி பிரச்சனை ☐

    ஆ) பல்சிகிச்சைக்கு முன்பு ☐

    இ) ஏதேனும் அறுவை சிகிச்சைக்கு முன்பு ☐

    ஈ) மேற்கண்ட அனைத்தும் ☐

23) மருத்துவ சிகிச்சையை உடனடியாக கீழ்கண்டவற்றில் எது நிகழ்ந்தால் அணுக வேண்டும்

    அ) அதிகப்படியான இரத்தம் வெளியேறுதல் ☐

    ஆ) மார்பு வலி/மூச்சுத் திணறல் ☐

    இ) இதய சத்தம் சரிவர கேளாமை ☐

    ஈ) மேற்கண்ட அனைத்தும் ☐

24) அறுவை சிகிச்சைக்கு பின்பு தூங்க வேண்டிய நிலை

    அ) நேராக படுக்க வேண்டும் ☐

    ஆ) ஒருபக்கமாக படுக்க வேண்டும் ☐

    இ) குப்புற படுக்க வேண்டும் ☐

    ஈ) தெரியாது ☐

25) அடிக்கடி ஏற்படக்கூடிய நோய் தொற்றை எவ்வாறு தடுக்கலாம்

    அ) சரிவிகித உணவு ☐

    ஆ) முறையான உடற்பயிற்சி ☐

    இ) சுத்தமான சுற்றுப்புறம் ☐

    ஈ) மேற்கண்ட அனைத்தும் ☐

NAME OF THE TOPIC : HOME CARE MANAGEMENT OF HEART VALVE REPLACEMENT

DURATION : 45 MINUTES

GROUP : PATIENT UNDERGONE HEART VALVE REPLACEMENT

PLACE : RGGGH HOSPITAL CHEENAI -03

METHOD OH TEACHING : LECTURE CUM DISCUSSION

MEDIUM OF INSTRUCTION : TAMIL AND ENGLISH

TEACHING AID : PAMPHLET, POWERPOINT, FLASH CARD,

CENTRAL OBJECTIVE:

At the end of the class the clients will be able to acquire adequate knowledge regarding   HOME CARE MANAGEMENT OF HEART VALVE REPLACEMENT to develop a positive attitude towards management gained knowledge and skill to practicing this in home care settings.

SPECIFIC OBJECTIVE:

At the end of the class the clients will be able to

- meaning of valvular heart disease
- describe the anatomy and physiology of heart
- enlist the etiological factors ,of valvular surgery
- list down the clinical manifestation, types, diagnostic evaluation of valvular replacement surgery
- enumerate the different types of surgery and prosthetics valve surgery
- explain the complication of prosthetic heart valve replacement
- discuss about the home care management of heart valve replacement
- mention the warning sign of heart valve replacement

s. no	mts	Specific objectives	Content	Researcher activity	A.V aids	Particip ants activity
1			**INTRODUCTION**:			
			My Name is Rathi.M I am studying MSc(N)II Year in college of Nursing In Madras Medical College ,Chennai-03.for my study partial fulfillment of curriculum do research activity , I selected patient who are undergone valve replacement surgery to improve the patients knowledge about home care management including diet advice ,personal hygiene, rest ,exercise ,medication ,complication ,follow up and prevention of complication after valve replacement surgery . Rheumatic heart disease is a chronic condition resulting from rheumatic fever scaring and deformity of the valve .Patient with prosthetic heart valves are not cured. Rather Still have	Self - introduction and establishing rapport with clients		
	1mts	Meaning of valvular heart disease	myocardial or ventricular dysfunction .which may lead to late mortality including sudden unexplained death. Infection is the early postoperative period are difficult to cure and have a high mortality morbidity rate in the post-operative			
			Meaning of valvular heart disease			
		describe anatomy	Valvular heart disease defined as according to the valve or valves are affected and the type of functional alterations , stenosis or regurgitation.			
			anatomy of the heart and valves	Explaining		
	5Mts	&physiolog y of heart	THE heart is four chambered-hollow muscular organ normally about the size of a fist. The heart is composed of three layers, endocardium, myocardium and			

S N O		specific objectives	content	Researcher activity	A.V aids	Particip ants activity
			. **CARDIAC VALVE** The four valve of the heart serve to keep blood flowing in a forward direction . the cups of the mitral and tricuspid valves are attached to thin strands of fibrous tissue termed chordae tendineae .chordae are anchored in the papillary muscle of the ventricles. This support system prevents the eversion of the leaflets in to the atria during ventricular contraction. The pulmonary and aortic valve are prevents blood from regurgitating in to the ventricles at the end of each ventricular Contraction. **FUNCTION OF VALVES** Valves are fibrous flaps of tissue found between the heart chamber and in the blood vessels. They are rather like gate which prevent blood from flowing in the wrong direction. Valves between the aerial and ventricles re known as he right and left atrioventricular valve. Right as called tricuspid valve. Left is mitral or bicuspid valve. The mitral valve opens to allow oxygenated blood collected in to the left atrium, in to the left ventricle.it closes as left ventricles contracts preventing from returning to the left ventricles.	listening		explaini ng

s.no	mts	Specific objectives	CONTENT	Student activity	A.V aids	Learners activity

3	5mts	Enlist the etiological factors, clinical manifestation and diagnostic eval	**ETIOLOGICAL FACTORS**
			✓ Rheumatic heart disease
			✓ Congenital mitral stenosis
			✓ Rheumatic carditis
			✓ Infective endocarditis
			✓ Valve ring dilatation
			✓ Traumatic valve rupture
			       TYPES OF VALVE DISEASE
			VALVULAR STENOSIS
			   stenosis meaning the valve opening narrows the valve leaflets may become fused or thickened and that the valve cannot open freely. Obstruction of the normal blood flow
			VALVULAR REGURGITATION
			Leakage of blood flow of blood results from incomplete closure of the valve. Due to scaring and retraction of valve leaflets or weakening of supporting structure
				explaining	Chart	listening

s. no	mts	Specific objectives	Content	Student activity	A.V aids	Learners activity
			. ✓ Mitral valve stenosis ✓ Mitral valve regurgitation ✓ Mitral valve prolapse ✓ Aortic valve stenosis ✓ Aortic valve regurgitation **CLINICAL MANIFESTATION** Dyspnea ✓ Chest pain, paroxysmal nocturnal dyspnea ✓ Hemoptysis ✓ Seizure or stroke ✓ Weakness ✓ Fatigue, palpitation ✓ Peripheral edema ✓ Murmur sound in heart ✓ Syncope ✓ Angina ✓ Water-hammer pulse	explaining		listening

s. no	mts	Specific objectives	Content	Student activity	A.V aids	Learners activity
			DIAGNOSTIC EVALUVATION			
			✓ History and physical examination			
			✓ Complete blood count			
			✓ Chest x- ray			
			✓ Electrocardiogram			
			✓ Electrocardiography (Doppler and transesophagel)			
			Cardiac catheterization			
			MANAGEMENT			
			MEDICAL MANAGEMENT			
			PROPHYLACTIC ANTIBIOTIC THERAPY			
			Oral			
			Dental manipulation involving the gum and roots of the Procedure			

