

DISSERTATION ON

**A STUDY TO ASSESS THE EFFECTIVENESS OF
COMMUNITY BASED HEALTH INTERVENTION ON
MANAGEMENT OF HYPERTENSION AMONG
PATIENTS WITH HYPERTENSION ATTENDING
PRIMARY HEALTH CENTER, CHENNAI.**

**M.Sc (NURSING) DEGREE EXAMINATION
BRANCH – IV COMMUNITY HEALTH NURSING**

**COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE, CHENNAI – 600 003**



A dissertation submitted to
**THE TAMIL NADU DR.M.G.R.MEDICAL UNIVERSITY,
CHENNAI – 600 032**

In partial fulfilment of the requirement for the award of degree of
MASTER OF SCIENCE IN NURSING

OCTOBER 2020

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CHENNAI – 600 032.**

CERTIFICATE

This is to certify that this dissertation titled, “**A STUDY TO ASSESS THE EFFECTIVENESS OF COMMUNITY BASED HEALTH INTERVENTION ON MANAGEMENT OF HYPERTENSION AMONG PATIENTS WITH HYPERTENSION ATTENDING PRIMARY HEALTH CENTER, CHENNAI**” is a bonafide work done by **Ms.A.Vinodha**, M.Sc (Nursing) 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 fulfilment of the requirement for the award of the degree of Master of Science in Nursing Branch – IV, Community Health Nursing under our guidance and supervision during academic year 2018-2020

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– Renée Paula

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ABSTRACT

Hypertension is an “iceberg disease”. The submerged portion of the iceberg represents the hidden mass of the disease while floating tip denotes the clinical signs and it became evident that only half of the hypertensive subjects in the general population of most developed countries were not aware of the condition this was the situation in developed countries with highly developed medical services, in the developing countries, the proportion treated would be far too less. Guidelines by the National Heart Foundation of Australia recommend that doctors caring for patients with hypertension should routinely provide advice on smoking, nutrition, alcohol use, physical activity and body weight. Lifestyle modification is indicated for all patients with hypertension, regardless of drug therapy, because it may reduce or even abolish the need for antihypertensive drugs. If we are not practicing a healthy life style practices the condition will be worsen

TITLE

A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary health Center, Chennai.

OBJECTIVES

To assess the pretest level of life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group, To evaluate the effectiveness of community based health intervention on life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group, To compare the pretest and post-test level of lifestyle modification, quality of life and drug compliance among hypertensive patients in experimental and control group and To find out the

association between post-test level of life style modification ,quality of life and drug compliance and their selected socio-demographic variables

METHODOLOGY

The study was conducted with 60 samples [hypertension patients] in quantitative approach. Quasi experimental non randomized control group design, sample selection was done by purposive sampling technique method. Pre-existing knowledge was assessed by using semi structured questionnaires. After the pre-test, community based health intervention was given regarding management of hypertension among hypertension patients. After 7 days post test was conducted by using tool.

RESULTS

The finding of the study revealed that community based health intervention had improved the knowledge regarding management of hypertension with paired t test, $p < 0.001$. There is statistically significance in knowledge attainment on regarding management of hypertension show effectiveness of community based health intervention.

CONCLUSION

The result of study shows that community based health intervention was effective in improving knowledge regarding management of hypertension.

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LIST OF ABBREVIATION

S.NO	ABBREVIATION	EXPANSION
1	CI	Confidence interval
2	DF	Degree of freedom
3	Fig	Figure
4	H1 and H2	Research hypothesis
5	SD	Standard Deviation
6	P&S	Significance
7	X ²	Chi square test
8	CMO	City Medical Officer
9	DASH	Dietary approaches to stop hypertension
10	WHO	World health organization
11	SBP	Systolic blood pressure
12	DBP	Diastolic blood pressure
13	NS	Non-significant

CHAPTER-I

INTRODUCTION

“Your life style, how you eat, emote, and think determines your health. To prevent disease you may have to change how to live.”

– Brian Carter

Health is a level of functional or metabolic efficiency of a living being in humans, that leads to free from illness injury or pain. Health is a state of complete physical mental and social wellbeing and not merely the absence of disease or infirmity (1946) .The cardiovascular system play a major role in delivery of blood which carries oxygen and nutrient to the tissues of the body the most cardio vascular deaths are due to Atherosclerosis/ hypertension it can more occur in lower socio economic status and developing countries.

Hypertension is one of the leading causes of death and disability among adults. Most of the health problems are preventable or controllable if it is anticipated or recognized and treated correctly. Hypertension risk factors can be modified through reduction of weight, exercise, behavioural changes like reducing the smoking, stress, modification of personal life style, yoga, health education regarding hypertension, self-care by participating in the healthwelfare programme, dietary modification by avoiding fatty food, restrict salt. Improving physical activity by doing exercise and yoga. Stress can raise blood pressure on a short term basis and has been implicated in the development of hypertension. Relaxation therapy, guided imagery and biofeedback maybe useful in helping patients manage stress, thus decreasing blood pressure

Lifestyle modification has a major impact on prevention of hypertension Most of the people are not aware that they have high blood

pressure because of lack of symptoms. Symptoms of hypertension may be mild and vague. The most common symptoms are headache, morning headache tinnitus- ringing or buzzing in ears, dizziness and confusion. Most of the symptoms occur from complication of hypertension like fatigue, shortness of breath, convulsion, and changes in vision, nausea, vomiting, anxiety, increased sweating and nose bleed. Most symptoms occur from complications of hypertension like fatigue, shortness of breath, convulsion, changes in vision, nausea, vomiting, anxiety, increased sweating, nose bleeds, heart palpitations.

A critical step in preventing and treating high blood pressure is healthy lifestyle. Lifestyle modifications that effectively lower blood pressure are losing weight if patients are overweight or obese. Losing as few as 10 pounds (4.5 Kg) can lower blood pressure. For people who are obese or who have diabetes or high cholesterol levels, changes in the diet (to fruits, vegetables and low fat diet) are important for reducing risk factors of heart and blood pressure. Hypertension induced diseases can result in difficulties with even minimal physical exertion. The patient may feel unusually tired after even a short walk. Excessive perspiration may also be a sign of cardiac damage. This is quite serious and anyone in this condition needs urgent medical attention. The eyes can also be affected by hypertension. It can result in lesions in eyes which can possibly lead to loss of vision; alcohol consumption is strongly associated with hypertension. Consumption of 3 or more alcoholic drinks daily is also a risk factor for heart disease and stroke. Men should limit their intake of alcohol to less to avoid the risk for hypertension. High blood pressure people should follow lifestyle modifications, such as eating a healthier diet, quitting smoking, and getting more exercise. Treatment with medication is recommended to lower blood pressure to less than 140/90 mm Hg.

Eating a healthy diet, including the DASH (Dietary Approaches to Stop Hypertension) diet involves eating several servings of fish each week, eating plenty of fruits and vegetables, increasing fibre intake, drinking a lot of water. The DASH diet significantly lower blood pressure. Patient awareness is important in its early stages, treatment of patients during the asymptomatic phase will help the people to identify and avoid risk factors. The nurse with her knowledge and skills can meet the needs of hypertensive patients and able to fulfil the needs of other to accept healthy life style. With so many possible complications of hypertension, it is a crucial step for a person to controlling it. Most of the studies emphasize the need of formal education regarding diet and lifestyle changes, including regular exercises, stress management.

BACKGROUND OF THE STUDY

Prevention is Better Than Cure

Hypertension is a serious public health concern. more than one quarter of the adult population over the world has hypertension targeted intervention is essential for control blood pressure it is important to improve the health related quality of life and increase the adherence to anti-hypertensive medications Hypertension is one of the most crucial health problem and the most common chronic disease in developed and underdeveloped countries prevention plays significant role in controlling this disease which by increasing the knowledge and awareness of the public and their attitude and practice .

The prevalence of hypertension was 59.9 and 69.9 per 1000, in males and females respectively in urban population and 35.5 and 35.9 per 1000 in males and females respectively in rural population. Older age it is one of the risk factor for cerebrovascular mortality which accounts for 20-50% of all deaths ,its prevalence has increased by about 30 times among urban dwellers and about 10 times the rural inhabitants.

Hypertension prevalence among urban peoples ranging from 1.24% in 1949 to 36.4% in 2003 and for rural people from 1.99% in 1958 to 21.2% in 1994. As mentioned above the rural areas in India are in a translational phase this increases the risk of condition like hypertension in rural areas, even today there is scarcity of studies in rural areas in India. They were unaware about predisposing factors, diet, exercise, stress reduction, medication etc. It is a major step to teach hypertension.

Recent studies recommended life style modification that decreases blood pressure levels. Weight control, exercise, healthy diet, limiting alcohol use & other life style modification help to manage high blood pressure (centre for disease control & prevention, 2006). The nurse plays an important role in teaching the patient with hypertension since without any life style changes hypertension cannot be treated. To lower the risk of hypertension, modification of life style or Behaviour is necessary. The nurse should provide on-going education and reinforcement while monitoring the patients progress and compliance with treatment regimen. The nursing care for the patient with hypertension is critically important.

NEED FOR THE STUDY

In the modern world 26.4% of adult in the world and 26.6% in India is suffering from hypertension. The world Health Organization (WHO) report that the number of people with hypertension worldwide is estimated at 600 million, of whom 3 million will die annually as a result of hypertension. Internationally, approximately 8- 10% of deaths in Western Europe result from intra cerebral hematomas

The prevalence of hypertension was 59.9% and 69.9% per 1000 population in males and females respectively in urban population, and 35.5% and 35.9% per 1000 in males and females respectively in the

rural population. Therefore change in life style pattern, diet and stress; increased population and shrinking employment have been implicated.

Recommendations were given by the National health research center for hypertension regarding regular physical activity (brisk walking at least 30 minutes a day, several days a week). Moderately intense activity such as walking, jogging and swimming can lower blood pressure, promote relaxation and decrease or control body weight. Sedentary life style should be advised to increase activity level gradually. The lower prevalence hypertension in some communities indicates that hypertension is potentially preventable. Although control of hypertension can be successfully achieved by medication that is, secondary prevention. The ultimate goal in general is primary prevention. By primary prevention is meant all the measures to reduce the incidence of disease in a population by reducing the rate of onset.. WHO has recommended primary prevention of hypertension by using, population strategy and high risk strategy.

Preventive measures should be encouraged regular checking of blood pressure modification of lifestyle and dietary habits and recommendation directed at the food industry. These preventive measures should help reduce the incidence of disease. Organization of patients and physician education programmes may improve hypertension controls and prevent its complication. WHO stated that hypertension or high blood pressure affects at least 1 billion people worldwide. In addition hypertension precedes heart failure in 90% of cases and majority of heart failure in the elderly may be attributable to hypertension.

Out of three adults in south Asia region is affected by high blood pressure it is the leading risk of mortality at least 1.5 million lives every year in the region . high blood pressure is increasingly in the region due

to rapid urbanization and globalization leading to adoption of unhealthy life style practices American society of hypertension stated that having high blood pressure and about half of them remained undetected during who survey the number of hypertension in India was expected to nearby double them from 118 million in 2000 to 213 million by 2015A study published in the international journal of public health reported 21.4 percent hypertension prevalence in about 10,500 people in 11 villages in Tamilnadu state about 71% of people had hypertension in 2016.

As a research persons we should insist about the life style modification such as Regular intake of Anti-Hypertensive medication,weight monitoring,Dietary approaches,avoidance of alcohol consumptionRegular physical activity,Avoidance of tobacco chewing and smokingManagement of psychosocial risk factors Proper Exercise. We create the awareness regarding public in order to reduce the occurrence of hypertension by managing the risk factors.

1.2 STATEMENT OF THE PROBLEM

“A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary Health Center, Chennai.”

1.3 OBJECTIVES OF THE STUDY

- ❖ To assess the pretest level of life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group
- ❖ To evaluate the effectiveness of community based health intervention on life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group

- ❖ To compare the pretest and post-test level of lifestyle modification ,quality of life and drug compliance among hypertensive patients in experimental and control group
- ❖ To find out the association between post-test level of life style modification ,quality of life and drug compliance and their selected socio-demographic variables

OPERATIONAL DEFINITIONS

Effectiveness

It is the capability of producing desired result towards management of hypertension

Assess

It is the ability to evaluate the life style modification, quality of life, drug compliance on management of hypertension

Community Based Health Intervention

It is one of the approaches to deliver home based positive healthy behaviour via mass media methods it includes improvement of life style modification, quality of life, drug compliance regarding the management of hypertension by using questionnaire and standardized scales

HYPERTENSION

It refers to individuals who are diagnosed as elevated blood pressure more than 120/80 mm hg

RESEARCH HYPOTHESIS

H₁ There will be a significant difference between pretest and posttest level of lifestyle modification, quality of life and drug compliance among hypertensive patients

H₂ There will be significant association between posttest level of life style modification ,quality of life and drug compliance and their selected demographic variables

1.6 ASSUMPTIONS

Patient with hypertension not aware regarding management of hypertension

The community based intervention enhance the knowledge regarding management of hypertension

Patient have some knowledge about management of hypertension

1.7 DELIMITATIONS

The study is limited in to only those who attending primary health center

The participant size is limited to 60 hypertensive clients

1.8 CONCEPTUAL FRAMEWORK

The conceptual framework plays several interrelated roles in the progress of science. Their overall purpose is to make scientific findings meaningful and generalize them. A conceptual framework deals with abstractions that are assembled by virtue of relevance to a common phenomenon. This study is intended to assess the effectiveness of community based health intervention on management of hypertension among hypertension patients attending primary health center. The conceptual framework of the present study is based on General System`s Theory which was introduced by Ludwig Von Bertalanffy (1968) with input, process, output and feedback model According to System`s Theory, a system is a group of elements that interact with one another in order to achieve the goal. An individual is a system because he/she receives input from the environment. This input when processed provides an output. This system is cyclical in nature and continues to be

so, as long as the input, process, output and feedback keep interacting. If there are changes in any of the parts, there will be changes in all the parts. Feedback from within the systems or from the environment provides information, which helps the system to determine whether it meets its goal. In the present study these concepts can be explained as follows.

INPUT

The input consists of information, material or energy that enters the system. Hypertensive patient is a system and has inputs within the system itself and acquired from the environment. The inputs include learner's background like age, sex, dietary pattern, education, occupation, income, drug intake ,life style modification and duration of hypertension which may influence the knowledge of hypertensive patients regarding management of hypertension .It refers to the action needed to accomplish the derived task to achieve the desired output that is effectiveness of community based health intervention

PROCESS OR THROUGH PUT

- 1) Assessment of level of knowledge among hypertensive patients regarding Life style modification, quality of life and drug compliance using structured questionnaires.
- 2) Conducting health education on management of hypertension and frequent reinforcement for modify the life style to improve quality of life and reduce drug compliance
- 3) Assessment of post-test level by using same structured questionnaires.

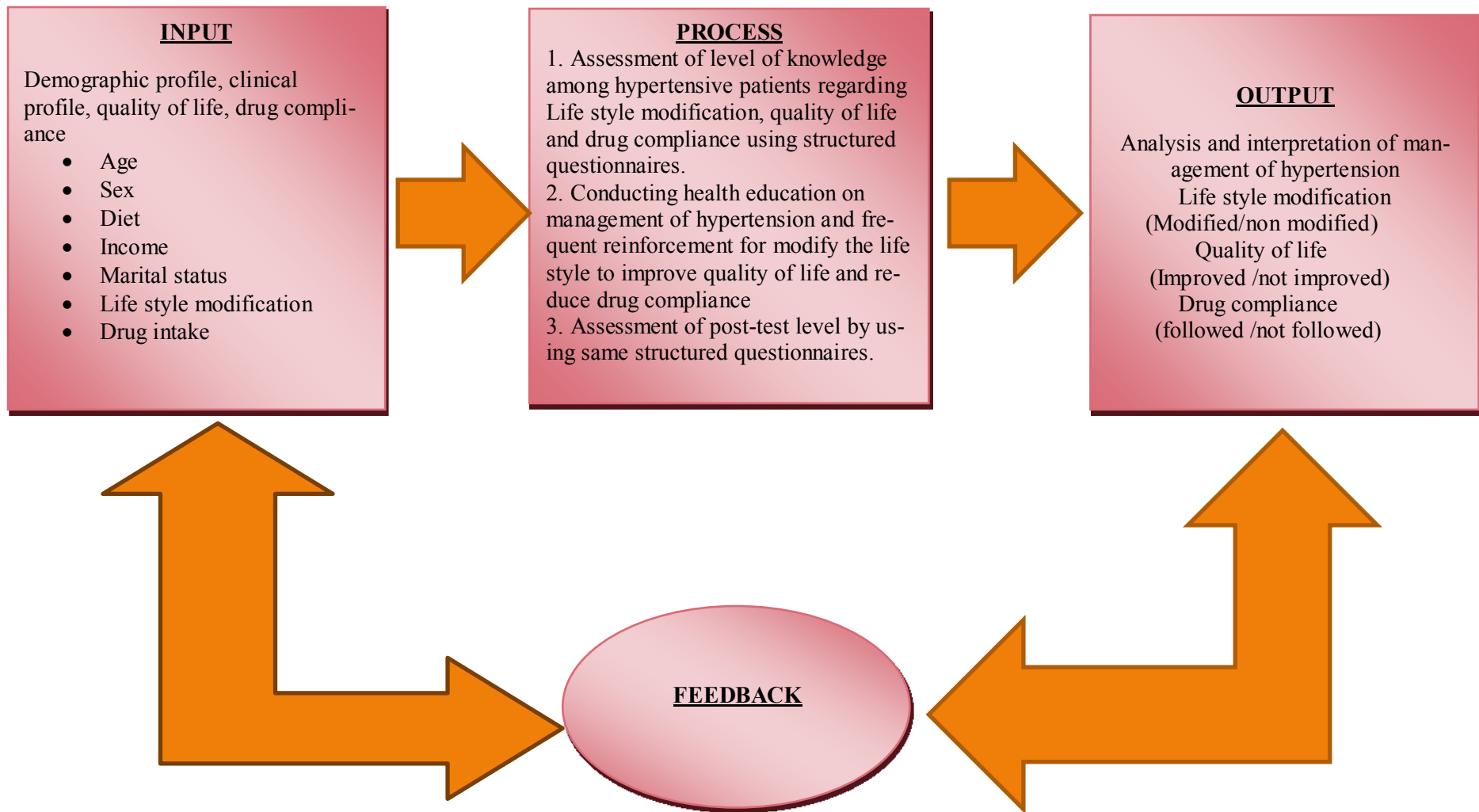
OUTPUT

Output is the behavioural response. Output response becomes feed back to the system and environment. In the present study, output is the

gain in knowledge and practice scores. This is achieved through a comparison between mean pre-test and post-test knowledge scores of the subjects.

FEEDBACK

It is the process that provides information about the system's output and its redirection to input. Accordingly the higher knowledge score obtained by the hypertensive patients indicates the effectiveness of community based health intervention in enhancing the knowledge on life style modification (management of hypertension) According to Ludwig Von Bertalanffy the system acts as a whole. Dysfunction of a part causes system disturbances rather than loss of a single function. Whole system can be resolved into an aggregation of feedback circuits such as input, throughput and output. The feedback circuits help in the maintenance and improvement of an intact system. In this study, effectiveness of community based health intervention is tested by interrelated elements such as input, throughput and output. From the feedback efficiency of the input, such as community based health intervention on management of hypertension, will be assessed. The process of teaching as throughput will be assessed in terms of its effectiveness.



Conceptual framework based on General System Theory by Von Bertalanffy (1968)

CHAPTER-II

REVIEW OF LITERATURE

This chapter deal with review of literature related to hypertension prevalence and its management

2.1. REVIEW OF LITERATURE RELATED TO STUDY

Review of literature is a summary of the study conducted previously study topic. The review of literature is defined as a broad, comprehensive in depth, systematic and critical review of scholarly publication, unpublished scholarly print materials, audio-visual materials and personal communication.

IN THIS STUDY, REVIEW OF LITERATURE WERE CLASSIFIED

2.1.1 Literature related to prevalence and risk factors of hypertension

2.1.2 Literature related to effectiveness of community based health intervention regarding management of hypertension

2.1.3 Literature related to management of hypertension it includes life style modification, quality of life and drug compliance regarding hypertension

2.1.1 LITERATURE RELATED TO PREVALENCE AND RISK FACTORS OF HYPERTENSION

Mujibarrah Man, et al., (2018) was conducted a survey to assess prevalence and risk factors for hypertension and pre-hypertension among adults in Bangladesh. Data for this analysis were collected during the national NCD Risk Factor Survey of Bangladesh conducted in 2010 from a representative sample of men and women, aged 25 years or above. The survey adopted a multistage, geographically clustered,

probability-based sampling approach. WHO STEPS questionnaire was used to collect data on demographics, behavioural risk factors, and physical measurements. Overall, 20% of the study population were hypertensive at study measurement. The prevalence of hypertension increased with age and body mass index (BMI). Twelve percent of the population we estimate that 1 out of 5 Bangladeshi adults have hypertension.

Nohnbui van, et al., (2018) carried out a cross-sectional study in two communes in Chiem Hoa district, Tuyen Quang province, between June and November 2017. All subjects at the age of 18 years and over currently living in two communes. The usage of the descriptive statistics was to characterize the HTN prevalence. We used the univariate and multivariate models of logistic regression to determine the prevalence and related factors of HTN. There were 319 people with overall HTN in the total of 675 hypertension patients. Among people with HTN, there were 101 ones with isolated systolic hypertension (ISH). The proportion of HTN among the Tay ethnic group was 47.6%.

Maryam eghbali ,et al., (2018) Was conducted a cross-sectional study was conducted among 2,107 residents of Isfahan, Iran. Samples were selected through multi-stage random cluster sampling in 2015-2016. The outcome was determined by measuring blood pressure in the right arm via a digital arm blood pressure monitor. Awareness, treatment, and control of HTN were assessed by a validated and reliable researcher-developed questionnaire. The overall prevalence of HTN was 17.3% (18.9 and 15.5% in men and women, respectively). The prevalence of HTN increased in both genders with age. The prevalence of awareness of HTN among people with HTN was 69.2%, of whom 92.4 and 59.9% were taking medication for HTN and had controlled HTN, respectively.

Yang shen and chunchang ,et al.,(2017) A cross-sectional survey was performed in an occupational sample of 4198 employees aged 20-59 years on Qinghai-Tibet Plateau between May to July 2013. Information from a self-administered questionnaire, physical examinations and laboratory measurements were obtained from each participant. Multivariable analysis was performed to determine the total crude prevalence of hypertension and prehypertension was 28.1 and 41.5%, respectively; the overall standardized prevalence of hypertension and prehypertension was 26.7 and 41.3%, respectively. Among the hypertensive, 36.5% were aware of their condition, 19.4% were being treated and 6.2% had their blood pressure (BP) controlled; among the treated hypertensive, 31.9% had their BP under control.

SubashiniN ,et al., (2017) conducted a cross sectional study to assess the level of knowledge regarding prevention of hypertension among adults. To find out association between the level of knowledge and socio demographic variables of adults. Cross Sectional descriptive design was used and study conducted in NMCH at Nellore. Andhra Pradesh state (India) and data was collected from 50 adults by using non probability convenience sampling technique for 4 weeks. The study findings revealed that, 26% had inadequate knowledge 64% had Average knowledge and remains 10% had adequate knowledge regarding preventive aspects of hypertension. There was an association between the education and level of knowledge with the chi square value of 26.91, and significant at $P < 0.05$.

Rananpreet Randhawa, Jaspreetkaur, ShardaSidhu (2017) conducted prospective study to review the prevalence of hypertension in various urban and rural populations of India. 88 cross-sectional studies which defined hypertension as an average blood pressure $\geq 140/90$ mm Hg have been reviewed with sample size varied from 200–1,67,331 subject. The present review has highlighted high prevalence of

hypertension in India. The prevalence of hypertension is higher in urban populations of India compared to rural populations but the prevalence of hypertension in rural populations is steadily increasing and approaching to the trends as in urban populations. Therefore, accurate estimates of prevalence of hypertension are necessary which can help in shaping the preventive programmes and management strategies for the hypertension in both urban and rural populations.

Jiapeng and yuvanlu ,et.al.,(2017) was conducted a descriptive study on Prevalence, awareness, treatment, and control of hypertension in China Hypertension is common in China We assessed awareness, treatment, and control in 264 475 population subgroups-defined a priori by all possible combinations of 11 demographic and clinical factors The sample contained 1 738 886 hypertension patients with a mean age of 55.6 years (SD 9.7), 59.5% of whom were women. 44.7% (95% CI 44.6-44.8) of the sample had hypertension, of whom 44.7% (44.6-44.8) were aware of their diagnosis, 30.1% (30.0-30.2) were taking prescribed antihypertensive medications, and 7.2% (7.1-7.2) had achieved control. The age-standardized and sex-standardized rates of hypertension prevalence, awareness, treatment, and control were 37.2% (37.1-37.3), 36.0% (35.8-36.2), 22.9% (22.7-23.0), and 5.7% (5.6-5.7), respectively.

Susan A Oliveria,Roland S Chen, Bruce D McCarthy (2016) was conducted a descriptive study to assess HTN knowledge, awareness, and attitudes, especially related to SBP in a hypertensive population. we identified patient with hypertension (N=2264) in the primary care setting. We randomly selected 1250 patients and ,after excluding ineligible patients, report the result on 826 completed patient telephone interviews(72% response rate).Ninety percent of hypertension patient knew that lowering blood pressure would improve health and 91% reported that a health care provider had told them that they have HTN or high BP.

R.Gupta, (2016) was conducted epidemiological study on convergence in urban-rural prevalence of hypertension in India. Hypertension has emerged as important public health problem in India. During the later half of the last century, epidemiological studies in India reported that hypertension. This urban-rural convergence of hypertension in India is due to rapid urbanization of rural populations with consequent changes in lifestyles (sedentariness, high dietary salt, sugar and fat intake) and increase in overweight and obesity. Hypertension prevention, screening and control, policies and programs, need to be widely implemented in India, especially in rural populations.

Ong.HT, et al.,(2015) conducted a descriptive study to determine the prevalence, awareness and control of hypertension in this elderly community in Penang, Malaysia. Prevalence of hypertension was 36% with 81% of adults being initially aware of this diagnosis. Similarly, the high hypertension awareness rate compared to reported figures in the community may be because residents are more regularly monitored by the attending medical care-givers. At the beginning of the study, only 34% of hypertensive adult were well controlled with a blood pressure less than 140/90 mm Hg. This proportion rose to 53% at the end of study by their care-givers and cost is absorbed in this charitable organization. This study suggests that hypertension awareness and control can be reasonable for the elderly in a residential home.

2.1.2 LITERATURE RELATED TO EFFECTIVENESS OF COMMUNITY BASED HEALTH INTERVENTION REGARDING MANAGEMENT OF HYPERTENSION

Kim JK ,et al .,(2020) was conducted a quasi experimental study on Effectiveness of a comprehensive blood pressure control program in primary health care. To assess the effectiveness of a comprehensive blood pressure (BP) control program. A prospective before-and-after study design was applied to 1 271 hypertension patients with hypertension or

pre-hypertension. The intervention was implemented for 2 years, from May 2015 - April 2017, in three health centres in Lima (2 in Comas and 1 in Callao). Lifestyle behaviours, such as weight and blood pressure monitoring, reduced salt consumption, increased fruit and vegetable consumption, and stress control improved during the intervention ($P < 0.001$).

Jafar TH, Gandhi M, de Silva HA., (2020) was conducted a cross sectional study on Community-Based Intervention for Managing Hypertension in Rural South Asia .A total of 30 communities were randomly assigned to a multicomponent intervention or usual care The intervention comprised home visits conducted by trained government community health workers who monitored blood pressure (BP) and counselled patients regarding BP management. BP was measured in the home every 3 months. 7 mm Hg in the intervention group and 144.7 mm Hg in the control group. At 24 months, the mean SBP was reduced by 9.0 mm Hg in the intervention group and by 3.9 mm Hg in the control group; the mean reduction was 5.2 mm Hg greater with the intervention (95% confidence interval [CI], 3.2-7.1; $p < 0.001$).

Benedict Jerome D colano Mary jane B cacal, (2019) quasi experimental study was conducted to determine the effectiveness of a community-based health programme a total of 50 community-dwelling adults with hypertension participated in the programme which included blood pressure monitoring, targeted health educations, motivational interviews, individualized lifestyle modification plans and house-to-house visits. Knowledge, adherence and blood pressure were assessed at the start and at the end of the 2-month programme.. Although knowledge scores were significantly higher after the programme, it only accounted 9% of the improvement.

Yang li and jingxioqing, et al., (2019) conducted cross sectional study on comprehensive intensive intervention for hypertension patients working in universities or colleges. From July 2015 to March in 2016, 220 hypertension subjects were recruited, with 165 cases in intensive intervention group and 55 in standard intervention group. After 24 months of intervention, 208 ones including of 157 in intensive intervention group and 51 in standard intervention group were included in the final analysis.. After 2 years, compared with the standard intervention group, SBP/DBP in the intensive intervention group decreased by 3.7/4 mmHg and BP control rate increased by 8.9%, and the unhealthy behaviours and life quality including tension and pressure were also improved in the intensive intervention group

Arlindasariwahyuni, et al., (2019) was conducted descriptive study The prevalence of prehypertension in the world reaches 20-25% with a figure that is still high in Indonesia (48.4%)..This study aims to determine the difference of effect between health promotion using media slides presentation and with video in increasing knowledge and attitude regarding the prevention of hypertension in patients .Distribution level of the knowledge of respondents before the intervention (Pretest) and after the intervention (Posttest) is (9.8, 2.68 vs 13.2, 1.58). Distribution of the pretest vs. respondent's attitude level. Posttest is (29.7, 2.76 vs 33.2, 3.52). Based on the comparison of effectiveness between video and slide presentation, the significance value of knowledge was 0.072, and the significance value of attitude was 0.000.

Thitipongtankumpuan and Sakuntalaanurang ,et al., (2019) was conducted a observational study sought to assess the effect of a community-based intervention influencing adherence status at baseline, 1, 3 and 6 months, and to evaluate the impact that a community-based intervention and socio-economic factors have on adherence. A sample of 156 hypertension patients was allocated into the intervention The

intervention group received the 4-week community-based intervention programme. Patients who received the intervention had significantly lower adherence scores (reflecting a higher level of adherence) at 3 and 6 months after intervention by 1.66 and 1.45 times, respectively, when adjusting for other variables. After 6 months, the intervention was associated with a significant improvement in adherence when adjusting for other variables.

Kang juson, (2019) was conducted a cross sectional study on A Community-Based Intervention for Improving Medication Adherence for Elderly Patients with Hypertension. This study applied a non-equivalent control group design using the Korean National Health Insurance Big Data. This study involved a cohort of patients with hypertension aged >65 and <85 years, among residents who lived in the study area for five years (between 2010 and 2014). The final number of subjects was 2685 in both the intervention and control region. The intervention program encouraged elderly patients with hypertension to receive continuous care. Another research is needed to determine whether further improvement in the continuity of comprehensive care will prevent the progression of cardiovascular diseases.

Lim SM, et al.,(2018) was conducted a descriptive study on Evaluation of Community-based Hypertension Control Programme .This study was conducted to provide an overview of the community-based hypertension and diabetes control programme of 19 cities in Korea and to evaluate its effectiveness in controlling hypertension at the community level. In this longitudinal observational study, we analyzed the data of 117,264 hypertensive patients aged ≥ 65 years old from the time of their first enrolment in July 2012 to October 2013 (up to their 2-year follow-up).The hypertension control rate of 72.5% at the time of enrolment increased to 81.3% and 82.4% at 1 and 2 years after enrolment. Despite its simplicity, the programme was evaluated as a

successful attempt to control hypertension among patients aged >65 years at the community level.

Hyesenjung and Jong eun lee (2017) was conducted a quasi experimental study to examine the effect of an eHealth self-management (eHSM) intervention on elderly Korean persons who live alone in a community. Methods, and a total of 64 elderly persons (intervention n = 31, control n = 33) with hypertension (a systolic blood pressure measurement of ≥ 140 and/or a diastolic blood pressure ≥ 90 mm Hg) or taking anti-hypertensive medication participated. Hypertension patients in the intervention group showed greater improvement in self-efficacy, self-care behaviour, and social support than did hypertension patients in the control group 24 weeks post-intervention. The eHSM intervention should be expanded to include community-dwelling elderly persons with hypertension to improve the self-management of hypertension and control of blood pressure.

