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A STUDY TO EVALUATE THE EFFECTIVENESS OF STRUCTURED TEACHING PROGRAM ON KNOWLEDGE OF RELAXATION THERAPY AMONG CLIENT WITH HYPERTENSION RESIDING IN SELECTED AREA OF CITY

***[1]Yogita Kailas Pawar, [2]Mr. Jaydeep Bhanudas Bhokare, [3]Ms. Pranali Gite**

*[1]Clinical Instructor, Matoshri College of Nursing, Eklahare, Nashik.
[2]Assistant Professor, Department of MSN, Matoshri College of Nursing, Eklahare, Nashik.
[3]Assistant Professor, Department of CHN, Matoshri College of Nursing, Eklahare, Nashik.

***Corresponding Author: Yogita Kailas Pawar**

Clinical Instructor, Matoshri College of Nursing, Eklahare, Nashik.

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ABSTRACT

TITLE OF STUDY

"Effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City"

Objectives

Primary Objective

1. To assess the level of knowledge on relaxation therapy among client with hypertension residing in selected area of City.

Secondary Objective

1. To evaluate the effectiveness of structured teaching programme on relaxation therapy among client with hypertension residing in selected area of City.
2. To find out the association between level of knowledge on relaxation therapy among client with hypertension with selected demographic variables.

Hypotheses

H0 – There will be no significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of City.

H1 – There will be significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of City.

Methodology: An quantitative research approach with pre experimental one group pre-test post-test design was used for the study. The main objective of the study was to evaluate the effectiveness of structured teaching program on knowledge regarding relaxation therapy among selected clients with hypertension. Total 60 clients with hypertension were selected as sample for study by using non probability convinent sampling technique. Inform written consent was taken from clients. Pre-test was conducted by using structured knowledge questionnaires & on the same day Structured teaching program on Relaxation Therapy was also administered. After 7 days post test was conducted to assess the gained in knowledge using the same structured knowledge questionnaire to assess post-test knowledge of Clients. The descriptive as well as inferential statistics was used. Result of the study was showed that, there has been increased in knowledge of clients with hypertension after administration of Structured teaching program on Relaxation Therapy. The calculated 't' value that is 16.18 at 59 degree of freedom was much higher than the tabulated value at 5% level of significance that is 1.66. Hence, it is lastly concluded that the Structured Teaching Program is effective in improving knowledge of clients with hypertension regarding Relaxation Therapy. **Conclusion:** There was significant difference in the pre-test and post-test knowledge score of clients with hypertension, which indicated Structured Teaching Program on Relaxation Therapy was effective in improving knowledge of clients with hypertension. The administration of Structured Teaching Program acts as a guiding key for clients with hypertension to improve knowledge and aware themes self about Relaxation Therapy.

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

Hypertension is a worldwide epidemic with an estimated 690 million people having high blood pressure. According to professor Reddy the prevalence of high Blood pressure in India is 24-30% in urban areas and 12-13% in rural areas. Many population studies have shown that the awareness is only 30% only half of the population have their Blood pressure adequately controlled and it is far worse in case of rural population, the awareness is only 10-20% and only 4-5% of these people have the blood pressure adequately controlled.[1]

The prevalence of hypertension increases with age. Hypertension is also prevalent more among less educated than in more educated people. Hypertension is more prevalent in men than in woman until age 55, after age 55 it is more prevalent in women than men. Hypertension is also more common among Blacks and less common in whites.[1]

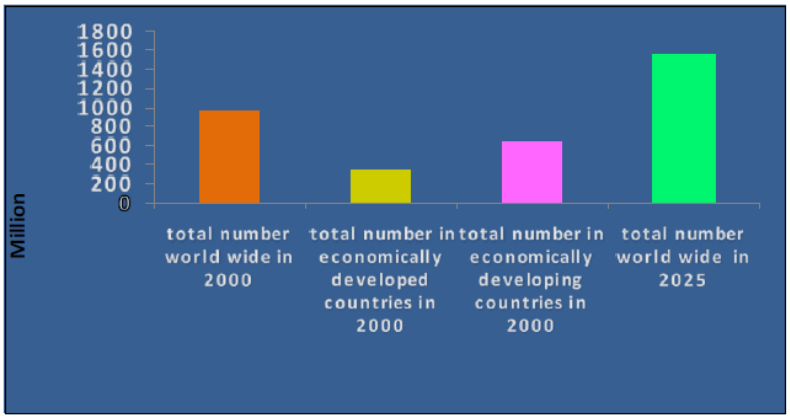
Hypertension is one of the leading causes of death and disability among adults. Most of the health problems are preventable or controllable if it is anticipated or recognized and treated correctly. Hypertension risk factors can be modified through reduction of weight, exercise, behavioural changes like reducing the smoking, stress, modification of personal life style, yoga, health education regarding hypertension, self-care by participating in the health welfare programme, dietary modification by avoiding fatty food, restrict salt.[2]

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.

Most studies have shown a small but statistically significant reduction in systolic and diastolic blood pressures in the range of 2 to 10mm of mercury, but several have shown only transient effects. The first long-term follow-up study of relaxation therapy for mild hypertension was recently published in the British medical Journal. The subjects who had been taught relaxation therapy had a mean reduction of 7.2/3.7mm of mercury.

The mechanism by which relaxation therapies lower blood pressure has not been extensively studied, but may be mediated by lowering of the plasma levels of catecholamine, renin and aldosterone.[2]

According to National Health Survey (2000) global burden of HYPERTENSION in the adult population
Estimated total number of adults with



Source : WHO Reports (2000)
The overall numbers in 2020 was predicated to increase by about 60% by 2025 in this model.

The Health and public policy committee of the American college of Physicians & recently concluded that biofeed back is a second line non pharamacologic therapy for hypertension. Relaxation training is cheaper, easier to implement and has a greater chance for a wide application in clinical practice. Non physician health professionals such as nutritionists and psychologists need to be involved in implementing the nonpharmacologic management of hypertension. Teaching relaxation therapy, including the use of commercially available audiotapes, can play an important role in a multi component non- drug approach to treating hypertension.[2]

Yoga, a practice of controlling the mind and body is an ancient that began in India over thousands of years ago. Because it involves breathe control, meditation and physical postures. It is supposed to increase the vitality of the human body, help with concentration, calm the mind, and improve common physical ailments [LAMB 2019].

A simple way to relax physically as well as mentally is to set in any comfortable position, without causing any

body movements with the eyes closed. After this, put your attention to sounds that go in around you. Get into a listening mood. Listen to noises, as well as listen to melodious sounds and one does not react or choose. This practice is called savasana. [JOURNAL OF THE YOGA INSTITUTE].[4]

Regular Meditation brings down the blood pressure in Hypertension patients. There are immediate benefits in stress relief and feeling of peace and contentment. Physically, it helps in prevention and cure of illnesses which are otherwise difficult to cure mentally and emotionally. It helps one to attain balance, and spiritually one can attain the highest level of enlightenment. An effective type of meditation allows us to attack the causes directly, by rebalancing our subtle system and by clearing our centers. Thus, ever so called incurable illness can be cured is a spontaneous manner by the purifying work of the energy of the kundalini. When we enter a state of meditation we enter a realm of silence, the thoughts which assail us fade away, & the reality of the present is revealed to us in all it intensity. Our senses send us a direct image of the world which is not altered by our mind or our conditioning.[3]

BACKGROUND OF STUDY

Hypertension or high blood pressure is an abnormal blood pressure in the arteries continuously for more than one period. This occurs due to arterioles construction. Arteriole construction makes blood difficult to flow and increases pressure against the arterial wall. Hypertension adds more workload for the heart and arteries, which is might be continued and causes heart and blood vessels damage.[3]

Hypertension is one of the most common health problems in the world and it is considered as the most common risk factor for different heart diseases such as coronary heart disease, stroke, renal disease, and peripheral vascular disease. Knowledge plays an important role in controlling hypertension among patients with hypertension and in preventing the long-term complications of hypertension. High-risk populations for hypertension must be educated and their health state should be checked early in order for them to have good and high awareness and greater adherence to treatment when they are diagnosed.

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.[3]

The prevalence of hypertension was 59.9and 69.9 per 1000, in males and females respectively in urban population and 35.5 and 35.9per 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.[4]

According to WHO, the blood pressure limit that is still considered normal is 140/90 mmHg, while blood pressure >160/95 mmHg is stated as hypertension. Blood pressure between normal tension and hypertension is called borderline hypertension. The WHO limit does not differentiate age and sex.

Hypertension is a global health problem that requires attention because it can lead to death in both developed and developing countries. According to the World Health Organization (WHO) in 2023, the prevalence of hypertension cases was 839 million and it is expected to increase in 2025 to 2, 15 billion (39%) of the total world population, with more sufferers in women (40%) than men (39%). About 80% of hypertension cases occur mainly in developing countries, including India.[4]

Mortality and morbidity from hypertension have reached epidemic proportion worldwide. It has been estimated that 974 million adults globally have systolic blood pressure (SBP) of 140 mm Hg or higher.

A cross-sectional study presented examine the range of knowledge about hypertension among adult patients with hypertension. More than 80% of the burden of hypertension in low-income and middle-income countries is because of the lack of in- formation and poor self-care practice. Lack of knowledge about hypertension is a major challenge in controlling hypertension. To reduce this burden, patients have to be counseled on lifestyle changes when they visit their health facility and take measures regarding self- care.[24]

In a study conducted in Saudi Arabia, around 68% of patients knew their target BP level, while around 70% of patients did not know their BP level in Asia. In South India, 52.4% of hypertensive patients had average or good knowledge, and 14%–56% were aware of hypertension in Nepal. On the other hand, 82% of patients did not know about hypertension and 92.2% had inadequate knowledge on hypertension in Canada and Sri Lanka, respectively. In India, 62.9% of the study participants had unfavorable self-care practice. But, in Jeddah, Saudi Arabia, the self-care practice ranged from 31.2% to 83.7% in each self-care subscales.[24]

In a study conducted in Western Nepal, Morthan 55% of patients involved in their own care in each self-care practice components (70% did not take alcohol/quit smoking, 80.6% took low fat and salt diet, 69.7% monitored their BP regularly, 58.2% reduced their stress,

and 85% used medication regularly). In another study conducted in outreach clinic of South India indicated that 11.4%, 49.2%, and 39.2% hypertensive patients had good, average, and poor self-care practice, respectively.[24]

A recent study from Saudi Arabia found 18.2% of adult Saudis were hypertensive of whom 67.8% unaware of this diagnosis. We aim to evaluate the lifestyle advices given to Saudi hypertensive patients, their current lifestyle to determine the effects of these factors on their BP control. Non random convenience sampling of Saudi patients followed up in the clinic by cross-sectional questionnaire. Their BP, blood sugar, and other anthropometric data were measured and provided self-filled questionnaire. The overall awareness score was 77.5% with the highest awareness score for "BP can be controlled by proper management" (93.2%) and the lowest score given for "BP is not affected by alcohol consumption" (63.4%). Study found significantly lower mean SBP in those with higher awareness in five of the nine awareness areas inquired. Researcher believe that educating hypertensive patients about their diseases and lifestyle advices has a significant impact on disease control and well- being.[26]

NEED FOR STUDY

Hypertension is one of the leading causes of disability or death due to stroke, heart attack and kidney failure. Heart disease and stroke remain the first and third leading cause of death in U.S.A [WHO]. Worldwide 900 million people with high blood pressure are at risk of heart attack, stroke and cardiac failure. High Blood pressure is estimated to cause 20.2 million deaths, about 30% of the global fatality total [WHO, 2024]

The lancet Frost and Sullivan [2023] statistics estimates that totally approximately 2 billion people world wide have high blood pressure and this number is expected to increase to 4.56 billion people by the year 2030, that translates to about 1 out of every 4 adults being affected with Hypertension.[6]

According to a study of urban community, Survey in India, between 3rd & 6th decades, prevalence of hypertension has increased by about 10 times among rural inhabitants. The rising level of blood pressure among the urban population is due to the consequences of urbanization such as change in lifestyle pattern, diet & stress, increased population and shrinking employment.[4]

The incidence of Hypertension on the basis of studies conducted between the years of 2015 & 2020. He mentioned that the incidence of Hypertension on India among rural population varies from 3.7% to 20%. In urban areas it is between 3.41% to 33% so nearly 50 million adults in India have high blood pressure.