S no	mts	Specific objectives	Content	Student activity	A.V aids	Learners activity
			MINIMALLY INVASIVE VALVULOPLASTY It involves a mini-sternotomy or parasternal approach it may be included robotic and throcoscopic surgical system. **ANNULOPLASTY** Reconstruction of the annulus, with or without the aid of prosthetic ring **VALVE REPLACEMENT** Valve replacement may required for the mitral, aortic ,tricuspid and occasionally pulmonic valve disease **MECHANICAL VALVE** It is manufactured by artificial material and consist of the combination of Metal alloys,pyrolytic carbon and decran. **BIOLOGICAL VALVE** Biological valve are constructed from bovine, porcine, and human (cadaver)heart tissue and usually contain some man made materials. Mechanical valve are more durable and lost longer than biological valve and require long term anticoagulation therapy	explaining		listening

s.no	mts	Specific objectives	Content	Student activity	A.V aids	Learners activity
	10 mts	Discussed about the home care management	**Complication** ✓ Prosthesis endocarditis ✓ Prosthesis dehiscence ✓ Prosthesis dysfunction ✓ Obstruction, regurgitation, hemolysis, structural failure ✓ Thromboembolism ✓ Hemorrhage with anticoagulation therapy ✓ Valve prosthesis-patient mismatch **HOME CARE MANAGEMENT OF HEART VALVE REPLACEMENT** **DIET-ADVICE** ✓ Daily eat variety of foods and balanced diet . ✓ Avoid fat rich foods. ✓ White garlic and fishes should include in the diet . ✓ Avoid salty foods such as pickles and fried items.	Explaining		listening

S. NO	mts	Specific objectives	CONTENS	Student teacher activity		
			Take green leafy vegetables in constant amount daily Avoid high content of vitamin k rich diet ✓ Avoid more than half teaspoon salt in daily. **REST AND EXERCISE** ➢ Take rest for 3 to 6 months after the surgery. ➢ Avoid lifting heavy weights for the first 3 months ➢ Avoid strenuous arm movement such as golf or tennis. ➢ When getting in and out of chair of bed, use legs. ➢ Arm should not bear weight and should be used only for balance ➢ Avoid side lying and prone position. ➢ 'Sleep at least for 6 to 8hrs in the night ➢ Avoid alcoholic intake and smoking. ➢ Walking is the best exercise after the surgery. Can you return to work within 3 to 6 months after the surgery according to doctors order. Do not dive automobile for 6 weeks after surge ➢ Take bath daily with soap and water	Explaining		Listening-

S n0	mts	Specific objectives	content	Researcher activity	Av aids	Participsnts activity
			➢ wear clean cotton cloth .. ➢ Dry the wound with a clean white cloth ➢ Don't use any medicines without doctors order. ➢ Don't apply powder or oil over the wound ➢ if any watery discharge or pus coming from the surgical wound seek medical attention ➢ Avoid scratching the wound with nail or any other object **MEDICATIONS ~** ➢ Tab.Digoxin is given for increase the ability of hears muscles to contract and arrange the rhythm. ➢ Tablets such as Lasix, aldactone, et. Are given for removing the unwanted water from all over the body and improve the ability of the heart to pump. ➢ If the doctor advised to take weight daily, take weight every day ➢ of peripheral edema or decreased amount of urine occurs . ➢ Tab.warfarin, Din divan, Acitrome (Anticoagulant) should take regularly as per ➢	explaining		listening

S n0	mts	Specific objectives	content	Researcher activity	Av aids	Participsnts activity
			WARNING SIGN • Signs of infection, including fever and chills • Redness, swelling, increasing pain, excessive bleeding, or any discharge from the incision site • Constipation, diarrhea, bloody, or tarry-color bowel movements or stomach pain • Weight gain—greater than 2 pounds in 2 days • Worsening of ankle swelling • Severe headache • Nausea and/or vomiting • Cough, shortness of breath, or chest pain Coughing up blood	explaining	chart	

Conclusion :

Home care management is important after valvular replacement .at the end of the teaching the participants have adequate knowledge about valve replacement meaning and it is caused beta hemolytic streptococcal infection primarily it occurred throat infection if it is not treated it leads to degenerative changes in the heart valve .valve replacement surgery after the valve replacement most of the complication occur post operatively ,early identification and prevention of complication is improved the quality of life and increased life expectancy of the clients .

மையக் கருத்துக்கள்

பயிற்சியின் முடிவில் குழு இதய வால்வு மாற்று அறுவை சிகிச்சையின் போது பயிற்சியில் கிடைத்த அறிவு மூலம் வீட்டில் பின்பற்ற வேண்டிய முறைகளையும் அறிவையும் பெற்றுக்கொள்வார்கள்.

குறிப்பிட்ட இலக்குகள்

பயிற்சி முடிவில் நோயாளிகள் தெளிவான அறிவைப் பெற்றுக்கொள்வார்கள்.

1. இதய வால்வு நோய் பற்றி குறிப்பிடுக

2. இதயத்தின் அமைப்பு மற்றும் செயல்முறைகளை விளக்குதல்

3. நோய்க்கான காரணங்கள், அறிகுறிகள் மற்றும் நோய் கண்டுபிடிப்பு முறைகளை வகைப்படுத்தல்

4. வேறுபட்ட முறையான மருத்துவ சிகிச்சை முறைகளை விளக்குதல்

5. செயற்கை வால்வு பொருத்தப்படுவதால் ஏற்படும் பிரச்சனைகளை விளக்குதல்

6. அறுவை சிக்சைக்கு பின்பு வீட்டில் பின்பற்ற வேண்டிய முறைகளை பற்றி விளக்குதல்

7. ஆபத்து காரணிகளை வகைப்படுத்துக.