Chu Honglu, et al.,(2015) was conducted a clinical trial on Community-based interventions in hypertensive patients: a comparison of three health education strategies. This was a randomized, non-blinded. After the 2-y intervention, the proportion of subjects with normalized BP increased significantly in Group 2 (from 41.2% to 63.2%, $p < 0.001$), and increased more substantially in Group 3 (from 40.2% to 86.3%, $p < 0.001$), but did not change significantly in Group 1. Improvements in hypertension-related knowledge score, adherence to regular use of medications, appropriate salt intake and regular physical activity were progressively greater from group 1 to group 2 to group 3. Group 3 had the largest reductions in body mass index and serum LDL cholesterol levels. Interactive education workshops may be the most effective strategy in community-based health promotion education programs.

2.1.3 LITERATURE RELATED TO MANAGEMENT OF HYPERTENSION IT INCLUDES LIFE STYLE MODIFICATION, QUALITY OF LIFE AND DRUG COMPLIANCE REGARDING HYPERTENSION

Sajid mahmood, et al.,(2019) was conducted a descriptive Study on Non-pharmacological management of hypertension: in the light of current research Non-pharmacological interventions help reduce the daily dose of antihypertensive medication and delay the progression from prehypertension to hypertension stage. Non-pharmacological interventions include lifestyle modifications like dietary modifications, exercise, avoiding stress, and minimizing alcohol consumption.. However, 6-12-month lifestyle modifications can be attempted in stage-1 hypertensive patients without any cardiovascular complication, in the hope that they may be sufficiently effective to make it unnecessary to use medicines.

Samuel Kimani ,et al.,(2019) was conducted a cross-sectional study in Medical wards and outpatient clinic of a national referral hospital on Association of lifestyle modification and pharmacological adherence on blood pressure control among patients with hypertension at Kenyatta National Hospital, Kenya. Patients (n=229) diagnosed with primary hypertension for at least 6 months. Respondents on antihypertensive medication, those engaged in healthy lifestyle and took their prescribed medications had lower mean BPs than those on medication only (138/85 vs 140/90). Few respondents (30.8%) considered hypertension as preventable, mainly the single and highly educated ($p < 0.05$). Respondents (53.6%) believed they should stop taking their antihypertensive medication once hypertension is controlled.

Oluwatosin Mary Oyewole ,et al.,(2019) was conducted a quasi-experimental study on Effect of a Training Programme on Knowledge

and Practice of Lifestyle Modification among Hypertensive Patients. The result showed that the *t*-test of the pre-knowledge about hypertension among hypertensive patients differed significantly from post-knowledge after intervention ($t = 4.90, p = 0.001$). In addition, there is significant different between the pre and post knowledge level about lifestyle modification after intervention ($t = 3.62, p = 0.001$). Significant different was also observed between the pre and post-practice of lifestyle medication after intervention ($t = 3.56, p = 0.001$). The health care providers, especially the nurses, must provide a continuous and focused training programme for hypertensive patients in order to improve their knowledge and practice of lifestyle modification.

OA bolarinwa and M H jun, (2019) was conducted a quasi-experimental study on Mid-term impact of home-based follow-up care on health-related quality of life of hypertensive patients at a teaching hospital in Ilorin, Nigeria. A total of 149 and 150 patients were randomized to intervention and usual care (control) groups, respectively. A 12-month task-shifting (nurse-driven) HBFC intervention was administered to intervention group. The mid-term impact of intervention on Health Related Quality of Life was assessed after 6 months intervention. Data were analyzed with intention-to-treat principle. Significant levels were set at $P < 0.05$ and 95% confidence interval. The between-group treatment effect was not statistically significant ($P > 0.05$), whereas the within-group treatment effects were statistically significant for both the intervention and control arms ($P < 0.05$) at 6 months.

J Koffi And C.Konnin ,et al.,(2018) conducted a clinical trial to assess the effects of patient education as tool to improve the compliance in hypertensive patients. All the patients were followed and re-evaluated after 1 year. We included consecutive 1000 hypertensive patients (mean age 40 ± 20 years, 80 % male). Among these, 50 % have been treated by a

single therapy, 30 % by a fixed double therapy and 25 % by a fixed triple combined therapy. At the start of the study, a low compliance is observed in 60 % of patients, 25 % have minimal problems of observance and 15 % are compliant. In 70 %, the low compliance may be explained by misconceptions and is associated with a persistent hypertension. One year after the education program, the compliance is improved: non-compliant patients represent 5 % of the population, 10 % having slight problems on compliance and 85 % have a good compliance

Chenliwang, et al., (2017) was conducted a cross sectional study on effect of health literacy and self-management efficacy on the health-related quality of life of hypertensive patients in a western rural area of China. A structural equation model was constructed, and $p \leq 0.05$ was taken as significant. Demographic characteristics, health literacy and self-management efficacy have all significant effects on HRQL. Based on the model, health literacy ($r = 0.604$, $p = 0.029$) and Self-management efficacy ($r = 0.714$, $p = 0.018$) have a significant impact on HRQL. Demographic characteristics were inversely related to HRQL ($r = -0.419$, $p = 0.007$), but have a significant impact on health literacy ($r = 0.675$, $p = 0.029$) and self-management efficacy ($r = 0.379$, $p = 0.029$). At the same time, self-management efficacy was positively correlated to health literacy ($r = 0.413$, $p < 0.01$).

Tadessemelaku ,et al., (2017) was conducted a systematic review study on Nonadherence to antihypertensive drugs: prevalence is estimated to increase by 30% by the year 2025. Nonadherence to chronic medication regimens is common; approximately 43% to 65.5% of patients who fail to adhere to prescribed regimens are hypertensive patients..A total of 28 studies from 15 countries were identified, in total comprising of 13,688 hypertensive patients, were reviewed. Of 25 studies included in the meta-analysis involving 12,603 subjects, a significant number (45.2%) of the hypertensive patients and one-third

(31.2%) of the hypertensive patients with comorbidities were nonadherent to medications. Overall, nearly two-thirds (62.5%) of the medication no adherence was noticed in Africans and Asians (43.5%). Non adherence to antihypertensive medications was noticed in 45% of the subjects studied and a higher proportion of uncontrolled BP (83.7%) was nonadherent to medication. Intervention models aiming to improve adherence should be emphasized.

Fariba Samadian ,Nooshin Dalili And Ali Jamalian, (2016) was conducted a cross sectional study to life style modification on prevent and control hypertension. Hypertension is the most important, modifiable risk factor for cardiovascular disease and mortality. High salt intake may predispose children to develop hypertension later. The foundation for a healthy blood pressure consists of a healthy diet, adequate exercise, stress reduction, and sufficient amounts of potassium and magnesium, but further investigations are required before making definitive therapeutic recommendations on magnesium use. Alcohol usage is a more frequent contributor to hypertension than is generally appreciated. For hypertensive patients in whom stress appears to be an important issue, stress management should be considered as an intervention. Individualized cognitive behavioural interventions are more likely to be effective than single-component interventions.

Ana Célia and Caetano de Souza , (2016) was conducted a meta analysis on Quality of life and treatment adherence in hypertensive patients (pharmacological and non-pharmacological) on the health-related quality of life of individuals with hypertension. The summarization of the effect showed an average increase of 2.45 points (95%CI 1.02-3.87; $p < 0.0008$) in the quality of life of individuals adhering to non-pharmacological treatment for arterial hypertension. Adherence to pharmacological treatment indicated an average increase

of 9.24 points (95%CI 8.16-10.33; $p < 0.00001$) in the quality of life of individuals with arterial hypertension.

Wanlijiao, et al., (2015) was conducted a retrospective study on Compliance of antihypertensive drug use in patients with hypertension A retrospective analysis was conducted among 218 patients with hypertension to understand their drug use compliancy and influencing factors, including side effect of the drugs, drug type, educational level, economic status and drug use length. Among the patients surveyed, 86.67% of them with poor drug use compliance had only an educational level less than senior high school, 77.33% had poor awareness of hypertension related knowledge. The antihypertensive drug use compliance in patients with hypertension is directly related to the outcome of the disease in clinical treatment. It is necessary to take effective measures to improve the treatment compliance and maintain normal blood pressure level of the patients.

CHAPTER-III

RESEARCH METHODOLOGY

This chapter explains the methodology in detail. It includes research design, setting of the study, sampling technique, tools, pilot study, data collection process and plan for the data analysis. The study was conducted to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending primary health center, Chennai.

3.1. RESEARCH APPROACH

The research approach adopted for this study is a quantitative approach

3.2. RESEARCH DESIGN

The research design adopted for the study is non randomized control group design(quasi experimental research design)

Group	Pre test	Intervention	Post test
Experimental group	O1	X	O2
Control group	O3	-	O4

O₁: Pretest assessment of life style modification, quality of life and drug compliance of hypertension patients in experimental group

X: Administration of community based health intervention on Management of hypertension

O₂: Posttest assessment of life style modification ,quality of life and drug compliance of hypertension patients in experimental group

O₃: Pretest assessment of life style modification ,quality of life and drug compliance of hypertension patients in control group.

O₄: Posttest assessment of life style modification ,quality of life and drug compliance of hypertension patients in control group

3.3. SETTING OF THE STUDY

The study was conducted in Primary health center, Chennai.

3.4. DURATION OF THE STUDY

The duration of data collection was four weeks from 20.01.2020 to 15.02.2020.

3.5. STUDY POPULATION

3.5.1 Target population

The target population of the present study includes hypertensive patients of age 30years -69 years

3.5.2 Accessible population

The accessible population of the study includes hypertensive patients of age 30 years to 69 years attending primary health center,Chennai.

3.6. SAMPLE

The sample includes hypertensive patients of age 30years -69 years attending primary health center, Chennai.

3.7. SAMPLE SIZE

The sample size was 60 hypertensive patients of age 30years -69 years attending primary health center, Chennai.

3.8. CRITERIA FOR SAMPLE SELECTION

3.8.1 Inclusion criteria

- ❖ The person who attending primary health center
- ❖ Those who are willing to participate in this study

- ❖ Those who are available at the time of data collection

3.8.2 Exclusion criteria

- ❖ Person with any other co morbidities
- ❖ Person who are having any complication due to hypertension
- ❖ Person who are not willing to take part in the study

3.9.SAMPLING TECHNIQUE

In this study Non Probability, Purposive Sampling Technique was used to select the subjects.

3.10. RESEARCH VARIABLES

3.10.1 Independent Variable

It refers to community based health intervention on management of hypertension

3.10.2 Dependent Variable

It refers to knowledge regarding management of hypertension among hypertension patients

3.10.3 Demographic Variables

variables include age, type of family, religion, Education, occupation and income of family, duration of illness, drug intake, life style changes, Quality of life, drug compliance.

3.11. DEVELOPMENT AND DESCRIPTION OF THE TOOL

Data collection tools are the procedures or instruments used by the researcher to observe the key variables in the researchproblem

3.11.1 Development of the tool

Appropriate structured questionnaire has been developed after extensive review of literature and obtained expert opinion, content validity from medical, nursing and statistical experts. Construction of the tool, pre testing of the tool, reliability of the tool was ascertained by test-retest method.

3.11.2 Description of the tool

The tool for data collection consists of 5 sections

SECTION - I

It contains demographic variables which comprises of the items such as age, gender, marital status, type of family, religion, Education, occupation, language known, religion, no of members in family

SECTION - II

This section contains clinical data it includes duration of illness , follow up, diagnosis, drug intake, stages of hypertension

SECTION III

This section contains self-administered questionnaire regarding life style modification profoma of 17 questions includes disease condition of hypertension.

SECTION IV

This section contains structured tool of quality of life –WHO it includes overall general health

SECTION V

This section contains structured tool of drug compliance- Morisky self-efficacy scale it includes situation face by patients while follow the doctor's prescription.

COMMUNITY BASED HEALTH INTERVENTION:

Community based health intervention contain management of hypertension(normal value of blood pressure ,risk factor and causes, symptoms, diagnostic evaluation, management and prevention of hypertension) it includes life style modification, quality of life, drug compliance.

3.12 Score Interpetation Of The Structured Questionnarire - Life Style Modification

S. No	Question No	Items	No.of. Questions
1	1 – 5	General information of hypertension	05
2	6-10	Dietary practices and personal habits	05
3	11-17	Management and complication of hypertension	07

Scoring Key

Total number of items : 17

Total Score : 17

The score gives as follows

For correct answer – 1 score

For wrong answer – 0 score

LEVEL OF KNOWLEDGE AND SCORE

Level of Knowledge	Score	Percentage
Inadequate	0 – 9	>50%
Moderate	10– 12	51 – 75%
Adequate	13–17	<75%

SCORE INTERPETATION OF THE STANDARDIZED QUESTIONNARIRE (QUALITY OF LIFE)

S. No	Items	No.of. Questions
1	Physical	6
2	Psychological	7
3	Social relationship	3
4	Environmental	8
5	Overall general health	1

Min score =1 max score =5

No. of questions=26(score converted as percentage)

Maximum obtainable score is 100

Level of quality of life	Score	Percentage
Poor quality of life	0-50	>50%
Moderate quality of life	51-75	51 – 75%
Good quality of life	76-100	<75%

Score Interpetation Of The Standardized Questionnarire (Drug Compliance –Morisky Self Efficacy Scale) Depend upon statements and situation scores will be calculated

Statements-5 questions

Situation -26 question

Level of Drug Compliance	Score	Percentage
Poor drug compliance	0-50	>50%
Moderate drug compliance	51-75	51 – 75%
Good drug compliance	76-100	<75%

3.13 CONTENT VALIDITY

Validity of the tool was assessed using content validity. Content validity was determined by experts from Nursing and Medical. They suggested certain modifications in tool. After the modifications they agreed this tool for assessing effectiveness of community based health intervention on management of hypertension among patient with hypertension attending primary health center, Chennai.

3.14 ETHICAL CONSIDERATION

The study was proposed and submitted to the ethical committee, Madras Medical College and the committee approved the study. All respondents were carefully informed about the purpose of the study and their part during the study. Informed consent for the study was obtained from all hypertension patients. Confidentiality of the subject's information was maintained. Thus the investigator followed the ethical guidelines, which were issues by the research committee. Necessary permission to conduct the study was requested and obtained from Chief Medical Officer, Chennai. The study was done without any violation of human rights.

Human Rights

- ❖ The study was proposed among the experts of the Institutional Ethics Committee and got the permission to carry out the study.
- ❖ The study details was also explained to the Medical Officer, Greater Chennai Corporation to carry out the study in the primary health center coming under the ambit of Chennai and got the permission.
- ❖ The content validity was received from the various experts in the community health nursing.

Beneficence

Potential benefits and risks were explained to the samples.

Dignity

- ❖ Hypertension patients were informed about the study in detail and ensured their participation. Informed consent was obtained from the hypertension patients.
- ❖ Freedom was given to the hypertension patients in opting to participate in the study or withdrawal from the study.

Confidentiality

- ❖ Confidentiality and anonymity pledge was ensured. The study hypertension patients were also ensured for maintaining the confidentiality of their details.

Justice

- ❖ The study hypertension patients were treated with justice.
- ❖ The content of the community based health intervention was also taught to the hypertension patients of the control group through the booklets after the post test.

3.15 RELIABILITY OF THE TOOL

Reliability of the tool was assessed by using cron bach alpha method. Life style modification score reliability correlation coefficient was 0.82 ,quality of life reliability correlation coefficient was 0.86 and drug compliance reliability correlation score was 0.83 these correlation coefficient are very high and it is a good tool for assessing effectiveness of community based health intervention on management of hypertension among patient with hypertension attending primary health center, Chennai.

3.16 PILOT STUDY

The pilot study was conducted for the period of 6 days in primary health center, Chennai. Formal permission was obtained from the authority. Purposive sampling technique was used to select the study subjects, Individual consent obtained from the each subjects after explaining the purpose of the study. The total sample size was 6 hypertensive patients. The health status of the sample was assessed by demographic variables. The pretest knowledge assessment was done to the sample using structured and standardized questionnaire. After that community based health intervention on management of hypertension was given. The posttest knowledge was assessed. Data analysis was done using descriptive and inferential statistics. The knowledge regarding management of hypertension 63.3% of the samples have inadequate knowledge and 36.7% samples were having moderate knowledge. The mean score percentage was 39.65 which revealed inadequate knowledge for the samples regarding management of hypertension. .

The association between the life style modification, quality of life, drug compliance among samples and their selected variable was checked. Result showed that there was association between the level of knowledge and their demographic variables. No modification was made after the pilot study.

3.17 DATA COLLECTION PROCEDURE

The plan of data collection for the proposed study is as follows:

- ❖ The study was conducted in primary health center, Chennai. It was coming under the ambit of Chennai corporation.
- ❖ Permission has obtained from the Institutional Ethics Committee, Formal permission was obtained from the Chief Educational Officer, Chennai.

- ❖ Samples were drawn using convenient sampling technique, during the 1st visit, the researcher introduced herself and explained the purpose of the study and confirmed the willingness of the hypertensive patients to participate in the study by getting consent from them as per the inclusion criteria
- ❖ Data collection procedure was done for a period of four weeks. Pre test assessment was done using structured and standardized questionnaire: Subsequently community based health intervention was given on same day for 30 minutes.
- ❖ On the seventh day post assessment was conducted using same structured questionnaire.
- ❖ Based on the criteria 8 – 10 subjects were selected each day. The subjects were assured of confidentiality of data collected.

Table-3.1: Intervention Protocol

S. No	Protocol	Experimental Group	Control Group
1	Place	Primary health Center, Chennai.	Primary health Center ,Chennai.
2	Intervention	Community based health intervention	Routine care
3	Duration	4 weeks	4 weeks
4	Frequency	Morning	-
5	Time	30- 45 min	-
6	Mode of teaching	Community based health intervention using hand out and power point presentation	-
7	Administrator	Investigator	Investigator
8	Recipient	Hypertension patients from 30 years to 69 years.	Hypertension patients from 30 years to 69 years.

3.18 DATA ANALYSIS

Data entry: Entered the data into the excel sheet and coding the data into SPSS statistical package system

Analysis: Collected data will be analysed by descriptive and inferential statistics

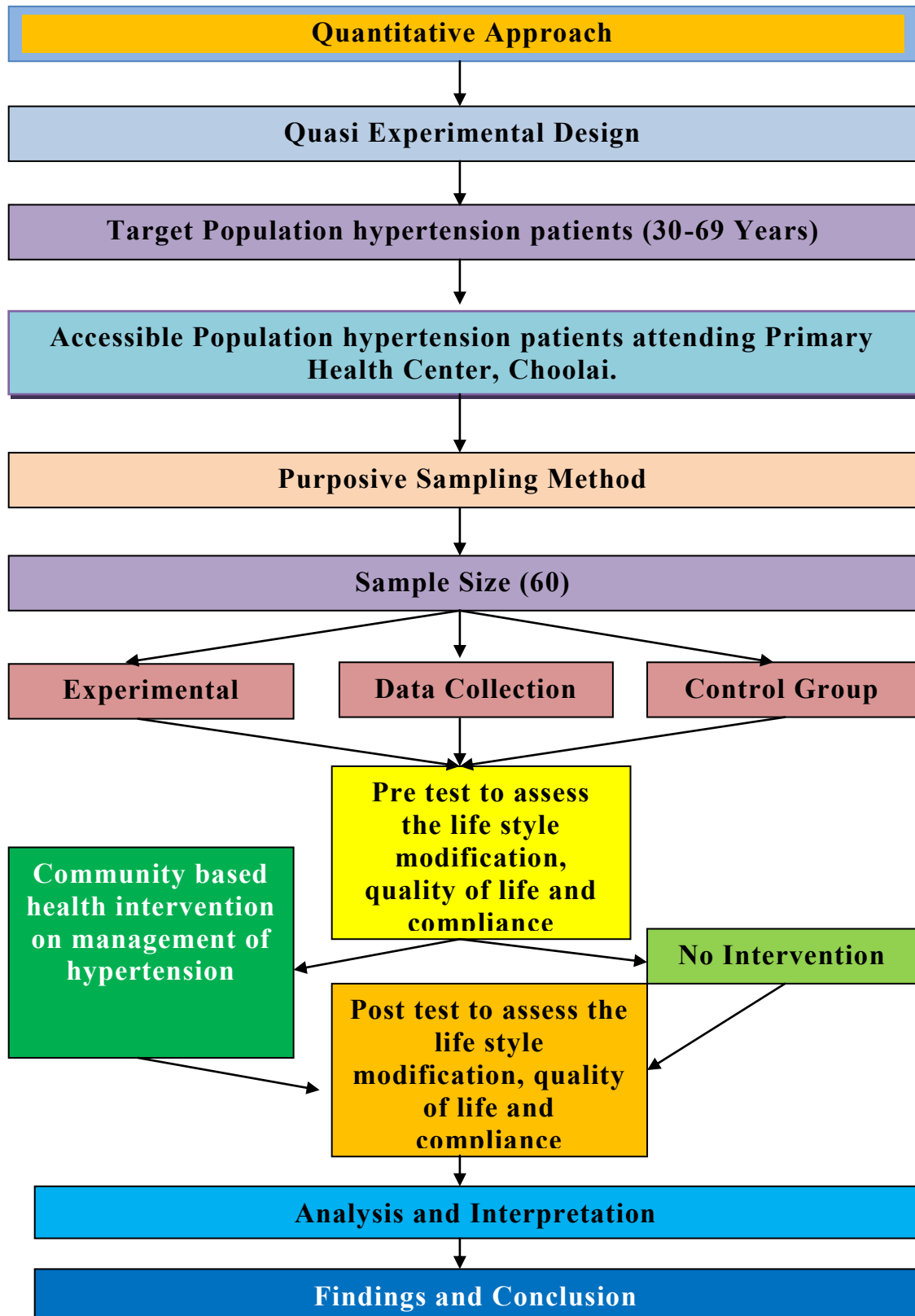
3.18.1 Descriptive Analysis

- ❖ Frequency and percentage analysis will be used to describe demographic characteristics of hypertension patients
- ❖ Mean and standard deviation will be used to assess the life style modification ,quality of life and drug compliance

3.18.2 Inferential Analysis

- ❖ Chi Square' test is used to find out significant association between demographic variables and pain score.
- ❖ Paired't' test is used to analyze the effectiveness of different pain management program.
- ❖ Difference between pretest and posttest difference on effectiveness of study was analyzed using mean difference with 95% CI. $p < 0.001$ was considered statistically significant

FIG: 3.1 SCHEMATIC REPRESENTATION OF RESEARCH METHODOLOGY



CHAPTER-IV

ANALYSIS AND INTERPRETATION OF DATA

This chapter deals with the description of the sample, analysis and interpretation of data to assess the effectiveness of community based health intervention on management of hypertension attending primary health center, Chennai. The obtained data have been classified, grouped and analysed statistically based on objectives of the study.

ORGANIZATION OF DATA

The collected data were tabulated and presented according to the objectives under the following sections:

Section - A: Description of frequency and percentage distribution of demographic information of Hypertension patients those who are participated in the following study.

Section - B: Description of frequency and percentage distribution of clinical variable of Hypertension patients those who are participated in the following study.

Section -C: Assessment of pre-test level of life style modification, quality of life, drug compliance among hypertension patients in experimental and control group

Section-D: Assessment of post-test level of life style modification, quality of life, drug compliance among hypertension patients in experimental and control group

Section- E: Effectiveness of community based health intervention on management of hypertension among hypertension patients in experimental and control group

Section -F: Comparison of pretest and post-test level of life style modification, quality of life, drug compliance among hypertension patients in experimental and control group

Section -G: Association between the post-test level of life style modification, quality of life and drug compliance with their selected socio-demographic variables.

STATISTICAL ANALYSIS:

- ❖ Similarity of demographic distribution among experimental and control group was tested using chi square test
- ❖ Quantitative data difference between experimental and control was analysed using student independent t test
- ❖ Quantitative data difference between pre-test and post-test was calculated using student paired t test
- ❖ Quantitative data difference between experimental and control group was analysed using student chi square test
- ❖ Correlation between life style modification ,quality of life ,drug compliance score was calculated using Karl Pearson correlation coefficient
- ❖ Effectiveness and generalization of study result was given in percentage with 95% CI and mean difference with 95% CI
- ❖ Simple bar diagram, Multiple bar diagram, simple bar with 2SE diagram were used to represent the data. A *p*-value of ≤ 0.05 was considered statistically significant.

❖ SECTION -A: DESCRIPTION OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF DEMOGRAPHIC INFORMATION OF HYPERTENSION PATIENTS THOSE WHO ARE PARTICIPATED IN THE FOLLOWING STUDY

Table-4.1: Demographic Variables

Demographic variables		Group			
		Experiment (n=30)		Control (n=30)	
		n	%	N	%
Age	30-39 Years	12	40.00%	11	36.67%
	40-49 Years	9	30.00%	10	33.33%
	50-59 Years	5	16.67%	6	20.00%
	60-69 Years	4	13.33%	3	10.00%
Gender	Male	15	50.00%	13	43.33%
	Female	15	50.00%	17	56.67%
Educational qualification	Formal education	14	46.67%	15	50.00%
	Professional	6	20.00%	5	16.67%
	Graduation	6	20.00%	3	10.00%
	Informal education	4	13.33%	7	23.33%
Occupation status	Employed	7	23.33%	6	20.00%
	Business	6	20.00%	6	20.00%
	Un employed	17	56.67%	18	60.00%
	Cooly	0	0.00%	0	0.00%
Monthly Family income	Below Rs.5,000	10	33.33%	11	36.67%
	Rs.5,000-Rs.10,000	7	23.34%	8	26.66%
	Rs.10,000-Rs.15,000	9	30.00%	6	20.00%
	Above Rs.15,000	4	13.33%	5	16.67%

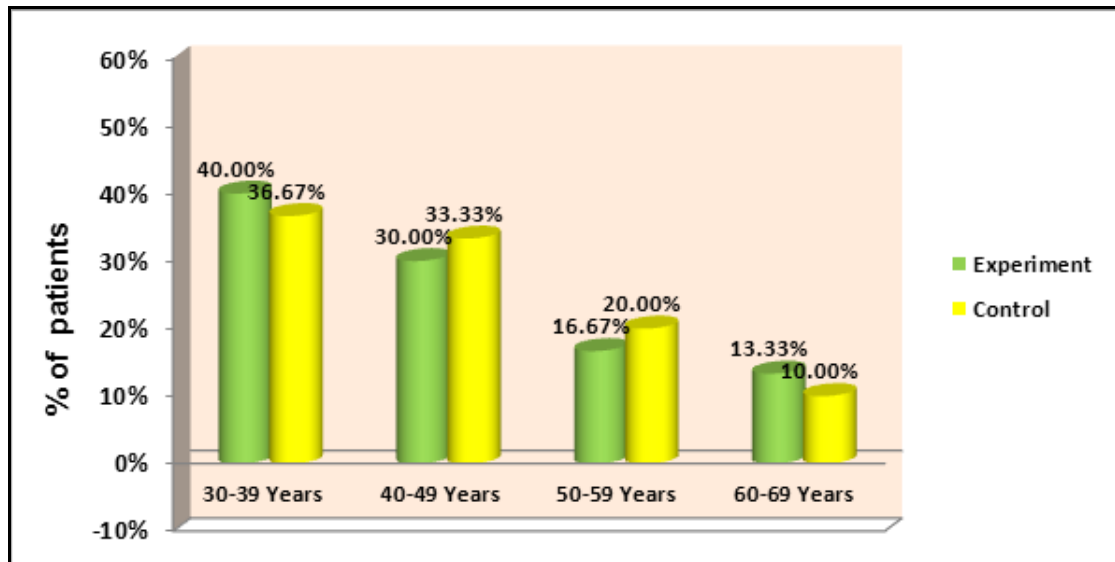
Demographic variables		Group			
		Experiment (n=30)		Control (n=30)	
		n	%	N	%
Religion	Hindu	14	46.67%	13	43.33%
	Christian	9	30.00%	9	30.00%
	Muslim	7	23.33%	8	26.67%
Language	Tamil	23	76.67%	27	90.00%
	English	0	0.00%	0	0.00%
	Both A and B	7	23.33%	3	10.00%
	Other language	0	0.00%	0	0.00%
Marital status	Married	30	100.00%	30	100.00%
	Unmarried	0	0.00%	0	0.00%
	Separated	0	0.00%	0	0.00%
	Widow/widower	0	0.00%	0	0.00%
Type of family	Nuclear family	15	50.00%	17	56.67%
	Joint family	10	33.33%	9	30.00%
	Extended family	5	16.67%	4	13.33%
Number of members	≤ 4 member	17	56.67%	20	66.67%
	> 4 member	13	43.33%	10	33.33%

p>0.05 not significant

Above table shows the demographic distribution of hypertensive patients in experimental and control group.40% patients belongs to (30-39years) age group,30% patients belongs to (40-49years) age group,16.67% patients belongs to (50-59years) age group,13.33% patients belongs to (60-69years) agein experimental groupand in control group 36.67% patients belongs to (30-39years) age group,33.33% patients belongs to (40-49years) age group,20% patients

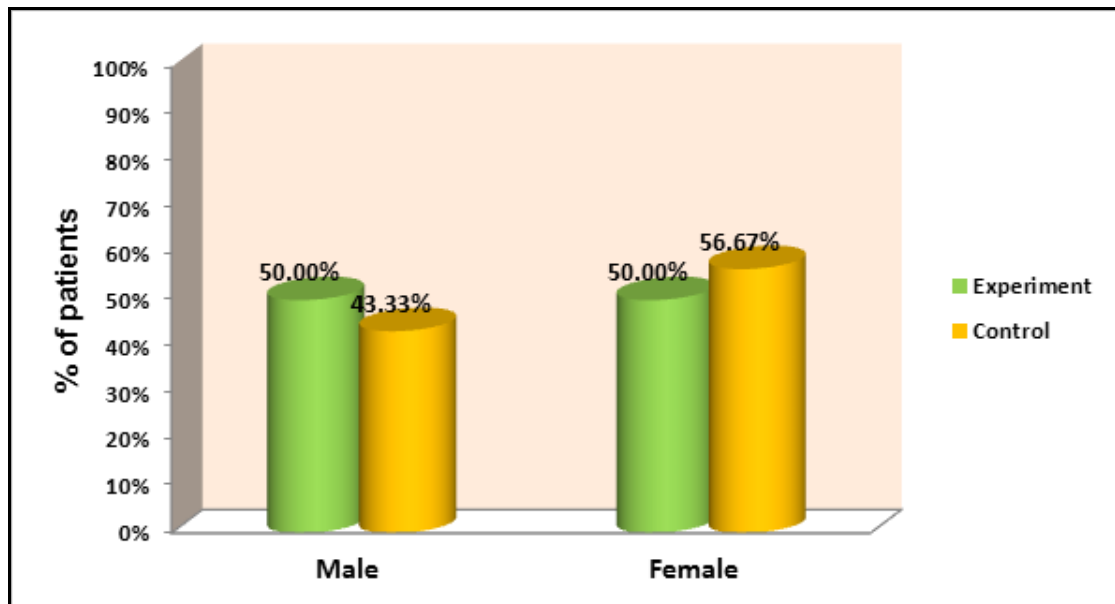
belongs to (50-59years) age group,10% patients belongs to (60-69years) age group and in experimental group 50% belongs to male gender and 50% belongs to female gender and in control group 43.33% belongs to male gender and 47.67% belongs to female gender and in experimental group 46.67 % formal education, 20% professional, 20% graduation, 13.33 % informal education and in control group 50 % formal education, 16.67% professional, 20% graduation and 23.33 % informal education and in experimental group 23.33 % are employed, 20% are business, and 56.67% are unemployed and in control group 20 % are employed, 20% are business, 60% are unemployed and in experimental group 33.33% family income is below 5000, 23.34% family income is 5000-10,000, 30% family income is 10,000-15,000 and 13.33 % family income is above 15,000 and in control group 36.67% family income is below 5000, 26.66% family income is 5000-10,000, 20% family income is 10,000-15,000 and 16.67 % family income is above 15,000 and in experimental group 46.67% patients belongs to Hindu, 30% patients belong to Christian, 23.33% patients belongs to Muslim and in control group 43.33% patients belongs to Hindu, 30% patients belong to Christian, 26.67% patients belong to Muslim and in experimental group 76.67% patients are able to know Tamil and 23.33 % patients are able to know both Tamil and English and in control group 90 % patients are able to know Tamil and 10 % patients are able to know both Tamil and English and 100% hypertension patients are married in both experimental and control group and in experimental group 50% belongs to nuclear family, 33.33% belongs to joint family and 16.67% belongs to extended family and in control group 56.67% belongs to nuclear family, 30% belongs to joint family and 13.33% belongs to extended family and in experimental group 56.67% having more than 4 members in family and 43.33 % having less than 4 members in family in control group 66.67 % having more than 4 members in family and 33.33 % having less than 4 members in family.