According to Indian Express Bureau stated that [2022] every 09 Indians suffer from high blood pressure. Nowadays antihypertensive drugs are available to control Blood pressure. These drugs alone cannot control blood pressure. Relaxation therapy also plays a key role in controlling blood pressure.[6]

The prevalence of Hypertension in Delhi is found to be 25% among male and 23% among female in the urban areas and 20%, 21% respectively in rural areas. Every eight persons in Chennai have high blood pressure. Study covered over 2300 persons aged 20 & above. A majority are unaware of it and even those who undergo treatment do not have their condition under control.

A Study conducted in 2015 reported that "relaxation techniques, Autogenic training or progressive muscular relaxation behavioral therapy or biofeed back techniques, can lower elevated blood pressure by an average of 10mmHg systolic and 55mmHg diastolic pressure".

Researcher selected this topic because of lack of awareness about Relaxation therapy in Hypertension among the general population. As most of the health habbits, behavioural and dietary risks are associated and seen furnishing educational interventions play a vital role in creating awareness among the people and aids in health promotion So with a view of educating the peoples this study is being selected.

TITLE OF STUDY

"A Study to evaluate the effectiveness of structured teaching programme on knowledge of relaxation therapy among clients with Hypertension".

PROBLEM STATEMENT

"A Study to evaluate the effectiveness of structured teaching programme on knowledge of relaxation therapy among clients with Hypertension".

OBJECTIVES

Primary Objective

1. To evaluate the effectiveness of structured teaching programme on relaxation therapy among client with hypertension residing in selected area of City

Secondary Objective

1. To assess the level of knowledge on relaxation therapy among client with hypertension residing in selected area of City.
2. To find out the association between level of knowledge on relaxation therapy among client with hypertension with selected demographic variables.

OPERATIONAL DEFINITIONS

Assess

According to Compact Oxford English Dictionary, it is to calculate or estimate the value, importance, or quality of.[7]

With reference to present study assess means to calculate the level of knowledge regarding oral cancer among selected government school teachers before and after the structured teaching program.

Effectiveness
Effectiveness is the extent to which an activity fulfills its intended purpose or function.[8]

It refers to evaluating structured teaching programme on relaxation therapy among clients with Hypertension. Effectiveness is assessed and evaluated by structured tool.

Knowledge
According to Cambridge English Dictionary, Knowledge is the understanding of the information about a subject that you get by experience or study.[10]

It refers to the understanding of the hypertensive patients on relaxation therapy as measured by a knowledge questionnaire which was designed by the investigator.

Hypertension
The person who have systolic blood pressure of 140 mmHg or above, and a diastolic blood pressure of 90 mmHg or above.[1]

Patients
Patients are newly diagnosed and old cases in Melmaruvathur between the age group of 30- 60 yrs.

Relaxation therapy
A treatment by teaching yoga, meditation, breathing exercises, among hypertension patients to reduce the level of blood pressure.[2]

Structured Teaching Program
According to Oxford English Dictionary, structured teaching program refers to preparing a teaching program using standard material and method for giving systematic information, instruction or training to or about a particular topic.[9]

In context to present study, Structured teaching program includes a teaching session for 45 minutes which encloses the topic relaxation therapy under following headings:

- ✓ Define relaxation therapy
- ✓ list out the purposes
- ✓ list out the purposes
- ✓ enlist the indication for relaxation therapy
- ✓ discribe the techniques of yoga
- ✓ enumerate the steps in breathing exercise
- ✓ illustrate the techniques of meditation

Program

- **Group Teaching**

Method of Teaching: Lecture cum Discussion
Teaching Aid: PPT, Flash Cards, Chart

- **Group of Samples: Group:** School Teachers **Number of groups:** 4

Number of samples in each group: 15
Duration: 45 minutes
Place: Selected Areas of City

SCOPE OF THE STUDY

The findings of the study can be the basis for planning health program for community peoples at various levels. This campaign will be focusing on various aspects of Relaxation Therapy in Hypertension. Similar awareness campaign can be planed and initiated for general community in different areas and settings.

The study findings will be utilized for planning the screening programs at various levels in the community.

The study will generate the future hypothesis to conduct the longitudinal study. The same study can be conducted on large scale. The number of participants included in the study can be increased and generalized.

HYPOTHESES

H0: There will be no significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of City.

H1: There will be significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of City.

DELIMITATION OF THE STUDY

The Delimitations of the study are:

1. The study was done only in the selected areas of city
2. The study was done with in a restricted time period of 4 weeks
3. The data was collected from 60 samples, which is a small sample size
4. The study samples were divided in groups for data collection

ETHICAL ASPECTS

The study proposal was accepted by the ethical committee of the institution. Permission was obtained by the concerned authorities before conducting the study. Consent letter will be obtained by individual samples after explaining them the research process in their own language. Confidentiality regarding the samples information will be maintained by using code numbers by the investigator.

CONCEPTUAL FRAMEWORK

DEFINITION OF CONCEPTUAL FRAMEWORK

According to Polit and Hungler (2000) – Conceptual framework represents a less formal attempt at organizing phenomena. It deals abstraction (concepts) that are assembled by virtue of their relevance to a common theme. The author also states that the conceptual framework is a cohesive supporting linkage of selected interrelated concepts.[11]

CONCEPTS

The basic assumption of the theory is that nurses and clients communicate information, set goals mutually and then act to attain goals.[12]

This study is focused on assessing the effectiveness of structured teaching program on knowledge regarding relaxation therapy among clients with hypertension.

CONCEPT

The conceptual Framework used for this study is based on general system model approach. General system theory serves as a model for viewing man as interacting with environment. It was developed by Bertalanffy [1968] & modified by J.W. kenny and named as a open system is made up of separate components. The components are interrelated and share a common purpose to form a whole. An open system, such as human organism or processes like the nursing process, interacts with environment, exchanging information between the system and the environment.

The main concept of general system theory is input, throughput, output and feedback.

INPUT

A system imparts products known as input in this study after assessing the existing knowledge; the investigator has been giving structured teaching programme regarding relaxation therapy among hypertensive patients in it as the input process.

THROUGHPUT

A system transforms, creates and organizes the process known as throughput which results in a reorganization of the input that is after a structured teaching programme, there is a change taking place in the subject regarding relaxation therapy among hypertensive patients.

OUTPUT

A System expert views in a process known as output. It is a product given to outside the system which can be detected and related to the system. This output is mentioned as post teaching stage in this study. This stage encompasses the improved adequate knowledge related to relaxation therapy among hypertensive patients.

FEED BACK

The feedback is the environmental response of the system. Feedback may be positive or negative or neutral. Feedback encomphasizes to strengthen the input and throughput. It is necessary if the result shows any inadequate knowledge.

SUMMARY

This chapter dealt with the introduction, background of the study, need of the study, Title of the study, objectives, hypothesis, operational definitions, limitations, ethical aspects and conceptual framework is described in detail here and is further to lead the study.

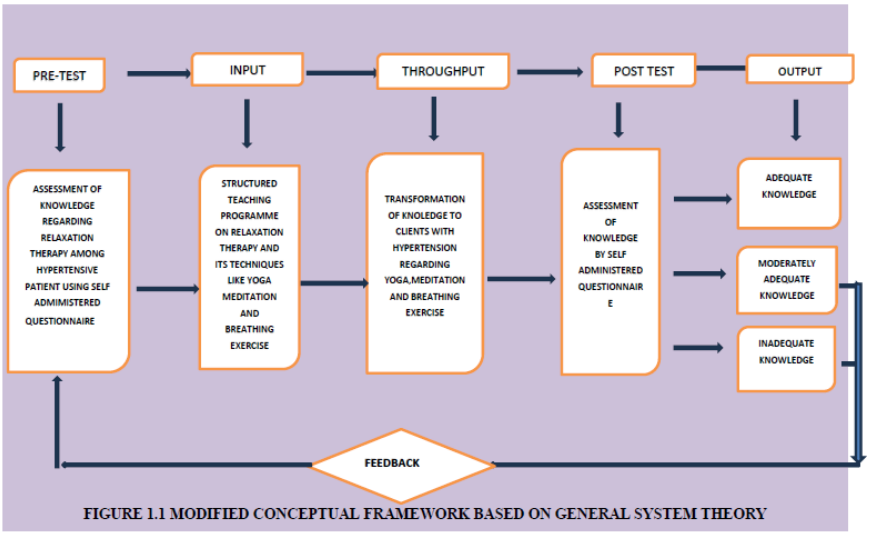


FIGURE 1.1 MODIFIED CONCEPTUAL FRAMEWORK BASED ON GENERAL SYSTEM THEORY

FIGURE 1.1 MODIFIED CONCEPTUAL FRAMEWORK BASED ON GENERAL SYSTEM THEORY.

CHAPTER II REVIEW OF LITERATURE

INTRODUCTION

Review of literature is one of the most important steps in the research process. The main purpose of literature review is to convey to the readers about the work already done and the knowledge and ideas that have been already established in a particular topic of research. Literature review is a laborious task, but it is essential if the research process is to be successful. Research studies are usually under taken within the context of an existing knowledge base because research cannot be conducted in an intellectual vacuum. One of the most satisfying aspects of the literature review is the contribution it makes to new knowledge, insight and general scholarship.[20]

A review of literature is a description and analysis of the literature relevant to a particular field or topic. It

provides an overview of what work already had been carried out who are the key researchers who did that work.