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சி யாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			முன்னுரை செயற்கை இருதய வால்வுகள் பொருத்துப்படுவது நோயின் தன்மையை முழுவதுமாக குணப்படுத்த முடியாது. சில சமயங்களில் இருதய செயல்மாற்றம் அல்லது பென்டிரிக்கிள் செயல்மாற்றம் ஏற்படும். இது பின் நாளில் நோயின் தாக்கம் அதிகரிக்கும். பின் நாளில் நோயின் தாக்கம் அதிகரிக்கும். சில நேரங்களில் இறப்புகூட ஏற்படும். நோய்தொற்று என்பது ஆரம்பகால அறுவை சிகிச்சைக்கு பின்பு ஏற்படும் பிரச்சனை ஆகும். முன்னெச்சரிக்கையாக மருந்துகள் மற்றும் நலக்கல்வி மூலம் நோயின் தாக்கத்தை குறைக்கலாம்.				
1.		இதய வால்வு நோய் பற்றி குறிப்பிட	**இதய வால்வு நோய் பற்றி விளக்கம்** இதய வால்வு நோய் என்பது இதயத்தின் வால்வுகளின் செயல்களில் ஏற்படும் மாற்றம் ஆகும். இது வால்வுகளில் அழற்சி மற்றும் சுருக்கம் ஆகும்.				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சி யாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
2.	5 நிமி	இதயத்தின் அமைப்பு மற்றும் செயல்முறைகளை விளக்குதல்	**இதயம் மற்றும் வால்வுகளின் அமைப்பு முறை** இருதயம் என்பது 4 அறைகளைக் கொண்ட தசையாலான பகுதியாகும. இது மூன்று அறைகலைக் கொண்ட பகுதி. உள்தசைப்பகுதி, நடுத்தசை பகுதி, வெளி தசைப்பகுதி இதயத்தில் மெல்லிய சவ்வு போன்ற பகுதி பெரிகார்டியம் என்றழைக்கப்படுகிறது. **இருதய வால்வுகள்** இருதத்தில் 4 வால்வுகள் உள்ளன. இருதயத்தின் இரத்த ஓட்டத்தை சரியான வழியில் செலுத்துகின்றன. அரை இதழ் மற்றும் மூவிதள் வால்வுகள் வெண்டிரிக்கிள் சுருக்கத்தின் போது இரத்தம் ஆரிக்கிள் இருந்து அழற்சி ஏற்படுவதை தடுக்கின்றன. **இருதய வால்வுகளின் வேலை** இருதய வால்வுகள் என்பதை தசையாலான பகுதியாகும். இது இதய அறைகளுக்கும் இரத்த நரம்புகளுக்கும் இடையே காணப்படுகின்ற பகுதி. இது ஒரு வாயிற்கதவு போன்ற	விவரித்தல்	கவனித்தல்		

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			அமைப்புடன் செயல்படுகின்றது. இரத்தமானது இருதயத்தில் இருந்து ஒரே சீரான பாதையில் எடுத்துச் செல்லுகின்றது. அரை இதழ் வால்வு சுத்திகரிக்கப்பட்ட இரத்தை இடது ஆரிக்கிள்ளில் இருந்து வெண்டிரிக்கிள்ளின் பகுதிக்கு எடுத்துச் செல்லுகின்றது. வெண்டிரிக்கிள் சுருக்கத்தின் போது இரத்தம் மகாதமனி வழியாக உடலின் பல பகுதிகளுக்கு எடுத்துச் செல்லுகின்றது.				
3	5 நிமி	நோய்க்கான காரணங்கள், அறிகுறிகள் மற்றும் நோய் கண்டுபிடிப்பு முறைகளை வகைப்படுத்துதல்	<u>நோய்க்கான காரணிகள்</u> • முடக்குவாத இருதயநோய் • பிறவிலே வால்வு சுருங்குதல் • முடக்குவாத இருதய வீக்கம் • நோய்தொற்று இருதயத்தின் உள் அறைகளில் • இருதய வால்வு விரிவடைதல் • காயங்களினால் வால்வு கிழிதல் <u>இருதய வால்வு நோய்களின் வகைகள்</u> <u>இருதய வால்வு சுருக்கம்</u> இருதய வால்வு– சுருக்கம் என்பது வால்வுகளில் காணப்படக்கூடிய சுருங்கி போதல் அல்லது தடிமனமாக காணப்படுவதால் சரியாக	விவரித்தல்	கவனித்தல்		

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சி யாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			சுருங்கி விரிய முடியாது. இதனால் சீரான இரத்த ஓட்டம் தடைபெறுகிறது. **இருதய வால்வு– அழற்சி நோய் என்பது** இது வால்வுகள் சரியாக சுருங்கி விரியாததினாலே இரத்தம் பின்னோக்கி செல்லுகிறது. இது வால்வுகளின் தசைகளில் பலவீனத்தினாலும் சுற்றியுள்ள தசைகளின் பலவீனத்தினாலும் ஏற்படுகிறது. • மைட்ரல் வால்வு சுருக்கம் • மைட்ரல் வால்வு அழற்சி • மைட்ரல் வால்வு தொங்கல் • மகாதமனி வால்வு சுருக்கம் • மகாதமனி வால்வு அழற்சி • மூவிதழ் வால்வு சுருக்கம் • நுரையீரல் வால்வு சுருக்கம் **நோயின் அறிகுறிகள்** • மூச்சு திணறல் • மார்பு வலி, இரவு நேரங்களில் மூச்சுத்திணறல் • இரத்தம் கலந்த சளி				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சி யாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			• வலிப்பு மற்றும் வாத நோய் • சோர்வு • மயக்கம் • படபடப்பு • கணுக்கால்களில் வீக்கம் • தலைச்சுற்றல் • அதிவேகமான நாடித்துடிப்பு <u>நோய் கண்டுபிடிப்பதற்கான முறைகள்</u> • வாழ்க்கை முறை பற்றிய கேள்விகள் • உடற்பரிசோதனை • முழுமையான இரத்த அணுக்கள் சோதனை • இருதய எக்ஸ்ரே படம் • இருதய வரைபடம் • இருதய உள்ளுருவ வரைபடம் மற்றும் இரத்த ஓட்டம் கண்டுபிடிப்பு • இருதய உள்ளுருவிக் கருவி				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
4		வேறுபட்ட முறையான மருத்துவ சிகிச்சைகளை விளக்குக	**மருத்துவ முறைகள்** **முன்னெச்சரிக்கை தடுப்பு மருந்துகள்** **வாய் வழியாக** • பல் சிகிச்சையின் போது • பல் பிடுங்குதல் • பல் மாற்று சிகிச்சையின் போது • பல் சுத்தப்படுத்தலின் போது **சுவாசப்பிரச்சனை** நுரையீரல் நோய் தொற்று மற்றும் திசு பரிசோதனை சிறு நாக்கு அறுவை சிகிச்சையின் போது இரப்பை மற்றும் சிறுநீரக சம்பந்தமான காய தொற்று மூலமாக ஏற்படும்போது, சிறுநீரக தொற்று மூலமாக ஏற்படும்போது • முடக்குவாத காய்ச்சல் • இருதயத்தின் உள் அறைகளில் நோய் தொற்று • உடலில் உப்பு அதிகமாக சேரும்போது • இரத்தநாளங்களை விரிவடைய செய்யும் மருந்துகள் • பாசிட்டிவ் அயனோரிரோப்ஸ் மருந்துகள் • நீர்பெருக்கி மருந்துகள்	விவரித்தல்	கவனித்தல்		