FIG-4.1: Age Distribution Of Hypertension Patients



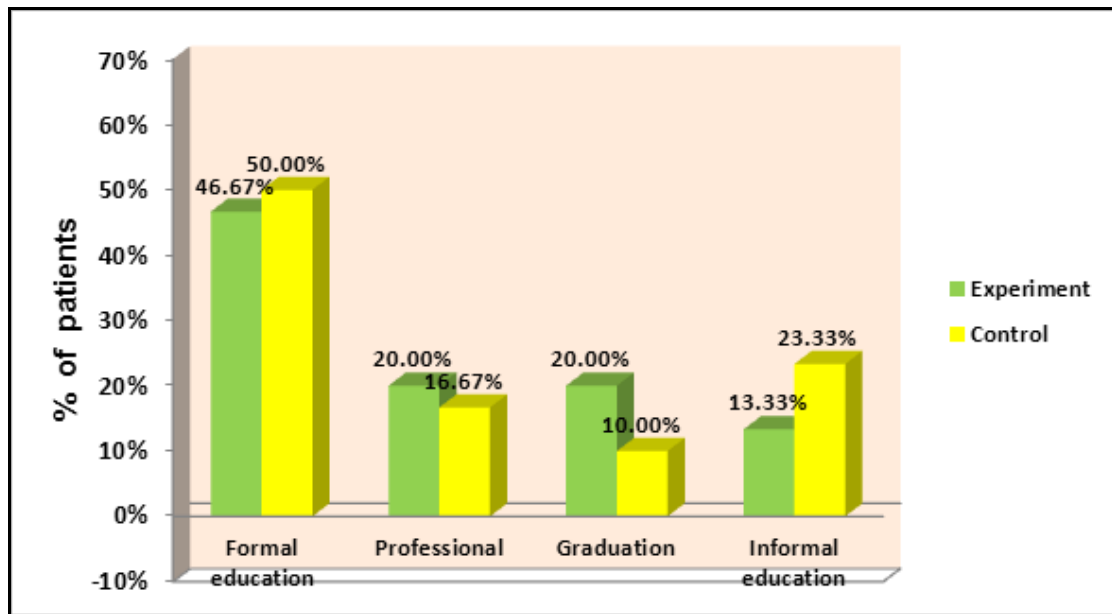
In the above figure shows Maximum 40% patients belongs to (30-39years) age group in experimental group and in control group maximum 36.67% patients belongs to (30-39years) age group.

Fig- 4.2: Gender Distribution Of hypertension Patients



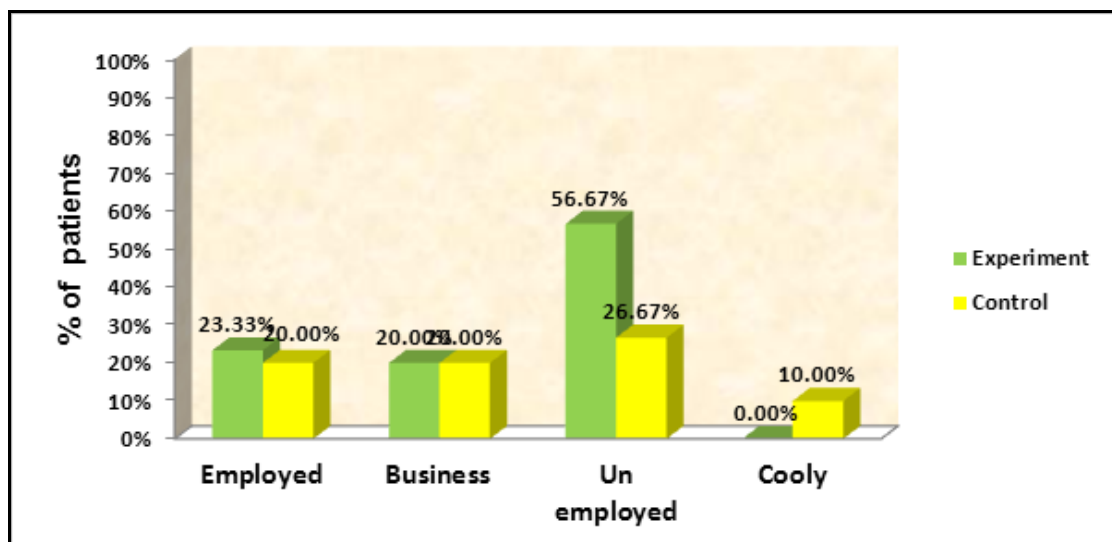
In the above figure shows Maximum 50% belongs to male and female gender in experimental group and maximum 47.67% belongs to female gender in control group.

Fig-4.3: Educational Qualification Of Hypertension Patients



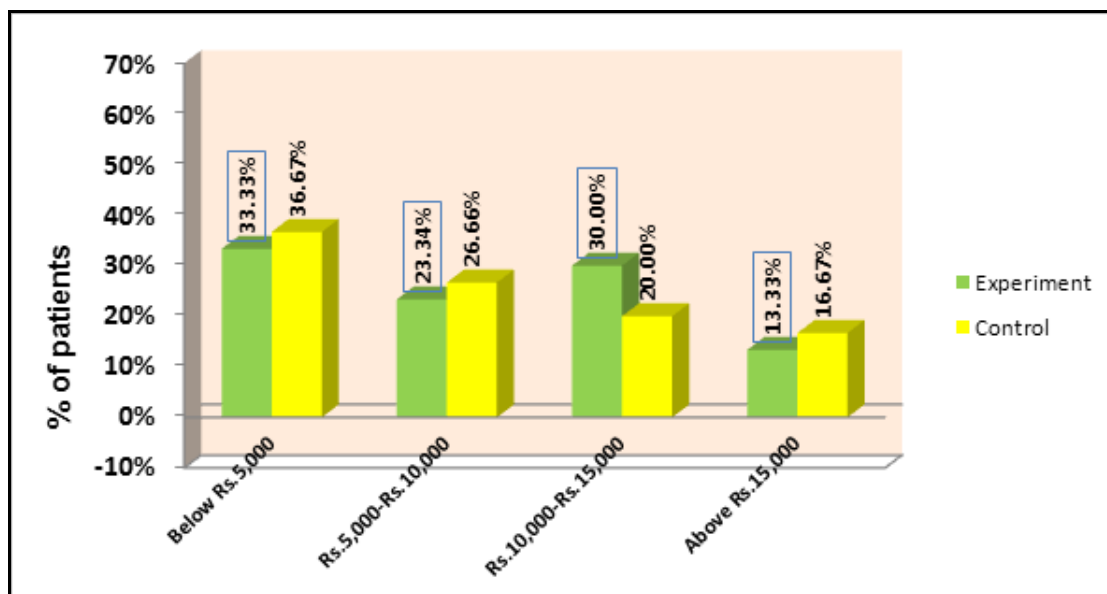
In the above figure shows Maximum 46.67 % had formal education in experimental group and maximum 50 % had formal education in control group.

Fig-4.4: Occupational Status Of Hypertension Patients



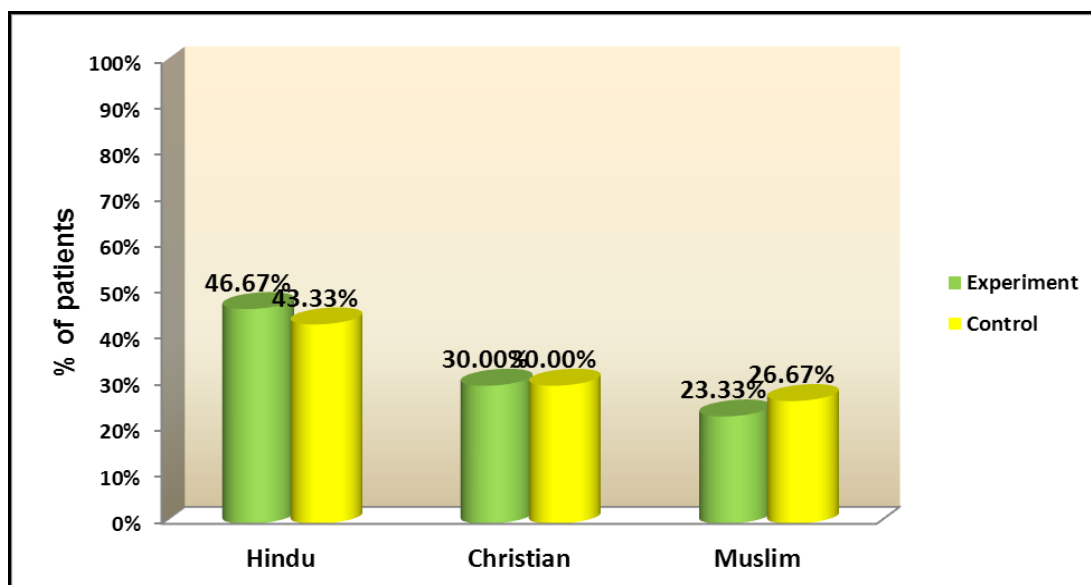
In the above figure shows Maximum 56.67% are unemployed in experimental and maximum 60% are unemployed in control group.

Fig-4.5: Monthly Income Of Hypertension Patients



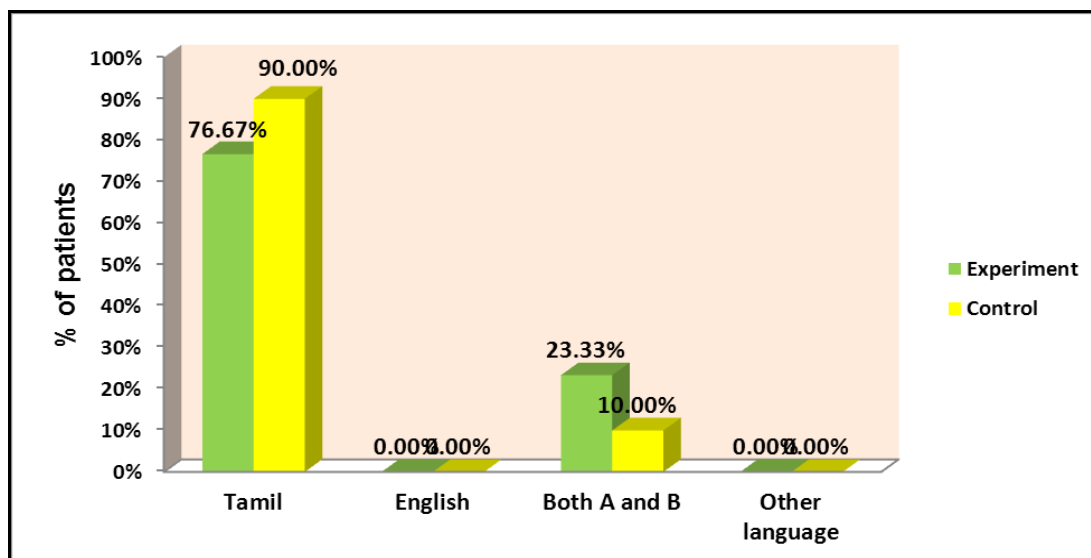
In the above figure shows Maximum 33.33% family income is below 5000 in experimental group and in control group 36.67% family income is below 5000.

Fig-4.6: Religion Of Hypertension Patients



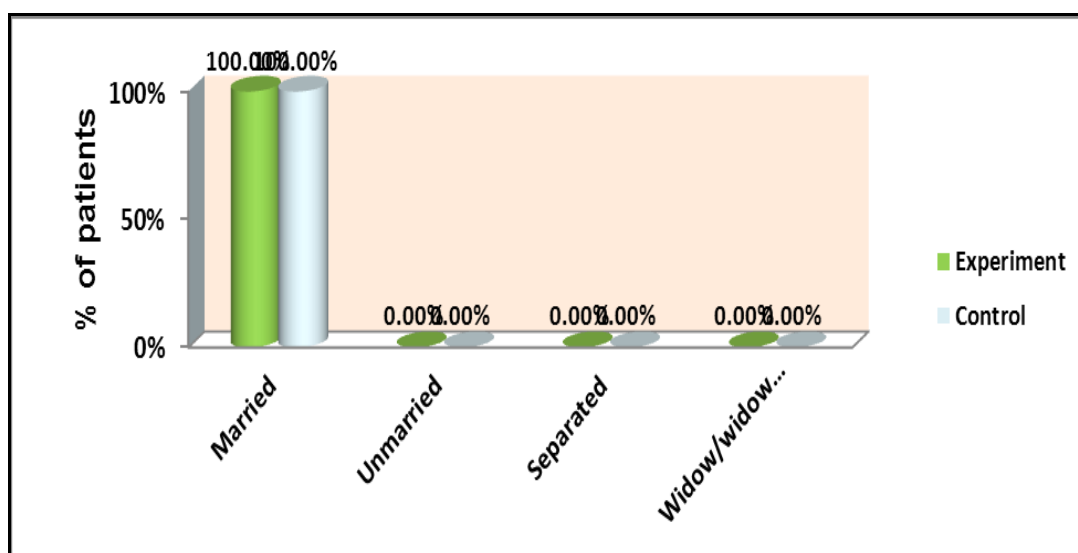
In the above figure shows Maximum 46.67% patients belongs to Hindu in experimental group and in control group 43.33% patients belongs to Hindu

Fig-4.7: Language Known Of Hypertension Patients



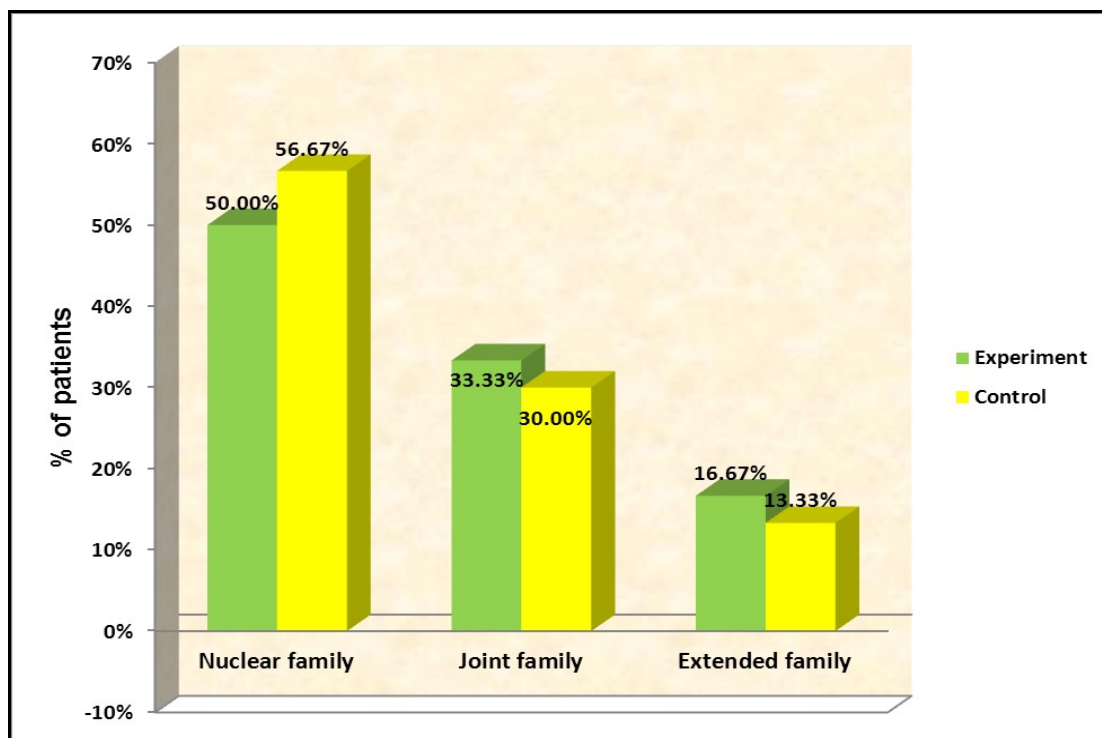
In the above figure shows Maximum 76.67% patients are able to know Tamil language in experimental group and in control group 90 % patients are able to know Tamil language.

Fig-4.8: Marital Status Of Hypertension Patients



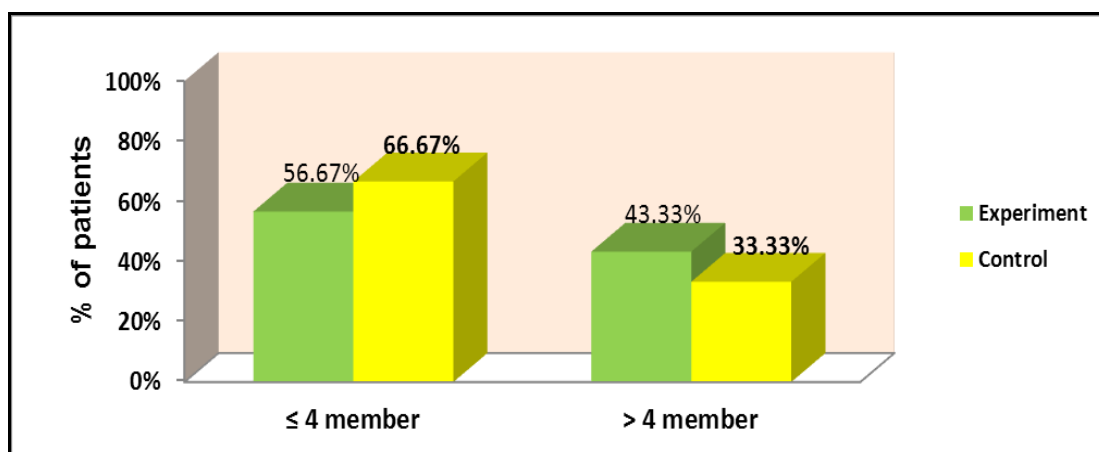
In the above figure shows Maximum 100% participants are married in both experimental and control group.

Fig-4.9: Type Of Family In Hypertension Patients



In the above figure shows Maximum 50% belongs to nuclear family in experimental group and in control group 56.67% belongs to nuclear family.

Fig-4.10: Number Of Members In Hypertension Patients Family



In the above figure shows Maximum 56.67% having more than 4 members in family in experimental group and in control group 66.67 % having more than 4 members in family.

SECTION - B: DESCRIPTION OF FREQUENCY AND PERCENTAGE DISTRIBUTION OF CLINICAL VARIABLE OF HYPERTENSION PATIENTS THOSE WHO ARE PARTICIPATED IN THE FOLLOWING STUDY.

Table-4.2: Clinical Variables

Clinical variables		Group			
		Experiment (n=30)		Control (n=30)	
		n	%	n	%
Diagnosis	In a routine medical examination	18	60.00%	13	43.33%
	Mass screening programme	9	30.00%	14	46.67%
	Emergency	3	10.00%	3	10.00%
	Others	0	0.00%	0	0.00%
Duration of illness	0-2 years	10	33.33%	7	23.33%
	3-4 years	11	36.67%	9	30.00%
	5-6 years	9	30.00%	14	46.67%
	More than 6 years	0	0.00%	0	0.00%
Routine Follow up	Private hospital	12	40.00%	13	43.33%
	Government hospital	15	50.00%	10	33.33%
	Alternative medicine clinic	3	10.00%	7	23.33%
	Others	0	0.00%	0	0.00%
Stages of hypertension	Primordial stage	9	30.00%	11	36.67%
	Primary stage	11	36.67%	8	26.67%
	Secondary stage	10	33.33%	11	36.67%
	Latent stage	0	0.00%	0	0.00%
Hypertensive Drugs	Amlodipine	22	73.33%	23	76.67%
	Nifidipine	8	26.67%	7	23.33%
	Aldamet	0	0.00%	0	0.00%
	Lasix	0	0.00%	0	0.00%

Above table shows the clinical distribution of hypertensive patients in experimental and control group are given below in experimental group maximum 60% patients diagnosed by routine medical examination,30% patients diagnosed by mass screening programme and 3% patients diagnosed by emergency and in control group 43.33% patients diagnosed by routine medical examination,47.67% patients diagnosed by mass screening programme and 10% patients diagnosed by emergency and in experimental group 33.33% patients illness duration is (0-2) years,36.67% patients illness duration is (3-4) years,30% patients illness duration is (5-6) years and in control group 23.33% patients illness duration is (0-2) years,30% patients illness duration is (3-4) years, 46.67% patients illness duration is (5-6) years and in experimental group 40% patients went to private hospital for follow up,50% patients went to government hospital for follow up,10% patients went to alternative medicine clinic for follow up and in control group 43.33% patients went to private hospital for follow up,33.33% patients went to government hospital for follow up, and 23.33% patients went to alternative medicine clinic for follow up and in experimental group 30% belongs to primordial stage 36.67% patient belongs to primary stage, 33.33% patients belongs to secondary stage and in control group 36.67% patients belongs to primordial stage 26.67% patient belongs to primary stage, 36.67% patients belongs to secondary stage and in experimental group 73.33% patients took amlodipine tablets and 27.67% patients took nifedipine tablets and in control group: 76.67% patients took amlodipine tablets and 23.33% patients took nifedipine tablets.

SECTION- C: ASSESSMENT OF PRE-TEST LEVEL OF LIFE STYLE MODIFICATION, QUALITY OF LIFE ,DRUG COMPLIANCE AMONG HYPERTENSION PATIENTS IN EXPERIMENTAL AND CONTROL GROUP.

Table-4.3: Pretest Level Of Life Style Modification Score

Level of LS modification	Experiment		Control		Chi square test
	n	%	n	%	
Poor	9	30.00%	8	26.67%	$\chi^2=0.08$ $p=0.77$ DF=1 not significant
Moderate	21	70.00%	22	73.33%	
Good	0	0.00%	0	0.00%	
Total	30	100.00%	30	100.00%	

P>0.05 not significant DF= Degrees of Freedom

Above table compares the pretest level of life style modification score between experimental and control hypertensive patients. Before administration of community based health intervention, life style modification score in experimental group was, 30.00% of the patients are having poor level of score, 70.00% of them having moderate level of score and none of them are having good level of score. In control group, 26.67% of the patients are having poor level of score, 73.33% of them having moderate level of score and none of them are having good level of score.

Statistically there is no significant difference between experimental and control group. Level of life style modification score between experimental and control group was calculated using chi-square test.

Fig-4.11: Pretest On Life Style Modification Score

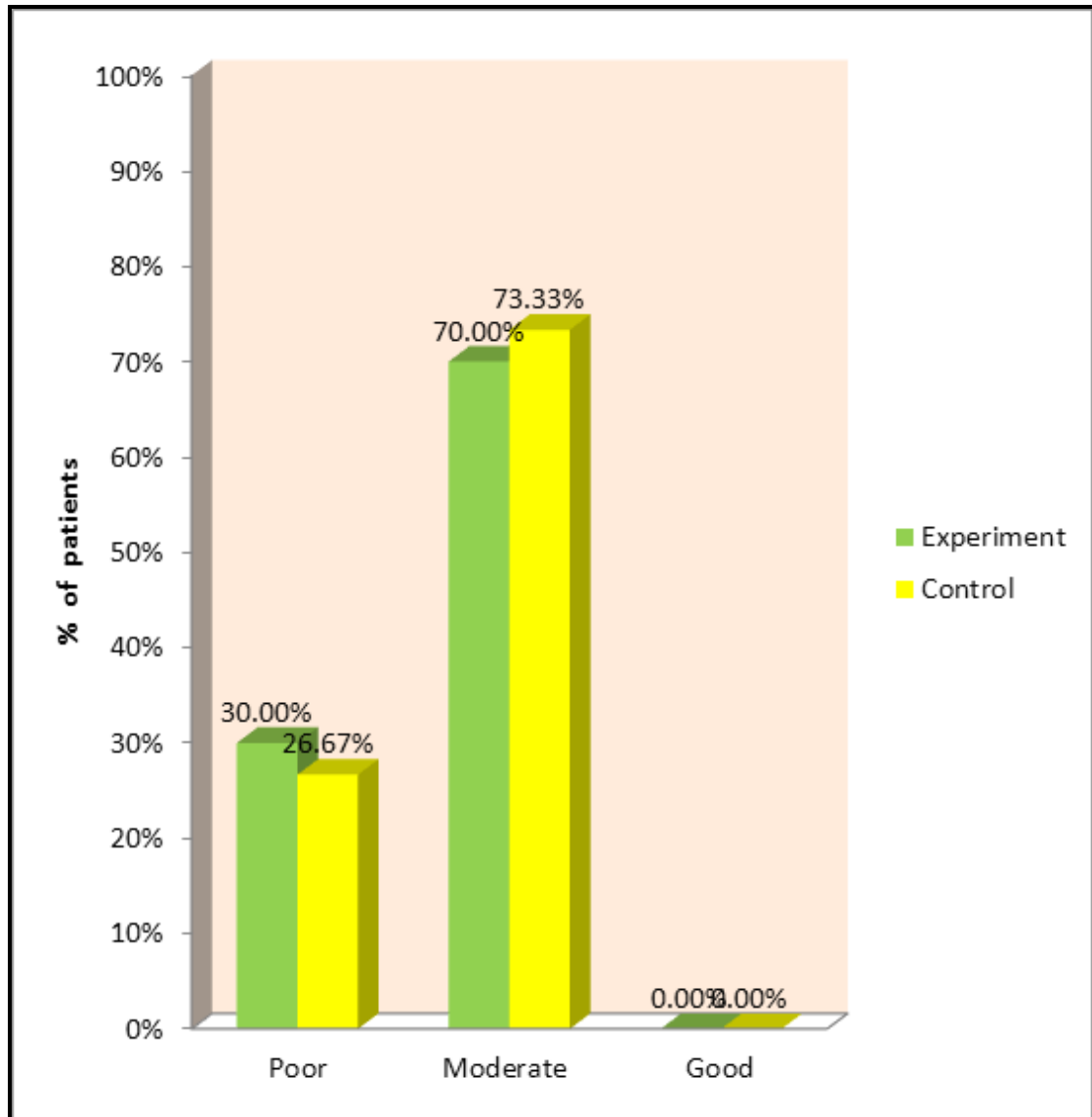


Table-4.4: Comparison Of Mean Pretest Life Style Modificationscore

Group	N	Mean score	Std. Deviation	Mean difference	Student's independent t-test
Experiment	30	8.97	1.79	0.03	t=0.08p=0.93 DF=58, not significant
Control	30	9.00	1.57		

p>0.05 not significant DF=Degrees of Freedom

Above table shows the comparison of mean pretest life style modification scores between experimental and control hypertensive patients. On an average, experimental group patients are having 8.97 score and control group patients are having 9.00 score, so the difference is 0.03 score. This difference is small and it is not statistically significant difference. Statistical significance was calculated by using student's independent 't' test.

Table-4.5: Pre Test Quality Of Life Score

S. No	Domains	Group				Mean Difference	Student independent t-test
		Experiment		Control			
		Mean	SD	Mean	SD		
1	Physical	53.69	6.42	54.79	7.71	1.10	t=0.84 p=0.40(NS)
2	Psychological	41.53	6.10	43.06	9.20	1.53	t=1.07 p=0.28(NS)
3	Social relationships	44.25	8.79	46.50	9.95	2.25	t=1.31 p=0.19(NS)
4	Environment	50.10	6.25	50.99	7.00	0.89	t=0.73 p=0.47(NS)
	Total	47.39	4.89	48.83	5.54	1.44	t=1.50 p=0.13(NS)

NS = Not significant $p > 0.05$ is not significant

In pretest, in all domains, mean difference between experiment and control group is small and it is not statistically significant difference. Considering **Physical health**, experiment group caregivers are having 53.69 score and in control group they are having 54.79 score, so the difference is 1.10, this difference is small and it is not statistically significant difference. Considering **Psychological health**, experiment group caregivers are having 41.53 score and in control group they are having 43.06 score, so the difference is 1.53, this difference is small and it is not statistically significant difference. Considering **Social relationships**, experiment group caregivers are having 44.25 score and in control group they are having 46.50 score, so the difference is 2.25, this difference is small and it is not statistically significant difference. Considering **Environment**, experiment group caregivers are having 50.10 score and in control group they are having 50.99 score, so the difference is 0.89, this difference is small and it is not statistically

significant difference. Considering **overall QOL score**, experiment group caregivers are having 47.39 score and in control group they are having 48.83 score, so the difference is 1.44, this difference is small and it is not statistically significant difference. It was confirmed using Student independent t-test.

Table-4.6: Difference Between Experiment And Control Percentage Of Quality Of Lifescore

	QOL score	Maximum score	QOL score				% of Quality of Life difference Score
			Experiment		Control		
			Mean	%	Mean	%	
Pre test	Physical	100	53.69	53.69%	54.79	54.79%	-1.10%
	Psychological	100	41.53	41.53%	43.06	43.06%	-1.53%
	Social relationships	100	44.25	44.25%	46.50	46.50%	-2.25%
	Environment	100	50.10	50.10%	50.99	50.99%	-0.89%
	Total	100	47.39	47.39%	48.83	48.83%	-1.44%

Overall percentage of difference between experiment and control group is 1.44% of QOL gain score before intervention on management of hypertension among patients with hypertension attending primary health center.

Table-4.7: Assessment Of Pretest Level Of Quality Of Lifescore

Level of QOL score	Experiment		Control		Chi-square test
	n	%	n	%	
Poor	22	73.33%	23	76.67%	$\chi^2=0.08$ $p=0.79$ DF=1 not significant
Moderate	8	26.67%	7	23.33%	
Good	0	0.0%	0	0.0%	
Total	30	100.0%	30	100.0%	

$p>0.05$ not significant DF= Degrees of Freedom

In pretest, in **experiment group**, 73.33% of them are having poor QOL score, 26.67% are having moderate level of QOL score and none are having good level of QOL score. Considering **control group**, 76.67% of them are having poor QOL score, 23.33% are having moderate level of QOL score and none are having good level of QOL score. Statistically there is no significant difference between experiment and control group. It was confirmed using chi square test.

Fig -4.12: Pretest Level Of Quality Of Life

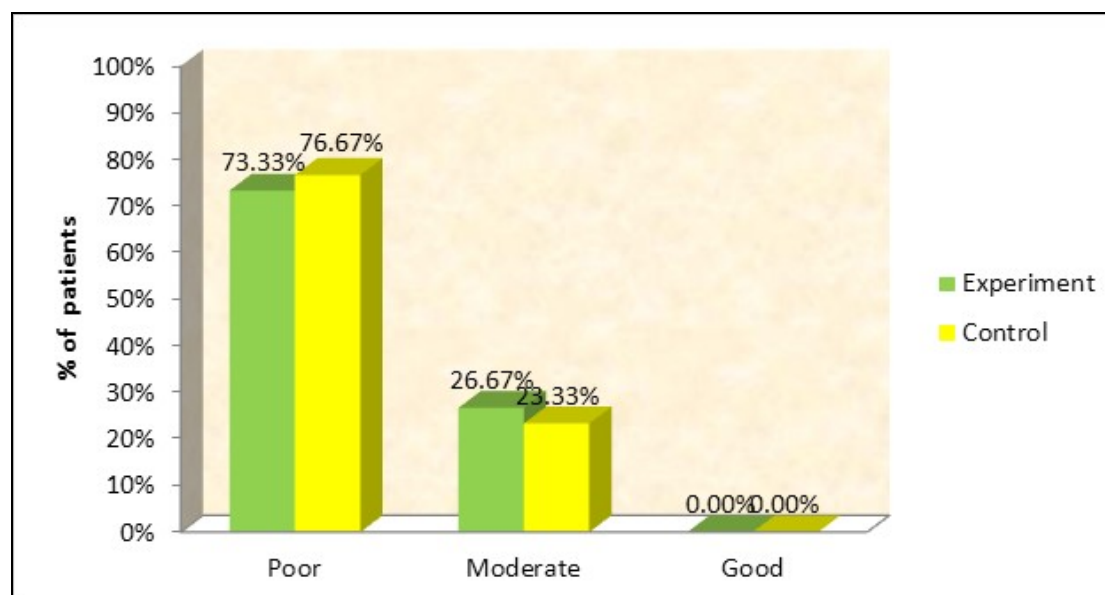


Table-4.8: Pretest Drug Compliance -Morisky Self Efficacy Scale

Statements	Group								Chi square test
	Experiment (n=30)				Control (n=30)				
	No		Yes		No		Yes		
	n	%	n	%	n	%	n	%	
over the past week have you taken your blood pressure as you should on schedule?	11	36.67%	19	63.33%	13	43.33%	17	56.67%	$\chi^2=0.28$ p=0.60(NS)
Do you ever forget to take your blood pressure medicine?	13	43.33%	17	56.67%	14	46.67%	16	53.33%	$\chi^2=0.07$ p=0.80(NS)
Are you careless at times about taking your blood pressure medicine?	18	60.00%	12	40.00%	17	56.67%	13	43.33%	$\chi^2=0.08$ p=0.80(NS)
when you feel better do you some times stop taking your blood pressure medicine?	17	56.67%	13	43.33%	14	46.67%	16	53.33%	$\chi^2=0.60$ p=0.44(NS)
Sometimes if you feel worsen when you take your blood pressure medicine ,do you stop taking it?	19	63.33%	11	36.67%	16	53.33%	14	46.67%	$\chi^2=0.61$ p=0.43(NS)

In pretest there is no statistically significant difference between experiment and control group patients Drug compliance score.