DEFINITION

Literature review is defined as broad, comprehensive, in depth, systematic critique and synthesis of scholarly publications, unpublished, print and online materials, audiovisual material and personal communications.[20]

The literature reviewed related to the present study is organized and presented under the following:

1. **Review of literature related to knowledge of hypertension.**
2. **Review of literature related to knowledge of Relaxation Therapy in Hypertension.**

1. **Review of literature related to knowledge of hypertension**

Mishra S, Mohapatra J, et, al (2025), conducted a cross sectional study to assess the level of knowledge and practice of lifestyle modifications among hypertensive patients attending the outpatient department, involving 250 hypertensive patients aged over 18 years. Data were collected through face-to-face interviews using a semi-structured questionnaire. Results showed that Among the 250 patients, 230 were on pharmacological treatment, but only 80 managed to control their blood pressure adequately. Knowledge of lifestyle modifications was inadequate in 40% of the participants. Urban residents showed significantly higher awareness than their rural counterparts ($p < 0.0001$). Educational background had a significant effect on knowledge ($p = 0.05$), whereas gender did not ($p = 0.81$). Awareness and practice of lifestyle interventions are essential for managing hypertension effectively. Enhancing educational resources and providing comprehensive counseling, particularly in rural areas, could bridge the gap between knowledge and practice, improving hypertension management outcomes in Odisha.[14]

Monshe CB, Kakumba JM, (2025) conducted a study to assess the level of antihypertensive medication adherence among adult hypertensive patients at Monkole Hospital Center, evaluate their knowledge of hypertension complications, and identify predictive factors for good adherence. A cross-sectional study was conducted on a sample of 121 hypertensive patients. Data were collected through interviews using a structured questionnaire. Medication adherence was assessed using the Girerd scale. Factors associated with adherence were identified using binary logistic regression analysis. Patients at Monkole Hospital Center were generally classified as good adherents based on the Girerd scale. More than half of the patients were informed about their disease by doctors. Older age and being married were associated with better medication adherence.[15]

Yee CS, Doris S. (2025) conducted a descriptive, cross-sectional study was conducted to assess the level of knowledge on hypertension among 114 adult hypertensive patients. Data was collected using self-administered questionnaire and analyzed using SPSS version 26.0. One-way ANOVA test, independent T-test, and Chi-Square Test were used to determine the relationship between participants' socio-demographic characteristics and their level of knowledge on hypertension. The study findings revealed that 45.6% (n=52) of the respondents have poor knowledge, 30.7% (n=35) of them have moderate knowledge, and only 23.7% (n=27) of them have a good level of knowledge. The results also showed that there was a statistically significant relationship between the level of knowledge on hypertension and age ($p = 0.001$), educational level ($p = 0.009$), source of information ($p = 0.009$), and race ($p = 0.035$). In contrast, no significant relationship was found between the level of knowledge on hypertension and gender. The results of this study highlighted the inadequate knowledge of hypertension among patients, which may affect timely diagnosis and management. This may increase the risk of serious complications like heart disease and stroke, leading to poorer health outcomes and higher healthcare costs.[16]

Hamid HJ. (2025) this study assessed hypertension knowledge among hypertensive employees at the University of Baghdad to identify key knowledge gaps. Conducted as a descriptive cross-sectional study, 74 participants referred to the university health center were selected through convenience sampling. Results revealed a mean HK-LS score of 13.8, or 62.7% of the total possible score, with the highest scores in lifestyle awareness and the lowest in the definition of hypertension. Educational level and duration since diagnosis were significantly associated with hypertension knowledge levels, with those of shorter diagnostic duration and lower education displaying lower awareness. Findings underscore the need to prioritize targeted education initiatives for newly diagnosed and less-educated patients to enhance prevention and effective management of hypertension.[17]

Alhazmi A, Moafa HN, (2024) Conducted a cross sectional study was conducted to assess overall and specific knowledge about hypertension and to identify predictors of inadequate knowledge. Data were collected using an online, self-administered questionnaire divided into two sections. In the first section, the characteristics of the participants were collected. In the second section, the Hypertension Knowledge-Level Scale was used to measure overall and specific knowledge areas (subdimensions). In all 253 hypertensive patients were eligible for participation; almost 70% of whom were male. The mean age of the participants was 45 years (±14.7), and their mean overall knowledge score was 17.60 (±5.09), which was equivalent to 67.7% of the maximum score. In addition, 40.7% of participants had an adequate level of hypertension knowledge. Most patients showed inadequate levels of knowledge related

to hypertension management. Diet, medical treatment, disease definition, drug compliance, and complications were subsequently the least knowledgeable subdimensions among the study population. Therefore, these subdimensions should be prioritized when planning hypertension educational interventions and during follow-up sessions, especially for patients of younger age groups and those with lower educational levels.[18]

Mahdi HA, Al-Humairi AK (2022) conducted a cross sectional study was conducted to assess the knowledge of hypertension among patients with hypertension in Al-Hilla city. This study was a "descriptive cross-sectional study" involving about 303 patients with hypertension older than 18 years who came to health-care centers and hospitals; the patients were assessed by a designed questionnaire through the interview method. There is a relationship between the age and duration of hypertension with knowledge, and there is a significant association between the study variables (age, sex, marital status, educational level, residence, employment status, socioeconomic level, duration of hypertension, family history of hypertension, measurement of hypertension) in our study and knowledge. This study in Babylon Province shows that the highest proportion of patients with hypertension have average knowledge about hypertension (42.9%); there is a significant association between age, duration, and study variables (age, sex, marital status, educational level, residence, employment status, socioeconomic level, duration of hypertension, family history of hypertension, measurement of hypertension) with knowledge.[19]

Wolde M, Azale T, et, al. (2022) Cross-sectional study was conducted to assess the knowledge of hypertension and associated factors among hypertensive patients in Gondar town. A systematic sampling technique was applied to select a total of 389 patients. A structured interview questionnaire was used to gather the data. A total of 385 respondents participated giving a response rate of 98.9%. The majority (55.3%) of the patients had a low level of, 17.9% had a moderate level of knowledge whereas 26.8% had a high level of knowledge about hypertension. Those working in government organizations had 5.5 times higher odds of having a high level of knowledge than other groups (AOR = 5.5; 95%CI = 1.21, 25). Patients who received longer than four years of treatment showed twice larger odds of knowledge than those with below two years of treatment (AOR = 2; 95%CI = 1.29, 3.22) Moreover, patients residing proximate to the hospital increases the odds of having a higher level of knowledge by 1.64 times versus patients living far away from the hospital (AOR = 1.64, 95% CI = 1.07–2.63). This finding revealed that knowledge about hypertension and risk factors among patients with hypertension was low. Therefore, it is important to give health education to patients working in non-governmental organizations and self-employed individuals about diseases and risk factors. In addition, emphasis should be given to patients receiving less than two years of treatment and coming from remote areas to improve their knowledge of the disease.[20]

Imán L, Imán A. (2021) conducted a Descriptive cross-sectional study was carried out with the aim of addressing the knowledge and adherence to treatment for hypertension in men aged 30 to 60 years old enrolled in a Health Center in the city of Rosario. The study population consisted of 40 hypertensive men with a firm diagnosis of hypertension, prescription of pharmacological treatment and active attendance at the center during the study period. The survey technique was applied using a questionnaire of 16 multiple-choice questions with some open-ended questions in which a brief justification for the answers was requested. The patients revealed to know their disease although there was a group that expressed not knowing the symptomatology. There was also little awareness of the risk that age represents in the evolution of the disease and the presentation of complications. Only a minority of patients performed the usual prescribed blood pressure controls, but the results on the adoption of a healthy diet and the reduction of salt consumption were acceptable. Compliance with prescribed physical activity was low. Knowledge and adherence to treatment were deficient and corresponded to international figures.[21]

Bahram M, Banafsheh T, et al, (2021) conducted a study on Factors predicting nutritional knowledge, illness perceptions, and dietary adherence among hypertensive middle-aged women: Application of transtheoretical model. rosssectional survey was conducted on 164 patients with HTN attending west health centers of Tehran, Iran, in 2020. Simple random sampling was used. Sociodemographic characteristics of the respondents were collected, a valid and reliable measure on nutritional knowledge, illness perceptions, and adherence to diet, and a researcher-made measure based on TTM constructs through in-person interview was applied. Descriptive statistics and general linear model were utilized for data analysis using SPSS version 25. The significance level was considered less than 0.05. Study findings highlighted the necessity of tailoring and implementing interventions based on TTM using appropriate strategies to promote quality of HTN management approach in nutritional knowledge, illness perceptions, and dietary adherence.[22]

Opare A, Buabeng K, Marfo AF, et al, (2021), conducted a study on Source of medicines and medicine information by self-reported persons living with hypertension and diabetes in rural and urban Ghana. Objective of the study was to determine the source of medicines and medicine information of persons living with hypertension and diabetes in rural and urban Ghana and assessing if they are influenced by predisposing and enabling factors as defined by Andersen's behavioural model. Study concluded that Majority of inhabitants with hypertension and diabetes in both rural and urban communities, sourced medicines and medicine

information from public health institutions though a larger proportion was recorded in the urban communities. More participants in the rural communities than in the urban communities sourced medicines and medicine information from community pharmacies. Participants' source of medicine and medicine information was influenced by both predisposing and enabling factors.[23]

Worku Kassahun C, Asasahegn A, (2020) conducted a study to assess knowledge on hypertension and self-care practice among adult hypertensive patients in the University of Gondar Comprehensive Specialized Hospital, Ethiopia. Descriptive cross-sectional study was conducted among 384 hypertensive patients from April to May 2019. The study participants were selected using a systematic random sampling technique. Data were collected using a pretested interviewer-administered questionnaire. Finally, the results were summarized and presented in texts, figures, and tables. Results showed that Among the study participants, 215 (56%) and 228 (59.4%) had good knowledge and self-care practice towards hypertension, respectively. The participants who had good knowledge had good self-care practice frequency. In this study, knowledge on hypertension was low, while self- care practice was moderate on the self-care interventions. Hence, increasing patients' awareness and intervention on medication adherence, low salt diet consumption, physical activity, weight management, cigarette smoking cessation, and alcohol consumption reduction is important.[24]

Estrada, Sierra et al, (2020), conducted a study on Grade of knowledge of hypertension in hypertensive patients, to evaluate the the grade of knowledge of hypertension in patients.

Cross sectional descriptive multicenter studyin primary and specialized care center in spain. 80 hypertensive patients, older than 18 years, with pharmacological treatment. The study concluded that Basic knowledge about hypertension remains low in these patients. These results enable future interventions to be oriented by promoting therapeutic education to the patient and improving their involvement in the disease in order to better control their hypertension.[25]

Alexander M, Gordon NP, et, al (2019) conducted a study was conducted to assess patient knowledge and awareness of hypertension are important factors in achieving blood pressure control. To examine hypertensive patients' knowledge of their condition, randomly surveyed 2500 hypertension patients from a large health maintenance organization; questionnaires were supplemented with clinic blood pressure measurements. Most patients perceived DBP to be a more important risk factor than SBP. Hypertensive patients' awareness of blood pressure targets and current hypertension control status, particularly with respect to SBP, is suboptimal. The authors' findings support the need to improve patient education for better management of hypertension.[26]

Part – II: Studies related to knowledge of Relaxation Therapy in Hypertension.