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			• பீட்டா– அட்ரிரோஜெனிக் மாத்திரைகள் • இரத்தம் உறையாமை மருந்துகள் • இரத்த ஓட்டத்தை சீர் செய்யும் மருந்துகள் **பிற சிகிச்சைகள்** **பலூன் சிகிச்சை முறை** இந்த முறையானது இருதய உள்ளுருவ கருவி மூலம் தொடையின் தமனி வழியாக சிறு குழாய் மூலம் வால்வுகளின் இதழ்களை தனிப்படுத்துவது. **அறுவை சிகிச்சையின் மூலம் வால்வுகளை சரிப்படுத்துவது** இது ஈரிதழ் வால்வு சுருங்கி இருக்கும் நோயாளிகளுக்கு சிறு வரிவடையச் செய்யும் கருவி மூலம் இருதயத்தின் வால்வுகளை சரிப்படுத்துவது. **மார்பு எலும்புக்கூடு அறுவை சிகிச்சை மூலம்** இது கிழிந்த அல்லது சிதைந்த வால்வுகளை தையல் மூலம் சரிப்படுத்துவது.				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			வால்வு மாற்று சிகிச்சை முறை				

வால்வு மாற்று சிகிச்சை முறை

மேற்கண்ட சிகிச்சை முறையின் மூலம் வால்வுகளை சரிப்படுத்த முடியவில்லை என்றால் மாற்று வால்வுகள் மூலம் சரிப்படுத்தலாம். இது 4 வால்வுகளுக்கும் பொருந்தும் முறையாகும். இது 2 வகைப்படும்.

- உலோகத்தாலான செயற்கையான வால்வுகள்
- உயிரியல் பகுதியில் செயற்கையான வால்வுகள்

உலோகதாலான செயற்கையான வால்வுகள்

இது செயற்கையான உலோகங்களாலான வால்வு ஆகும்.

உயிரியல் வால்வு

இது உயிருள்ள ஜீவன்களின் தசைப்பகுதியில் இருந்து தயாரிக்கப்படுகின்றன. பொதுவாக மனித இருதயத்தில் தசைகளில் இருந்து செயற்கையாக செய்யப்படுகின்றன. உலோகத்தால் ஆன வால்வுகள் நீடித்த, உறுதியான தன்மையுடையது. நீடித்த நாட்கள் இரத்தம் உறையாமை மருந்துகள் எடுத்துக்கொள்ள வேண்டும்.

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சி யாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
5	5 நிமி	செயற்கை வால்வு பொருத்தப் படுவதால் ஏற்படும் பிரச்சனைகளை விளக்குக	**பிரச்சனைகள்** • வால்வு தொற்று ஏற்படலாம் • செயற்கை வால்வு பொருத்தாமல் போகலாம் • செயற்கை வால்வு செயல்படாமல் போகலாம் • செயற்கை வால்வில் அடைப்பு மாற்று, அழற்சி, இரத்தம் உறைதல், அமைப்பு தோல்வி ஏற்படலாம். • இரத்தம் அதிகமாக வெளியேறுதல், இரத்தம் உறையாமை மருந்துகளின் மூலமாக. • செயற்கை வால்வு உடல் பகுதியோடு ஒத்துப்போகாமல் இருக்கலாம்.				
6	20 நிமி	அறுவை சிகிச்சைக்கு பின்பு வீட்டில் பின்பற்ற வேண்டிய முறைகள் பற்றி விளக்குதல்	**சிகிச்சைக்கு பின்பு வீட்டில் கவனிக்கவேண்டிய முறைகள்** **உணவு முறைகள்** • சரிவிகித உணவு எடுக்க வேண்டும். • கொழுப்பு மற்றும் எண்ணெய் உணவுகளை தவிர்க்க வேண்டும். • வெள்ளை பூண்டு மற்றும் மீன் உணவுகள் அதிகமாக எடுத்துக்கொள்ள வேண்டும். • மருத்துவரின் அறிவுரைப்படி உப்பு உணவில்	விளக்குதல்	கவனித்தல்		

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			சேர்க்க வேண்டும்.				

சேர்க்க வேண்டும்.

- அரை கண்டி அளவு உப்பு தினமும் சேர்க்க வேண்டும்.

- பச்சை காய்கறிகள், கீரை வகைகளை உணவில் தேவையான அளவு சேர்த்துக்கொள்ள வேண்டும்.

ஓய்வு மற்றும் உடற்பயிற்சி

- அறுவை சிகிச்சைக்கு பின்பு 3 முதல் 6 மாதங்கள் ஓய்வு எடுக்க வேண்டும்.

- அதிக பளுவான எடை முதல் 3 மாதங்களுக்கு தூக்க கூடாது.

- அதிவேகமான பயிற்சிகளான கோல்ப் மற்றும் பூபந்து விளையாடக்கூடாது.

- படுக்கையில் இருந்து எழும்போது கைகளில் அதிகமாக எடை கொடுக்கக் கூடாது. கால்களை பயன்படுத்தலாம்.

- முதல் 3 முதல் 4 மாதங்களுக்கு ஒரே நிலையில் படுக்கக் கூடாது.

- ஒரே பகுதியில் அதிக நேரம் படுக்கக் கூடாது.

- இரவு நேரங்களில் 6 முதல் 8 மணி நேரம் வரை தூங்க வேண்டும்.

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			• மதிய நேரங்களில் சிறு ஓய்வு எடுக்க வேண்டும். • மது மற்றும் புகை பழக்கங்களை தவிர்க்க வேண்டும். • நடைபயிற்சி சிறந்த உடற்பயிற்சியாகும். • தினமும் குறிப்பிட்ட தூரம் நடக்க வேண்டும். • உங்களுடைய வேலைக்கு 3 முதல் 6 மாதம் ஓய்விற்கு பின்பு மருத்துவரின் அறிவுரைப்படி செல்லலாம். • முதல் 6 வாரங்களுக்கு மோட்டர் சைக்கிள் ஓட்டக்கூடாது. <u>**தன் சுத்தம் மற்றும் அறுவை சிகிச்சை காயத்தின் சுத்தம்**</u> • தினமும் சோப்பு போட்டு குளிக்க வேண்டும். • சுத்தமான ஆடைகளை அணிய வேண்டும். • காயத்தை சுத்தமாக உலர்ந்த வெள்ளை துணியால் துடைக்க வேண்டும். • மருத்துவரின் அறிவுரைப்படி மருந்துகள் போட வேண்டும். • காயத்தின் மீது பவுடர் மற்றும் எண்ணெய் தடவ கூடாது. • காயத்திலிருந்து சீழ் மற்றும் தண்ணீர் போன்ற				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			நீர் வடிந்தால் மருத்துவரிடம் அறிவுரை பெற வேண்டும்.				