Fig -4.13: Pretest Situation Drug Compliance

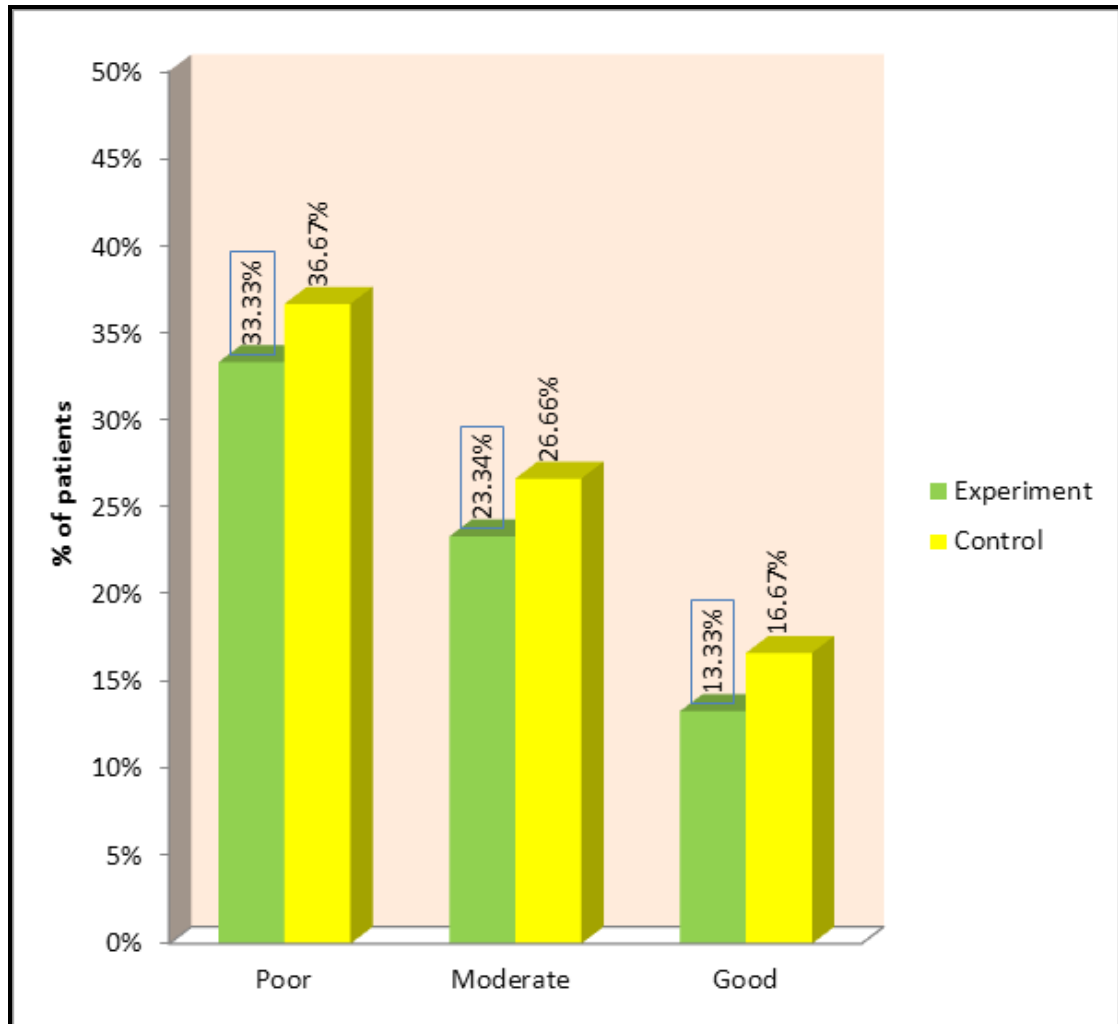


Table-4.9: Comparison Of Drug Compliance Score Between Experiment And Control Group

Group	Group				Mean Difference	Student independent t-test
	Experiment		Control			
	Mean	SD	Mean	SD		
Pretest	2.40	1.16	2.53	1.38	0.13	t=0.40 p=0.69 DF=5(NS)

NS= not significant

Considering Pretest, mean difference between experiment group and control group is small (0.13) and it is not statistically significant difference. It was confirmed using student independent t-test.

Table-4.10: Comparison Of Level Of Pretestsituation Drug Compliance Score

Level of DC score	Experiment		Control		Chi square test
	N	%	n	%	
Poor	20	66.67%	18	60.00%	$\chi^2=0.29$ p=0.59 DF=1 Not significant
Moderate	10	33.33%	12	40.00%	
Good	0	0.00%	0	0.00%	
Total	30	100.00%	30	100.00%	

p>0.05 not significant DF= Degrees of Freedom

Above table compares the pretest level of drug compliance score between experimental and control group hypertensive patients. Before administration of community based health intervention, drug compliance score in experimental group was, 66.67% of the patients are having poor level of score, 33.33% of them having moderate level of score and none of them are having good level of score. In control group, 60.00% of the patients are having poor level of score, 40.00% of them

having moderate level of score and none of them are having good level of score. Statistically there is no significant difference between experimental and control group. Level of drug compliance score between experimental and control group was calculated using chi-square test.

Table-4.11: Comparison Of Mean Pretest Situation Drug Compliance Score

Group	N	Mean score	Std. Deviation	Mean difference	Student's independent t-test
Experiment	30	71.07	7.73	1.83	t=0.82p=0.43, DF=58, not significant
Control	30	72.90	9.52		

p>0.05 not significant DF=Degrees of Freedom

Above table shows the comparison of mean pretest situation drug compliance scores between experimental and control hypertensive patients. On an average, experimental group patients are having 71.07 score and control group patients are having 72.90 score, so the difference is 1.83 score. This difference is small (1.83) and it is not statistically significant difference. Statistical significance was calculated by using student's independent 't' test.

SECTION – D: ASSESSMENT OF POST-TEST LEVEL OF LIFE STYLE MODIFICATION, QUALITY OF LIFE ,DRUG COMPLIANCE AMONG HYPERTENSION PATIENTS IN EXPERIMENTAL AND CONTROL GROUP.

Table-4:12: Posttest Level Of Life Style Modification Score

Level of Life style modification	Experiment		Control		Chi square test
	n	%	n	%	
Poor	0	0.00%	11	36.67%	$\chi^2=33.79$ $p=0.001^{***}$ DF=2 Significant
Moderate	10	33.33%	19	63.33%	
Good	20	66.67%	0	0.00%	
Total	30	100.00%	30	100.00%	

*** $p \leq 0.001$ very high significant DF= Degrees of Freedom

Above table compares the posttest level of Life style Modification score between experimental and control group hypertensive patients. After administration of **community based health intervention**, Life style Modification in experimental group was, none of the patients are having poor level of score, 33.33% of them having moderate level of score and 66.67% of them are having good level of score. In control group, 36.67% of the patients are having poor level of score, 63.33% of them having moderate level of score and none of them are having good level of score. Statistically there is a significant difference between experimental and control group. Level of Life style Modification score between experimental and control group was calculated using chi-square test.

Fig-4.14: Post Test Level Of Life Style Modification Score

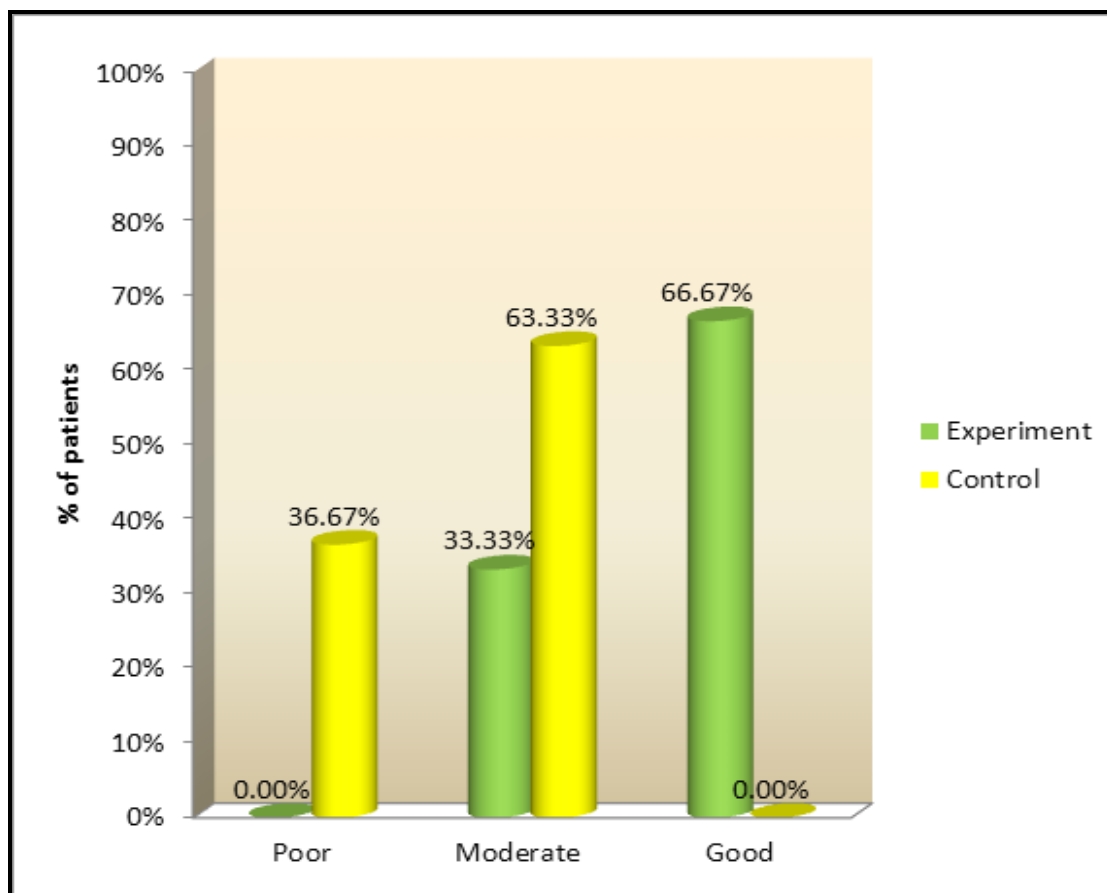


Table-4.13: Comparison Of Mean Posttest Life Style Modification Score

Group	N	Mean score	Std. Deviation	Mean difference	Student's independent t-test
Experiment	30	13.00	1.11	3.40	t=9.43p=0.001*** DF=58 significant
Control	30	9.60	1.63		

***p≤0.001very high significant DF=Degrees of Freedom

Above table shows the comparison of mean posttest life style modification score between experimental and control patients. On an average, experimental group patients are having 13.00 score and control group patients are having 9.60 score, so the difference is 3.40 score. This difference is large and it is statistically significant difference. Statistical significance was calculated by using student's independent 't' test.

Table-4.14: Assessment Of Posttest Level Of Quality Of Life Score

Level of QOL	Experiment		Control		Chi-square test
	N	%	n	%	
Poor	0	0.00%	20	66.67%	$\chi^2=34.28$ p=0.001*** DF= 2 significant
Moderate	18	60.00%	10	33.33%	
Good	12	40.00%	0	0.00%	
Total	30	100.00%	30	100.00%	

***P \leq 0.001 very high significant

In posttest, in experiment group, none are having poor level of QOL score, 60.00% are having moderate level of QOL score and 40.00% are having good level of QOL score. Considering control group, 66.67% of them are having poor QOL score, 33.33% are having moderate level of QOL score and none are having good level of QOL score. Statistically there is a significant difference between experiment and control group. It was confirmed using chi square test.

Fig-4.15: Post Test Level Of Quality Of Life Score

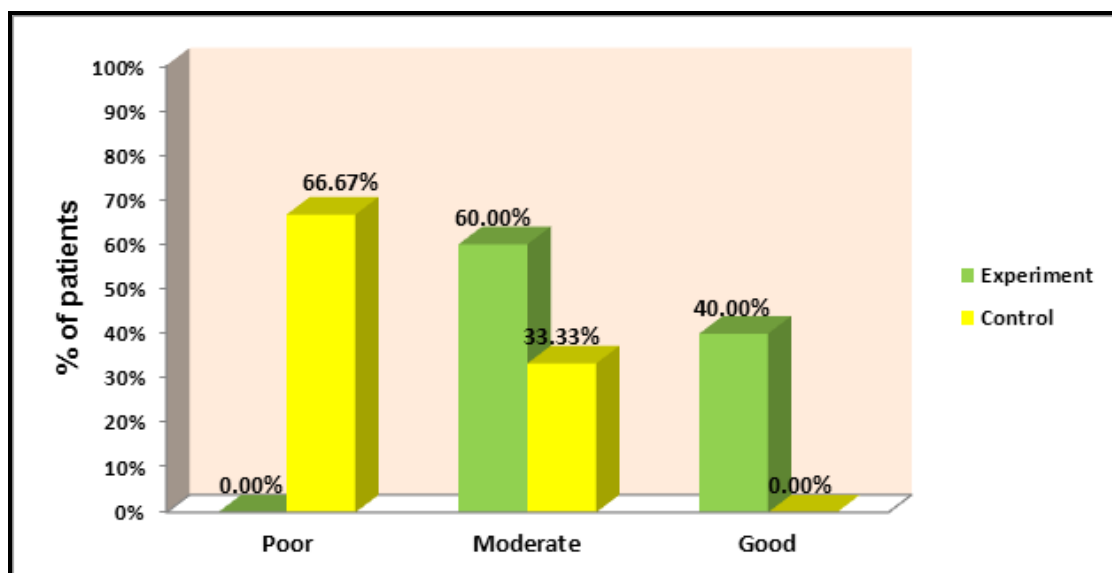


Table-4.16: Comparison Of Posttest Quality Of Life Score Between Experiment And Control Group

s.no	Domains	Group				Mean Difference	Student independent t-test
		Experiment		Control			
		Mean	SD	Mean	SD		
1	Physical	71.95	5.96	55.23	7.38	16.72	t=13.70 p=0.001***(S)
2	Psychological	60.63	6.23	43.51	8.56	17.12	t=11.96 p=0.001***(S)
3	Social relationships	65.50	7.91	47.12	9.13	18.38	t=11.78 p=0.001***(S)
4	Environment	70.02	7.87	52.46	5.54	17.56	t=13.71 p=0.001***(S)
	Total	67.02	5.07	49.58	5.03	17.44	t=18.86 p=0.001***(S)

S = significant ***P≤0.001 very high significant

In posttest, in all domains ,mean difference between experiment and control group is large and it is statistically significant difference. Considering **Physical health**, experiment group patients are having 71.95 score and in control group they are having 55.23 score, so the difference is 16.72 , this difference is large and it is statistically significant difference. Considering **Psychological health**, experiment group patients are having 60.63 score and in control group they are having 43.51 score, so the difference is 17.12, this difference is large and it is statistically significant difference. Considering **Social relationships**, experiment group patients are having 65.50 score and in control group they are having 47.12 score, so the difference is 18.38, this difference is large and it is statistically significant difference. Considering **Environment**, experiment group patients are having 70.02 score and in control group they are having 52.46 score, so the difference

is 17.56, this difference is large and it is statistically significant difference. Considering **overall QOL score**, experiment group patients are having 67.02 score and in control group they are having 49.58 score, so the difference is 17.44, this difference is large and it is statistically significant difference. It was confirmed using Student independent t-test.

Table-4.17: Difference Between Experiment And Control Percentage Of Posttest Quality Of Life Score

	QOL score	Maximum score	QOL score				% of QOL difference Score
			Experiment		Control		
			Mean	%	Mean	%	
Posttest	Physical	100	71.95	71.95%	55.23	55.23%	16.72%
	Psychological	100	60.63	60.63%	43.51	43.51%	17.12%
	Social relationships	100	65.50	65.50%	47.12	47.12%	18.38%
	Environment	100	70.02	70.02%	52.46	52.46%	17.56%
	Total	100	67.02	67.02%	49.58	49.58%	17.44%

Overall percentage of difference between experiment and control group is 17.44% of QOL gain score after having community based health intervention on management of hypertension among patients with hypertension attending primary health center.

Table-4.18: Posttest Drug Compliance -Morisky Self Efficacy Scale

General statements	Group								Chi square test
	Experiment(n=30)				Control(n=30)				
	No		Yes		No		Yes		
	n	%	n	%	n	%	n	%	
over the past week, have you taken your blood pressure as you should on schedule?	4	13.33%	26	86.67%	11	36.67%	19	63.33%	$\chi^2=4.35$ $p=0.05(S)$
Do you ever forget to take your blood pressure medicine?	4	13.33%	26	86.67%	11	36.67%	19	63.33%	$\chi^2=4.35$ $p=0.05(S)$
Are you careless at times about taking your blood pressure medicine?	6	20.00%	24	80.00%	17	56.67%	13	43.33%	$\chi^2=8.53$ $p=0.01(S)$
when you feel better do you some times stop taking your blood pressure medicine?	14	46.67%	16	53.33%	10	33.33%	20	66.67%	$\chi^2=1.11$ $p=0.29(NS)$
Sometimes if you feel worsen when you take your blood pressure medicine ,do you stop taking it?	18	60.00%	12	40.00%	15	50.00%	15	50.00%	$\chi^2=0.61$ $p=0.43(NS)$

In posttest, first three statements there is a statistically significant difference between experiment and control group patients Drug compliance score.

Table-4.19: Comparison Of Posttest Level Of Drug Compliance Score

Level of DC score	Experiment		Control		Chi square test
	n	%	n	%	
Poor	0	0.00%	16	53.33%	$\chi^2=5.71$ $p=0.02^*$ DF=2 Significant
Moderate	7	23.33%	14	46.67%	
Good	23	76.67%	0	0.00%	
Total	30	100.00%	30	100.00%	

* $p \leq 0.05$ significant DF= Degrees of Freedom

Above table compares the posttest level of drug compliance score between experimental and control group hypertensive patients. After administration of community based health intervention, drug compliance score in experimental group was, none of the patients are having poor level of score, 23.33% of them having moderate level of score and 76.67% of them are having good level of score. In control group, 53.33% of the patients are having poor level of score, 46.67% of them having moderate level of score and none of them are having good level of score.

Statistically there is a significant difference between experimental and control group. Level of drug compliance score between experimental and control group was calculated using chi-square test.

Fig-4.16: Post Test Level Of Drug Compliance

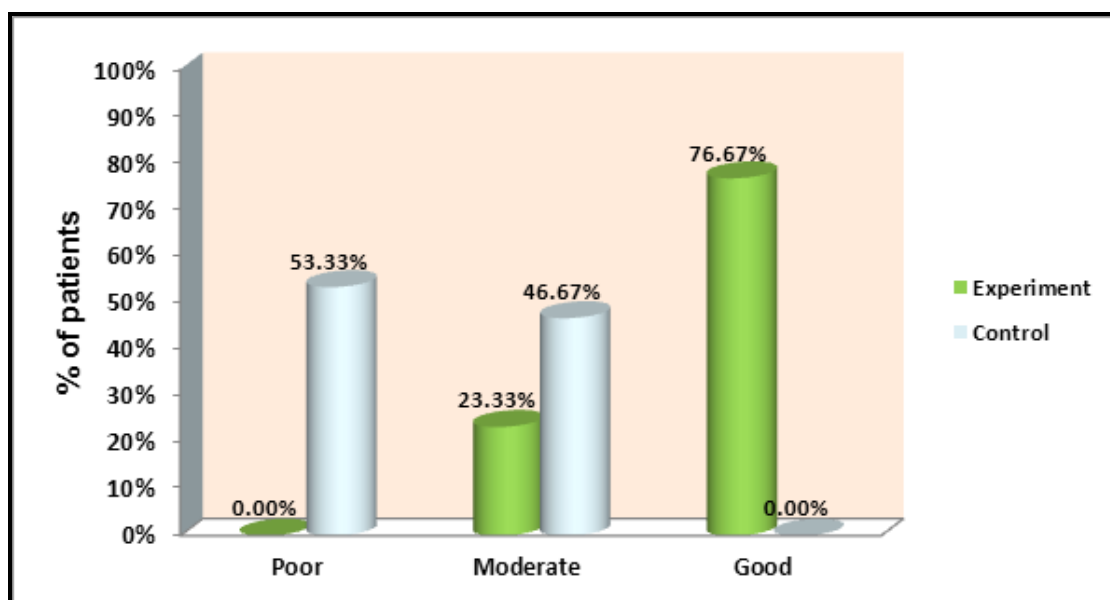


Table-4.20: Comparison Of Mean Posttest Drug Compliance Score

Group	N	Mean score	Std. Deviation	Mean difference	Student's independent t-test
Experiment	30	84.30	5.76	10.27	t=5.09p=0.001*** DF=58significant
Control	30	74.03	9.43		

*** $p \leq 0.001$ very high significant DF=Degrees of Freedom

Above table shows the comparison of mean posttest drug compliance scores between experimental and control patients. On an average, experimental group patients are having 84.30 score and control group patients are having 74.03 score, so the difference is 10.27 score. This difference is large and it is statistically significant difference. Statistical significance was calculated by using student's independent 'test.

SECTION -E: EFFECTIVENESS OF COMMUNITY BASED HEALTH INTERVENTION ON MANAGEMENT OF HYPERTENSION AMONG HYPERTENSION PATIENTS IN EXPERIMENTAL AND CONTROL GROUP

Table-4.21: Effectiveness of Community Based Health Intervention And Generalization Of Life Style Modification Gain Score

Group	Test	Maximum score	Mean score	% of mean score	Mean Difference of LSM gain score with 95% Confidence interval	Percentage Difference of LSM gain score with 95% Confidence interval
Experiment	Pretest	17	8.97	52.76%	4.03 (3.29 – 4.77)	23.70% (19.35% – 28.05%)
	Posttest	17	13.00	76.47%		
Control	Pretest	17	9.00	52.94%	0.40 (-0.01 – 0.81)	2.35% (-0.06% – 4.76%)
	Posttest	17	9.40	55.29%		

Above shows the effectiveness of community based health intervention and generalization of QOL gain score. Experimental group gained 23.70% LSM score after intervention whereas control group gained only 2.35% QOL score without any intervention. Differences and generalization of LSM score between pretest and posttest score was calculated using and mean difference with 95% CI and proportion with 95% CI.

Table-4.22: Effectiveness Of Community Based Health Intervention And Generalization Of Quality Of Life Gain Score

Group	Test	Maximum score	Mean score	Mean Difference of QOL gain score with 95% Confidence interval	Percentage Difference of QOL gain score with 95% Confidence interval
Experiment	Pretest	100	47.39	19.63 (18.62 – 20.63)	19.63% (18.62% – 20.63%)
	Posttest	100	67.02		
Control	Pretest	100	48.83	0.75 (-0.06 – 1.54)	0.75% (-0.06% – 1.54%)
	Posttest	100	49.58		

Above table shows the effectiveness of community based health intervention and generalization of QOL gain score. Experimental group gained 19.63% QOL score after intervention whereas control group gained only 0.75% QOL score with routine care. Differences and generalization of QOL score between pretest and posttest score was calculated using mean difference with 95% CI and proportion with 95% CI.

Table-4.23: Effectiveness Of Community Based Health Intervention And Generalization Of Drug Compliance Gain Score

Group	Test	Maximum score	Mean score	% of mean score	Mean Difference of DC gain score with 95% Confidence interval	Percentage Difference of DC gain score with 95% Confidence interval
Experiment	Pretest	104	71.06	68.33%	13.23 (9.57 – 4.77)	12.72% (9.20% – 4.59%)
	Posttest	104	84.30	81.06%		
Control	Pretest	104	72.90	70.10%	1.13 (-0.28 – 2.55)	1.08% (-0.27% – 2.45%)
	Posttest	104	74.03	71.18%		

Above table shows the effectiveness of community based health intervention and generalization of Drug compliance gain score. Experimental group gained 12.72% Drug compliance score after intervention whereas control group gained only 1.08% Drug compliance score routine care. Differences and generalization of Drug compliance score between pretest and posttest score was calculated using and mean difference with 95% CI and proportion with 95% CI.

SECTION -F: COMPARISON OF PRETEST AND POST-TEST LEVEL OF LIFE STYLE MODIFICATION, QUALITY OF LIFE ,DRUG COMPLIANCE AMONG HYPERTENSION PATIENTS IN EXPERIMENTAL AND CONTROL GROUP

Table-4.24: Comparison Of Pretest And Posttest Life Style Modification Score

Group	Group				Mean Difference	Student Paired t-test
	Pretest		Posttest			
	Mean	SD	Mean	SD		
Experiment	8.97	1.79	13.00	1.11	4.03	t=11.19 p=0.001*** DF=29 (S)
Control	9.00	1.57	9.40	1.63	0.40	t=1.86 p=0.07 DF=29(NS)

S = significant ***P≤0.001 very high significant NS= not significant

Considering experiment group, In posttest, mean difference between experiment and control group is large(4.03) and it is statistically significant difference. Considering control group, In posttest, mean difference between experiment and control group is small(0.40) and it is not statistically significant difference. It was confirmed using student paired t-test.

Table-4.25: Domainwise Comparison of Pretest And Posttest Quality Of Life Score (Experiment)

Domains	Pretest		Posttest		Mean Difference	Paired t-test
	Mean	SD	Mean	SD		
Physical	53.69	53.69	71.95	5.96	18.26	t=26.35 p=0.001***(S)
Psychological	41.53	41.53	60.63	6.35	19.10	t=30.16 p=0.001***(S)
Social relationships	44.25	44.25	65.50	7.96	21.25	t=44.26 p=0.001***(S)
Environment	50.10	50.10	70.02	7.79	19.92	t=33.03 p=0.001***(S)
Overall	47.39	47.39	67.02	5.12	19.63	t=74.07 p=0.001***(S)

*** very high significant at $P \leq 0.001$ S= significant

In Experiment group, all domainwise differences between pretest and posttest score are large and it is statistically significant. Statistical significance was confirmed using student paired t-test.

Table-4.26: Domainwise Comparison of Pretest And Posttest Quality Of Life Score (Control)

Domains	Pretest		Posttest		Mean Difference	Paired t-test
	Mean	SD	Mean	SD		
Physical	54.79	7.71	55.13	7.40	0.34	t=1.55p=0.11 (NS)
Psychological	43.06	9.20	43.39	9.16	0.33	t=1.57p=0.10(NS)
Social relationships	46.50	9.95	46.83	9.32	0.33	t=1.60p=0.09 (NS)
Environment	50.99	7.00	52.16	6.31	1.17	t=1.79p=0.07 (NS)
Overall	48.83	5.54	49.58	5.25	0.75	t=1.22p=0.24 (NS)

NS= not significant

In control group, all domainwise differences between pretest and posttest score are small (0.55) and it is not statistically significant. It was confirmed using student paired t-test.

Table-4. 27: Difference Between Pretest And Posttest Percentage Of Qualityof Life Score

Group	Domains	QOL score				% QOL gain score
		Pretest		Posttest		
		Mean	%	Mean	%	
Experiment	Physical	53.69	53.69%	71.95	71.95%	18.26%
	Psychological	41.53	41.53%	60.63	60.63%	19.10%
	Social relationships	44.25	44.25%	65.50	65.50%	21.25%
	Environment	50.10	50.10%	70.02	70.02%	19.92%
	Total	47.39	47.39%	67.02	67.02%	19.63%
Control	Physical	54.79	54.79%	55.23	55.23%	0.44%
	Psychological	43.06	43.06%	43.51	43.51%	0.45%
	Social relationships	46.50	46.50%	47.12	47.12%	0.62%
	Environment	50.99	50.99%	52.46	52.46%	1.47%
	Total	48.83	48.83%	49.58	49.58%	0.75%

In experiment group, in pretest they are having 47.39% of QOL score, after community based health intervention, in posttest they are having 67.02 QOL score.

In control group, in pretest they are having 48.83% of QOL score, after routine care, in they are having 49.58 QOL

Table-4.28: Comparison Of Pretest And Posttest Situation Drug Compliance Score

Group	Group				Mean Difference	Student Paired t-test
	Pretest		Posttest			
	Mean	SD	Mean	SD		
Experiment	71.06	7.73	84.30	5.76	13.24	t=7.39 p=0.001*** DF=29 (S)
Control	72.90	9.52	74.03	9.43	1.13	t=1.63 p=0.11DF=29(NS)

S = significant ***P≤0.001 very high significant NS= not significant

Considering experiment group, In posttest, mean difference between experiment and control group is large (13.24) and it is statistically significant difference. Considering control group, In posttest, mean difference between experiment and control group is small (1.13) and it is not statistically significant difference. It was confirmed using student paired t-test.

Statistical Test-1

H₁: There will be a significant difference between pretest and posttest level of lifestyle modification, quality of life and drug compliance among hypertensive patients

Inference

Here H₁ is accepted. From the above test, it is seen that the 't' value of lifestyle modification (t=11.19), 't' value of quality of life (t=26.35, t=30.16, t=44.26, t=33.03, t=74.07) and 't' value of drug compliance (t=7.39) is more than the table value for df= 29. Hence, There is a significant difference between pretest and posttest level of lifestyle modification, quality of life and drug compliance among hypertensive patients. It is inferred that community based health intervention is effective among hypertensive patients.

Table-4.29: Correlation Between Posttestlife Style Modification Score, Quality Of Life Score And Drug Compliance Score

	Correlation between	Mean score Mean±SD	Karl Pearson Correlation coefficients	Interpretation
Experiment	Life style Vs Quality of life	13.11±1.11 67.02±5.07	r= 0.42 p=0.001***	Moderate correlation
	Life style VsDrug compliance	13.11±1.11 84.30±5.76	r= 0.37 p=0.001***	Fair correlation
	Quality of Life VsDrug compliance	67.02±5.07 84.30±5.76	r= 0.44 p=0.001***	Moderate correlation
Control	Life style Vs Quality of life	9.60±1.63 49.58±5.03	r= 0.12p=0.55	poor correlation
	Life style VsDrug compliance	9.60±1.63 74.03±9.43	r= 0.19p=0.27	poor correlation
	Quality of life VsDrug compliance	49.58±5.03 74.03±9.43	r= 0.17p=0.44	poor correlation

In experiment group,

Considering Life style Vs,Quality of lifethere is significant, positive, Moderate correlation between posttest life style modification score and posttest Quality of life score. It means life style modification score increases their Quality of life score also increases moderately.

Considering Life style VsDrug compliance, there is significant, positive, Fair correlation between posttest life style modification score and posttest Drug compliance score. It means life style modification score increases their Drug compliance score also increases Fairly.

Considering Quality of life Vs Drug compliance, there is significant, positive, Fair correlation between posttest Quality of life score and posttest Drug compliance score. It means life style modification score increases their Drug compliance score also increases moderately.

In control group,

Considering Life style Vs Quality of life, there is significant, positive, poor correlation between posttest life style modification score and posttest Quality of life score. It means life style modification score increases their Quality of life score also increases poorly.

Considering Life style Vs Drug compliance, there is significant, positive, poor correlation between posttest life style modification score and posttest Drug compliance score. It means life style modification score increases their Drug compliance score also increases poorly.