Walaa EI, Mohamed H, Safaa M, et al (2023) Conducted a study on Effect of Relaxation Technique on Blood Pressure, Stress and Quality of Life among Hypertensive Females in Damanhour City. Quasi experimental design (two groups) research design was adopted to carry out this study. This study was conducted in the outpatient clinic at the National Institute of Medicine in Damanhour. A purposive sample of 60 female patients was included in the study. Three tools were used for data collection Tool I: Structured Interview Schedule for female patients' basic data. It consists of three parts. Tool II: Perceived Stress Scale (PSS). Tool III: Quality of Life Scale (WHOQoL-BREF- 26). The systolic blood pressure mean score among the study group was 153.30 ± 6.564 in the initial assessment, and dropped to 126.50 ± 4.883 after 2 weeks of the relaxation techniques and then decreased to 124.63±5.196 after 4 weeks, with a statistically significant difference between them (F=246.49, P=0.000). Study concluded that progressive muscle relaxation program proved to be significantly effective in decreasing levels of stress and controlling blood pressure level as well as increase the level of quality of life among the study group.[27]

Pradeep Y, Vasantha K, et al (2023), conducted a descriptive study to assess knowledge related to hypertension and its impact upon exercises and sleep pattern among adults from communities of Uttarakhand, study concluded that the majority of the population were having no knowledge regarding blood pressure management due to lack of education which was strongly associated with amount of exercises, sleep among adults at risk of hypertension from both rural and urban communities of Uttarakhand.[28]

Tanna, Dhara B, Bose, Neeta, Tejas, (2022), conducted a study on Effect of Relaxation Therapy on Pre-Induction Blood Pressure and Anxiety in Hypertensive Patients. A randomized controlled study was conducted on hypertensive patients undergoing elective surgery. They were allocated into two groups (relaxation therapy and control) using simple randomization with allocation concealment. The relaxation therapy group received intervention by an audio clip an evening prior and 30 min before the scheduled surgery. Their anxiety score on numerical rating scale (0–10) and BP was recorded before and after each intervention. The control group received standard care only. Pre-induction BP and anxiety score were recorded in both groups. The outcome measures were difference in pre- induction anxiety and BP between relaxation and control groups and difference in pre- and post-relaxation anxiety and BP. Out of 70 patients, 30 received relaxation therapy and 34 received standard preoperative care. There was a significant reduction in BP and anxiety after relaxation therapy in

the intervention group (P < 0.0001). The relaxation therapy group showed significantly lower pre-induction systolic BP (138.93 vs. 156.59, P < 0.0001) and anxiety score (2.5 vs. 5.5, P < 0.0001) than the control group. Requirement of anxiolytic drug was less in the relaxation therapy group.[29]

Kep Das (2018) Conducted a study on The Effect of Progressive Muscle Relaxation Techniques to decrease Blood Pressure for Patients with Hypertension in Mataram. The study uses "Quasi Experiment Design" with control group as comparison. The population in this study are 724 hypertension patients and 27 patients as sample based on inclusion and exclusion criteria. The results of this study indicates that the T-test calculation using Quasi Experiment Design shows the difference of average of hypertension rate before and after given progressive muscle relaxation technique. It is 10,306 mmHg in intervention group and 1,425 mmHg in control group. The p-value in the intervention group is 0.000 that is smaller than α=0.05 and the p-value of control group is 0.431 that is greater than α=0.05. Researcher conclude that there is a difference of hypertension rate between intervention and control group. Researcher hope this progressive muscle relaxation technique can be used as an appropriate alternative or complementing treatment to control Hypertension rate.[30]

SUMMARY

This chapter has dealt with the review of research literature related to the present study. The review indicated that few studies have been conducted in India to assess the knowledge of clients regarding relaxation therapy.

Thus, the review has enabled the researchers to establish the need for the study, develop the conceptual work, adopt the research design, develop the research tool and provide information to clients with hypertension. Select a data collecting technique and to decide upon plan of statistical analysis.

CHAPTER III RESEARCH METHODOLOGY

INRODUCTION

Research methodology are the techniques researchers use to structure a study to gather and analyze information relevant to gather and analyze information relevant to research question. The two alternatives paradigm correspond to different methods for developing evidence. A key methodology distinction is between quantitative research, which is closely allied with positivism, and The study design systematically represented as follows: qualitative research, which is associated with constructive inquiry.[31]

This chapter deals with the description of methodology and different steps which were undertaken for gathering and organizing data for assessing knowledge of clients with hypertension regarding relaxation therapy. It includes research design, population, study setting, variable, sample size, development and description of tool, pilot study, data collection method and statistical method to analyze the data.

RESEARCH APPROCH

Research approach involves the mental processes of logical reasoning concerning the existence and properties of phenomena about which more information and new knowledge are sought through a systematically planned investigation. The approach refers to the way in which the researcher plans and constructs in research process.[31]

In view of the nature of problem selected for the study and the objectives to accomplished a quantitative approach was used for the present study. This approach was considered to be the most suitable one to conduct the study because it would help the researcher to use one group and observe the difference in the knowledge scores before and after administrating structured teaching program and evaluate the effectiveness of structured teaching program on knowledge regarding relaxation therapy among clients with hypertension.

RESEARCH DESIGN

Research design is the master plan specifying the methods and procedures for collection and analyzing the needed information in a research study.[13]

In view of the nature of the problem and to accomplish the objectives of the study, a Pre-experimental one group pretest-posttest design was used to evaluate the effectiveness of structured teaching program on knowledge regarding relaxation therapy among clients with hypertension.

The study design shows that on first day (day 1), pretest was given to assess the knowledge regarding relaxation therapy among clients with hypertension. The structured teaching program was also administered on the same day. On the seventh day (day 7) post- test was conducted to assess the gain in knowledge using the semi structured knowledge questionnaire.

Table No. 1: A pre- experimental one group pre-test post-test research design.

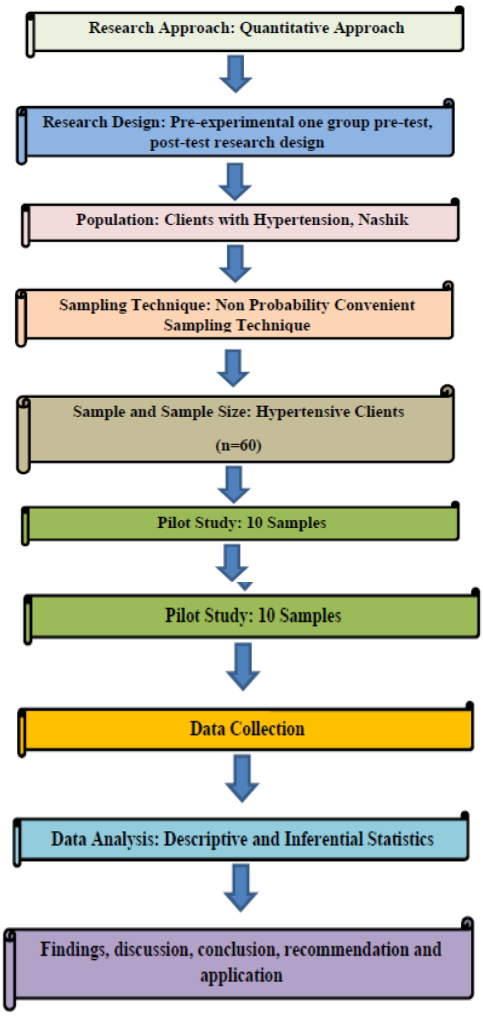
SAMPLES	PRE-TEST	INTERVENTION	POST-TEST
Clients with Hypertension	Administration of semi structured knowledge questionnaire on day 1	Administration structured teaching program on day 1	Administration of semi structured knowledge questionnaire on day 7
	01	**X**	**02**

KEY

01- Administration of semi structured knowledge questionnaire to assess pretest knowledge regarding relaxation therapy on day 1.

X- Intervention includes administrating structured teaching program to clients with hypertensionon day 1.

02- Administration of semi structured knowledge questionnaire to assess the posttest knowledge regarding relaxation therapy on day 7.



SETTING OF STUDY

The study setting is the location in which the research is conducted – it could be natural, partially controlled or highly controlled, or highly controlled. Natural or field setting is an uncontrolled real life situation. In a partially controlled situation, environment is partially modified to control extraneous variables, while in highly controlled situation study environment is fully controlled to combat the effect of extraneous variable.[13]

The study was conducted at selected area of the city.

VARIABLE OF STUDY

Attributes or characteristics that can have more than one value, such as height or weight. In others words, variables are qualities, quantities, properties or characteristic of people, things or situations that change or vary.[13]

Variables used in this study are:

Independent Variables

Variables that are purposively manipulated or changed by researcher is called as independent variables.[13]

In this study independent variable is Structured Teaching Program on Relaxation Therapy for Hypertension.

Dependent Variables

Variables that changes as the independent variable is manipulated by the researcher is called as dependent variable.[13]

With respect to present study, Knowledge of clients with hypertension regarding relaxation therapy is dependent variable.

Demographic Variables

Extraneous variable are the factors that are not the part of the study but may affect the measurement of the study variables, they commonly known as extraneous variables.[11] Extraneous variable for present study are:

1. Age in Years
2. Gender
3. Religion
4. Educational Status
5. Occupation
6. Monthly Income
7. Source of Information Received from
8. Habits

POPLATION OF STUDY

Population

Population is the aggregation of all the units in which a researcher is interested. In other words population is the set of people or entities to which the result of a research are to be generalized.[13]

In the context to present study, the population consisted of the clients with hypertension of city.

Target Population

A target population consist of the total number of people or objects which are meeting the designated set of criteria. In other words, it is aggregate of all the cases with certain phenomenon about which the researcher would like to make generalization.[13]

In the context to present study, the target population will be the clients with hypertension in selected areas of the city.

Accessible Population

The Accessible population refers to the aggregate of cases that conform to designated criteria and are also accessible as subjects a study. i.e that aggregate must meet the criteria for inclusion in the study and that is available to the researcher.[13]

In the present context of study, the accessible population was clients with hypertension available at the time of data collection who were meeting inclusion and exclusion criteria listed by researcher.

SAMPLING

Sample

"A sample is a subset of population selected to participate in a research study".[31]

Sample selected for present study comprised of clients with hypertension, who will fulfill the sampling criteria.

Sampling Technique

Sampling techniques is defined as the process of selecting a portion of a population to represent the entire population for study in a research.[31]

In the present study, sampling technique used was non probability convinent sampling technique. This technique is found appropriate for this study because it helps the researcher for selecting the samples with a specific purpose in mind to be met for.

SAMPLE SIZE

Sample size refers to the number of people who participate in a study.[32]

The sample size selected for this study was 60 samples who fulfilled the sampling criteria and who were willing to participate in the study.

SAMPLE SELECTION CRITERIA

Inclusion Criteria

1. Both men and women with Hypertension in selected areas of city
2. Clients between the age group of 30- 60yrs.
3. Clients who can understand English and Marathi.

Exclusion Criteria

1. Clients who are not willing to participate in the study
2. Clients who are not able to understand English and Marathi.
3. Clients who are not available at the time of study

TOOL AND TECHNIQUE

TOOLS: A research tool or instrument is a device used to measure the concept of interest in a research project that a researcher uses to collect the data.[13]

With reference to present study, Semi Structured Questionnaires was used to assess the knowledge regarding relaxation therapy among hypertensive clients.

TECHNIQUES: The means of gathering the data with the use of specific tools used in a given methods are known as techniques of data collection.[13]

With reference to this study, technique used was Questioning (Self - Reported Questioning Technique).

DESCRIPTION OF THE TOOL

Semi Structured Questionnaire: A questionnaire is a structured self – report paper and pencil instrument that a research subject is asked to complete.[20]

With reference to present study, the semi structured questionnaire was used to assess the knowledge of clients with hypertension. The tools were prepared after reviewing the related literature, books, journals, articles, reports, published and unpublished research and in consultation with experts and the research guide.

Based on the objectives, the tool selected for the study, were divided in following sections:

Section-A: It consists of 08 items regarding demographic variables of teachers that are developed to collect the background information of clients with

hypertension.

1. Age in Years
2. Gender
3. Religion
4. Educational Status
5. Occupation
6. Monthly Income
7. Source of Information Received from
8. Habits

Section-B: It consists of 30 items to assess the knowledge about relaxation therapy for Hypertension Use of semi structured knowledge questionnaire on Relaxation Therapy.