நீர் வடிந்தால் மருத்துவரிடம் அறிவுரை பெற வேண்டும்.

- காயத்தின் மீது நகம் மற்றும் பொருட்கள் கொண்டு காயம் ஏற்படுத்தக்கூடாது.

மருந்துகள்

- டிஜாக்ஸின் மருந்துகள் தவறாமல் எடுக்க வேண்டும்.
- நீர் மாத்திரைகள் உடலில் உள்ள தேவையற்ற நீரை வெளியேற்றி இருதயத்தை சீராக இயங்கச் செய்யும்.
- உடலின் எடை தினமும் குறிப்பிட்ட நேரத்தில் பார்க்க வேண்டும்.
- எடை அதிகரித்தால் மருத்துவரின் அறிவுரை பெற வேண்டும்.
- அசிட்ரோம் மாத்திரைகள் எடுக்கும்போது குறிப்பிட்ட நேரத்தில் எடுக்க வேண்டும்.

இரத்தம் உறையாமை மருந்துகள் எடுக்கும்போது

- ஒவ்வொரு நாளும் மாலை 5 மணியளவில் தவறாமல் மாத்திரை எடுக்க வேண்டும்.
- சாப்பிட்ட பின்பு எடுக்க வேண்டும்.
- தினமும் எவ்வளவு மாத்திரை, நேரம், தேதி எழுதி

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சி யாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			வைக்க வேண்டும்.				
			• மாத்திரை சாப்பிட மறந்துவிட்டால் அதிகமான மாத்திரை எடுக்க் கூடாது.				
			• ஒவ்வொரு மாதமும் இரத்த உறைதலுக்கான பரிசோதனை செய்து மருத்துவரிடம் காண்பிக்க வேண்டும்.				
			தொடர் சிகிச்சை முறை				
			15 நாட்களுக்கு ஒருமுறை மருத்துவ ஆலோசனை பெற வேண்டும். மருத்துவரின் அறிவுரைப்படி தொடர்ந்து சிகிச்சை எடுக்க வேண்டும்.				
7		ஆபத்து காரணிகளை வகைபடுத்துக	**ஆபத்து காரணிகள்**				
			• காய்ச்சல், குளிருடன் கூடிய காய்ச்சல்				
			• அதிகமான இரத்தம் வெளியேறுதல்				
			• அரிப்பு மற்றும் வீக்கம் காணப்படுதல்				
			• உடல் எடை வேகமாக அதிகரித்தல்				
			• கணுக்கால் வீக்கம்				
			• தலைவலி, வாந்தி				
			• பற்களில் இருந்து இரத்தம் வெளிப்படுதல்				
			• இருதய படபடப்பு				

வ. எண்	நேரம்	குறிப்பான நோக்கங்கள்	பொருளடக்கம்	ஆராய்ச்சியாளர் செயல்	நோயாளியின் செயல்கள்	ஒலி, ஒளி சார் உபகரணங்கள்	மதிப்பீடு
			• இருதய சுத்தம் சரிவர கேளாமை **நோயாளிகள் கவனிக்க வேண்டியவை** • மாத்திரையின் அளவை மருத்துவரின் அறிவுரையின்றி மாற்றக் கூடாது. • சுயமாக அளவுக்கு அதிகமான மாத்திரை எடுக்கக் கூடாது. • உங்களுடைய மருத்துவ சீட்டை மற்றவருக்கு கொடுக்கக் கூடாது. • அசிட்ரோம் மாத்திரை எடுப்பதற்கான அடையாள அட்டை வைத்திருக்க வேண்டும்.				

<center>INFORMED CONSENT FORM</center>

Investigator   : M.RATHI

Name of participant   :

Age/ sex   :

Date   :

Name of the Ins tuition   :   RAJIV GANTHI GOVERNMENT GENERAL   HOSPITAL

                                       ,CHENNAI-03

Title of the study: "**A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL ,CHENNAI-03."**

Documentation of the informed consent(legal representative can sign if the participants is minor or competent)

I   have read / it has been read for me , the information in this form . I was free to ask any questions and they have been answered. I am over 50 years of age and exercising my free power of , choice here by give my consent to be included as a participants in the study.

- I have read and understood this consent form and the information provided to me .
- I have had the consent document explained in detail to me .
- I have been explained about the nature of my study.
- My rights and responsibilities have been explained to me by the investigator.

- I agree to cooperative the investigator.

- I have not participated in any research study at time.

- I am aware of the fact that I can out of the study at any time without having to give any reason.

- I here by give permission to the investigator to release the information obtained from me as a result of participants in this study to the regulatory authorities , government agencies, and intuitional ethics committee. I understand that they are publicly presented.

- My identity will be kept confidential if my data are publicly presented.

- .I am aware that I have any question during this study : I should contact the concerned investigator.

Signature of investigator   signature of the   participants

Date   Date

<u>INFORMATION TO PARTICIPANTS</u>

Title : "A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL ,CHENNAI-03."

Name of the Participant :

Date :

Age/sex :

Investigator **: M. RATHI**

Name of the instruction **: RAJIV GANTHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03**

Enrolment no **:**

You are invited to take part in this study. The information in this document is meant to help you decide whether or not to take part. Please feel free to ask if you have any queries or concerns.

You are being asked to Cooperative in this study being conducted in selected Institute of mental health hospital at Chennai.

What is the Purpose of the Research (explain briefly)

This research is conducted to evaluate to assess the effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone heart valve replacement in cardio thoracic surgery post-operative wards, Rajiv Gandhi government general hospital ,chennai-03."

We have obtained permission from the Institutional Ethics Committee.

Study Procedures

- Study will be conducted after approval of ethics committee
- A written formal permission will be obtained from authorities of Rajiv Gandhi Government General Hospital at Chennai to conduct study.
- The purpose of study will be explained to the participants.

- The investigator will obtain informed consent.

Possible benefits to other people

The result of the research may provide benefits and also empathetic care to them by investigator.

Confidentiality of the information obtained from you

You have the right to confidentiality regarding the privacy of your personal details. The information from this study, if published in scientific journals or presented at scientific meetings, will not reveal your identity.

How will your decision not to participate in the study affect you?

Your decisions not to participate in this research study will not affect your activity of daily living, medical care or your relationship with investigator or the institution.

Can you decide to stop participating in the study once you start?

The participation in this research is purely voluntary and you have the right to withdraw from this study at any time during course of the study without giving any reasons.