Considering Quality of life Vs Drug compliance, there is significant, positive, poor correlation between posttest Quality of life score and posttest Drug compliance score. It means life style modification score increases their Drug compliance score also increases poorly.

SECTION -G: ASSOCIATION BETWEEN THE POST-TEST LEVEL OF LIFE STYLE MODIFICATION, QUALITY OF LIFE AND DRUG COMPLIANCE AND THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES.

Table-4.30: Association Between Posttest Level Of Life Style Modification Score And Hypertensive Patients Demographic Variables (Experiment)

Demographic variables		Posttest level of LSM score						n	Chi square test
		Poor		Moderate		Good			
		n	%	n	%	n	%		
Age	30-39 Years	0	0.00%	1	8.33%	11	91.67%	12	$\chi^2=11.90$ $p=0.01^{**}(S)$
	40-49 Years	0	0.00%	2	22.22%	7	77.78%	9	
	50-59 Years	0	0.00%	4	80.00%	1	20.00%	5	
	60-69 Years	0	0.00%	3	75.00%	1	25.00%	4	
Monthly Family income	Below Rs.5,000	0	0.00%	7	70.00%	3	30.00%	10	$\chi^2=10.12$ $p=0.02^{*}(S)$
	Rs.5,000-Rs.10,000	0	0.00%	2	28.57%	5	71.43%	7	
	Rs.10,000-Rs.15,000	0	0.00%	1	11.11%	8	88.89%	9	
	Above Rs.15,000	0	0.00%	0	00.00%	4	100.00%	4	
Duration of illness	0-2 years	0	0.00%	1	10.00%	9	90.00%	10	$\chi^2=7.13$ $p=0.03^{*}(S)$
	3-4 years	0	0.00%	3	27.27%	8	72.73%	11	
	5-6 years	0	0.00%	6	66.67%	3	33.33%	9	
	More than 6 years	0	0.00%	0	0.00%	0	0.00%	0	

Above table shows the association between posttest level of life style modification score and hypertensive patients demographic variables among the experiment group. Younger patients, more income patients and less duration of illness patients are having more good level of life style modification score than others. Statistical significance was calculated using chi square test.

FIG -4.17: Association Between Post Test Level Of Life Style Modification And Patient Age

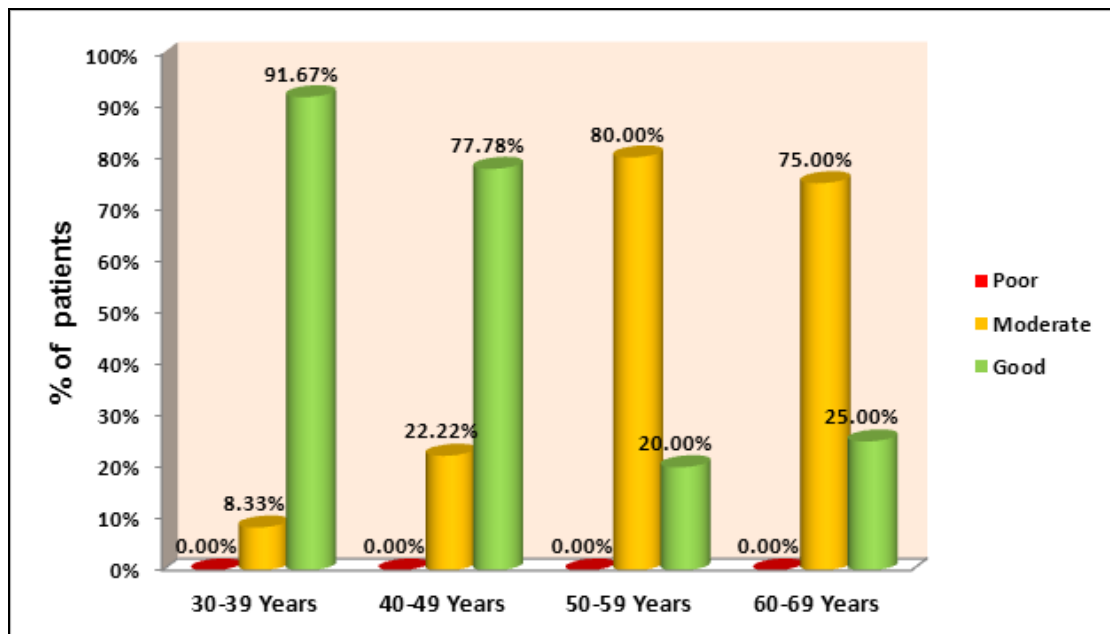


Fig -4.18: Association Between Post Test Level Of Life Style Modification And Monthly Income

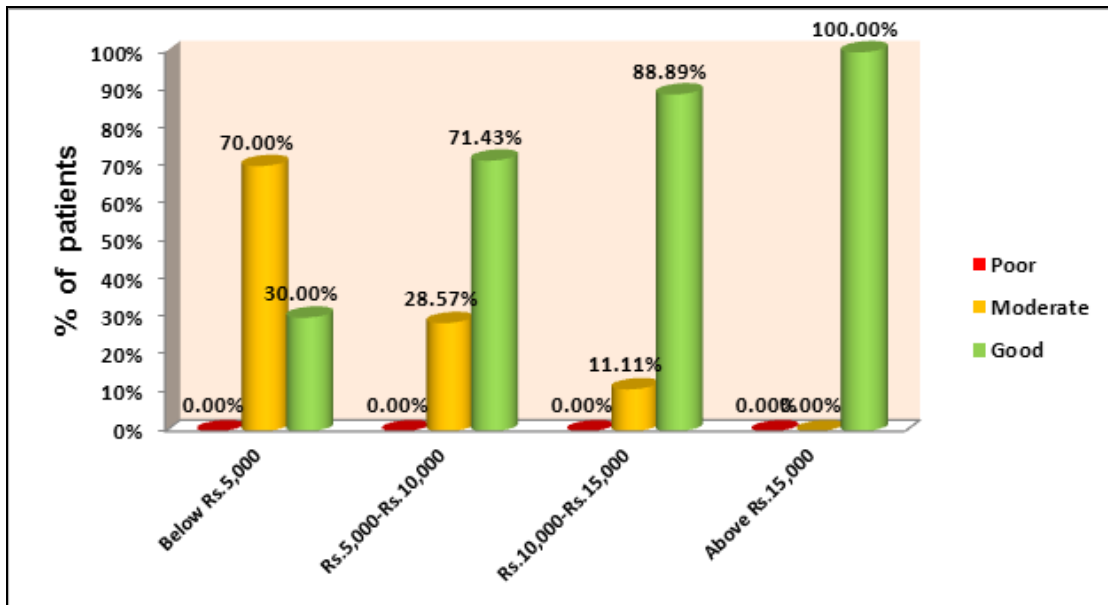


Fig -4.19: Association Between Post Test Level Of Life Style Modification And Illness

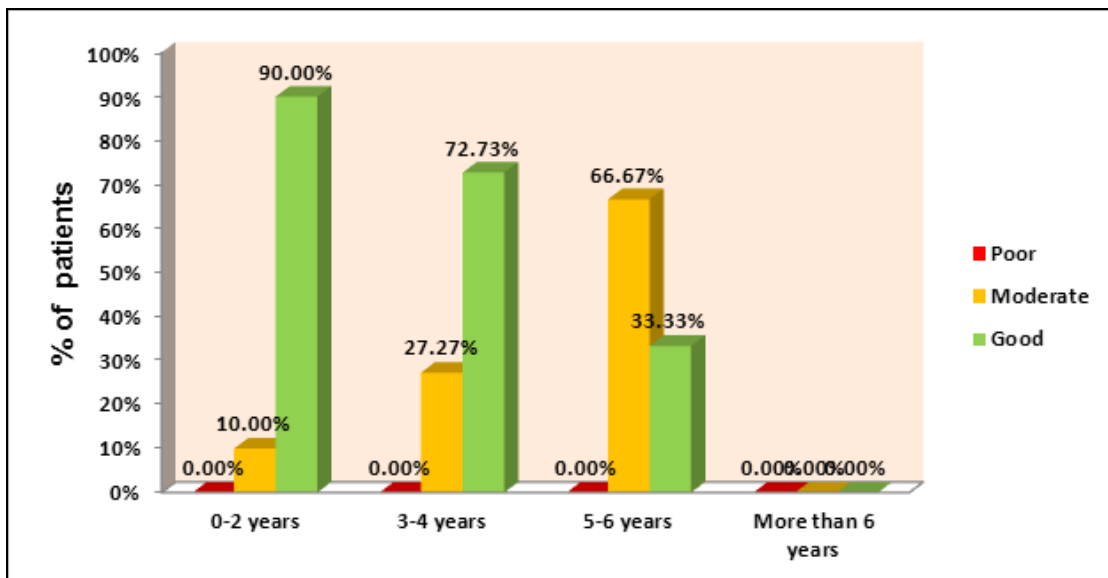


Table- 4.31: Association Between Posttest Level Of Quality Of Life Score And Hypertensive Patients Demographic Variables (Experiment)

Demographic variables		Posttest level of QOL score						n	Chi square test
		Poor		Moderate		Good			
		n	%	n	%	n	%		
Age	30-39 Years	0	0.00%	4	33.33%	8	66.67%	12	$\chi^2=9.62$ p=0.02*(S)
	40-49 Years	0	0.00%	5	71.42%	4	28.58%	9	
	50-59 Years	0	0.00%	5	100.00%	0	0.00%	5	
	60-69 Years	0	0.00%	4	100.00%	0	0.00%	4	
Educational qualification	Formal education	0	0.00%	13	92.86%	1	7.14%	14	$\chi^2=13.28$ p=0.01**(S)
	Professional	0	0.00%	3	50.00%	3	50.00%	6	
	Graduation	0	0.00%	1	16.67%	5	83.33%	6	
	Informal education	0	0.00%	1	25.00%	3	75.00%	4	
Duration of illness	0-2 years	0	0.00%	4	40.00%	6	60.00%	10	$\chi^2=8.63$ p=0.01**(S)
	3-4 years	0	0.00%	5	45.45%	6	54.55%	11	
	5-6 years	0	0.00%	9	100.00%	0	0.00%	9	
	More than 6 years	0	0.00%	0	0.00%	0	0.00%	0	

Above table shows the association between posttest level of life style modification score and hypertensive patients demographic variables among the experiment group. Younger patients, more educated patients and less duration of illness patients are having more good level of Quality of lifescore than others. Statistical significance was calculated using chi square test.

Fig - 4:20: Association Between Post Test Level Of Quality Of Life and Patients Age

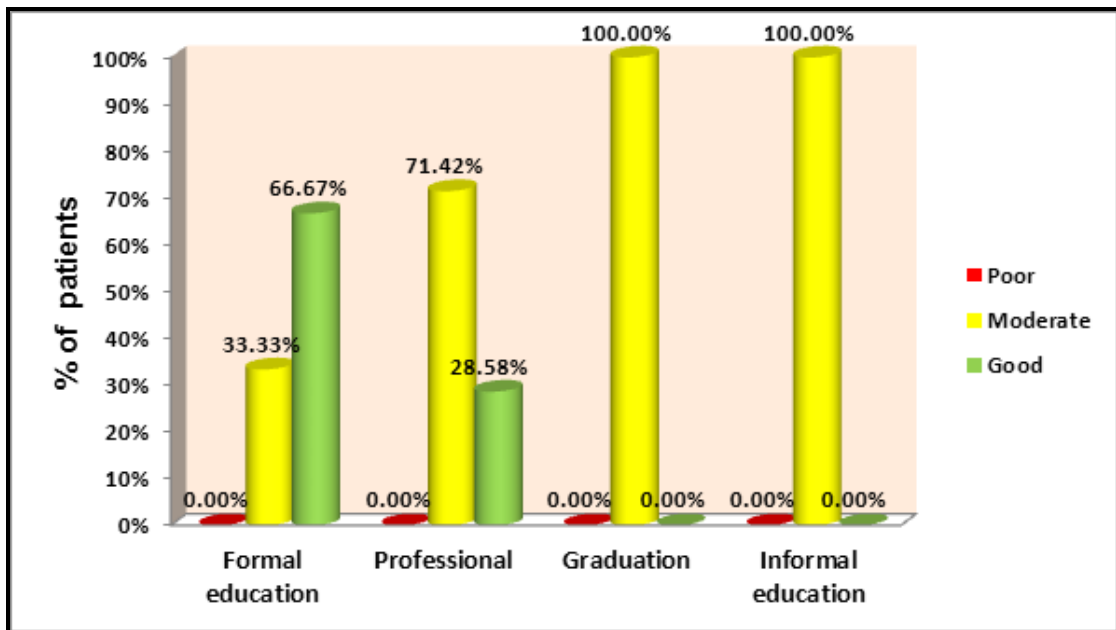


Fig -4.21: Association Between Post Test Quality Of Life And Educational Status

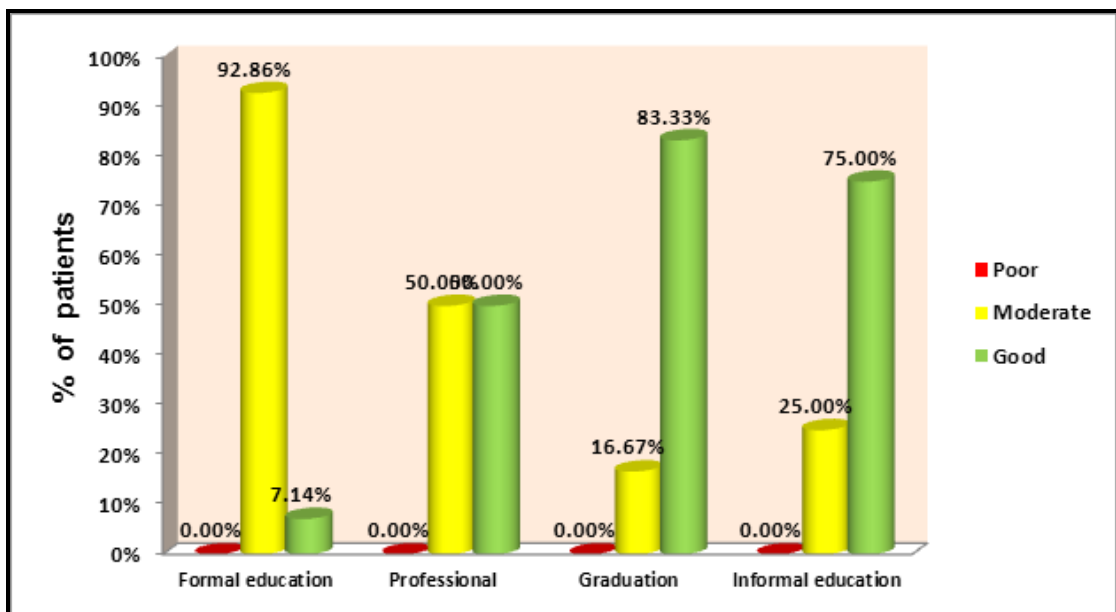


Fig -4:22: Association Between Post Test Quality Of Life And Duration Of Illness

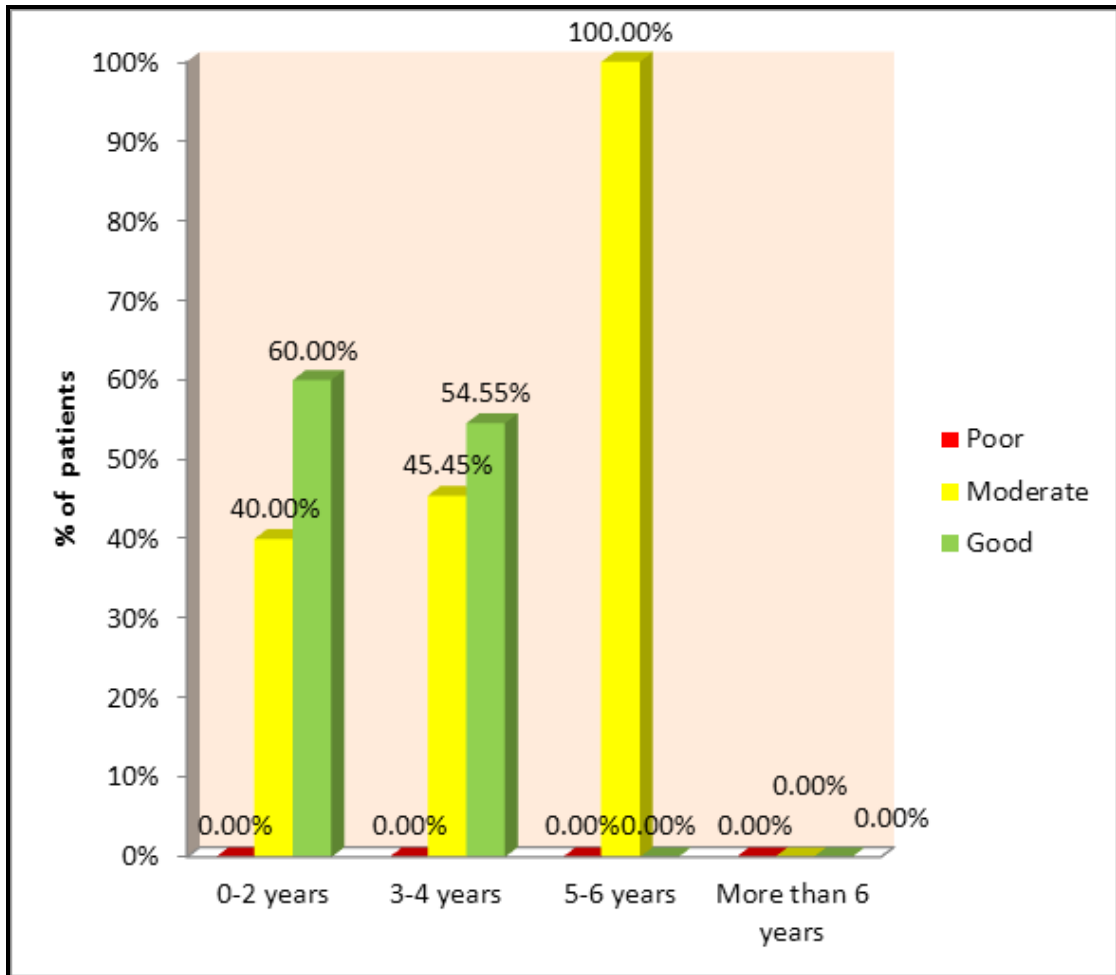


Table-4.32: Association Between Posttest Level Of Drug Compliance Score And Hypertensive Patients Demographic Variables (Experiment)

Demographic variables		Posttest level of DC score						n	Chi square test
		Poor	Moderate		Good				
		n	%	n	%	n	%		
Age	30-39 Years	0	0.00%	1	8.33%	11	91.67%	12	$\chi^2=9.00$ $p=0.03^*(S)$
	40-49 Years	0	0.00%	1	11.11%	8	88.89%	9	
	50-59 Years	0	0.00%	2	40.00%	3	60.00%	5	
	60-69 Years	0	0.00%	3	75.00%	1	25.00%	4	
Educational qualification	Formal education	0	0.00%	5	35.71%	9	64.29%	14	$\chi^2=9.24$ $p=0.05^*(S)$
	Professional	0	0.00%	0	0.00%	6	100.00%	6	
	Graduation	0	0.00%	0	0.00%	6	100.00%	6	
	Informal education	0	0.00%	2	50.00%	2	50.00%	4	
Diagnosis	In a routine medical examination	0	0.00%	1	5.56%	17	94.44%	18	$\chi^2=8.57$ $p=0.01(S)$
	Mass screening programme	0	0.00%	4	44.44%	5	55.56%	9	
	Emergency	0	0.00%	2	66.67%	1	33.33%	3	
	Others	0	0.00%	0	0.00%	0	0.00%	0	
Duration of illness	0-2 years	0	0.00%	0	0.00%	10	100.00%	10	$\chi^2=8.43$ $p=0.01^{**}(S)$
	3-4 years	0	0.00%	2	18.18%	9	81.82%	11	
	5-6 years	0	0.00%	2	22.22%	7	77.78%	9	
	More than 6 years	0	0.00%	0	0.00%	0	0.00%	0	

Above table shows the association between posttest level Drug compliance score and hypertensive patients demographic variables among the experiment group. Younger patients, more educated patients, In a routine medical examination diagnosis patients and less duration of illness patients are having more good level of Drug compliance score than others. Statistical significance was calculated using chi square test.

Statistical test-2

H₂: There will be a significant association between posttest level of lifestyle modification, quality of life and drug compliance among hypertensive patients and their selected demographic variables.

Inference

Here **H₂** is accepted. From the table it is seen that, as p value is ≤ 0.05 there is significant association between the posttest level of lifestyle modification, quality of life and drug compliance among hypertensive patients and their selected demographic such as age, educational qualification, family income, duration of illness and diagnosis of hypertension.

Fig -4.23: Association Between Post Test Level Of Drug Compliance And Patients Age

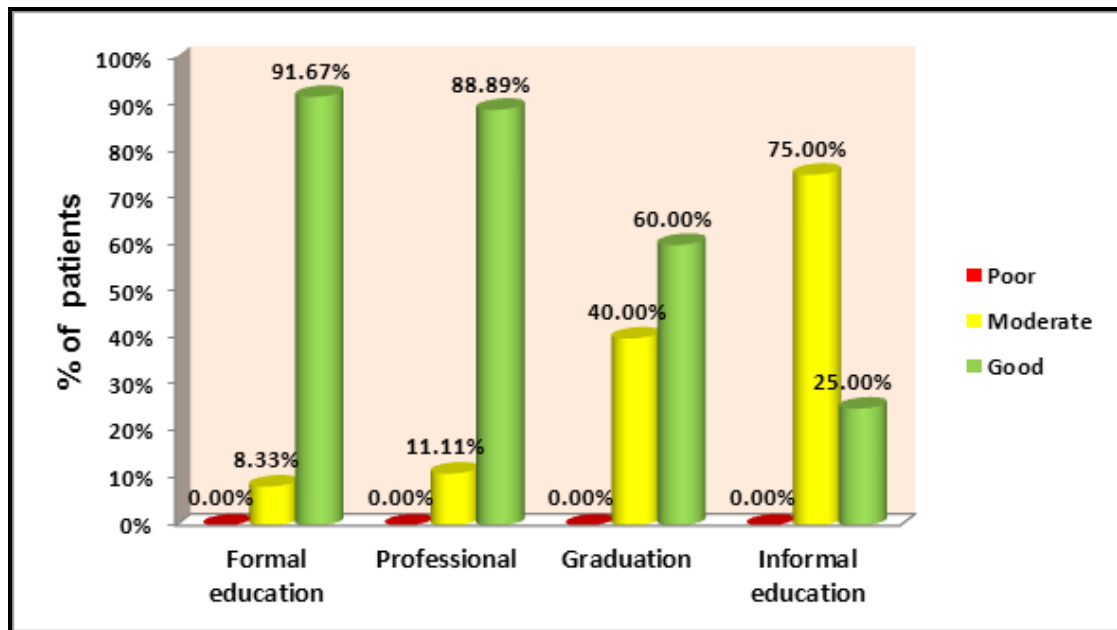


Fig-4.24: Association Between Post Test Level Of Drug Compliance And Educational Status

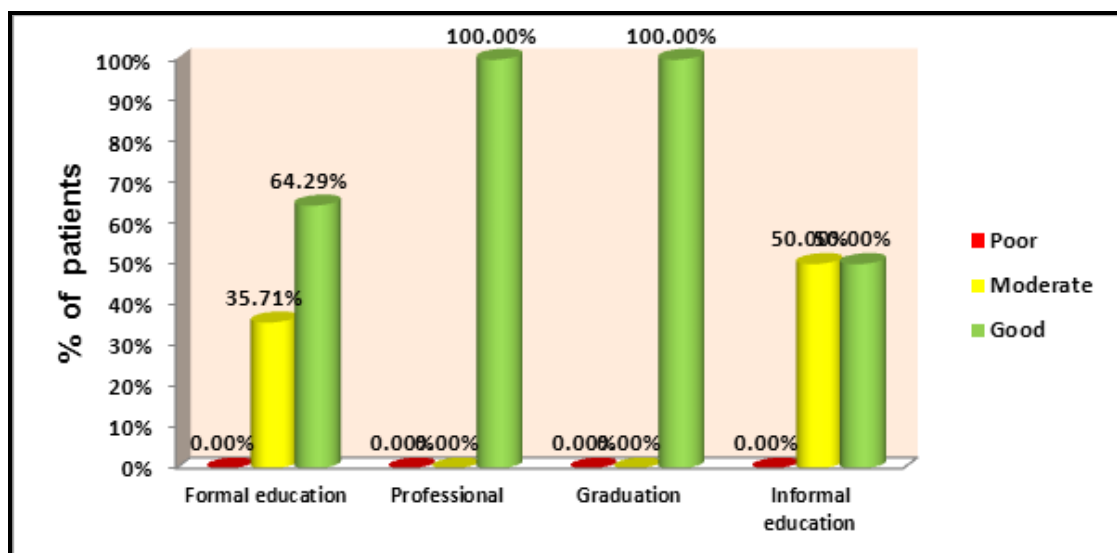


Fig-4.25: Association Between Post Test Level Of Drug Compliance And Diagnosis

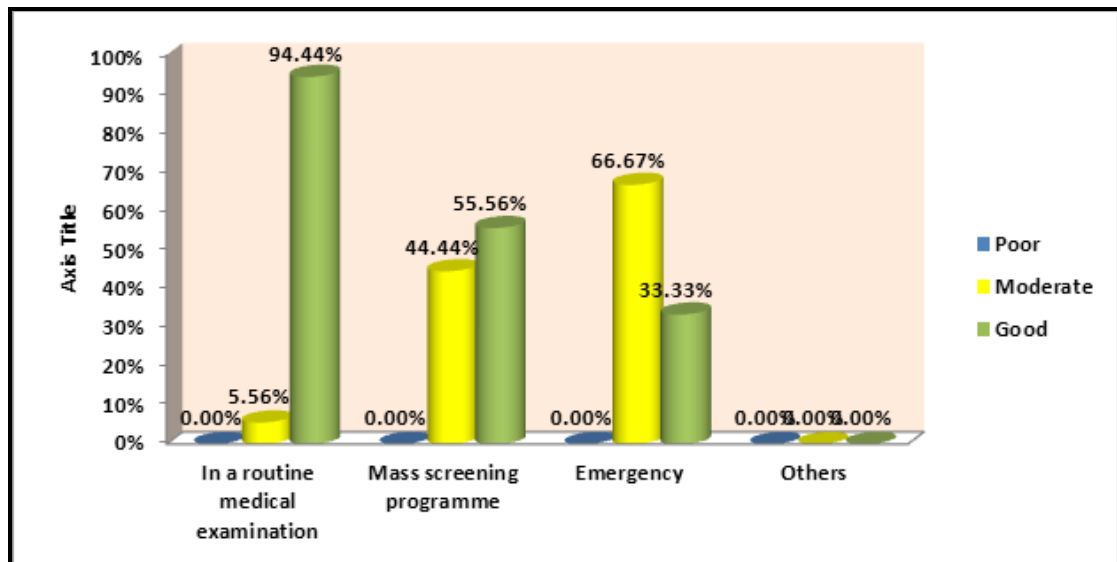
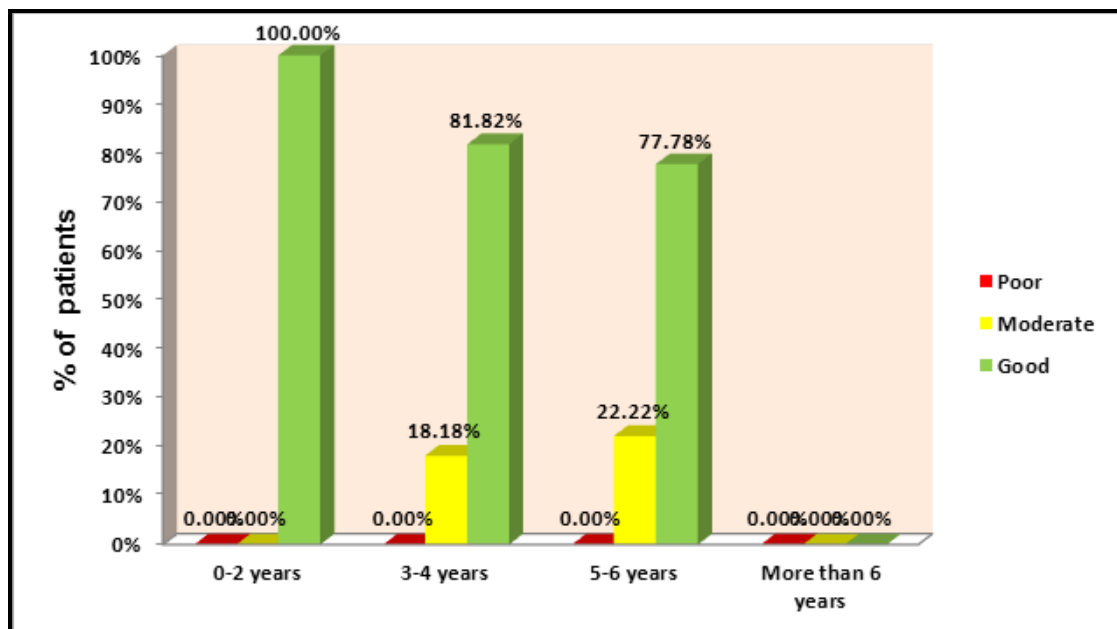


Fig -4.26: Association Between Post Test Level Of Drug Compliance And Duration Of Illness



CHAPTER-V DISCUSSION

This chapter deals with the discussion of the results of data analyzed bases on the objective of the study. The purpose of the study is to assess the effectiveness of community based health intervention on management of hypertension among patient with hypertension attending primary health center, Chennai. The objectives of the study are To assess the pretest level of life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group, To assess the post-test level of lifestyle modification, quality of life and drug compliance among hypertensive patients in experimental and control group ,To evaluate the effectiveness of community based health intervention on life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group, To find out the association between post-test level of life style modification ,quality of life and drug compliance with their selected socio-demographic variables. The study was done in primary health center choolai, Chennai .using nan randomized control group design with 60 sample. The data was analyzed using descriptive and inferential statistics.

FINDINGS BASED ON DEMOGRAPHIC VARIABLES

- ❖ **AGE:** Maximum 40% patients belongs to (30-39years) age group in experimental group and in control group maximum 36.67% patients belongs to (30-39years) age group
- ❖ **GENDER:** maximum 50% belongs to male and female gender in experimental group and maximum 47.67% belongs to female gender in control group.

- ❖ **EDUCATIONAL QUALIFICATION:** Maximum 46.67 % had formal education in experimental group and maximum 50 % had formal education in control group.
- ❖ **OCCUPATIONAL STATUS:** Maximum 56.67% are unemployed in experimental and maximum 60% are unemployed in control group
- ❖ **FAMILY MONTHLY INCOME:**Maximum 33.33% family income is below 5000 in experimental group and in control group 36.67% family income is below 5000
- ❖ **RELIGION:**Maximum 46.67% patients belongs to Hindu in experimental group and in control group 43.33% patients belongs to Hindu
- ❖ **LANGUAGE :** Maximum76.67% patients are able to know Tamil language in experimental group and in control group 90 % patients are able to know Tamil language
- ❖ **MARITAL STATUS:** 100% hypertension patients are married in both experimental and control group
- ❖ **TYPE OF FAMILY:**Maximum 50% belongs to nuclear family in experimental group and in control group 56.67% belongs to nuclear family.
- ❖ **NO OF MEMBERS:**Maximum 56.67% having more than 4 members in family in experimental group and in control group 66.67 % having more than 4 members in family

FINDINGS REGARDING CLINICAL VARIABLE:

- ❖ **DIAGNOSIS:**Maximum 60% patients diagnosed by routine medical examination in experimental group and in control group 47.67% patients diagnosed by mass screening programme
- ❖ **DURATION OF ILLNESS:** Maximum 36.67%patients illness duration is (3-4)years in experimental group and in control group 46.67% patients illness duration is (5-6)years.
- ❖ **ROUTINE FOLLOW UP:**Maximum 50% patients went to government hospital for follow up and in control group 43.33%patients went to private hospital for follow up
- ❖ **STAGES OF HYPERTENSION:**Maximum 36.67%patient belongs to primary stage in experimental group and in control group 36.67% patients belongs to primordial stage and secondary stage.
- ❖ **HYPERTENSIVE DRUGS:**Maximum 73.33% patients took amlodipine tablets in experimental group and in control group 76.67% patients took amlodipine tablets

FINDING BASED ON THE OBJECTIVES

Objective-1:To assess the pretest level of life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group

The present study shows the analysis of pretest level of life style modification score between experimental and control hypertensive patients. Before administration of community based health intervention ,life style modification score in experimental group was, 30.00% of the patient score had poor level of score, 70.00% of them had moderate level of score and none of them had good level of score. In control group, 26.67% of the patient score had poor level of score, 73.33% of

them had moderate level of score and none of them had good level of score and in quality of life experiment group, 73.33% of them had poor QOL score, 26.67% had moderate level of QOL score and none had good level of QOL score. Considering control group, 76.67% of them had poor QOL score, 23.33% had moderate level of QOL score and none had good level of QOL score and the pretest level of drug compliance score between experimental and control group hypertensive patients. Before administration of community based health intervention, drug compliance score in experimental group was, 66.67% of the patients had poor level of score, 33.33% of them had moderate level of score and none of them had good level of score. In control group, 60.00% of the patients had poor level of score, 40.00% of them had moderate level of score and none of them had good level of score.