Researcher will provide 30 knowledge questionnaire to government school teachers regarding Oral Cancer, which includes questions based on:
Section I: Knowledge about Hypertension Section II: Knowledge about Relaxation Therapy
Section III: Knowledge r about Yoga Therapy
Section IV: Knowledge about Meditation Therapy
Section V: Knowledge about Breathing Exercises Therapy

SCORING
The structure of the questionnaire was developed into only one section to assess the knowledge of clients with hypertension regarding Relaxation Therapy. Section B of the questionnaire dealt with objective type (multiple type questions) items. The scores of the Section B were based on worth of correct answers. The correct responses were given '1' and the incorrect response '0'. Knowledge was graded from poor knowledge to excellent knowledge. In the self-structured questionnaire for each question, four options were given out of which 3 were distracters and with only one correct response. For each correct answer, the score given was 1 and for the wrong answer the score was given 0. The highest score was 30.

Grading for knowledge score

SCORE	REMARK
0-10	Poor
11-20	Good
21-30	Excellent

DEVELOPMENT OF STRUCTURED TEACHING PROGRAM
The Structured Teaching Program was developed based on the review of literature and experts opinion. The structured teaching program consisted Information on Introduction to Relaxation Therapy, Definition of Relaxation Therapy, Purposes, Indications for Relaxation Therapy, Techniques of Yoga, Steps in Breathing Exercises, Techniques of Meditation.

Structured teaching program was developed keeping in mind the objectives, literature reviewed and the opinion of the experts. The main factor that were kept in mind while preparing structured teaching program were; the level of understanding of non- medical people (samples), simplicity of the language, relevance of pictures.

FEASIBILITY OF THE STUDY
Suitability of a study, determined by examining the time and money commitment, the researcher's expertise, availability of subjects, facility and equipment, cooperation of others and study's ethical consideration.[33]

The study was feasible by considering various aspects of the study such as methodology, sampling technique, sample selection criteria, time, facilities and ethical consideration.

CONTENT VALIDITY
Validity of the tool refers to degree to which an instrument measures what it is intended to measure. Content validity is concerned with scope of coverage of the content area to be measured.[31]

To ensure the content validity, the tool was distributed to 10 experts including medical surgical nursing experts, physician, statistician.

The experts includes
10 – Medical Surgical Nursing Speciality
1 –Doctor
1 – Statistician

All the necessary changes were done considering the experts suggestions after discussing with the guide.

RELIABILITY
Reliability is the degree of consistency and accuracy with which an instrument measures the attribute for which it is designed to measure.[33]

In this study the reliability of the tool was determined by administering the semi structured questionnaire to 10 samples. The Cronbach's Alpha(α) method was used to test the reliability of tool. The semi structured questionnaire was said to be reliable if value of (α) is more than 0.6. The value of (α) for the semi structured questionnaire was 0.712. Hence the tool was found to be reliable.

PILOT STUDY
It is a small scale version, or trial run, done in preparation for a major study.[31]

In context to present study, pilot study was conducted on 10 samples. This was undertaken in order to ensure feasibility and predictability of research methodology and tool. Samples were selected as per selection criteria and this samples were not been included in main study.

Researcher gave self introduction and explained the study objectives to the samples. Researcher had obtained

written consent from the participants of study. Researcher gave semi structured questionnaire to the samples for pretest to assess the knowledge about Relaxation Therapy. On the same day Structured Teaching Program on Relaxation Therapy for Hypertension was administered and then after post test was administered after 7 days.

The collected data was analyzed by using descriptive and inferential statistics. After conducting the pilot study, it was found that the study was feasible and effective, the concerned authority and the samples were found to be co-operative, the questionnaire and structured teaching program was relevant and the time and cost of the study was within the limit. The significant difference between pre-test and post-test was found by using paired't' test. The difference found very highly significant ($t = 7.60$, $p<0.05$)

DATA COLLECTION PROCESS

Step 1: The study was conducted after obtaining permission from Institutional Ethical Committee.
Step 2: The researcher have obtained permission from competent authority of the selected city and consent was taken from participant to conduct the study.
Step 3: Researcher firstly given self introduction.
Step 4: Researcher explained objectives of the study to clients with hypertension also cleared their doubts about the study.
Step 5: Researcher selected the clients with hypertension those who fulfilled the inclusion criteria of the study.
Steps 6: Researcher obtained written consent from participants of the study.
Step 7: Pretest was conducted to assess the knowledge of clients with hypertension regarding relaxation therapy using knowledge questionnaire on day '0' as per following sessions and groups.
Step 8: On the same day structured teaching program had been administered to teachers regarding relaxation therapy for hypertension on day '0'.
Step 9: Posttest was conducted on the same sample using the same knowledge questionnaire on 7 day of administering the structured teaching program.

PLAN FOR DATA ANALYSIS

Descriptive statistics are useful for summarizing empirical information; inferential statistics which are based on laws of probability provide a means of drawing conclusion about the population from which data was obtained for the sample.[31]

- In this study data was entered into excel sheet and master chart was prepared
- Description of the samples with respect to demographic variables was presented using frequency and percentage
- Data was presented in tables, graphs, and diagrams. The level of knowledge was grouped from poor to excellent.
- Mean and Standard deviation was used to evaluate the effectiveness of structured teaching program on relaxation therapy for hypertension
- Further statistical significance of the effectiveness of structured teaching program by using paired't' test.
- To find out association of pre-test knowledge score with selected demographic variables chi square technique was used

SUMMARY

This chapter of methodology dealt with research approach, research design, identification of target population, accessible population, sampling technique, sampling size, inclusion and exclusion criteria of subject, tool preparation, feasibility of study, validity and reliability of research tool, pilot study, data collection process and plan for data analysis which helps the researcher in a better way to collect data from subjects so as to makes the study effective.

CHAPTER IV ANALYSIS AND INTERPRETATION

INTRODUCTION

Analysis and interpretation of data is the most important phase of the research process, which involves the computation of the certain measures along with searching for patterns of relationship that exists among data groups. Data collection is followed by the analysis and interpretation of data, where collected data are analysed and interpreted in accordance with study objectives. Analysis and interpretation of data includes compilation, editing, coding, classification and presentation of data.[13]

Analysis is the process of organizing and synthesizing the data so as to answer research questions and test hypothesis.

The analysis of data collected data done with the help of descriptive and inferential statistics. The data was first coded and entered into computer. Frequency, percentage, mean, standard deviation, paired 't' test, pearson correlation and chi-square were used to fulfill the objectives of the study.

PROBLEM STATEMENT

"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of city."

OBJECTIVES

PRIMARY OBJECTIVE

1. To assess the level of knowledge on relaxationtherapy among client with hypertension residing in selected area of City.

SECONDARY OBJECTIVE

1. To evaluate the effectiveness of structured teaching programme on relaxation therapy among client with

hypertension residing in selected area of city.
2. To find out the association between levels of knowledge on relaxation therapy among client with hypertension with selected demographic variables

HYPOTHESES

H_0 – There will be no significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of city.

H_1 – There will be significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of city.

ORGANIZATION OF STUDY FINDINGS

The data collected by the researcher during the data collection from 60 clients with hypertension was analysed as per the objectives of the study and was organized as per following setting:

Section I: Description on analysis of demographic data of the client with hypertension residing in selected area of city in terms of frequency and percentage.

Section II: Description on analysis of data related to assessment of the knowledge regarding relaxation therapy among client with hypertension residing in selected area of city in terms of frequency and percentage.

Section III: Description on analysis of data related to the effectiveness of structured teaching program on knowledge regarding relaxation therapy among client with hypertension residing in selected area of city.

Section IV: Description on analysis of data related to association between pre-test knowledge score regarding relaxation therapy among client with hypertension residing in selected area of city with their selected demographic variables.

Section I

Description on demographic data of the clients with hypertension residing in selected areas of city in terms of frequency and percentage

This section deals with distribution of clients with hypertension residing in selected areas if city to demographic characteristics. 60 participants were drawn from the study population, who were taken from selected areas of the city.

Table No (2): ***Frequency & percentage distribution of the client with hypertension residing in selected area of city*** **n=60**

Variables	Specifications	Frequency	Percentage
Age (in years)	30-40	6	10.00
	41-50	11	18.33
	51-60	36	60.00
	61 & above	7	11.67
Gender	Male	43	71.67
	Female	17	28.33
	Transgender	0	0.00
Religion	Hindu	40	66.67
	Christian	2	3.33
	Muslim	9	15.00
	Other	9	15.00
Educational Status	Illiterate	6	10.00
	Primary school	8	13.33
	Higher primary school	26	43.33
	Higher school education	9	15.00
	HSC	6	10.00
	Degree and above	5	8.33
Occupation	Worker	7	11.67
	Self Employed	15	25.00
	Private Job	29	48.33
	Government Job	4	6.67
	Unemployed	5	8.33
Monthly Income	up to Rs. 5000	12	20.00
	Rs. 5001 - 8000	11	18.33
	Rs. 8001 – 10000	10	16.67
	Rs. 10001 and Above	27	45.00
Source of health information	Newspaper	5	8.33
	Radio	15	25.00
	Television	20	33.33
	Relatives / family members	8	13.33

	Friends / neighbours	8	13.33
	Health personnel	4	6.67
Habits	Tobacco chewing and smoking	4	6.67
	Smoking and alcoholism	21	35.00
	Tobacco chewing and alcoholism	16	26.67
	Tobacco chewing, smoking & alcoholism	8	13.33
	None	11	18.33

Frequency & percentage distribution of client with hypertension residing in selected area of city according to age

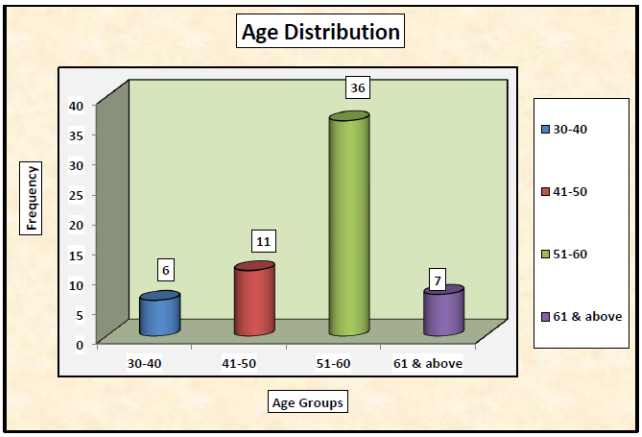


Figure No (3): Age wise classification of Clients with Hypertension.

The above figure shows that, in the study, according to age of the client with hypertension residing in selected area of city, 10% of them were from age group 30-40 years, 18.33% clients from the 41-50 years, 60% from 51-60 years and 11.67% from the age group 61 & above years.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to gender

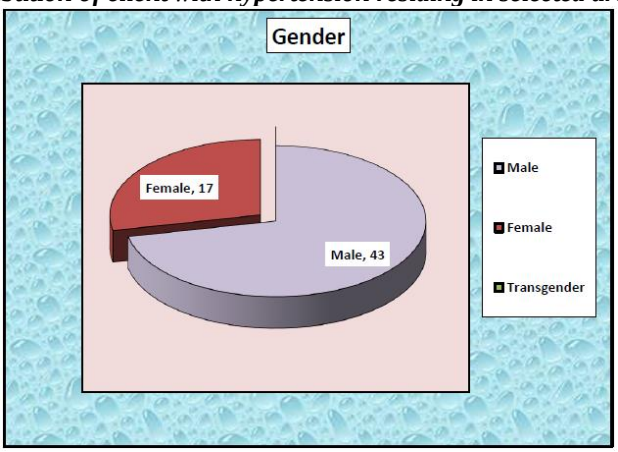


Figure No (4): Gender wise classification of Clients with Hypertension.