Your Privacy in the research will be maintained throughout study. In the event of any publications or presentation resulting from the research, no personally identifiable information will be shared.

Signature of Investigator   Signature of Participants

Date   Date

ஆராய்ச்சி தகவல்கள்

விளக்கமான ஆய்வு மூலம் நாள்பட்ட ஆஸ்துமா நோயாளியின் பதட்டம் மற்றும் உற்சாகமின்மை குறித்த ஆய்வு

ஆய்வாளர் பெயர் : ம. ரதி

பங்கேற்பாளர் :

தேதி :

வயது / பால் :

- ❖ ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமுமின்றி முழுமனதுடன் சம்மதிக்கலாம்.
- ❖ இதில் பங்கேற்பதன் நோக்கம் அந்த ஆராய்ச்சியில் தகவல்களை தெரிந்து கொள்வதற்காகவும் , அதனை பயன்படுத்துவதற்காக மட்டும்தான்.
- ❖ இந்த ஆராய்ச்சியின் நோக்கம் விளக்கமான ஆய்வு மூலம் நாள்பட்ட ஆஸ்துமா நோயாளியின் பதட்டம் மற்றும் உற்சாகமின்மை குறித்து அறியலாம்.

ஆராய்ச்சி மேற்கொள்ளும் முறை

இந்த ஆராய்ச்சியில் விளக்கமான ஆய்வு மூலம் நாள்பட்ட ஆஸ்துமா நோயாளியின் பதட்டம் மற்றும் உற்சாகமின்மை குறித்த ஆய்வு

இதனால் ஆய்வாளருக்கான பயன்

இந்த ஆய்விற்கு பின் விளக்கமான ஆய்வு மூலம் நாள்பட்ட ஆஸ்துமா நோயாளியின் பதட்டம் மற்றும் உற்சாகமின்மை குறித்து அறியலாம்.

இதனால் பங்கேற்பாளருக்கான பயன்

இந்த ஆய்வு முறையான விளக்கமான ஆய்வு மூலம் நாள்பட்ட ஆஸ்துமா நோயாளியின் பதட்டம் மற்றும் உற்சாகமின்மை குறித்து அறியலாம்..

- ❖ ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும், உங்களின் சராசரி வாழ்க்கை முறையில் எந்த வித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கிறேன்.
- ❖ இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழு மனதுடன் நீங்கள் இந்த ஆராய்ச்சியில் இருந்து விலகி கொள்ளலாம் என்பதை தெரிவிக்கிறேன்.
- ❖ இந்த ஆராய்ச்சியில் உங்களின் தகவல்களை பாதுகாப்பாக வைத்துக் கொள்கிறேன். என்பதை தெரிவித்துக்கொள்கிறேன்.
- ❖ இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும்போது உங்களை பற்றிய அடையாளங்கள் வெளிவராது என்பதை உறுதி கூறுகிறேன்.

ஆய்வாளர் கையொப்பம்   பங்கேற்பாளர் கையொப்பம்

தேதி:   தேதி:

சுய ஒப்புதல் கடிதம்

முறையான நலக்கல்வி மூலம் இருதய வால்வு மாற்று அறுவை சிகிச்சைக்கு பின்பு
வீட்டில் பின்பற்ற வேண்டிய நடைமுறைகள் பற்றிய திறன் குறித்த ஆய்வு

ஆய்வாளர் பெயர்   :   மா.ரதி
பங்கேற்பாளர் பெயர் :
தேதி   :
வயது/ பால்   :

❖ ஆய்வாளர் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய
   கட்டாயமுமின்றி முழு மனதுடனும் சுய நினைவுடனும் சம்மதிக்கிறேன்.

❖ ஆய்வாளர் மேற்கொள்ள போகும் பரிசோதனைகளை மிக தெளிவாக
   விளக்கிக் கூறின்ார்.

❖ எனக்கு விருப்பமில்லாத் பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும்
   விலகலாம் என்பதை ஆய்வாளர் மூலம் அறிந்துகொண்டேன்.

❖ இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நன்கு
   புரிந்துகொண்டேன். எனது உரிமைகள் மற்றும் கடமைகள் ஆராய்ச்சியாளர்
   மூலம் விளக்கப்பட்டது.

❖ நான் ஆராய்ச்சியாளருடன் ஒத்துழைக்க சம்மதிக்கிறேன். எனக்கு ஏதேனும்
   உடல்நலக்குறைவு ஏற்பட்டால் ஆராய்ச்சியாளரிடம் தெரிவிப்பேன்.

❖ நான் வேறு எந்த ஆராய்ச்சியிலும் தற்சமயம் இடம்பெறவில்லை என்பதை
   தெரிவித்துக்கொள்கிறேன்.

❖ இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன். அப்படி
   வெளியிடும்போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்.

❖ எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது.

ஆய்வாளர் பெயர்   பங்கேற்பாளர் கையொப்பம்
தேதி   தேதி

CERTIFICATE OF PLAGIARISM

This is to certify that the dissertation work titled, "**A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI-03**" of the candidate **Mrs.RATHI.M** for the partial fulfillment of M.Sc. Nursing Programme in the branch of MEDICAL SURGICAL NURSING has been verified for plagiarism through relevant plagiarism checker. We found that the uploaded thesis file from introduction to conclusion pages and rewrite shows _____% of Plagiarism (_____% uniqueness) in this dissertation.

CLINICAL SPECIALITY GUIDE / SUPERVISOR
Mrs.V.K.R.Periyar Selvi, M.Sc(N).,
Reader in Medical Surgical Nursing,
College of Nursing,
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Chennai -03.

PRINCIPAL
Mrs.A.Thahira Begum, M.Sc(N).,MBA., M.Phil.,
Principal,
College of Nursing,
Madras Medical College,
Chennai -03.

REQUISITION LETTER

From

    M. Rathi,   31-012019

    M.Sc.(N) II year Student,   Chennai03.

    College of Nursing,

    Madras Medical College, Chennai-03.

To

    Director,

    Institute of Cardio-vascular and thoracic surgery,

    Rajiv Gandhi Government General Hospital,

    Chennai -03

    .

Through

    The Principal,

    College of Nursing,

    Madras Medical College, Chennai-03.

Respected Sir/ Madam,

    Sub: **College of Nursing - Madras Medical College, Chennai-03 - M.Sc. (N) II Year Student- Dissertation - Requesting permission to conduct research study in Cardiothoracic surgery post-operative wards, Rajiv Gandhi Government General Hospital, Chennai- 03.- Regarding**

----------×------------

    I, M. Rathi, M.Sc. Nursing II year student have to conduct the research study for the partial fulfillment of M.Sc. (N) programme. My topic is **"A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST -OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL,CHENNAI-03".** The data collection period is from 02.02.2019 to 04.03.2019 from 8 am to 4 pm. I assure that I will not disturb the routine activities of the patients/ wards.