A true experimental was conducted by **Solomon James (2016)** the study was carried out to assess the effectiveness of intervention strategies to life style modifications among hypertensive patients at selected hospitals at Bangalore .the findings of pretest. It showed that, in the experimental and control group, 95%and 98.3% of subjects had inadequate knowledge level, 5% and1.7% had moderately adequate knowledge level, none of them hadadequate knowledge in the pretest respectively.

A cross sectional study was conducted by **s.pirasath (2017)**A Study on Knowledge, Awareness,and Medication Adherence in Patients with Hypertension from a Tertiary Care Centre from Northern Sri Lanka the findings of the pretest shows that Most of patients (84.5%) had poor compliance of drugs in our study.

From the above discussion it is understood that the majority of the hypertension patients lacks knowledge on life style modification ,poor quality of life and drug compliance which seeks the need for the

development of community based health intervention for the hypertension patients.

Objective-2: To evaluate the effectiveness of community based health intervention on life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group

The present shows that the Effectiveness regarding management of hypertension showed that out of 60 samples score based on Life style modification in experimental group gained 23.70% score after intervention whereas control group gained only 2.35% Considering experiment group, In posttest, mean difference between experiment and control group is large(4.03) and it is statistically significant difference. Considering control group, In posttest, mean difference between experiment and control group is small (0.40) and it is not statistically significant difference. It was confirmed using student paired t-test. QOL score without any intervention. In quality of life experimental group gained 19.63% QOL score after intervention whereas control group gained only 0.75% QOL score without routine care. In Experiment group, all domainwise differences between pretest and posttest score are large and it is statistically significant. Statistical significance was confirmed using student paired t-test and In control group, all domainwise differences between pretest and posttest score are small (0.55) and it is not statistically significant. It was confirmed using student paired t-test and in experimental group gained 12.72% Drug compliance score after intervention whereas control group gained only 1.08% Drug compliance score routine care. Considering experiment group, In posttest, mean difference between experiment and control group is large (13.24) and it is statistically significant difference. Considering control group, In posttest, mean difference between experiment and control group is small (1.13) and it is not statistically significant difference. It was confirmed using student paired t-test.

A true experimental was conducted by **Solomon James (2016)** the study was carried out to assess the effectiveness of intervention strategies to life style modifications among hypertensive patients at selected hospitals at Bangalore .the findings of the mean posttest knowledge of hypertensive patients whoreceived intervention strategies on lifestyle modifications will be significantly higher than the mean pretest knowledge. The hypothesis is tested using paired' test method. It illustrates that the mean pretest knowledge level (9.64) is lesser than the mean posttest knowledge (23.86) level in the experimental group. There is a significant difference in knowledge scores between the pretest and posttest in the experimental group is statistically highly significant ($t=.33.81, p < .001$).

A cross sectional study was conducted by **s.pirasath (2017)**A Study on Knowledge, Awareness,and Medication Adherence in Patients with Hypertension from a Tertiary Care Centre from Northern Sri Lanka. systematic randomized controlled sampling was done by using Morisky questionnaires to assess their knowledge about hypertension. Data were analyzed using SPSS (version 21) analytical package. 73 of 303 patients were males. 69.9% of patients had adequate knowledge about hypertension. 40.5% are unaware about condition 75.8% of patients are not on regular follow up72.3% of patients were unaware of previous report findings . 48.2% of patients had awareness of about complication . Most of the patients had poor drug compliance. They found forgetfulness and busy schedule are common reason for non adherence. Therefore the results proves that through the community based health intervention on management of hypertension among hypertension patients was effective

Objective-3: To compare the pretest and posttest level of life style modification, quality of life and drug compliance among hypertensive patients in experimental and control group

The present study shows the result of Life style Modification in experimental group , none of the patient score had poor level of score, 33.33% of them had moderate level of score and 66.67% of them had good level of score. In control group, 36.67% of the patient score had poor level of score, 63.33% of them had moderate level of score and none of them had good level of score.

Quality of life in in experiment group, none had poor level of QOL score, 60.00% had moderate level of QOL score and 40.00% had good level of QOL score. Considering control group, 66.67% of them had poor QOL score, 33.33% had moderate level of QOL score, 38.33% had moderate level of QOL score and none of them had good level of QOL score.

Drug compliance score in experimental group, none of the patients had poor level of score, 23.33% of them had moderate level of score and 76.67% of them had good level of score. In control group, 53.33% of the patients had poor level of score, 46.67% of them had moderate level of score and none of them had good level of score..

A true experimental was conducted by **Solomon James (2016)** the study was carried out to assess the effectiveness of intervention strategies to life style modifications among hypertensive patients at selected hospitals at Bangalore .the findings of In the experimental group and the control group, 2.5% and 95.8% had inadequate knowledge level, 35% and 3.3% had moderately adequate knowledge level, 62.5% and 0.8% had adequate knowledge level in the post test respectively.

A cross sectional study was conducted by **s.pirasath (2017)** A Study on Knowledge, Awareness, and Medication Adherence in Patients with Hypertension from a Tertiary Care Centre from Northern Sri Lanka the findings of the pretest shows that Almost all patients (99%) thought that taking medicine plays a key role in controlling the blood pressure.

The discussion of the posttest level of knowledge score and its comparison with the pretest knowledge proves that through the community based health intervention on management of hypertension among hypertension patients was effective. **So that H₁ is accepted. Therefore there is a significant difference regarding pretest and posttest level of lifestyle modification, quality of life and drug compliance among hypertensive patients.**

Objective-4: To find out the association between post-test level of life style modification, quality of life and drug compliance and their selected socio-demographic variables.

There was significant association with the effectiveness of community based health intervention regarding management of hypertension and their Younger patients, more income patients and less duration of illness patients are having more good level of life style modification score

[$\chi^2=11.90$ p=0.01*],[$\chi^2=10.12$ p=0.02*],[$\chi^2=7.13$ p=0.03*]

There was significant association with the effectiveness of community based health intervention regarding management of hypertension and their Younger patients, more educated patients and less duration of illness patients are having more good level of Quality of life score

[$\chi^2=9.62$ p=0.02*(),[$\chi^2=13.28$ p=0.01*],[$\chi^2=8.63$ p=0.01*]

There was significant association with the effectiveness of community based health intervention regarding management of hypertension and their Younger patients, more educated patients, In a routine medical examination diagnosis patients and less duration of illness patients are having more good level of Drug compliance score

[$\chi^2=9.00$ p=0.03*],[$\chi^2=9.24$ p=0.05*],[$\chi^2=8.57$ p=0.01],[$\chi^2=8.43$ p=0.01**]

A true experimental was conducted by **Solomon James (2016)** the study was carried out to assess the effectiveness of intervention strategies to life style modifications among hypertensive patients at selected hospitals at Bangalore .the findings of this study shows in order to find out the association between the sex, familymonthly income, history of

Smoking and alcoholism and weight, Kraal Wallis test value was computed and the obtained chi-square value was significant at $p<.0.001$. This showed that there was a significant association between sex, family monthly income, history of smoking and alcoholism and weight of hypertensivepatients in the experimental and control group.

A cross sectional study was conducted by **s.pirasath (2017)**A Study on Knowledge, Awareness,and Medication Adherence in Patients with Hypertension from a Tertiary Care Centre from Northern Sri Lanka the findings are.The knowledge about hypertension among majority of patients was reasonable. But they were unaware of their disease status. The drug compliance among them was poor. Forgetfulness and interruptions of daily routine were common reasons attributed for non-adherence. This recent research clearly illustrates the need to improve hypertension knowledge and awareness in order to improve the medication adherence and optimum blood pressure control.

A cross sectional study was conducted by **Mein Xian (2019)** was conducted a study to health related quality of life of hypertension patients and findings are Perceived economic burden that is caused by hypertension was the most common factor that impacts on patients' Health related quality of life. Female patients were more susceptible, when compared to male patients. The study suggested healthy life style, such as regular physical exercise and family members' support, would have a positive impact on Health related quality of life among

hypertension patients. Health intervention strategies need to be further explored and adapted to the context to improve Health related quality of life for patients who suffer from hypertension and other chronic non-communicable diseases.

Above the discussion shows that the age group, types of family, income are associated with the knowledge. The analysis revealed that there was a significant association between posttest level of life style modification, quality of life, drug compliance and their selected demographic variable. **So that H₂ accepted. Therefore there is significant association regarding posttest level of life style modification, quality of life and drug compliance and their selected demographic variables.**

From the above discussion of the present study with other similar studies justifies that there is a poor life style modification, quality of life and drug compliance among hypertension patients. The education was planned through community based health intervention on management of hypertension among hypertension patients to gain adequate knowledge about life style modification and able to improve quality of life and having high drug compliance and same was implemented. The results of this study highlighted the effectiveness of community based health intervention on management of hypertension. Therefore the patients can able to manage the hypertension and more conscious about healthy life style it leads to increase quality of life and drug compliance .

CHAPTER –VI

SUMMARY,IMPLICATIONS,RECOMMENDATION, LIMITATION AND CONCLUSION

This chapter deals with the summary, implication, Recommendation, Limitation and Conclusion.

6.1. SUMMARY OF THE STUDY FINDINGS

The study was conducted to ascertain the effectiveness of community based health intervention on management of hypertension among patient with hypertension attending primary health center, Chennai. It was a quantitative approach. The main objectives of the study is to assess the effectiveness of community based health intervention with non randomized control group design. The study was conducted at primary health center Chennai. 60 hypertension patients were included in the study based on the inclusion criteria. Self-administered questionnaire was used to determine the level of knowledge, quality of life, and drug compliance among hypertension patients. The pilot study was conducted in primary health center, Chennai with 10 samples. No modifications were made after pilot study.

The review of literature provided the base to construct the tools to select the methodology. The conceptual framework of the study was based on the von Bertalanffy general system theory . Data was collected in 4 weeks from 20-01-2020 to 15-02-2020. Initially the investigator got formal permission from medical officer of primary health center, Chennai. Informed written consent was obtained from each sample after explaining the purpose of the study and was given assurance for keeping the information confidentially. The data was collected by using a convenient sampling technique. The knowledge regarding management of hypertension was assessed by structured and semi- structured questionnaire. Community based health intervention regarding

management of hypertension was given to the samples after the management of hypertension to improve the knowledge ,quality of life ,drug compliance . Data analysis was done by using descriptive and inferential statistics.

MAJOR FINDINGS OF THE STUDY:

6.1.1 Findings related to Demographic Variables

- ❖ Maximum 40% patients belongs to (30-39years) age group in experimental group and in control group maximum 36.67% patients belongs to (30-39years) age group
- ❖ Maximum 50% belongs to male gender and 50% belongs to female gender in experimental group and maximum 47.67% belongs to female gender in control group.
- ❖ Maximum 46.67 % had formal education in experimental group and maximum 50 % had formal education in control group.
- ❖ Maximum 56.67% are unemployed in experimental and maximum 60% are unemployed in control group
- ❖ Maximum 33.33% family income is below 5000 in experimental group and in control group 36.67% family income is below 5000
- ❖ Maximum 46.67% patients belongs to Hindu in experimental group and in control group 43.33% patients belongs to Hindu
- ❖ Maximum 76.67% patients are able to know Tamil language in experimental group and in control group 90 % patients are able to know Tamil language
- ❖ 100% hypertension patients are married in both experimental and control group

- ❖ Maximum 50% belongs to nuclear family in experimental group and in control group 56.67% belongs to nuclear family.
- ❖ Maximum 56.67% having more than 4 members in family in experimental group and in control group 66.67 % having more than 4 members in family

6.1.2. Findings regarding Clinical Variable

- Maximum 60% patients diagnosed by routine medical examination in experimental group and in control group 47.67% patients diagnosed by mass screening programme
- ❖ Maximum 36.67%patients illness duration is (3-4) years in experimental group and in control group 46.67% patients illness duration is (5-6) years.
- ❖ Maximum 50% patients went to government hospital for follow up and in control group 43.33%patients went to private hospital for follow up
- ❖ Maximum 36.67%patient belongs to primary stage in experimental group and in control group 36.67%patients belongs to primordial stage and secondary stage.
- ❖ Maximum 73.33% patients took amlodipine tablets in experimental group and in control group 76.67% patients took amlodipine tablets

6.1.3. Findings regarding pretest score of life style modification, quality of life and drug compliance in experimental and control group

Life style modification score in experimental group was, 30.00% of the patients had poor level of score, 70.00% of them had moderate level of score and none of them had good level of score and in control

group, 26.67% of the patients had poor level of score, 73.33% of them had moderate level of score and none of them had good level of score.

Quality of life experiment group, 73.33% of them had poor QOL score, 26.67% had moderate level of QOL score and none had good level of QOL score. Considering control group, 76.67% of them had poor QOL score, 23.33% had moderate level of QOL score and none had good level of QOL score.

Drug compliance score in experimental group was, 66.67% of the patients had poor level of score, 33.33% of them had moderate level of score and none of them had good level of score. In control group, 60.00% of the patients had poor level of score, 40.00% of them had moderate level of score and none of them had good level of score.

6.1.4. Finding related to effectiveness of community based health intervention on life style modification, quality of life and drug compliance in experimental and control group

Effectiveness regarding management of hypertension showed that out of 60 samples score based on Life style modification in experimental group gained 23.70% score after intervention whereas control group gained only 2.35% QOL score without any intervention. In quality of life experimental group gained 19.63% QOL score after intervention whereas control group gained only 0.75% QOL score without routine care and in experimental group gained 12.72% Drug compliance score after intervention whereas control group gained only 1.08% Drug compliance score routine care.

6.1.4; Findings regarding to compare the pretest and posttest of life style modification, quality of life and drug compliance in experimental and control group:

Life style Modification in experimental group was, none of the patient score had poor level of score, and 33.33% of them had moderate level of score and 66.67% of them had good level of score. In control

group, 36.67% of the patient score had poor level of score, 63.33% of them had moderate level of score and none of them are had good level of score.

Quality of life in in experiment group, none had poor level of QOL score, 60.00% had moderate level of QOL score and 40.00% had good level of QOL score. Considering control group, 66.67% of them had poor QOL score, 33.33% are having poor level of QOL score, 38.33% had moderate level of QOL score and none had good level of QOL score.

Drug compliance score in experimental group, none of the patients had poor level of score, 23.33% of them had moderate level of score and 76.67% of them had good level of score. In control group, 53.33% of the patients had poor level of score, 46.67% of them had moderate level of score and none of them had good level of score.

.6.1.6 Findings related to association with demographic variables

There was significant association with the effectiveness of community based health intervention regarding management of hypertension and their Younger patients, more income patients and less duration of illness patients are having more good level of life style modification score

[$\chi^2=11.90$ $p=0.01^*$],[$\chi^2=10.12$ $p=0.02^*$],[$\chi^2=7.13$ $p=0.03^*$]

There was significant association with the effectiveness of community based health intervention regarding management of hypertension and their Younger patients, more educated patients and less duration of illness patients are having more good level of Quality of life score

[$\chi^2=9.62$ $p=0.02^*$ (),[$\chi^2=13.28$ $p=0.01^*$],[$\chi^2=8.63$ $p=0.01^*$]

There was significant association with the effectiveness of community based health intervention regarding management of hypertension and their Younger patients, more educated patients, In a routine medical examination diagnosis patients and less duration of illness patients are having more good level of Drug compliance score

[$\chi^2=9.00$ p=0.03*],[$\chi^2=9.24$ p=0.05*],[$\chi^2=8.57$ p=0.01],[$\chi^2=8.43$ p=0.01**]

6.2 IMPLICATIONS

The investigator has drawn the following implications from the studies which are of vital concern in the field of nursing practice, nursing education, nursing administration and nursing research.

6.2.1 Implications For Nursing Practice

- ❖ The study result will help the nursing personnel to understand the importance of management of hypertension among hypertension patients
- ❖ The community health nurse can motivate the hypertension patient to follow the proper management of hypertension.
- ❖ The nurse can emphasize on the weight reduction, regular intake of drugs, exercise ,dietary intake , to prevent the complication and drug noncompliance among hypertension patients
- ❖ Community health nurse plays a vital role in providing behaviour change communication in the hypertension patients to adopt the appropriate measure to manage the hypertension ,improve quality of life and reduce drug noncompliance and also prevent complication
- ❖ Health education regarding the general information of cardiovascular system risk factors and aetiology ,signs and symptoms and management of hypertension.

6.2.2 Implications For Nursing Education

- ❖ To improve the knowledge in the community student nurses need to update with their knowledge on management of hypertension
- ❖ Student nurses in the nursing colleges should be encouraged to conduct mass educational campaigns on management of hypertension
- ❖ Educative materials like hand-outs can be prepared by the nursing students to create awareness among the adults to prevent the hypertension.

6.2.3 Implications For Nursing Administration

- ❖ Nursing administrators should organize In service programme on life style modification on hypertension
- ❖ Periodic workshops, conferences, and exhibitions can be arranged by the community health nurse at community area in prevention of hypertension
- ❖ Standard protocols on management of hypertension and imparting the update knowledge can be prepared for the health workers at primary level to impart the best knowledge to the community at door step.

6.2.4 Implications For Nursing Research

- ❖ Promote more research activities on prevention and management of hypertension Knowledge, attitude can be assessed applying various research designs.
- ❖ This study will be helpful to plan new interventional studies to improve the knowledge regarding management of hypertension.
- ❖ Develop different tools to manage the hypertension

- ❖ Disseminate the research findings in journals, seminars and conferences.
- ❖ Different domains can be used to manage the hypertension in different studies

6.3. RECOMMENDATIONS FOR FURTHER STUDY

- 1) The study can be repeated on the large sample for better generalization of the findings.
- 2) A descriptive study on assessing the knowledge, attitude and practice on management of hypertension can be done.
- 3) The similar study can be done on one group pretest and posttest research design
- 4) The similar study can be done to test the effectiveness of various teaching aids in imparting knowledge on management of hypertension
- 5) The study can be repeated among the newly diagnosed patient
- 6) The same study can be done as a comparative study to assess the knowledge, attitude and practice on management of hypertension between government hospital and primary health center

6.4 LIMITATIONS

- ❖ This study was basically conducted as community based study in primary health center.
- ❖ The study was limited with fewer samples.
- ❖ Data collection is limited to four weeks.

6.5 CONCLUSION

The findings revealed that the community based health intervention was more effective with the adequate gain score when compared to pretest score further studies focusing on the practice of life style modification regarding the management of hypertension can be more useful. Enhanced knowledge regarding management of hypertension should be used in developing highly effective community based health intervention in different areas of various non-communicable disease screening clinics.

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TOOL FOR RESEARCH DISSERTATION
SECTION – A
DEMOGRAPHIC PROFORMA

Instructions:

This section A consists of demographic variables. Kindly read the questions given below and provide the necessary information by filling of space (or) placing a tick (☑) mark against the option.

1. Age

- A) 30-39 Years
- B) 40-49Years
- C) 50-59Years
- D) 60-69 Years

2. Gender

- A) Male
- B) Female
- C)Transgender

3. Educational qualification

- A) formal education
- B) professional
- C) graduation
- D) informal education

4. Occupation of the client

- A)employed
- B)business
- C)un employed
- D)Cooly

5. Income of the family

- A) Below Rs.5,000
- B) Rs.5,000-Rs.10,000
- C) Rs.10,000-Rs.15,000
- D) Above Rs.15,000

6. Religion

- A) Hindhu
- B) Christian
- C) Muslim
- D)Others

7. Language known

- A) Tamil
- B) English
- C) Both A and B
- D) Other Language

8. Marital status

- A) Married
- B) Unmarried
- C) Separated
- D) Widow/widower

9. Type of family

- A) Nuclear family
- B) Joint family
- C) Extended family

10. Total number of members in the family

- A) <4
- B) >4

SECTION-B
CLINICAL DATA

1. how did you diagnosed as hypertension?

- A) In a routine medical examination
- B) Mass screening programme
- C) emergency .
- D) others

2. Duration of illness

- A) 0-2 years
- B) 3-4 years
- C) 5-6 years
- D)More than 6 years

3. where do you regularly go for routine follow up?

- A)Private hospital
- B)government hospital
- C)Alternative medicine clinic
- D)Others

4) stages of hypertension

- A)primordial stage
- B)primary stage
- C)secondary stage
- E)latent stage

5). hypertensive drugs are

- A)Amilodipine
- B)Nifidipine
- C)Aldamet
- D)Lasix

SECTION -C

(LIFE STYLE MODIFICATION PROFOMA)

1) what is the normal Blood Pressure?

- A)Blood pressure 120/80 mm hg
- B)Blood pressure more than 130/80 mm hg
- C)Blood pressure 140/80mm hg
- D)Blood pressure less than 140/80 mm hg

2)what are the causes of hypertension?

- A) high cholesterol
- B) genetic factors
- C) change of life style
- D) all of the above

3) What are all the risk factors of hypertension?

- A) Age
- B)alcohol
- C)stress
- D)all of the above

4)signs and symptoms of hypertension

- A)Headache
- B)vomiting
- C)Mental irritation
- D)Blurred vision

5)what kind of food is preferable for hypertension?

- A)High protein and fiber
- B)High fat and fiber
- C)rich in fruits and vegetables
- D)all of the above

6).what type of oil is used for cooking?

- A)sunflower oil
- B)coconut oil
- C)groundnut oil
- D)sesame oil

7).how often do you take non veg food items?

- A)weekly once
- B)twice a week
- C)monthly once
- D)occasionally

8)what items to be avoided for hypertension?

- A)creamy food
- B)salted foods
- C) sweetened diet
- D)all of the above

9)what is the normal level of sodium intake per day?

- A)1-2 Mg per day
- B)3-4 mg per day
- C)5-6 mg per day
- D)>6 mg per day

10)do you have a any social habits?

- A)Smoking
- B) Alcohol
- C) Tobacco chewing
- D) No Habits

11)do you practice any kind of exercise daily?

- A)yes
- B) No

12)when will you do your exercise?

- A)morning
- B)evening
- C)any time
- D) No exercise

13)what type of exercise you are doing?

- A)Walking
- B)slow running
- C) jogging
- D)None of the above

14)how will you manage your hypertension?

- A)life style modification
- B)Avoiding high cholesterol diet
- C) periodical examination
- D)diversional therapy

15)what are the complication of hypertension?

- A) heart attack
- B)stroke
- C)diabetes
- D)retinal damage

16)how often do you see your doctor for blood pressure check up?

- A)Monthly
- B)weekly
- C)daily
- D)When needed

17)how will you manage your stress?

A)music therapy

B) talking with friends

C)meditation,yoga

D)None

SECTION – D
(QUALITY OF LIFE-WHO)

S. NO	OVER ALL GENERAL HEALTH	1 Very poor	2 poor	3 average	4 good	5 Very good
1	General quality of life					
2	General health					
	PHYSICAL HEALTH					
1.	Pain and discomfort					
2.	Dependence medication					
3.	Mobility					
4.	Energy and fatigue					
5.	Sleep and rest					
6.	Activities of daily living					
7.	Working capacity					
	PSYCHOLOGICAL					
1.	Positive feeling					
2.	Spirituality, religion and personal beliefs					
3.	Thinking ,learning, memory, concentration					
4.	Body image					
5.	Self esteem					
6.	Negative feelings					
	SOCIAL RELATIONSHIP					
1,	Personal relationship					
2.	Sex					
3.	Practice social support					
	ENVIRONMENTAL					
1.	Safety					
2.	Home environment					
3.	Financial resources					
4.	Information					
5.	Recreation and leisure					
6.	Physical environment					
7.	Access to health care					
8.	Transport					

SECTION –E

(DRUG COMPLIANCE -MORISKY SELF EFFICACY SCALE)

S.NO	QUESTIONS	YES	NO
1.	over the past week,have you taken your blood pressure as you should on schedule?		
2	Do you ever forget to take your blood pressure medicine?		
3	Are you careless at times about taking your taking your blood pressure medicine?		
4	when you feel better do you some times stop taking your blood pressure medicine?		
5	Sometimes if you feel worsen when you take your blood pressure medicine ,do you stop taking it?		

s.no	situation	Not at all sure (1)	A little sure (2)	Fairly sure (3)	Extremely sure (4)
1.	When you are busy at home				
2.	When you are at home				
3.	When there is no one to remind you				
4.	When you worry about taking them for the rest of your life				
5.	When they cause some side effects				
6.	When they costly a lot of money				
7.	When you come home late from work				
8.	When you do not have any symptoms				
9.	When you are with family members				
10.	When you are in a public place				
11.	When you are afraid of becoming dependent on them				
12.	When you afraid they may affect your sexual performance				
13.	When the time to take them is between your meals				
14.	When you feel you do not need them				
15.	When you are travelling				

s.no	situation	Not at all sure (1)	A little sure (2)	Fairly sure (3)	Extremely sure (4)
16.	When you take them more than once a day				
17.	If they sometimes make you dizzy				
18.	If they sometimes make you tired				
19.	When you have other medication to take				
20.	When you feel well				
21.	If they make you want to urinate while away from home				
22.	Get refills for your medications before you run out				
23.	Make taking your medications part of your routine				
24.	Fill your prescription whatever they cost				
25.	Always remember to take your blood pressure medication				
26.	Take your blood pressure medication for the rest of your life				

பகுதி அ

சுயவிவரப் பட்டியல்

வழிமுறைகள்:

இந்தப் பகுதி அ சுயவிவரப் பட்டியல் நிறைந்தது. கீழே கொடுக்கப்பட்டுள்ள கேள்விகளை தயவு செய்து படித்து இடத்தை நிரப்புவதன் மூலம் அல்லது விருப்பத்திற்கு எதிராக ஒரு [✓] குறி வைப்பதன் மூலம் தேவையான தகவல்களை வழங்கவும்.

1) வயது.

அ) 30- 39 வயது.

ஆ) 40 – 49 வயது.

இ) 50- 59 வயது.

ஈ) 60 – 69 வயது.

2) பாலினம்.

அ) ஆண்.

ஆ) பெண்.

இ) திருநங்கைகள்.

3) கல்வி தகுதி.

அ) முறையான கல்வி.

ஆ) முறைசாரா கல்வி.

இ) தொழில் கல்வி.

ஈ) பட்டப்படிப்பு.

4) தொழில்.

அ) பணிபுரிபவர்.

ஆ) பணிபுரியாதவர்.

இ) வணிக வேலை.

ஈ) கூலி வேலை.

5) மாத வருமானம்

அ) ரூபாய் 5000 கீழ்.

ஆ) ரூபாய் 5000 - ரூபாய் 10, 000.

இ) ரூபாய் 10,000 - ரூபாய் 15, 000.

ஈ) ரூபாய் 15, 000 மேல்.

6) மதம்.

அ) இந்து.

ஆ) கிறிஸ்துவர்.
இ) முஸ்லிம்.
ஈ) மற்றமதம்.

7) மொழி.
அ) தமிழ்.
ஆ) ஆங்கிலம்.
இ) அ மற்றும் ஆ.
உ) மற்றவை.

8) திருமணத்தகுதி.
அ) திருமணமானவர்.
ஆ) திருமணமாதவர் .
இ) பிரிந்து வாழ்பவர்.
ஈ) விதவை.

9) குடும்ப வகை.
அ) தனி குடும்பம்.
ஆ) கூட்டுக்குடும்பம்.
இ) விரிவாக்கப்பட்ட குடும்பம்.

10) குடும்பத்தில் உள்ள நபர்களின் எண்ணிக்கை.
அ) நான்கு நபர்களுக்கு கீழ்.
ஆ) நான்கு நபர்களுக்கு மேல்.

பகுதி-ஆ

(மருத்துவ தரவு)

1) உயர் இரத்த அழுத்தம் என நீங்கள் எவ்வாறு கண்டறிந்தார்கள்?
அ) வழக்கமான மருத்துவ பரிசோதனையில்.
ஆ) வெகுஜன திரையிடல் திட்டம்.
இ) அவசர சிகிச்சை மூலம்.
ஈ) மற்றவை.

2) நோயின் காலம்.
அ) 0 - 1 வருடம்.
ஆ) 1 - 2 வருடம்.
இ) 3 - 4 வருடம்.
ஈ) 4 வருடத்திற்கு மேல்.

3) வழக்கமான பின்தொடர்தலுக்கு நீங்கள் தொடர்ந்து எங்கு செல்கிறீர்கள்?

அ) தனியார் மருத்துவமனை.

ஆ) அரசு மருத்துவமனை.

இ) மாற்று மருந்து மருத்துவமனை (சித்தா, ஆயுர்வேதா...).

ஈ) மற்றவை.

4) உயர் இரத்த அழுத்தத்தின் நிலைகள்.

அ) ஆதிகால நிலை.

ஆ) முதல் நிலை.

இ) இரண்டாம் நிலை.

ஈ) கடைநிலை.

5) உயர் இரத்த அழுத்தத்திற்கான மருந்துகள்.

அ) அமிலோடிப்பின்.

ஆ) நிஃபிடிப்பின்.

இ) ஆல்டோநெட்.

ஈ) லாசிக்ஸ்.

பகுதி-இ

(உயர் ரத்த அழுத்தம் மேலாண்மை சுயவிபரம்)

1) உயர் இரத்த அழுத்தம் என்றால் என்ன?

அ) இரத்த அழுத்தம் 120/80 மிமீ. எச். ஜி.

ஆ) இரத்த அழுத்தம் 130/80 மிமீ. எச். ஜி மேல்.

இ) இரத்த அழுத்தம் 140/80 மிமீ. எச். ஜி.

ஈ) இரத்த அழுத்தம் 140/80 மிமீ. எச். ஜி கீழ்

2) உயர் இரத்த அழுத்தத்திற்கான காரணங்கள்.

அ) அதிக கொழுப்பு.

ஆ) பரம்பரை.

இ) வாழ்க்கை முறை மாற்றம்.

ஈ) இவையனைத்தும்.

3) உயர் இரத்த அழுத்த அழுத்தத்திற்கான ஆபத்துக் காரணிகள் யாவை?

அ) வயது

ஆ) மது

இ) மன அழுத்தம்

ஈ) இவையனைத்தும்

4) அறிகுறிகளின் பரவல்.

அ) தலைவலி.

ஆ) வாந்தி.

இ) மன எரிச்சல்.

ஈ) மங்கலான பார்வை

5) எந்த வகையான உணவு உயர் இரத்த அழுத்தத்திற்கு ஏற்றது?

அ) அதிக புரதம் மற்றும் நார்.

ஆ) அதிக கொழுப்பு மற்றும் நார்.

இ) பழம் மற்றும் காய்கறிகள் நிறைந்தது.

ஈ) இவையனைத்தும்

6) எந்த வகையான எண்ணெய் சமையலுக்கு பயன்படுத்துகிறீர்கள்?

அ) சூரியகாந்தி எண்ணெய்.

ஆ) தேங்காய் எண்ணெய்.

இ) கடலை எண்ணெய்.

ஈ) எள் எண்ணெய்.

7) எத்தனை தடவை அசைவ உணவை எடுத்துக் கொள்கிறீர்கள்.

அ) வாரத்திற்கு ஒரு தடவை.

ஆ) வாரத்திற்கு இரண்டு தடவை.

இ) மாதத்திற்கு ஒரு தடவை.

ஈ) எப்போதாவது

8) உயர் இரத்த அழுத்தம் உள்ளவர்கள் எந்த வகையான உணவை தவிர்க்க வேண்டும்.