The above figure shows that, in the study, according to gender of the client with hypertension residing in selected area of city, 71.67% of them were males and 28.33% of them were females.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to religion

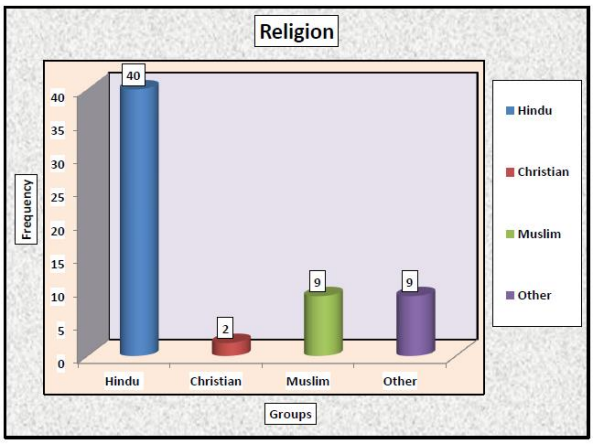


Figure No (5): Religion wise classification of Clients with Hypertension.

The above figure shows that, in the study, according to religion of the client with hypertension residing in selected area of city, 66.67% of them were from Hindu religion, 15% clients from Muslim religion, 3.33% from Christian, 15% from other religions.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to educational status

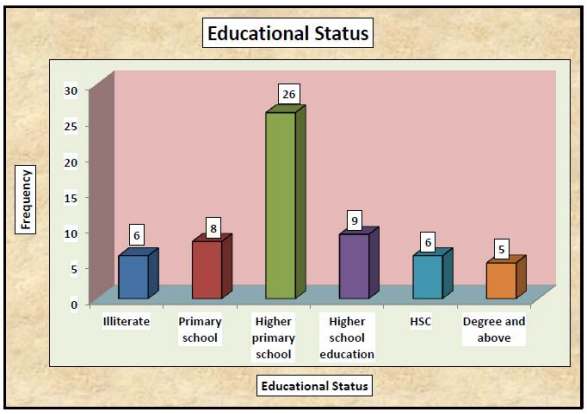


Figure No (6): Educational Status wise classification of Clients with Hypertension.

The above figure shows that, in the study, according to educational status of the client with hypertension residing in selected area of city, 10% of them were illiterate, 13.33% educated up to primary school, 43.33% up to higher primary school, 15% educated up to higher school, 10% clients educated up to HSC and 8.33% had completed degree & above qualification.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to occupation

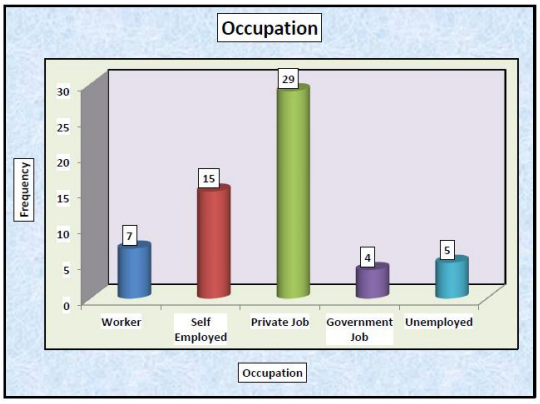


Figure No (7): Occupation wise classification of Clients with Hypertension.

The above figure shows that, in the study, according to occupation of the client with hypertension residing in selected area of city, 11.67% of them were workers, 25% self- employed, 48.33% of them had private job, 6.67% in government job and 8.33% clients were unemployed.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to monthly income

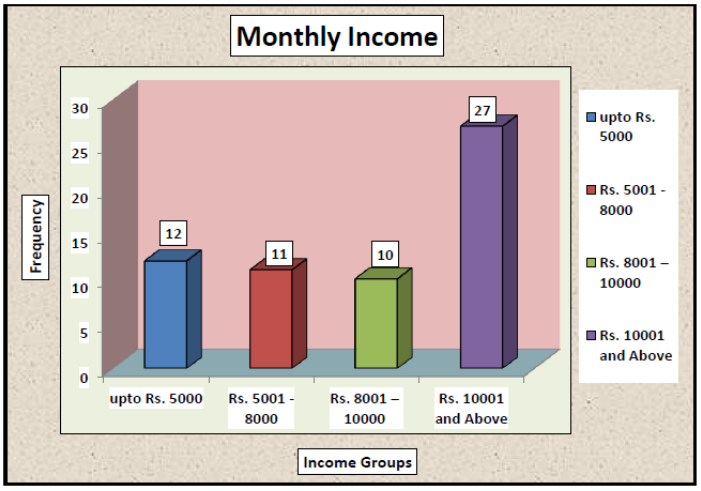


Figure No (8): Monthly Income wise classification of Clients with Hypertension.

The above figure shows that, in the study, according to monthly income of client with hypertension residing in selected area of city, 20% of them had income up to Rs. 5000, 18.33% had income in Rs. 5001 – 8000, 16.67% clients had income in Rs. 8001 – 10000 and 45% of them had income Rs. 10001 and Above.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to Source of health information

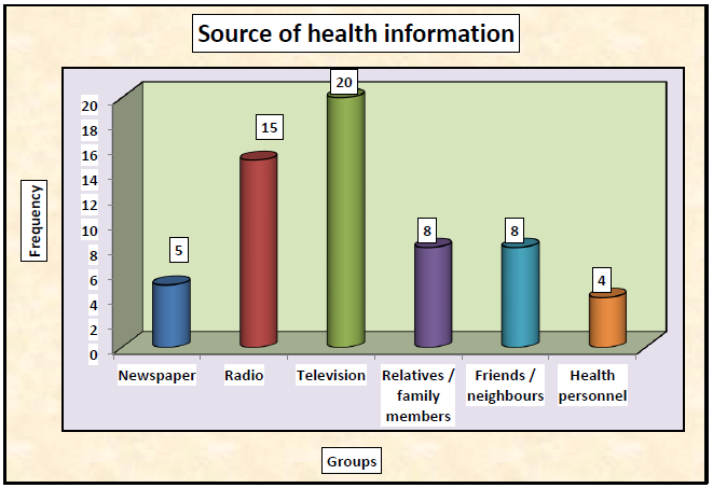


Figure No (9): Classification of Clients with Hypertension according to source of Health information about Hypertension.

The above figure shows that, in the study, according to Source of health information of client with hypertension residing in selected area of city, 8.33%% of them answered as newspaper, 25% from radio, 33.33% from television, 13.33% answered as Relatives / family members, 13.33% from Friends / neighbors and 6.67% clients answered as Health personnel.

Frequency & percentage distribution of client with hypertension residing in selected area of city according to habits

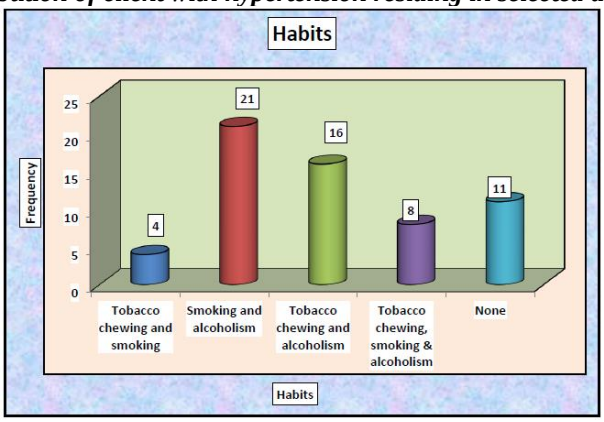


Figure No (10): Distribution of client with hypertension residing in selected area of city according to habits.

The above figure shows that, in the study, according to habits of client with hypertension residing in selected area of city, 6.67%% of them had habit of Tobacco chewing and smoking, 35% had habit of Smoking and alcoholism, 26.67% answered as Tobacco chewing and alcoholism, 13.33% answered as Tobacco chewing, smoking & alcoholism and 18.33% clients don't have any habit.

Section II

Description on pretest and posttest knowledge score of Clients with Hypertension regarding Relaxation therapy

Deals with analysis of data related to assessment of the knowledge regarding relaxation therapy among client with hypertension residing in selected area of city in terms of frequency and percentage.

PART A-PRE-TEST KNOWLEDGE

Table No (3): Part: A- Description on pretest knowledge score of Clients with Hypertension regarding Relaxation therapy n=60

Level of knowledge	Pretest score		Mean	SD
	Frequency	Percentage (%)		
0 - 10 (Poor)	40	66.67	10.28	3.81
11 - 20 (Good)	17	28.33		
21 - 30 (Excellent)	3	5.00		
Total	60	100.0%		

Description on pretest knowledge score of Clients with Hypertension regarding Relaxation Therapy

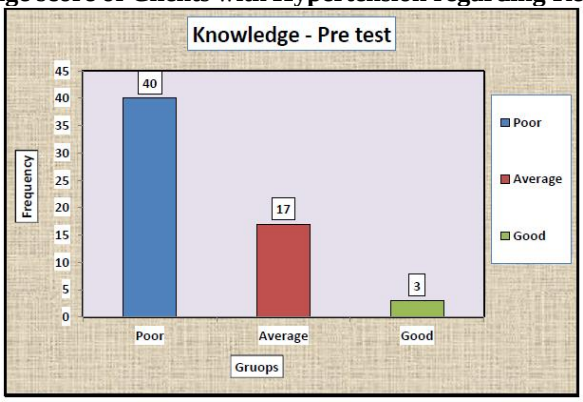


Figure No (11): Distribution of pretest knowledge score of Clients with Hypertension regarding Relaxation Therapy.

At the time of pretest, assessment of the knowledge regarding relaxation therapy among client with hypertension residing in selected area of city shows that, 66.67% of them had poor knowledge, 28.33% had average knowledge and 5% of them had good knowledge. Average knowledge score at the time of pretest was 10.28 with standard deviation of 3.81. The minimum score of knowledge was 5 with maximum score of 22.

PART B -POST-TEST KNOWLEDGE

Table No (4): Part: A- Description on posttest knowledge score of Clients with Hypertension regarding Relaxation therapy.

n=60

Level of knowledge	Posttest score		Mean	SD
	Frequency	Percentage (%)		
0 - 10 (Poor)	0	0.0%	18.48	3.16
11 - 20 (Good)	45	75%		
21 - 30 (Excellent)	15	25%		
Total	60	100.0%		

Description on posttest knowledge score of Clients with Hypertension regarding Relaxation therapy

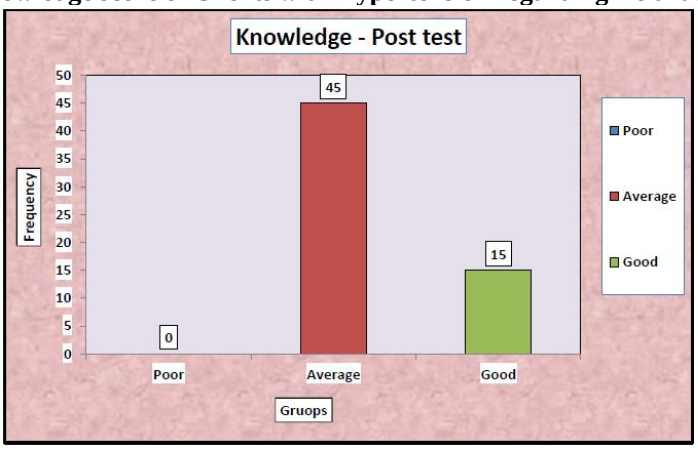


Figure No (12): Distribution of posttest knowledge score of Clients with Hypertension regarding Relaxation therapy.