    With due respect, I request your good self to kindly permit me to conduct this study in Cardiothoracic post-operative wards Rajiv Gandhi Government General Hospital, Chennai- 03

                                 Thanking you,

Signature of HOD
(Research)

Yours faithfully,

M. Rathi 28/1/2019
(M. Rathi)

PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by **M. Rathi** M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in his study titled, "**A study to evaluate the effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone heart valve replacement in cardio thoracic surgery post -operative wards, Rajiv Gandhi Government General Hospital,Chennai-03**" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then he can proceed to do the research.

PRINCIPAL
MADHA COLLEGE OF NURSING
MADHA NAGAR, KUNDRATHUR,
CHENNAI - 600 069
PHONE : 24780736

Signature with seal

Name: DR. B. TAMILARASI

Designation: PRINCIPAL

College: MADHA COLLEGE OF NURSING, CHENNAI-69

Place:

Date: 1 8 JAN 2019

MADHA COLLEGE OF NURSING
CHENNAI - 600 069

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool constructed by **M. Rathi** M.Sc., (Nursing) II year, College of Nursing, Madras Medical College which is to be used in his study titled, "**A study to evaluate the effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone heart valve replacement in cardio thoracic surgery post -operative wards, Rajiv Gandhi Government General Hospital,Chennai-03**" has been validated by the undersigned. The suggestions and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then he can proceed to do the research.

Signature with seal

PRINCIPAL
MOHAMED SATHAK
A.J. COLLEGE OF NURSING
34, Rajiv Gandhi Road, (OMR)
IT Highway, Siruseri, Chennai-603 103.

Name: Dr. Prof. R. Rama Sambasivan, Msc(N)., Ph.D.,

Designation: Principal

College: Mohamed Sathak -A.J. College of Nursing

Place:

Date:

CERTIFICATE FOR TAMIL EDITING

This is to certify that the dissertation work topic titled, **"A study to evaluate the effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone heart valve replacement in cardio thoracic surgery post-operative wards, Rajiv Gandhi Government General Hospital ,Chennai-03"**,done by **Rathi M.Sc.(N) II year** student, College of Nursing, Madras Medical College, Chennai – 03 has been edited and validated for Tamil language appropriateness.

Place: Vellore

Date 28. 6. 19

Signature:

Name:

Designation:

A.J. THEODORE RAJKUMAR
Asst. Professor & H.O.D.
Department of Tamil,
Voorhees College-Vellore

Place:

CERTIFICATE FOR ENGLISH EDITING

This is to certify that the dissertation work topic titled, **"A study to evaluate the effectiveness of focused teaching programme on knowledge regarding home care management among patients undergone heart valve replacement in cardio thoracic surgery post-operative wards, Rajiv Gandhi Government General Hospital ,Chennai-03",**done by **M.Rathi, M.Sc. (N) II year** student, College of Nursing, Madras Medical College, Chennai – 03 has been edited and validated for English language appropriateness.

Place:

Date: 28.6.19

Signature:

Name: DR. J. EBENEZER
                    Headmaster
          Voorhees Higher Secondary School,
Designation: Vellore - 632 001.

Place:

INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003

CERTIFICATE OF APPROVAL

To
M Rathi,
M.Sc. Nursing I Year,
College of Nursing,
Madras Medical College,
Chennai 600 003.

Dear M Rathi,

The Institutional Ethics Committee has considered your request and approved your study titled **"A STUDY TO EVALUATE THE EFFECTIVENESS OF FOCUSED TEACHING PROGRAMME ON KNOWLEDGE REGARDING HOME CARE MANAGEMENT AMONG PATIENTS UNDERGONE HEART VALVE REPLACEMENT IN CARDIO THORACIC SURGERY POST-OPERATIVE WARDS, RAJIV GANDHI GOVERNMENT GENERAL HOSPITAL, CHENNAI – 03."** - **NO.37072018.**

The following members of Ethics Committee were present in the meeting hold on **24.07.2018**   conducted at Madras Medical College, Chennai 3

1. Prof.P.V.Jayashankar   :Chairperson
2. Prof.R.Jayanthi,MD.,FRCP(Glasg) Dean,MMC,Ch-3   : Deputy Chairperson
3. Prof.Sudha Seshayyan,MD., Vice Principal,MMC,Ch-3   : Member Secretary
4. Prof.N.Gopalakrishnan,MD,Director,Inst.of Nephrology,MMC,Ch   : Member
5. Prof.S.Mayilvahanan,MD,Director,Inst. of Int.Med,MMC, Ch-3   : Member
6. Prof.A.Pandiya Raj,Director, Inst. of Gen.Surgery,MMC   : Member
7. Prof.Shanthy Gunasingh, Director, Inst.of Social Obstetrics,KGH   : Member
8. Prof.Rema Chandramohan,Prof.of Paediatrics,ICH,Chennai   : Member
9. Prof. Susila, Director, Inst. of Pharmacology,MMC,Ch-3   : Member
10. Prof.K.Ramadevi,MD., Director, Inst. of Bio-Chemistry,MMC,Ch-3   : Member
11. Prof.Bharathi Vidya Jayanthi,Director, Inst. of Pathology,MMC,Ch-3: Member
12. Thiru S.Govindasamy, BA.,BL,High Court,Chennai   : Lawyer
13. Tmt.Arnold Saulina, MA.,MSW.,   :Social Scientist
14. Thiru K.Ranjith, Ch- 91   : Lay Person

We approve the proposal to be conducted in its presented form.

The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary – Ethics Committee

செவிலியர் கல்லூரி
சென்னை மருத்துவக்கல்லூரி, சென்னை-600003.