அ) க்ரீமி உணவு.

ஆ) உப்பு நிறைந்த உணவு.

இ) பாட்டிலில் அடைக்கப்பட்ட உணவு.

ஈ) இவை அனைத்தும்.

9) ஒரு நாளைக்கு எவ்வளவு அளவு உப்பு உட்கொள்ள வேண்டும்?

அ) ஒரு நாளைக்கு 1 முதல் 2 மில்லிகிராம்.

ஆ) ஒரு நாளைக்கு 3 முதல் 4 மில்லிகிராம்

இ) ஒரு நாளைக்கு 5 முதல் 6 மில்லி ராம்.

ஈ) ஒரு நாளைக்கு 6 மில்லிகிராம் மேல்.

10) மது/புகையிலை எடுக்கும் பழக்கம் இருக்கிறதா?

அ) ஆம்.
ஆ) இல்லை.

ஆம் எனில்.
அ) தினமும்.
ஆ) வாரத்திற்கு ஒரு முறை.
இ) வாரத்திற்கு மூன்று முறை.
ஈ) எப்போதாவது.
உ) இவற்றில் எதுவுமில்லை

11) தினமும் உடற்பயிற்சி செய்யும் பழக்கம் இருக்கிறதா?
அ) ஆம்.
ஆ) இல்லை.

12) எப்போது நீங்கள் உடற்பயிற்சி செய்கிறீர்கள்?
அ)காலை
ஆ)மாலை
இ)விரும்பும்போது
ஈ)இவற்றில் எதுவுமில்லை

13) எந்த விதமான உடற்பயிற்சி செய்கிறீர்கள்?
அ) நடைப்பயிற்சி.
ஆ) கயிறு தாண்டுதல்.
இ) மெதுவாக ஓடுதல்.
ஈ) இவற்றில் எதுவுமில்லை
14)உயர் இரத்தத்தை எப்படி கையாள்கிறீர்கள்?
அ) வாழ்க்கை முறை மாற்றம்.
ஆ) அதிக கொழுப்பு நிறைந்த உணவை தவிர்த்தல்.
இ) அவ்வப்போது உடல் பரிசோதனை.
ஈ) மாறுபட்ட சிகிச்சை.

15)உயர் இரத்த அழுத்தத்திற்கான பின் விளைவுகள் யாவை?
அ) மாரடைப்பு.
ஆ) பக்கவாதம்.
இ) சக்கரை நோய்.
ஈ) கண்பார்வை பாதிப்பு

16)நீங்கள் எத்தனை முறை மருத்துவ ஆலோசனையை பெறுகிறீர்கள்?
அ) மாதத்திற்கு ஒருமுறை.
ஆ) வாரத்திற்கு ஒருமுறை.

இ) தினமும்.

ஈ) தேவை ஏற்படும் போது

17) உங்கள் மன அழுத்தத்தை எப்படி கையாளுகிறீர்கள்?

அ) இசை சிகிச்சை.

ஆ) நண்பர்களுடன் உரையாடல்.

இ) யோகா, தியானம்.

ஈ) இவற்றில் எதுவுமில்லை

பகுதி-ஈ

(வாழ்க்கைத்தரம் - WHO)

வ. எண்.	ஒட்டுமொத்த பொது ஆரோக்கியம்	1 மிகவும்	2 மோசம்	3 சராசரி	4 நன்று	5 மிகவும் நன்று
1.	பொது வாழ்க்கைத் தரம் .					
2.	பொது ஆரோக்கியம் .					
உடல் நலம்						
1.	வலி மற்றும் அசவ்கரியம்					
2.	சார்பு மருந்து					
3.	மொபிலிட்டி					
4.	ஆற்றல் மற்றும் சோர்வு					
5.	தூங்கி ஓய் வெடுங்கள்					
6.	அன்றாட வாழ்வின் செயல்பாடுகள்					
7.	வேலை திறன்					
மனோதத்துவ						
1.	நேர்மறை உணர்வு					
2.	ஆன்மிகம், மதம் மற்றும் தனிப்பட்ட					

	நம்பிக்கைகள்					
3.	சிந்தனை, கற்றல், நினைவகம், செறிவு					
4.	உடல் படம்					
5.	சுயமரியாதை					
6.	ஏதிர்மறை உணர்வுகள்					
சமூக உறவுகள்						
1.	தனிப்பட்ட உறவு					
2.	உடல் உறவு					
3.	சமூக ஆதரவைப் பயிற்சி செய்யுங்கள்					
சுற்றுச்சூழல்						
1.	பாதுகாப்பு					
2.	வீட்டுச்சூழல்					
3.	நிதி ஆதாரம்					
4.	தகவல்					
5.	பொழுதுநோக்கு மற்றும் ஓய்வு					
6.	உடல் சூழல்					
7.	சுகாதார பராமரிப்புக்கான அணுகல்					
8.	போக்குவரத்து					

பகுதி - 2
மருந்து பின்பற்றுதல் - மோரிஸ்கி சுய செயல்திறன் அளவு

வ. எண்.	கேள்விகள்	ஆம்	இல்லை
1.	கடந்த வாரத்தில், உங்கள் இரத்த அழுத்தத்தை நீங்கள் திட்டமிட்டபடி ஏடுத்துள்ளீர்களா ?		
2.	உங்கள் இரத்த அழுத்த மருந்தை நீங்கள் எப்போதாவது மறந்து விட்டீர்களா?		
3.	உங்கள் இரத்த அழுத்து மருந்தை ஏடுத்துக்கொள்வது குறித்து நீங்கள் சில நேரங்களில் கவனக்குறைவாக இருக்கிறீர்களா ?		
4.	நீங்கள் நன்றாக உணரும்போது சில நேரங்களில் உங்கள் இரத்த அழுத்து மருந்தை உட்கொள்வதை நிறுத்துங்கள்		
5.	சில நேரங்களில் நீங்கள் உங்கள் இரத்த அழுத்த மருந்தை உட்கொள்ளும்போது மோசமடைந்துவிட்டால் அதை உட்கொள்வதை நிறுத்துகிறீர்களா ?		

வ. எண்.	காரணங்கள்	நிச்சயமாக இல்லை	கொஞ்சம் உறுதியாக	மிகவும் உறுதியாக	மிகவும் உறுதியாக உள்ளது
1.	நீங்கள் வீட்டில் பிஸியாக இருக்கும்போது				
2.	நீங்கள் வீட்டில் இருக்கும் போது				
3.	உங்களுக்கு நினைவூட்ட யாரும் இல்லாத போது				
4.	உங்கள் வாழ்நாள் முழுவதும் அவற்றை ஏடுத்துக்கொள்வது பற்றி				
5.	நீங்கள் கவலைப்படும்போது அவை சில பக்கவிளைவுகளை ஏற்படுத்தும் போது				
6.	அவர்கள் நிறைய பணம் செலவழிக்கும்போது				
7.	நீங்கள் வேலையிலிருந்து தாமதமாக வீட்டிற்கு வரும்போது				
8.	உங்களுக்கு ஏந்த அறிகுறிகளும் இல்லாதபோது				
9.	நீங்கள் குடும்ப உறுப்பினர்களுடன் இருக்கும்போது				
10.	நீங்கள் ஒரு பொதுஇடத்தில்				

	இருக்கும்போது				
11.	நீங்கள் அவர்களைச் சார்ந்து இருப்பதற்கு பயப்படும்போது				
12.	நீங்கள் பாடப்படும்போது அவை உங்கள் பாலியல் செயல்திறனை பாதிக்கலாம்				
13.	அவற்றை ஏடுத்துக் கொள்ள வேண்டிய நேரம் உங்கள் உணவுக்கு இடையில் இருக்கும் போது				
14.	உங்களுக்கு அவை தேவையில்லை என்று நீங்கள் உணரும்போது				
15.	நீங்கள் பயணம் செய்யும் போது				
16.	ஒரு நாளைக்கு ஒரு முறைக்கு மேல் அவற்றை ஏடுத்துக் கொள்ளும் போது				
17.	அவை சில நேரங்களில் உங்களை மயக்கப்படுத்தினால்				
18.	அவை சில நேரங்களில் உங்களை சோர்வடையச் செய்தல்				
19.	நீங்கள் ஏடுக்க வேறு மருந்துகள்				

	இருக்கும்போது				
20.	நீங்கள் நன்றாக உணரும் போது				
21.	அவர்கள் வீட்டிலிருந்து விலகி இருக்கும்போது சிறுநீர் கழிக்க விரும்பினால்				
22.	உங்கள் வழக்கமான உங்கள் மருந்தின் ஒரு பகுதியை மீண்டும் பெறுங்கள்				
23.	உங்கள் மருந்துகளை உங்கள் வழக்கத்தின் ஒரு பகுதியாக ஏடுத்துக் கொள்ளுங்கள்				
24.	உங்கள் மருந்துகளை அவர்கள் எதை வேண்டுமானாலும் நிரப்பவும்				
25.	உங்கள் இரத்த அழுத்த மருந்தை எப்போதும் எடுக்க நினைவில் கொள்ளுங்கள்				
26.	உங்கள் வாழ்நாள் முழுவதும் உங்கள் இரத்த அழுத்த மருந்தை எடுத்துக் கொள்ளுங்கள்.				

KEY ANSWER

QUESTION	ANSWER
1	A
2	D
3	D
4	A
5	D
6	A
7	B
8	D
9	D
10	D
11	A
12	A
13	A
14	A
15	B
16	B
17	D

**COMMUNITY BASED HEALTH
INTERVENTION ON MANAGEMENT OF
HYPERTENSION
LESSON PLAN
CONTENT OF TEACHING OUTLINE**

Name of the student :Ms.A.Vinodha
Subject : community health nursing
Topic : management of hypertension
Group : hypertension patients
Place : selected primary health center, chennai
Duration : 45 minutes
Method of teaching : lecture cum discussion

CENTRAL OBJECTIVES:

At the end of the intervention program hypertension patients will gain adequate knowledge regarding management of hypertension through community based health intervention in life style modification, quality of life ,drug compliance. It develops desirable attitude and practice management of hypertension in daily life.

SPECIFIC OBJECTIVES:

The hypertension patients will able to

- define the term hypertension
- list down the causes of hypertension
- enlist the risk factors of hypertension
- point out the classification of hypertension
- explain about signs and symptoms of hypertension
- enumerate the diagnostic evaluation of hypertension
- elaborate the management of hypertension
- describe the preventive measures of hypertension
- mention the complication of hypertension

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
1	3minutes	Review the anatomy and physiology of urinary system	<p>ANATOMY AND PHYSIOLOGY OF CARDIOVASCULAR SYSTEM:</p> <p>The circulatory system also called the cardiovascular system or the vascular system is an organ system that permits blood to circulate and transport nutrients (such as amino acids and electrolytes) oxygen, carbon di oxide ,hormones and blood cells to and from the cells in the body to provide nourishment and help in fighting disease ,stabilize temperature and ph and maintain homeostasis . many disease affect the cardiovascular system the most cardiovascular deaths are due to atherosclerosis it can more occur in low socio economic status and developing countries</p> <p>The heart is responsible for maintaining adequate circulation of oxygenated blood around the vascular network of the body. It is a four chamber pump with the right side receiving deoxygenated blood from the body at low pressure and pumping in to blood</p> <p>As the aging progress the physiological function deteriorates therefore hypertension is a silent killer it usually increase blood pressure but more people are not aware about related effects if we are not practices a healthy life style practice the condition will be worsen</p>	Black board	Explaining and listening	Explain the structure and function of cardiovascular system ?

	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
2	2minutes	Define the term hypertension	<p>DEFINITION OF HYPERTENSION: Hypertension is defined as persistent systolic blood pressure 120 mm hg ,diastolic blood pressure <u>80</u> mm hg (Or) Persistent elevation of arterial blood pressure is called hypertension</p>	Roller board	Explaining and listening	Define the term hypertension?
3.	3 minutes	listdown the causes of hypertension	<p>CAUSES OF HYPERTENSION:</p> <p>Primary hypertension:</p> <ul style="list-style-type: none"> ✓ unknown ✓ overproduction of sodium retaining hormones ✓ increased sodium intake ✓ greater than ideal body weight ✓ diabetes mellitus ✓ excessive alcohol consumption <p>secondary hypertension:</p> <ul style="list-style-type: none"> ✓ coarctation of aorta ✓ renal disease - pheochromocytoma ✓ endocrine disorders – brain tumours ✓ neurologic disorders – brain tumours ✓ sleep apnoea ✓ sympathetic stimulant medication ✓ cirrhosis 	Chart	Explaining and listening	What are the causes of hypertension?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION																				
4	5 minutes	enlist the common risk factors of hypertension	<p>RISK FACTORS OF HYPERTENSION:</p> <ul style="list-style-type: none"> • age • alcohol • cigarette smoking • diabetes • elevated serum lipids • excess dietary sodium • gender- (men) • family history • obesity • ethnicity –whites • sedentary life style • socio economic status • stress 	Chart	Explaining and listening	List down the risk factors of hypertension?																				
5	2 minutes	Point out the classification of hypertension	<p>CLASSIFICATION:</p> <table border="1"> <thead> <tr> <th>S.no</th> <th>classification</th> <th>SBP mm hg</th> <th>DBP mm hg</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>normal</td> <td>< 120</td> <td>< 80</td> </tr> <tr> <td>2</td> <td>Pre hypertension</td> <td>120-139</td> <td>80-89</td> </tr> <tr> <td>3</td> <td>Stage 1</td> <td>140-149</td> <td>90-99</td> </tr> <tr> <td>4</td> <td>Stage 2</td> <td>≥160</td> <td>≥100</td> </tr> </tbody> </table>	S.no	classification	SBP mm hg	DBP mm hg	1	normal	< 120	< 80	2	Pre hypertension	120-139	80-89	3	Stage 1	140-149	90-99	4	Stage 2	≥160	≥100			
S.no	classification	SBP mm hg	DBP mm hg																							
1	normal	< 120	< 80																							
2	Pre hypertension	120-139	80-89																							
3	Stage 1	140-149	90-99																							
4	Stage 2	≥160	≥100																							

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
6	5 minutes	Explain the signs and symptoms of hypertension	<p>SIGNS AND SYMPTOMS OF HYPERTENSION:</p> <ul style="list-style-type: none"> ➤ fatigue ➤ reduced activity ➤ dizziness ➤ palpitation ➤ dyspnea ➤ headache 	Hand out	Explaining and listening	What are all the signs and symptoms of hypertension?
7	5 minutes	Enumerate the diagnostic evaluation of hypertension	<p>DIAGNOSTIC EVALUATION OF HYPERTENSION</p> <ul style="list-style-type: none"> ❖ routine urinalysis ❖ basic metabolic panel <ul style="list-style-type: none"> - serum glucose - sodium - potassium - chloride - calcium - blood urea nitrogen - creatinine ❖ serum lipid profile <ul style="list-style-type: none"> -total lipid -Triglycerides -HDL -LDL -cholesterol ❖ serum uric acid ❖ 12 lead electro cardiogram] ❖ Others: <ul style="list-style-type: none"> -24 hour urinary creatinine clearance -echocardiography - liver function studies ❖ Serum thyroid stimulating hormones 	Handout		How to diagnose hypertension?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
8	5 minutes	describe the management of hypertension	<p>MANAGEMENT OF HYPERTENSION:</p> <ul style="list-style-type: none"> ▪ Periodic monitoring of Blood pressure ▪ Every 6 month check blood pressure ▪ Nutritional therapy: <ul style="list-style-type: none"> -restrict sodium -reduce weight -restrict cholesterol -maintain adequate intake of potassium -maintain adequate intake of calcium and magnesium -regular ,moderate physical activity -cessation of smoking -moderation of alcohol consumption -stress management -Anti hypertensive drugs -patient teaching <p>LIFESTYLE MODIFICATION:</p> <ul style="list-style-type: none"> ➤ Weight reduction ➤ DASH Diet ➤ Dietary sodium reduction ➤ Moderation of alcohol consumption ➤ Regular aerobic physical activity ➤ Avoidance of tobacco use(smoking and chewing) 	Power point presentation		How to manage the Hypertension?

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			<p>WEIGHT REDUCTION:</p> <ul style="list-style-type: none"> ➤ Weight loss of 10 kg may decrease SBP by 5 to 20 mm hg ➤ Reduce calorie intake and sodium intake reduce the weight <p>DASH EATING PLAN:</p> <ul style="list-style-type: none"> ➤ Eating fish of each week, eating plenty of fruits and vegetables ,increase fiber intake and drinking plenty of water <p>DIETARY SODIUM INTAKE:</p> <ul style="list-style-type: none"> ➤ Reduce the sodium intake less than 6 g of salt or less than 2.4 g of sodium per day ➤ Avoid food rich in sodium –canned soups. Processed meats, dry fish cheese ,frozen meals <p>MODERATION OF ALCOHOL CONSUMPTION:</p> <ul style="list-style-type: none"> ➤ Men should reduce alcohol intake <p>PHYSICAL ACTIVITY:</p> <ul style="list-style-type: none"> ➤ Brisk walking art 30 minutes ➤ Moderate instance activity- jogging ➤ It can reduce the blood pressure 4 to 9 mm hg <p>AVOIDANCE OF TOBACCO PRODUCT:</p> <ul style="list-style-type: none"> ➤ Nicotine increase the vasoconstriction <p>And increase blood pressure</p> <ul style="list-style-type: none"> ➤ Encourage quite tobacco products <p>STRESS MANAGEMENT:</p> <ul style="list-style-type: none"> ➤ Relaxation therapy ➤ Biofeed back ➤ Guided imaginery 			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
			<p>DRUG THERAPY:</p> <ul style="list-style-type: none"> ➤ Continue the drug intake, mild side effects has aroused ➤ Common side effect is orthostatic hypertension, dizzyfeel, weak and faint ➤ Dry mouth, frequent voiding <p>Instruction related to drug :</p> <ul style="list-style-type: none"> - Regular and convenient intake of drugs - Do not discontinue drug it increase side effect - Do not double the dose intake - Avoid hot bath and excessive amount of alcohol and strenuous exercise <p>PATIENT COMPLIANCE:</p> <ul style="list-style-type: none"> • Scheduling medicine intake • Drug and diet therapy . life style modification , physical activity periodic evaluation reduce compliance 			

S.NO	TIME	SPECIFIC OBJECTIVES	CONTENT	AV AIDS	TEACHING LEARNING ACTIVITY	EVALUATION
9	5minutes	Describe the preventive measures of hypertension	PREVENTIVE MEASURES OF HYPERTENSION: <ul style="list-style-type: none"> ✓ Regular screening ✓ Reduction of sodium intake ✓ Increase physical activity ✓ Stress management ✓ Reduction of alcohol intake. 	handout	Explaining and listening	How to prevent the hypertension?
10	5 minutes	Monitor the complication /effects of hypertension	COMPLICATION OF HYPERTENSION: If untreated it leads to worsen may produce <ul style="list-style-type: none"> ▪ Coronary artery disease ▪ Left ventricular hypertrophy ▪ Heart failure ▪ cerebrovascular accident ▪ Peripheral vascular disease ▪ Retinal damage 	Flannel board with flannel graph	Explaining and listening	What are all the complication of hypertension?

SUMMARY:

Till now we have discussed about hypertension Anatomy and Physiology of cardiovascular system, cause, risk factors, signs and symptoms, diagnostic evaluation and treatment and preventive measures and complication/effects of hypertension.

CONCLUSION:

I Hope you have gained some knowledge regarding hypertension and you will be able to apply this knowledge in practical life and convey this health message to others

உயர் இரத்த அழுத்தத்தை நிர்வகிப்பதில்
சமூக அடிப்படையிலான சுகாதார
தலையீடு
பாட திட்டம்
கற்பித்தலின் உள்ளடக்கம்

மாணவியின் பெயர்	:	அ. வினோதா
பாடம்	:	சமுதாயா சுகாதார செவிலியம்
தலைப்பு	:	உயர் இரத்த அழுத்த மேலாண்மை
குழு	:	உயர் இரத்த அழுத்த நோயாளிகள்
இடம் நிலையம்	:	தேர்ந்தெடுக்கப்பட்ட ஆரம்ப சுகாதார சென்னை
நேரம்	:	45 நிமிடங்கள்
கற்பிக்கும் முறை	:	விரிவுரையாடல் விவாதம்

மைய நோக்கம்:

தனிநபர் உயர் இரத்த அழுத்தத்தை நிர்வகிப்பது குறித்து போதுமான அறிவைப் பெறுவார் மற்றும் உயர் இரத்த அழுத்தத்தை நிர்வகிக்க இந்த அறிவைப் பயன்படுத்துவார்.

குறிப்பிட்ட நோக்கங்கள்:

கற்பவர்கள் அறிய

- ✓ உயர் இரத்த அழுத்தம் என்ற சொல்லை வரையறுக்கவும்.
- ✓ உயர் இரத்த அழுத்தத்திற்கான காரணத்தை பட்டியலிடுங்கள்
- ✓ உயர் இரத்த அழுத்தத்திற்கான ஆபத்துக் காரணிகளைப் பட்டியலிடுங்கள்
- ✓ உயர் இரத்த அழுத்தத்தின் வகைப்பாட்டை சுட்டிக்காட்டவும்
- ✓ உயர் இரத்த அழுத்தத்தின் அறிகுறிகளை விளக்கவும்
- ✓ உயர் இரத்த அழுத்தத்தின் கண்டறியும் முறைகளைக் கணக்கிடுங்கள்
- ✓ உயர் இரத்த அழுத்தத்தின் நிர்வாகத்தை விரிவாகக் கூறுங்கள்
- ✓ உயர் இரத்த அழுத்தத்தின் தடுப்பு நடவடிக்கைகளை விவரிக்கவும்
- ✓ உயர் இரத்த அழுத்தத்தின் சிக்கல்களைக் குறிப்பிடவும்.

வ. எண்.	நேரம்	குறிப்பிட்ட நோக்கங்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	கணிப்பு
1.	3 நிமிடம்	இதயத்தின் உடற்கூறியல் மற்றும் உடலியல் பற்றிய முன்னோட்டம்	<p>முன்னுரை: நமது உடலில் இதயம் நம் உடலிற்கு தேவையான சத்துகளை வழங்கி வருகிறது அவை நம் உடலுக்கு புத்துணர்வு அளிக்கிறது. நோயை ஏதிர்த்து போராடுகிறது. வெப்பநிலையை சமப்படுத்துகிறது.</p> <p>இதயத்தில் பாதிப்பு ஏற்படுவதால் அதிக மரணங்கள் நிகழ்கின்றன இவை வளரும் நாடுகளில் அதிகம் காணப்படுகின்றன.</p> <p>நமது இதயம் நான்கு அறைகளை கொண்டது இது கெட்ட இரத்தத்தை நல்ல இரத்தமாக தூய்மை செய்கிறது வயது மாற்றத்தால் நமது உடலில் செயல்மாற்றம் நடைபெற்று அதிக இரத்தம் அழுத்தம் எனப்படுகிறது இதைப்பற்றி மக்களுக்கு போதுமான அளவு தெரியவில்லை வாழ்க்கை முறை மாற்றத்தால் இதனை கட்டுப்படுத்தலாம்.</p>	கற்பித்தல் & விளக்கவுரை	கவனித்தல் மற்றும் கலந்து-ரையாடல்	கரும் பலகை	கேள்வி பதில்

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பு-பவர் செயல்	படங்கள்	கணிப்பு
2.	2 நிமிடம்	உயர் இரத்த அழுத்தம் என்ற சொல்லை வரையறுக்கவும்.	உயர் இரத்த அழுத்தம் என்பது சிஸ்டாலிக் இரத்த அழுத்தம் 120 மிமீ ஏசுஜிக்கு மேலும் டயஸ்டாலிக் 80 மிமீ ஏசுஜிக்கு மேலாகவும் இருப்பதாகும்	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	உருளை பலகை	உயர் இரத்த அழுத்தத்தை வரையறை
3.	3 நிமிடம்	உயர் இரத்த அழுத்தத்திற்கான காரணங்களை பட்டியளிடுங்கள்	<p>காரணங்கள்:</p> <p>முதல்நிலை இரத்த அழுத்தம் :</p> <ul style="list-style-type: none"> ✓ தெரியவில்லை ✓ அதிகரித்த நரம்பு மண்டல செயல்பாடு ✓ சோடியம் தக்கவைக்கும் ஹார்மோன்களின் அதிக உற்பத்தி ✓ எடை சிறந்த உடல் எடையை விட அதிகம் ✓ நீரிழிவு நோய் ✓ மது அருந்துதல் 	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	விளக்கப் படம்	உயர் இரத்த அழுத்தத்திற்கான காரணங்கள் யாவை?

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	கணிப்பு
4.	5 நிமிடம்	உயர் இரத்த அழுத்தத்தின் ஆபத்துக் காரணிகளை பட்டியல்விடுக	<p>இரண்டாம் நிலை இரத்த அழுத்தம்:</p> <ul style="list-style-type: none"> ✓ பெருநாடியின் ஒருங்கிணைப்பு கோளாறுகள் மூளைக்கட்டி ✓ சிறுநீரக நோய் அக்பியோக்ரோமோசைட்டோம ✓ நாளமில்லா கோளாறுகள் மூளைக்கட்டி ✓ நரம்பியல் நோய் ✓ தூக்கத்தில் மூச்சித்திணறல் ✓ அணுதாப நரம்பு மண்டல தூண்டுதல் மருந்து ✓ சிரோசிஸ் <p>ஆபத்துக் காரணிகள்:</p> <ul style="list-style-type: none"> ✓ வயது ✓ மதுப் பழக்கம் ✓ புகைப் பிடிப்பது ✓ நீரிழிவு நோய் ✓ இரத்தத்தில் அதிக கொழுப்பு ✓ அதிகமாக உப்பு உண்பது ✓ பாலினம் - ஆண் ✓ குடும்ப வரலாறு ✓ உடல் பருமன் 	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	விளக்கப்படம்	உயர் இரத்த அழுத்தத்தின் ஆபத்துக் காரணிகள் யாவை?

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	கணிப்பு			
5.	2 நிமிடம்	இரத்த அழுத்தத்தின் வகைப்பாட்டை சுட்டிக்காட்டவும்	<ul style="list-style-type: none"> ✓ இனம் - வெள்ளையர்கள் ✓ சொகுசான வாழ்க்கை முறை ✓ சமூக பொருளாதார நிலை ✓ மன அழுத்தம் 	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	விளக்கப்படம்	வகைப்பாட்டை பற்றி விவரி?			
			வகைப்பாடு:							
			வ. எண்					வகை	சிஸ்டாலிக் மிமி எச்ஜிக்	டயஸ்டாலிக் மிமி எச்ஜிக்
			1					சாதாரண	< 120	< 80
			2					உயர் இரத்தம் முன்	120 - 159	80 - 89
3	நிலை 1	140 - 149	90 - 99							
4	நிலை 2	≥ 160	≥ 100							

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பு-பவர் செயல்	படங்கள்	கணிப்பு
6.	5 நிமிடம்	உயர் இரத்த அழுத்தத்தின் அறிகுறிகளை விளக்கவும்	அறிகுறிகள்: <ul style="list-style-type: none"> ✓ சோர்வு ✓ குறைக்கப்பட்ட செயல்பாடு ✓ தலைச்சுற்றல் ✓ படபடப்பு ✓ மூச்சித் திணறல் ✓ தலைவலி 	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	கையேடு	உயர் இரத்த அழுத்தத்தின் அறிகுறிகளை கூறவும்
7.	5 நிமிடம்	உயர் இரத்த அழுத்தத்தை கண்டறியும் முறைகளைக் கணக்கிடுங்கள்	கண்டறியும் முறைகள்: <ul style="list-style-type: none"> ✓ வழக்கமான சிறுநீர் கழித்தல் ✓ அடிப்படை வளர்சிதை மாற்றம் ✓ இரத்தத்தில் சர்க்கரை, உப்பு, குளோரைடு, கால்சியம், பொட்டசியம், இரத்த யூரியா நைட்ரஜன். ✓ இரத்தின் கொழுப்பு அளவு <ul style="list-style-type: none"> - மொத்த லிப்பிட் - ட்ரைகிளிசரைடுகள் - அதிக அடர்த்தி கொண்ட கொழுப்புப்புரதங்கள் - கொழுப்பு சீரம்	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	கையேடு	உயர் இரத்த அழுத்தத்தை கண்டறியும் முறைகள் யாவை

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர்-செயல்	கவனிப்பவர்-செயல்	படங்கள்	கணிப்பு
8.	5 நிமிடம்	உயர் இரத்த அழுத்த நிர்வாகத்தை விரிவாக்கக் கூறுங்கள்	<ul style="list-style-type: none"> ✓ யூரிக் அமிலம் ✓ 12 முன்னணி எலக்ட்ரோ கார்டியோகிராம் ✓ மற்றவ:- <ul style="list-style-type: none"> - 24 மணிநேர சிறுநீரக பரிசோதனை - மின் ஒலி இதய விரைவி - கல்லீரல் செயல்பாடு ஆய்வுகள் <ul style="list-style-type: none"> - சீரம் தைராய்டு <p>தூண்டுதல் ஹார்மோன்கள்.</p> <p>உயர் இரத்த அழுத்த மேலாண்மை:</p> <ul style="list-style-type: none"> ✓ அடிக்கடி உயர் இரத்த அழுத்தத்தை பரிசோதிப்பது ✓ 6 மாதத்திற்கு ஒருமுறை உடல் பரிசோதனை ✓ ஆரோக்கிய உணவு: <ul style="list-style-type: none"> - உப்பை குறைப்பது - உடல் எடையை குறைப்பது - உடல் கொழுப்பை குறைப்பது - பொட்டஸியம், மெக்னிஸியம், கால்சியம் - போதுமான <p>உட்கொள்ளலை-யை பராமரிக்கவும்.</p>	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	கையேடு	உயர் இரத்த அழுத்த நிர்வாகங்கள் யாவை?

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர்-செயல்	கவனிப்பவர்-செயல்	படங்கள்	கணிப்பு
			<ul style="list-style-type: none"> ✓ தொடர்ந்து வழக்கமான வேலைகளை மிதமான வகையில் செய்தல் ✓ புகைப்பிடித்தலை தவிர்ப்பது ✓ மதுப்பழக்கத்தை குறைத்துக் கொள்வது ✓ மன அழுத்தம் மேலாண்மை ✓ மருந்துகளை தொடர்ந்து உட்கொள்ளுதல் <p>வாழ்க்கை முறை மாற்றும்:</p> <ul style="list-style-type: none"> ✓ எடையை குறைத்தல் ✓ டாஸ் உணவு ✓ உப்பை சாப்பாட்டில் குறைத்து கொள்வது ✓ மது அருந்துவதை குறைத்துக் கொள்வது ✓ வழக்கமான ஏரேபிக் உடல் செயல்பாடு ✓ புகை,புகையிலை உட்கொள்வதை தவிர்த்தல். <p>எடை கட்டுப்பாடு:</p> <ul style="list-style-type: none"> ✓ உடல் எடையில் 10 கிலோ வரை குறைப்பதால் சிஸ்டாலிக் இரத்த அழுத்தம் 5 to 20 மிமி எச்ஜி குறையும் ✓ கலோரி மற்றும் உப்பு உண்பதை குறைதல். 				