At the time of posttest, assessment of the knowledge regarding relaxation therapy among client with hypertension residing in selected area of city shows that, no one of them had poor knowledge, 75% had average knowledge and 25% of them had good knowledge. Average knowledge score at the time of posttest was 18.48 with standard deviation of 3.16. The minimum score of knowledge was 12 with maximum score of 25.

Section III

Description on analysis of data related to effectiveness of structured teaching program on knowledge regarding relaxation therapy among client with hypertension selected area of city

This section deals with significance of Structured Teaching Program. Paired't' test was applied to evaluate the effectiveness of Structured Teaching Program on knowledge of clients with hypertension regarding relaxation therapy. Before interpreting data researcher stated H0 & H1

H0 – There will be no significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of city.

H1 – There will be significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of city.

Paired 't' test formula

$$t = \frac{\sum d}{\sqrt{n(\sum d^2) - (\sum d)^2/n-1}}$$

Where,

∑d= sum of differences

n= number of sample

Table No. (5): Description on Effectiveness of Structured Teaching Program on knowledge of clients with Hypertension regarding Relaxation Therapy.

n=60

Knowledge	Mean	S.D.	't' statistics	Degree of freedom	P Value	S/NS
Pre Test Score	10.28	3.81	16.80	59	0.000*	**Significant (p<0.05)**
Post Test Score	18.48	3.16				

*- significant, ** - not significant (t (59) =16.80, table value t (59) =1.66, p<0.05)

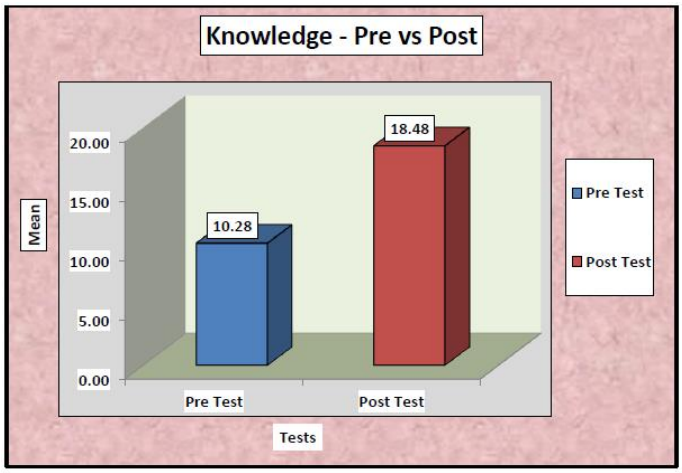


Figure No (13): Comparison of pretest and posttest knowledge score.

- The comparison of pretest and posttest means of knowledge regarding relaxation therapy among client with hypertension selected area of city was done by paired t test. The pretest average score was 10.28 with standard deviation of 3.81. The posttest average score was 18.48 with standard deviation of 3.16. The test statistics value of paired t test was 16.80 with p value 0.00. The p value less than 0.05, hence reject the null hypothesis. That means there is significant difference in pre and posttest knowledge.

- **Shows that, structured teaching program on knowledge regarding relaxation therapy among client with hypertension selected area of city was effective.**
- Hence it was statistically interpreted that H_0 is rejected and H_1 is accepted which states there is significant difference in pretest-posttest knowledge among clients with hypertension. So researcher accepted H_1 hypothesis
- **H1:** There is a significant difference between pre and post-test knowledge regarding relaxation therapy among clients with hypertension.
- Hence it was inferred that the structured teaching program on knowledge regarding relaxation therapy was effective in increasing the knowledge of clients with hypertension.

Section IV

Description on association between Pretest knowledge score on Relaxation Therapy with selected demographic variable

This section deals with the association between Pretest knowledge score on relaxation therapy with selected demographic variable

Chi-square was used to find out an association using formula:

$$\chi 2 = [\Sigma (O-E)\ 2 / E]$$

Where O = Observed value, E = Expected value

Table No (8): Description on Association between Pretest knowledge score on Relaxation Therapy with selected demographic variable.
n=60

Variable	Groups	Knowledge - PRE		Chi Square	d.f.	p value	Significance
		below Md	above Md				
Age (in years)	30-40	3	3	0.35	3	0.94	Not Significant
	41-50	6	5				
	51-60	22	14				
	61 & above	4	3				
Gender	Male	25	18	0.002	1	0.96	Not Significant
	Female	10	7				
	Transgender	0	0				
Religion	Hindu	23	17	0.35	3	0.95	Not Significant
	Christian	1	1				
	Muslim	6	3				
	Other	5	4				
Educational Status	Illiterate	5	1	19.78	5	**0.001**	**Significant**
	Primary school	6	2				
	Higher primary school	17	9				

	Higher school education	7	2				
	HSC	0	6				
	Degree and above	0	5				
Variable	**Groups**	**Knowledge - PRE**		**Chi Square**	**d.f.**	**p value**	**Significance**
		below Md	**above Md**				
Occupation	Worker	7	0	12.04	4	**0.017**	**Significant**
	Self Employed	11	4				
	Private Job	13	16				
	Government Job	3	1				
	Unemployed	1	4				
Monthly Income	up to Rs. 5000	9	3	2.66	3	0.44	Not Significant
	Rs. 5001 - 8000	7	4				
	Rs. 8001 – 10000	6	4				
	Rs. 10001 and Above	13	14				
Source of health information	Newspaper	4	1	12.03	5	**0.034**	**Significant**
	Radio	11	4				
	Television	13	7				
	Relatives / family	5	3				
	members						
	Friends / neighbours	2	6				
	Health personnel	0	4				
Habits	Tobacco chewing and smoking	3	1	2.26	4	0.68	Not Significant
	Smoking and alcoholism	11	10				
	Tobacco chewing and alcoholism	8	8				
	Tobacco chewing, smoking & alcoholism	6	2				
	None	7	4				

ASSOCIATION OF KNOWLEDGE SCORE IN RELATION TO DEMOGRAPHIC VARIABLES – PRE TEST

The chi square test was used to see association between pre-test knowledge score regarding relaxation therapy among client with hypertension residing in selected area of city with their selected demographic variables. The test was conducted at 5% level of significance.

Significant Association

For the demographic variables educational status occupation and source of health information, p value of the association test with pretest knowledge was less than 0.05. That means, knowledge regarding relaxation therapy among client with hypertension residing in selected area of city was associated with these demographic variables.

Concludes that, there was significant association of these demographic variables with the pretest knowledge

No Significant Association

For the demographic variables age, gender, religion etc., p value of the association test with pretest knowledge was more than 0.05. That means, knowledge regarding relaxation therapy among client with hypertension residing in selected area of city was not associated with these demographic variables.

Concludes that, there was no significant association of these demographic variables with the pretest knowledge.

SUMMARY

This chapter dealt with analysis and interpretation of the data collected for the study. The analysis presents that structured teaching program was significantly effective in improving Knowledge of clients with hypertension regarding relaxation therapy. There was significant association between selected demographic variable such as with pretest knowledge score.

CHAPTER V

FINDING, DISCUSSION, SUMMARY, CONCLUSION, LIMITATIONS, IMPLICATIONS AND RECOMMENDATIONS

This chapter deals with the major findings of the study and reviews of them in relation to the findings of the study. The aim of study was, a study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of city.

The design used for study was pre experimental, one group pre-test and post-test research design. The study was conducted at selected area of city. The sample size of study was 60 clients with hypertension residing in selected area of city.

The reliability of the knowledge tool was determined Split Half Method of Reliability, the tool was administered to 6 samples. Reliability of the knowledge tool was found to be 0.87. The pilot study was conducted, to assess the feasibility of the study and to decide the statistical analysis and practicability of research. It was found feasible.

PROBLEM STATEMENT

"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of city."

OBJECTIVES

1. To assess the level of knowledge on relaxation therapy among client with hypertension residing in selected area of City.
2. To evaluate the effectiveness of structured teaching programme on relaxation therapy among client with hypertension residing in selected area of City.
3. To find out the association between level of knowledge on relaxation therapy among client with hypertension with selected demographic variables.

HYPOTHESIS

H0 – There will be no significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of city.

H1 – There will be significant difference between knowledge scores of relaxation therapy among client with hypertension residing in selected area of city.

MAJOR FINDINGS OF THE STUDY

The analysis of demographic data of study samples gave an idea about general characteristics of client with hypertension residing in selected area of city.

The following are major findings of study.

SECTION –I

DEMOGRAPHIC VARIABLES

1. According to age of the client with hypertension residing in selected area of city, 10% of them were from age group 30-40 years, 18.33% clients from the 41-50 years, 60% from 51-60 years and 11.67% from the age group 61 & above years.
2. In the study, according to gender of the client with hypertension residing in selected area of city, 71.67% of them were males and 28.33% of them were females.
3. According to religion of the client with hypertension residing in selected area of city, 66.67% of them were from Hindu religion, 15% clients from Muslim religion, 3.33% from Christian, 15% from other religions.
4. In the study, according to educational status of the client with hypertension residing in selected area of city, 10% of them were illiterate, 13.33% educated up to primary school, 43.33% up to higher primary school, 15% educated up to higher school, 10% clients educated up to HSC and 8.33% had completed degree & above qualification.
5. According to occupation of the client with hypertension residing in selected area of city, 11.67% of them were workers, 25% self-employed, 48.33% of them had private job, 6.67% in government job and 8.33% clients were unemployed.
6. According to monthly income of client with hypertension residing in selected area of city, 20% of them had income up to Rs. 5000, 18.33% had income in Rs. 5001 – 8000, 16.67% clients had income in Rs. 8001 – 10000 and 45% of them had income Rs. 10001 and Above.
7. According to Source of health information of client with hypertension residing in selected area of city, 8.33%% of them answered as newspaper, 25% from radio, 33.33% from television, 13.33% answered as Relatives / family members, 13.33% from Friends / neighbors and 6.67% clients answered as Health personnel.
8. In the study, according to habits of client with hypertension residing in selected area of city, 6.67%% of them had habit of Tobacco chewing and smoking, 35% had habit of Smoking and alcoholism, 26.67% answered as Tobacco chewing and alcoholism, 13.33% answered as Tobacco chewing, smoking & alcoholism and 18.33% clients don't have any habit.

SECTION-II

GENERAL ASSESSMENTS OF KNOWLEDGE – PRE VS POST

For the assessment purpose total score of knowledge regarding relaxation therapy among client with hypertension residing in selected area of city was divided in to three groups like poor (0-10 score), average (11-20 score) and good (21-30 score).

Pre Test

At the time of pretest, assessment of the knowledge regarding relaxation therapy among client with hypertension residing in selected area of city shows that, 66.67% of them had poor knowledge, 28.33% had average knowledge and 5% of them had good knowledge.