இதய வால்வு மாற்று அறுவை சிகிச்சைக்கு பின்பு வீட்டில் பின்பற்ற வேண்டிய சுகாதார நடைமுறைகள்
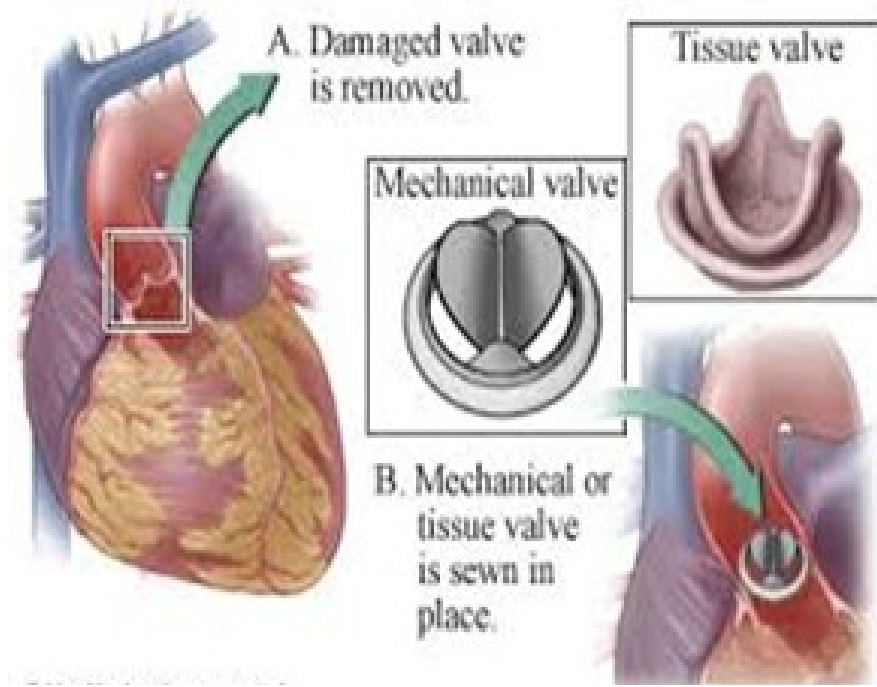
மா.ரதி
இரண்டாம் ஆண்டு முதுநிலை செவிலிய மாணவி

செவிலியர் கல்லூரி, சென்னை மருத்துவக் கல்லூரி,

சென்னை–600 003.

உணவு முறைகள்

- தினமும் சரிவிகித உணவு நிறைந்த உணவுகள் உட்கொள்ள வேண்டும்.

- கொழுப்பு நிறைந்த உணவு வகைகளை தவிர்த்திட வேண்டும்.

- வெள்ளைப்பூண்டு மற்றும் இஞ்சியை உணவில் சேர்த்துக்கொள்ள வேண்டும்.

- உப்பு சேர்த்து எண்ணெயில் பொரிக்கப்பட்ட மற்றும் வறுக்கப்பட்ட உணவுகளை தவிர்க்க வேண்டும்.

- இரத்தம் உறைதலை ஏற்படுத்தக்கூடிய பச்சை கீரை மற்றும் காய்கறிகளை தவிர்க்க வேண்டும்.

| முட்டைகோஸ் | காளிபிளவர் | பச்சை கீரைகள் |

| மசாலா | கடல் மீன் | கொழுப்பு உணவு | பொரித்த உணவு |

ஓய்வு மற்றும் உடற்பயிற்சி

- அறுவை சிகிச்சைக்கு பின்பு 3 முதல் 6 மாதங்கள் வரை ஓய்வு எடுக்க வேண்டும்.

- முதல் 3 மாதங்களுக்கு பளு தூக்க கூடாது.

- கடினமான பயிற்சி, பூப்பந்தாட்டம் போன்றவை விளையாடக்கூடாது.

- குப்புற மற்றும் பக்கவாட்டில் படுப்பதை தவிர்க்க வேண்டும்.

Upright

Back

Right Side

காய சிகிச்சை

- தினமும் சோப்பு போட்டு குளிக்க வேண்டும்.

- சுத்தமான ஆடைகளை அணிய வேண்டும்.

- காயத்தின் மீது பரிந்துரைக்கப்பட்ட மருந்துகள் தடவலாம்.

- காயத்தின் மீது பவுடர் மற்றும் எண்ணெய் தடவக்கூடாது.

- கூர்மையான பொருட்கள் நகம் கொண்டு காயத்தில் கீறல் ஏற்படுத்தக் கூடாது.

- காயத்திலிருந்து தண்ணீர் மற்றும் சீழ் போன்றவை காணப்பட்டால் மருத்துவரிடம் காண்பிக்க வேண்டும்.

மருந்துகள் உட்கொள்ளுதல்

- இருதய துடிப்பை அதிகரிக்க கூடிய மாத்திரைகள் கட்டாயமாக சாப்பிட வேண்டும்.

- இரத்தம் உறையாமைக்குரிய மாத்திரைகளை சரியான நேரத்தில் (தினமும் மாலை 6 மணிக்கு)உட்கொள்ள வேண்டும்.

- ஒவ்வொரு நாளும் சரியான நேரத்தை குறித்துக்கொள்ள வேண்டும்.

- இரத்தம உறையாமை கண்டுபிடிப்பதற்கு உரிய பரிசோதனையை மருத்துவரின் பரிந்துரைப்படி செய்ய வேண்டும்.

- சரியான அளவான மருந்து மாத்திரைகளை உட்கொள்ள வேண்டும். அளவுகளை மாற்றக் கூடாது.

கவனிக்க வேண்டியவை

- மருத்துவரின் அறிவுரையின்றி மருந்துகளை நிறுத்தக்கூடாது.

- மற்றவர்களுக்கு மருந்து சீட்டினை பகிரக்கூடாது.

எச்சரிக்கை அறிகுறிகள்

கீழ்கண்ட அறிகுறிகள் தென்பட்டால் கண்டிப்பாக மருத்துவரை அணுக வேண்டும்.

- குளிர் மற்றும் நடுக்கத்துடன் கூடிய காய்ச்சல்.

- கடுமையான தலைவலி, மூச்சு விடுவதில் சிரமம்.

- நெஞ்சுவலி, படபடப்பு

- அதிகமான இரத்தப்போக்கு, சிறுநீர் மற்றும் மலத்துடன் இரத்தம் வெளியேறுதல்

- பல் மற்றும் ஈறுகளிலிருந்து இரத்தம் வடிதல்

- கணுக்கால்களில் வீக்கம்.

- இதயத் துடிப்பு சரிவர கேளாமை

முன்னெச்சரிக்கை மருத்துவ வழிமுறைகள்

இரத்தம் உறையாமை மருந்து எடுத்துக் கொள்ளுவதை கீழ்கண்ட மருத்துவ சிகிச்சையின் போது மருத்துவரிடம் தெரிவிக்க வேண்டும்.

- பல் எடுத்தலின்போது

- பல் சம்பந்தப்பட்ட சிகிச்சையின் போது

- நுரையீரல் நோய் தொற்று ஏற்படும்போது

- சிறுநாக்கு அறுவை சிகிச்சையின் போது

- காயத்தொற்று ஏற்பட்டால்

- சிறுநீரக தொற்று ஏற்படும்போது

- ஏதேனும் அறுவை சிகிச்சையின் போது

- சதை ஊசி போட்டுக்கொள்வதை தவிர்க்க வேண்டும்

சிறு நாக்கு அறுவை சிகிச்சையின் போது
சிறுநிரக நோய் தொற்று