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	கணிப்பு
			<p>டாஸ் உணவு:</p> <ul style="list-style-type: none"> ✓ வாரத்திற்கு ஒருமுறை மீன் உட்கொள்ளவேண்டும் ✓ அதிக நார்ச்சத்து நிறைந்த உணவுகளை உண்பது ✓ குறைந்த கொழுப்பு நிறைந்த உணவுகளை உண்பது ✓ அதிக காய்கறிகளை உண்பது <p>சோடியம் உட்கொள்ளல்:</p> <ul style="list-style-type: none"> ✓ உப்பை 6 மீல்லி கிராமிக்கு கீழ் உண்ண வேண்டும். ✓ அதிக உப்பு உள்ள உணவை தவிர்த்தல், பாட்டிலில் அடைக்கப்பட்ட உணவு, பதப்படுத்தப்பட்ட உணவு, கருவாடு ,பதப்படுத்தப்பட்ட இறைச்சி சீஸ். <p>மது அருந்துவதை குறைத்துக் கொள்வது: படிப்படியாக மது அருந்துவதை குறைத்து கொள்வது</p> <p>உடல் செயல்பாடு:</p> <ul style="list-style-type: none"> ✓ நடைப்பயிற்சி 30 நிமிடம் ✓ மிதமான நடைப்பயிற்சி ஜாக்கிங் 				

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பவர் செயல்	படங்கள்	கணிப்பு
			<p>புகையிலை தவிர்த்தல் மன அழுத்த மேலாண்மை:</p> <ul style="list-style-type: none"> ✓ தளர்வு சிகிச்சை ✓ உடல் இயங்கல் மாற்றக் குறிப்பு ✓ வழிக்கட்டப்பட்ட பாடங்கள். <p>மருந்து உட்கொள்ளுதல்:</p> <ul style="list-style-type: none"> ✓ தொடர்ந்து உட்கொள்ளுதல் ✓ பின் விளைவுகள் (உடல் அளுத்தக்குறை, சோர்வு, நாவறச்சி, அடிக்கடி சிறுநீர் கழித்தல். <p>மருந்து தொடர்பான அறிவுறுத்தல்:</p> <ul style="list-style-type: none"> ✓ தொடர்ந்து உட்கொள்ளுதல் ✓ விட்டு விட்டு மருந்து உண்ண கூடாது. ✓ ஒரு வேளை எடுக்க மறந்துவிட்டால் அடுத்த வேளை இரண்டு வேளை மருந்துகளையும் சேர்த்து உண்ணக் கூடாது. ✓ மிகவும் சூடான நீரில் குளிப்பதை தவிர்த்தல் ✓ கடுமையான உடற்பயிற்சியை தவிர்த்தல். 				

வ. எண்	நேரம்	குறிப்பு-க்கள்	விளக்கம்	மாணவர் செயல்	கவனிப்பு-பவர் செயல்	படங்கள்	கணிப்பு
9.	5 நிமிடம்	உயர் இரத்த அழுத்த தடுப்பு நடவடிக்கைகளை விவரிக்கவும்	<p>நோயாளி இணக்கம்:</p> <ul style="list-style-type: none"> ✓ மருந்து உட்கொள்ள அட்டவனையை பின்பற்றுதல் மருந்து மற்றும் உணவு சிகிச்சை. <p>தடுக்கும் முறைகள்:</p> <ul style="list-style-type: none"> ✓ உடல் நிலை பரிசோதனை ✓ உப்பை உணவில் குறைத்தல் ✓ உடல் செயல்பாட்டை அதிகப்படுத்துதல் ✓ மன அழுத்த மேலாண்மை ✓ மது/புகை பழக்கத்தை தவிர்த்தல் 	அறிவுறுத்தல் மற்றும் கலந்து-ரையாடல்	கவனித்தல் மற்றும் கலந்து-ரையாடல்	கையேடு	உயர் இரத்த அழுத்த தடுப்பு முறைகள் யாவை?
10.	5 நிமிடம்	உயர் இரத்த அழுத்த சிக்கல்களை குறிப்பிடவும்	<p>பின் விளைவுகள்:</p> <p>ஆரம்பத்தில் சிகிச்சை மேற்கொள்ளாவிட்டால்.</p> <ul style="list-style-type: none"> ✓ இதய கோளாறு ✓ இடது வென்ட்ரிகுலர் ஹைபர்டிரபி ✓ இதய செயல்பாடு ✓ பக்கவாதம் ✓ புற வாஸ்குலர் நோய் ✓ விழித்திரை பாதிப்பு ஏற்படும் 				

சுருக்கம்:

இதுவரை நாம் நமது உடலின் இதயத்தை பற்றியும், உயர் இரத்த அழுத்தத்தின் காரணம், அறிகுறி, கண்டறியும் முறை, மேலாண்மை, தடுக்கும் முறை, பின் விளைவுகள் பற்றி தெரிந்துக் கொண்டோம்.

முடிவுரை:

நீங்கள் அனைவரும் உயர் இரத்த அழுத்த மேலாண்மை பற்றி நன்கு தெரிந்து மற்றும் அதனை நடைமுறை வாழ்வில் பின்பற்றி மற்றும் இதை மற்றவர்களுடன் பகிர்ந்து கொள்வீர்கள் என்று நம்புகிறேன்.

INFORMATION TO PARTICIPANTS

TITLE: A STUDY TO ASSESS THE EFFECTIVENESS OF COMMUNITY BASED HEALTH INTERVENTION ON MANAGEMENT OF HYPERTENSION AMONG PATIENTS WITH HYPERTENSION ATTENDING PRIMARY HEALTH CENTER, CHENNAI”.

Investigator : A.Vinodha

Name of the Participant :

Date :

Age/sex

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 Cooperate in this study being conducted in Primary health Center choolai, Chennai.

What is the Purpose of the Research study? (explain briefly)

The main purposes of this study is to teach the hypertension patients on regarding management of hypertension with the use of community based health intervention. To improve the knowledge of the hypertension patients regarding management of hypertension.

Obtained permission from the Institutional Ethics Committee.

The study design:

Quasi experimental study – Non randomized control group research design

Study Procedures

- The Study will be undertaken after the approval of Institutional Ethics committee.
- Those who are willing to participate will be enrolled and informed consent will be obtained.

- The hypertension patients who full fill the inclusion criteria and exclusion criteria are selected as samples
- The level of knowledge regarding management of hypertension is assessed with semi- structured questionnaire and standardized tool pre-test to the hypertension patients
- Teach the hypertension patients regarding management of hypertension
- After that assess the knowledge regarding management of hypertension with community based health intervention
- After seven days analyze the effectiveness of knowledge regarding management of hypertension by post-test.
- Result of the study will be analyzed by using descriptive and inferential statistics.

Possible Risk to you- Briefly Mention

No risk involved

Possible benefits to you

After finishing this study, investigator will provide adequate knowledge about management of hypertension. It will improve the knowledge of the patients about the hypertension management.

Possible benefits to other people

The result of the research may provide benefits to the patients and to follow some management of hypertension measures.

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.

Your privacy in this research will be maintained throughout this study. In the event of any publication or presentation resulting from research, no personal information will be shared.

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 routine medical check up, and 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.

However, it is advisable that you talk to the research team prior to stopping the treatment/ discontinuation of procedures etc

The result of this study will be informed to you at the end of the study.

Signature of Investigator

Date

Signature of Participants

Date

INFORMED CONSENT

Investigator :

Name of the participant :

Age /sex :

Name of the institution :College of Nursing, Madras Medical College, Chennai.

Title : “A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary Health Center,Chennai.”

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

- I -----have read /it have been read for me ,the information in this form. Was free to ask any questions and they have been answered .I am over 25 years of age and exercising my free power of choice, hereby give my consent to include my son/daughter as a participant 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 cooperate with the investigator
- I have not participated in any research study at any time
- I am aware of the fact that I can opt out of the study at any time without having to give any reason
- I here by give permission to the investigators to release the information obtained from me as a result of participation in this study to the regulatory authorities ,government agencies and institutional 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 Participants

Date:

Date:

சுய ஒப்புதல் படிவம்

ஆராய்ச்சி தலைப்பு : ஆரம்ப சுகதார நிலையத்தில் கலந்துக்கொள்ளும் உயர் இரத்த அழுத்தம் உள்ள நோயாளிகளிடையே உயர் இரத்த அழுத்தத்தை நிர்வகிப்பதில் சமூக அடிப்படையிலான சுகாதார தலையிட்டின் செயல்திறனை மதிப்பீடுவதற்க்கான ஒரு ஆய்வு

ஆய்வாளர் பெயர் : அ.வினோதா

பங்கேற்பாளர் பெயர்:

தேதி :

வயது/பால் :

- ஆய்வாளர்கள் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமின்றி முழு மனதுடன் சுய நினைவுடன் சம்மதிக்கிறேன்.
- ஆய்வாளர்கள் மேற்கொள்ளப்போகும் பறிசோதனைகளை பற்றி மிக தெளிவாக விளக்கி கூறினார்
- எனக்கு விருப்பமில்லதா பட்சத்தில் ஆராய்ச்சியிலிருந்து எந்நேரமும் விலகலாம் என்பதையும் ஆய்வாளர் முலம் தெரிந்துக் கொண்டேன்
- இந்த ஆராய்ச்சி ஒப்புதல் கடிதத்தில் உள்ள விவரங்களை நங்கு அறிந்து கொண்டேன் எனது உரிமைகள் மற்றும் கடமைகள் ஆய்வாளர் முலம் விளக்கப்பட்டது
- நான் ஆய்வாளருடன் ஒத்துவைக்க சம்மதிக்கிறேன் .எனக்கு ஏதேனும் உடல்நலக்குறைவு ஏற்பட்டால் ஆராய்ச்சியாளர் இடம் தெறிவிப்பேன்
- நான் வேறு எந்த ஆராய்ச்சியிலும் தற்சமயம் இடம் பெறவில்லை என்பதை தெரிவித்துக்கொள்கிறேன்
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிட சம்மதிக்கிறேன் அப்படி வெளியிடும்போது என் அடையாளம் வெளிவராது என்பதை அறிவேன்
- எனக்கு இந்த ஒப்புதல் கடிதத்தின் நகல் கொடுக்கப்பட்டது

ஆய்வாளர் கையொப்பம்

பங்கேற்பாளர் கையொப்பம்

தேதி:

தேதி:

ஆராய்ச்சி தகவல் தாள்

ஆராய்ச்சி தலைப்பு : ஆரம்ப சுகதார நிலையத்தில் கலந்துக்கொள்ளும் உயர் இரத்த அழுத்தம் உள்ள நோயாளிகளிடையே உயர் இரத்த அழுத்தத்தை நிர்வகிப்பதில் சமூக அடிப்படையிலான சுகாதார தலையிட்டின் செயல்திறனை மதிப்பீடுவதற்க்கான ஒரு ஆய்வு

ஆய்வாளர் பெயர் : அ.வினோதா

பங்கேற்பாளர் பெயர்:

தேதி :

வயது/பால் :

- ஆய்வாளர்கள் மேற்கொள்ளும் ஆராய்ச்சியில் பங்கேற்க யாருடைய கட்டாயமின்றி முழு மனதுடன் சுய நினைவுடன் சம்மதிக்கலாம்
- இதில் பங்கேற்பதன் நோக்கம் :உயர் இரத்த அழுத்தம் உள்ள நோயாளிகளிடையே உயர் இரத்த அழுத்தத்தை நிர்வகிப்பதினை தெரிந்து கொள்வதற்காகவும் மட்டும் தான்
- இந்த ஆராய்ச்சியின் நோக்கம்: உயர் இரத்த அழுத்த நோயாளிகளிடையே உயர் இரத்த அழுத்தத்தை நிர்வகிப்பதில் சமூக அடிப்படையிலான சுகாதார தலையிட்டின் செயல்திறனை மதிப்பீடுவதற்க்கான பற்றிய ஆய்வு
- ஆராய்ச்சி மேற்க்கொள்ளும் முறை : உயர் இரத்த அழுத்தம் உள்ள நோயாளிகளின் உயர் இரத்த அழுத்த நிர்வகிப்பதின் மேலான்மையை பற்றிய கற்றுத்தந்தவன் தாக்கத்தை அறியலாம்
- இதனால் ஆய்வாளருக்கான பயன்:இந்த ஆய்விற்கு பின் உயர் இரத்த அழுத்தம் உள்ள நோயாளிகளின் உயர் இரத்த அழுத்த நிர்வகிப்பதின் மேலான்மையை பற்றிய தன் தாக்கத்தை அறியலாம்
- இதானால் பங்கேற்பாளருக்கான பயன்: இந்த ஆய்விற்கு பின் உயர் இரத்த அழுத்த நோயாளிகளுக்கு சமூக அடிப்படையிலான உயர் இரத்த அழுத்த மேலான்மை அதிகரிக்கிறது.
- ஆராய்ச்சியில் பங்கேற்கவில்லை என்றாலும் உங்களின் சராசரி வாழ்க்கை முறையில் எந்தவித மாற்றமும் ஏற்படாது என்பதை தெரிவிக்கின்றேன்
- இந்த ஆராய்ச்சியில் பங்கேற்க விருப்பம் இல்லை என்றால் உங்களின் முழு மனதுடன் நிங்கள் விலகிக் கொள்ளலாம் என்பதை தெரிவிக்கின்றேன்
- இந்த ஆராய்ச்சியில் உங்கள் தகவல்களை பாதுகாப்பாக வைத்து கொள்கிறேன் என்பதை தெரிவிக்கின்றேன்
- இந்த ஆராய்ச்சியின் தகவல்களை வெளியிடும் போது உங்களை பற்றி அடையாளங்கள் வெளிவராது என்று கூறுகிறேன்.

ஆய்வாளர் கையொப்பம்

தேதி:

பங்கேற்பாளர் கையொப்பம்

தேதி:

உயர் இரத்த அழுத்தத்தை நிர்வகிப்பதில் சமூக அடிப்படையிலான சுகாதார தலையீடு



வரையறை: உயர் இரத்த அழுத்தம் என்பது சிஸ்டாலிக் இரத்த அழுத்தம் 120 மிமீ எச்ஜிக்கு மேலும் டயஸ்டாலிக் 80 மிமீ எச்ஜிக்கு மேலாகவும் இருப்பதாகும்.

காரணங்கள்:

முதல்நிலை இரத்த அழுத்தம்



அதிகரித்த நரம்பு
மண்டல செயல்பாடு

அதிக உப்பு



அதிக உடல் எடை

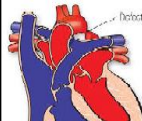


நீரிழிவு நோய்



மது அருந்துதல்

இரண்டாம் நிலை இரத்த அழுத்தம்



பெருநாடியின்
ஒருங்கிணைப்பு

சிறுநீரக நோய்



நாளயில்லா கோளாறுகள்



நரம்பியல் நோய்



தூக்கத்தில்
மூச்சிடுகின்றால்

ஆபத்துக் காரணிகள்: வயது, மதுப பழக்கம், புகைப் பிடிப்பது, நீரிழிவு நோய், இரத்தத்தில் அதிக கொழுப்பு, அதிகமாக உப்பு உண்பது, பாலினம் - ஆண், குடும்ப வரலாறு, உடல் பருமன், இனம் - வெள்ளையர்கள், சொகுசான வாழ்க்கை முறை, சமூக பொருளாதார நிலை, மன அழுத்தம்



அறிகுறிகள்:



தலைவலி



சோர்வு



பார்வை
குறைவு



மூச்சித் திணறல்



செயல்
குறைவு



நெஞ்சிவலி



படபடப்பு



சிறுநீரில்
இரத்தம்

கண்டறியும் முறைகள்:

கல்லீரல்
செயல்பாடு



இரத்ததின்
கொழுப்பு



இருதய
செயல்பாடு



சிறுநீர்
பரிசோதனை



இரத்த
பரிசோதனை



எலக்ட்ரோ

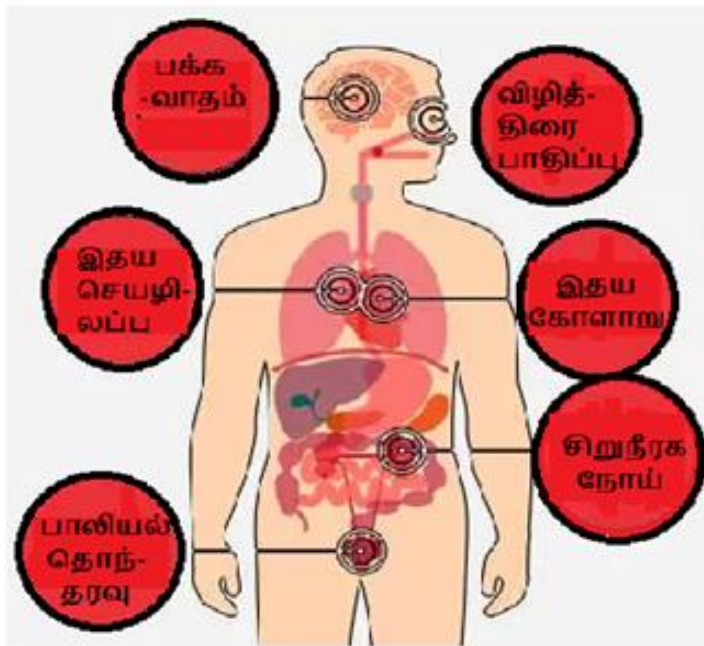
இரத்த கார்டியோகிராம்

உயர் இரத்த அழுத்த மேலாண்மை: அடிக்கடி உயர் இரத்த அழுத்தத்தை பரிசோதிப்பது, 6 மாதத்திற்கு ஒருமுறை உடல் பரிசோதனை , ஆரோக்கிய உணவு: உப்பை குறைப்பது, உடல் எடையை குறைப்பது, உடல் கொழுப்பை குறைப்பது, பொட்டஸியம்,மெக்னிஸியம், கால்சியம், போதுமான உட்கொள்ளலையை பராமரிக்கவும், தொடர்ந்து வழக்கமான வேலைகளை மிதமான வகையில் செய்தல், புகைப்பிடித்தலை தவிர்ப்பது, மதுப்பழக்கத்தை குறைத்துக் கொள்வது, மன அழுத்தம் மேலாண்மை, மருந்துகளை தொடர்ந்து உட்கொள்ளுதல்.



பின் விளைவுகள்:

மருந்து தொடர்பான அறிவுறுத்தல்:



- தொடர்ந்து உட்கொள்ளுதல்
- விட்டு விட்டு மருந்து உண்ண கூடாது.
- ஒரு வேளை எடுக்க மறந்துவிட்டால் அடுத்த வேளை இரண்டு வேளை மருந்துகளையும் சேர்த்து உண்ணக் கூடாது.
- மிகவும் குடான நீரில் குளிப்பதை தவிர்த்தல்
- கடுமையான உடற்பயிற்சியை தவிர்த்தல்.

நன்றி

REQUISITION FORM

From

Vinodha.A,
M.Sc (N) I year student,
College of Nursing,
Madras Medical College,
Chennai-600 003

To

Medical Officer,
Urban Primary Health Centre
Choolai,
Chennai-600112

Through,

Principal, College of Nursing, Madras Medical College, Chennai-03

Respected Sir / Madam,

**Sub: College of Nursing, Madras Medical College, M.Sc (N) I year student
Dissertation permission to conduct study requested-reg**

-----x-----

I request you to kindly permit me to conduct dissertation on **“A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary Health Centre, Chennai”**

Thanking you

Date`:

Place : Chennai-03

Yours faithfully,



(VINODHA. A)

Forwarded
Abdelmoneem
**PRINCIPAL
COLLEGE OF NURSING
MADRAS MEDICAL COLLEGE
CHENNAI - 600 003.**


**Dr. S. DEVIKALA, M.B.B.S., F.C.D.,
Regd. No: 82075
MEDICAL OFFICER
CORPORATION OF CHENNAI**

**INSTITUTIONAL ETHICS COMMITTEE
MADRAS MEDICAL COLLEGE, CHENNAI 600 003**

EC Reg.No.ECR/270/Inst./TN/2013/RR-16
Telephone No.044 25305301
Fax: 011 25363970

CERTIFICATE OF APPROVAL

To

VINODHA A

M.Sc (N) I Year

College of Nursing

Madras Medical College

Chennai-600003.

Dear VINODHA A,

The Institutional Ethics Committee has considered your request and approved your study titled **“A STUDY TO ASSESS THE EFFECTIVENESS OF COMMUNITY BASED HEALTH INTERVENTION ON MANAGEMENT OF HYPERTENSION AMONG PATIENTS WITH HYPERTENSION ATTENDING PRIMARY HEALTH CENTRE, CHENNAI”-NO.30112019**. The following members of Ethics Committee were present in the meeting held on **12.11.2019** conducted at Madras Medical College, Chennai 3.

- | | |
|---------------------------------------------------------------------------------------------|--------------------|
| 1. Prof.P.V.Jayashankar | :Chairperson |
| 2. Prof.R.Jayanthi,MD.,FRCP(Glasg)., Dean,MMC,Ch-3 | :DeputyChairperson |
| 3. Prof.N.Gopalakrishnan,MD.,DM.,FRCP, Vice Principal Director,Inst.of
Nephrology,MMC,Ch | : Member Secretary |
| 4.Prof.Bharathi Vidya Jayanthi,Vice Principal Director,Inst. of Pathology,MMC,Ch- | : Member |
| 5. Prof.R.Muthuselvan,MD,Prof. Inst. of Int.Med,MMC, Ch-3 | : Member |
| 6. Prof.Alli, Prof. Inst. of Gen.Surgery,MMC | : Member |
| 7. Prof.Shobha, Prof, Inst.of O&G, Chennai | : Member |
| 8. Prof.Rema Chandramohan,Prof.of Paediatrics,ICH,Chennai | : Member |
| 9. Prof. Sudha, Prof. Inst. of Pharmacology,MMC,Ch-3 | : Member |
| 10.Prof.K.Ramadevi,MD., Director, Inst. of Bio-Chemistry,MMC,Ch-3 | : Member |
| 11.Prof. S.Lakshmi, Prof. of Paediatrics ICH Chennai | : 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.

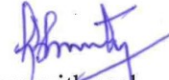
The Institutional Ethics Committee expects to be informed about the progress of the study and SAE occurring in the course of the study, any changes in the protocol and patients information/informed consent and asks to be provided a copy of the final report.

Member Secretary – Ethics Committee



CERTIFICATE OF CONTENT VALIDITY.

This is to certify that the tool submitted by VINODHA.A, M.Sc (Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled “**A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary Health Centre, Chennai.**” Has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.



Signature with seal

Name: *Bareemathi.k*
Designation: *Asst. Prof.*
Apollo college of Nursing,
Place: *Chennai-95*
Date: *23/12/19.*



CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool submitted by VINODHA.A, M.Sc (Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled **“A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary Health Centre, Chennai.”** Has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.



Jilak

Signature with seal

PROFESSOR
Institute of Community Medicine
Madras Medical College
Chennai-600 003.

Name: *Dr Jilak* PATRICIA PUSHPARANI

Designation: *Professor of Community Medicine*

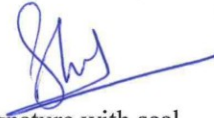
College: *Madras Medical College, Chennai*

Place:

Date:

CERTIFICATE OF CONTENT VALIDITY

This is to certify that the tool submitted by VINODHA.A, M.Sc (Nursing) II year, College of Nursing, Madras Medical College which is to be used in her study titled "A study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension attending Primary Health Centre, Chennai." Has been validated by the undersigned. The suggestion and modifications given by me will be incorporated by the investigator in concern with their respective guide. Then she can proceed to do the research.



Signature with seal

S. KANCHANA M.Sc.(N)
Associate Professor
MADHA COLLEGE OF NURSING
KUNDRATHU, CHENNAI-600 069.

Name: MRS. KANCHANA S

Designation: ASSOCIATE PROFESSOR
MADHA COLLEGE OF NURSING
KUNDRATHU, CHENNAI-69

Place: CHENNAI

Date: 23/12/19

From
Addl. City Medical Officer(i/c)
Medical Services Department
Greater Chennai Corporation,
Ripon Buildings
Chennai- 3

To
A. Vinodha
M.Sc (N) 1st year, student
College of Nursing
Madras Medical College
Chennai-03.

M.S.D/Trg/F20/ 2377 /2019

Date : 22.11.2019

Madam,

Sub : Greater Chennai Corporation - Medical Services Dept – Training - Permission to conduct a research study by A. Vinodha, M.Sc Nursing 1st year student, College of Nursing, Madras Medical College among the patients attending Choolai UPHC and in the field belonging to Choolai UPHC from January 2020 to February 2020 - Orders issued – Regarding.

Ref: 1.Orders of the Deputy Commissioner (Health), Dated: 21.11.2019

As per the Orders of the Deputy Commissioner (Health), permission is accorded to conduct a research study to assess the effectiveness of community based health intervention on management of hypertension among patients with hypertension by A. Vinodha M.Sc Nursing 1st year student, College of Nursing, Madras Medical College among the patients attending Choolai UPHC and in the field belonging to Choolai UPHC from January 2020 to February 2020 with the following

Terms and conditions:-

- Consent form should be obtained from the study participant after giving the information sheet
- Progress of data collection should be appraised at each stage.
- The study should not be detrimental to the normal functioning of the Institution.
- The Greater Chennai Corporation will not provide any monetary or human resource support for this study.
- The data should be kept confidential and the report should not be published or shared with any Institution / person / press without the permission and approval of the Commissioner, Greater Chennai Corporation.
- The views of the department should be obtained before finalizing the report for submission.
- The data should be used for the Project work only.
- Study report should be submitted to the Deputy Commissioner (Health) and City Medical Officer, Medical Services Department Greater Chennai Corporation. If not submitted it will be addressed to the University authorities for necessary action.
- If there is any deviation, action will be taken against the individual.

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Greater Chennai Corporation

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Date :

Signature :



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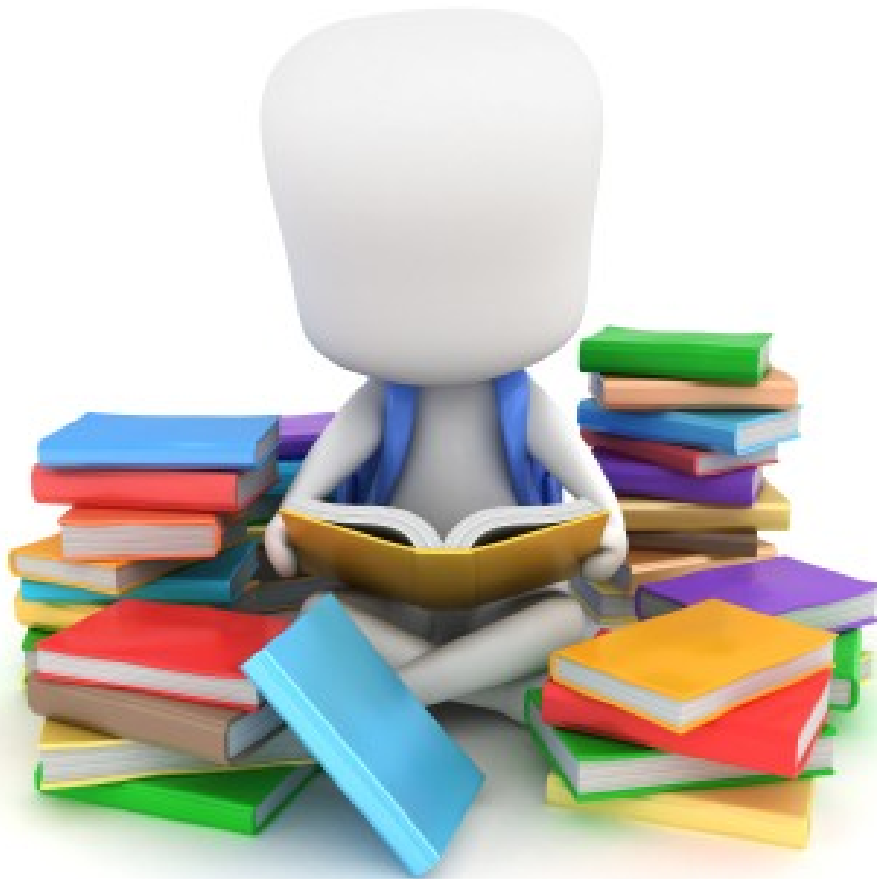
Chapter-I

Introduction



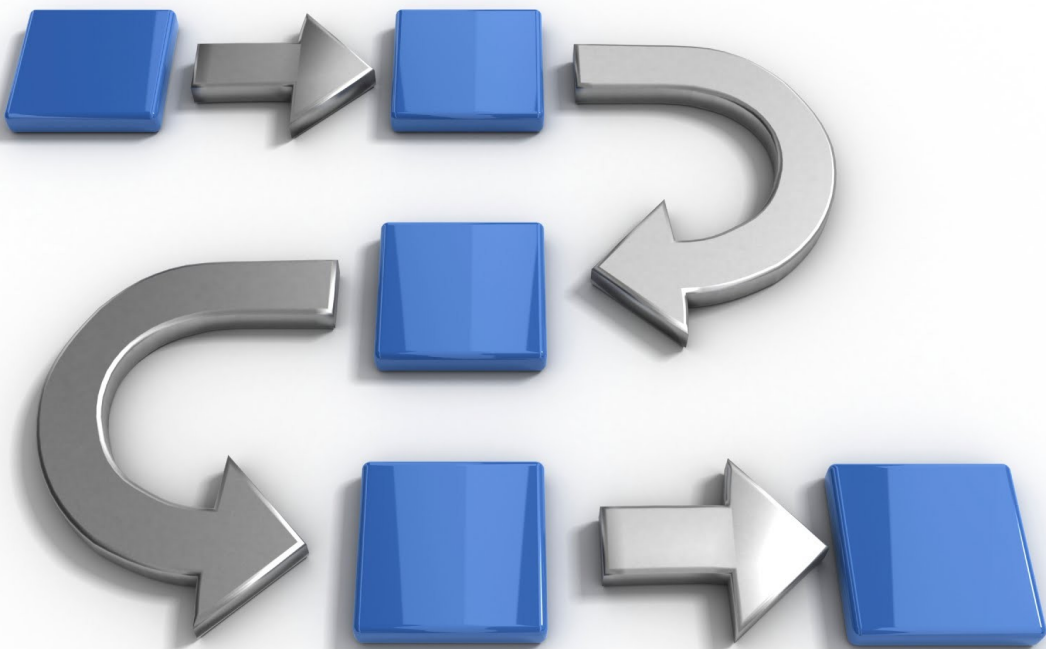
Chapter-II

Review of Literature



Chapter-III

Research Methodology



Chapter-IV

Data Analysis &

Interpretation



Chapter-V

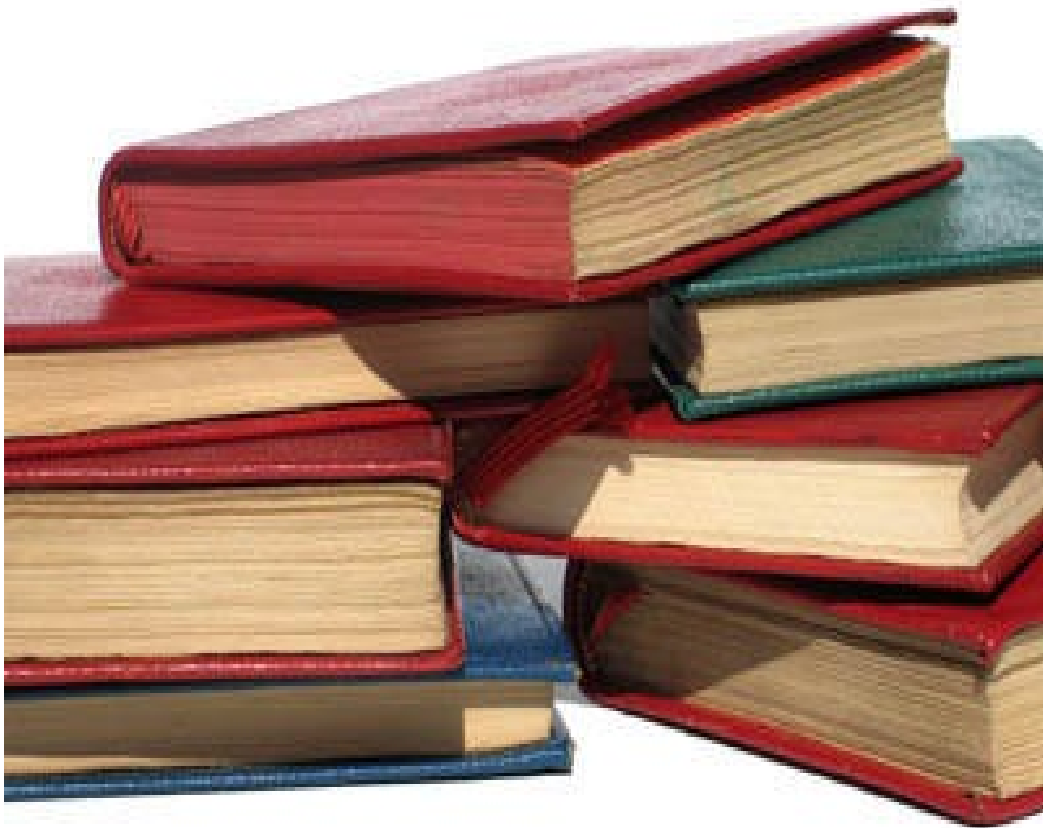
Discussion



Chapter-VI
Summary, Implication,
Recommendation,
Limitation & Conclusion



References



Appendices