Average knowledge score at the time of pretest was 10.28 with standard deviation of 3.81. The minimum score of knowledge was 5 with maximum score of 22.

Post Test

At the time of posttest, assessment of the knowledge regarding relaxation therapy among client with hypertension residing in selected area of city shows that, no one of them had poor knowledge, 75% had average knowledge and 25% of them had good knowledge.

Average knowledge score at the time of posttest was

18.48 with standard deviation of 3.16. The minimum score of knowledge was 12 with maximum score of 25.

SECTION-III
COMPARISON OF PRE & POSTTEST KNOWLEDGE (PAIRED T TEST)
The comparison of pretest and posttest means of knowledge regarding relaxation therapy among client with hypertension selected area of city was done by paired t test.

The test was conducted at 5% level of significance.

The pretest average score was 10.28 with standard deviation of 3.81. The posttest average score was 18.48 with standard deviation of 3.16.

The test statistics value of paired t test was 16.80 with p value 0.00. The p value less than 0.05, hence reject the null hypothesis. That means there is significant difference in pre and posttest knowledge.

Shows that, structured teaching program on knowledge regarding relaxation therapy among client with hypertension selected area of city was effective.

SECTION IV
ASSOCIATION OF KNOWLEDGE SCORE IN RELATION TO DEMOGRAPHIC VARIABLES – PRE TEST
The chi square test was used to see association between pre-test knowledge score regarding relaxation therapy among client with hypertension residing in selected area of city with their selected demographic variables.

The test was conducted at 5% level of significance.

Significant Association
For the demographic variables educational status occupation and source of health information, p value of the association test with pretest knowledge was less than 0.05. That means, knowledge regarding relaxation therapy among client with hypertension residing in selected area of city was associated with these demographic variables.

Concludes that, there was significant association of these demographic variables with the pretest knowledge.

No Significant Association
For the demographic variables age, gender, religion etc., p value of the association test with pretest knowledge was more than 0.05. That means, knowledge regarding relaxation therapy among client with hypertension residing in selected area of city was not associated with these demographic variables.

Concludes that, there was no significant association of these demographic variables with the pretest knowledge.

DISCUSSION
In the present study, researcher thought to give structured teaching program on knowledge of relaxation therapy. A pre-experimental one group pre-test post-test research design was used. Total 60 clients were selected by non probability convinent sampling technique as per the inclusion criteria. Semi Structured Knowledge Questionnaires was used as an instrument which consisted of two sections. Consisted of various items regarding demographic variable and Consisted of questionnaires related to knowledge of relaxation therapy in hypertension.

Prior to the collection of data researcher had obtained permission from competent authority of the selected area and informed consent was taken from all the participants. Pretest was conducted to assess the knowledge of clients with hypertension regarding relaxation therapy using semi structured knowledge questionnaire on day '0'. On the same day Structured Teaching Program was also administered to clients regarding relaxation therapy as per schedule and convenience. On 7th day Posttest was conducted to assess the gain in knowledge using the same semi structured knowledge questionnaire on the same sample.

According to age of the client with hypertension residing in selected area of city, 10% of them were from age group 30-40 years, 18.33% clients from the 41-50 years, 60% from 51-60 years and 11.67% from the age group 61 & above years. In the study, according to gender of the client with hypertension residing in selected area of city, 71.67% of them were males and 28.33% of them were females. According to religion of the client with hypertension residing in selected area of city, 66.67% of them were from Hindu religion, 15% clients from Muslim religion, 3.33% from Christian, 15% from other religions.

In the study, according to educational status of the client with hypertension residing in selected area of city, 10% of them were illiterate, 13.33% educated up to primary school, 43.33% up to higher primary school, 15% educated up to higher school, 10% clients educated up to HSC and 8.33% had completed degree & above qualification. According to occupation of the client with hypertension residing in selected area of city, 11.67% of them were workers, 25% self-employed, 48.33% of them had private job, 6.67% in government job and 8.33% clients were unemployed.

According to monthly income of client with hypertension residing in selected area of city, 20% of them had income up to Rs. 5000, 18.33% had income in Rs. 5001 – 8000, 16.67% clients had income in Rs. 8001 – 10000 and 45% of them had income Rs. 10001 and Above. According to Source of health information of client with hypertension residing in selected area of city, 8.33%% of them

answered as newspaper, 25% from radio, 33.33% from television, 13.33% answered as Relatives / family members, 13.33% from Friends / neighbors and 6.67% clients answered as Health personnel.

In the study, according to habits of client with hypertension residing in selected area of city, 6.67%% of them had habit of Tobacco chewing and smoking, 35% had habit of Smoking and alcoholism, 26.67% answered as Tobacco chewing and alcoholism, 13.33% answered as Tobacco chewing, smoking & alcoholism and 18.33% clients don't have any habit In present study, findings shows that pre-test knowledge mean was 10.28 and posttest mean was 18.48. The data presented shows that 't' value calculated between mean pretest and posttest was statistically highly significant [calculated 't' value = 16.80, table value 't' = 1.66, $P < 0.05$]. Hence the null hypothesis (H_0) was rejected and (H_1) was accepted.

Present study highlighted that in pretest overall knowledge about various aspects of relaxation therapy for hypertension was minimum. After administration of structured teaching program on relaxation therapy the post test knowledge score was significantly improved.

This study interpreted that there was significant association of pre test knowledge score with selected demographic that is Educational Status, Occupation, Source of Health Information. There was no significant association of pre- test knowledge scores with demographic variables, that is Age (in years), gender, religion, monthly income, and habits.

SUMMARY OF THE STUDY

The purpose of the present study was to assess the effectiveness of structured teaching program on knowledge regarding relaxation therapy among clients with hypertension.

The pre-experimental one group pre-test, post-test research design was used for the study, which consisted of 60 samples that were selected on the basis of the non probability convinent sampling technique. The content validity and reliability of the tool was done, which suggested that tool was reliable. The pilot study was conducted on 10 samples and the feasibility of the study was established. It was found that the tool had no major flaws and was used for the final study with the changes as per the experts based on the objectives and the assumptions as per guides permission. The collected data was analyzed using descriptive and inferential statistics. Analysis of data was done in accordance with the objectives. The data analysis was done by calculating mean, frequency and its % and 'p' value. The study found that majority of clients with hypertension had poor knowledge which was improved after administration of structured teaching program on knowledge regarding relaxation therapy.

This chapter has brought out the various implication of this study and also has provided suggestions for the future studies. Studies of this kind should be ongoing process to make awareness among school teachers regarding knowledge about relaxation therapy.

CONCLUSION

From the study findings it is concluded that the Structured Teaching Program was effective in improving the knowledge of clients with hypertension regarding relaxation therapy.

IMPLICATIONS

The findings of this study had implication for, nursing education, nursing practices, nursing administration, and nursing research.

Nursing Education

The nursing curriculum should consist of knowledge related health information on relaxation therapy for hypertension using different methods of teaching. Nursing students should be made aware of their role in health promotion and disease prevention in present and future year, which may help in achieving goal of health for all.

Nursing students should be made aware of the importance of educating the public regarding relaxation therapy for hypertension.

Nursing at Post-Graduate level have to develop their skill in preparing health teaching materials according to the community's level of understanding. Improved and newer techniques have to be used for motivating public.

Nursing Practice

Nursing is a dynamic process, which involves quality based on scientific body of knowledge and dissemination of research knowledge into practice. Nursing professionals find the health promotion very relevant because it applies across the span and is useful in variety of settings. Several implication can be drawn from the present study for nursing practice.

The extended and expanded roles of professional nurses emphasize more about the preventing and promotive aspects of the health.

Health information about various aspects of relaxation therapy can be important through various methods like Structured Teaching Program, Information Booklet, Lecture, Mass media, Pamphlet etc. Nurses have to position themselves in all areas of community. Hence, nurses should take keen interest in preparing different teaching strategies suitable for the community.

Nursing Administration

The nurse administrators should take active and pivotal role in developing teaching modules, cost effective educational materials and policies for initiation of oral health services as well as guidance and counselling

clinics to the people hypertension and relaxation therapy in hypertension.

The nurse as an administrator should plan and organize educational programs for nursing personnel and motivating them in conducting relaxation therapy related teaching programs for beneficial to the community.

Nursing Research

More qualitative and quantitative research studies can be undertaken in the area of community and clinical setting . In the field of research the present study helps to utilize the findings and disseminate the knowledge in the field of work. Research studies can be done among large group of peoples.

LIMITATIONS

Limitations are the boundaries that are set by researcher in order to control the range of a study.

1. The finding of the study was restricted to the respondents under study, only from selected selected areas of city
2. The data was collected from 60 samples to find out the knowledge. It could be done on more samples for the larger generalization
3. The study considers only one aspect of hypertension, generalization can be done with respect to other aspects and associated risk factors
4. The study was done with in a restricted time period of 4 weeks.

RECOMMENDATIONS

The present study findings revealed that the Structured Teaching Program was effective in improving the knowledge of clients with hypertension regarding relaxation therapy. So the following recommendations were framed for future study:

- A similar study can be done using self-instructional module, information booklet and awareness campaign.
- This study can be replicated on larger sample to generalize the findings.
- A study can be conducted to compare the knowledge level among various groups of society.
- A similar study can be conducted on various groups to improve knowledge about relaxation therapy

SUMMARY

This chapter dealt with problem statement, objectives, major findings of the study, discussion, summary of the study, conclusion, implications of the study, limitations and recommendations.

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8. Venkatesan B, A Textbook of Medical Surgical Nursing, Emmess, 1st Edition.

ANNEXURE A

LETTER TO ETHICAL COMMITTEE

To,

The Chairperson,

Research and Ethics Committee.

Subject: Letter requesting approval of title and synopsis of dissertation from ethical committee.

Respected sir / madam,

I First year M.sc Nursing student is requiring approval of title and synopsis of dissertation for the year 2024 - 25 on **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."**

I will be grateful to you, if you would kindly give the permission for the same.

Thanking you.

Your's sincerely

Date: / /

ANNEXURE B

PERMISSION LETTER TO CONDUCT THE PILOT STUDY

To,

- - - - - - - - - - - - - - - - - - -.

- - - - - - - - - - - - - - - - - - -.

- - - - - - - - - - - - - - - - - - -.

Subject: Permission to conduct the Pilot study

Respected Sir/ Madam,

With the reference to above mentioned subject this is to bring to your information that is a bonafide postgraduate (M.Sc. Nursing) student of our institute. He has selected the below mentioned topic for his dissertation which is to be submitted to Maharashtra University of Health Science, Nashik. In partial fulfilment for award of Master of Science Degree In Nursing.

The said student is completing his study guidance of and is titled as **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."**

I assure that presence will not interfere in the routine of your esteemed hospital/organization. I would be highly obligated, if you permit him to conduct the study and extend your for his Research.

Thanking you.

Yours faithfully,

Principal

ANNEXURE C

PERMISSION LETTER TO CONDUCT THE MAIN STUDY

To,

- - - - - - - - - - - - - - - - - - -.

- - - - - - - - - - - - - - - - - - -.

- - - - - - - - - - - - - - - - - - -.

Subject: Permission to conduct the Pilot study

Respected Sir/ Madam,

With the reference to above mentioned subject this is to bring to your information that is a bonafide postgraduate (M.Sc. Nursing) student of our institute. He has selected the below mentioned topic for his dissertation which is to be submitted to Maharashtra University of Health Science, Nashik. In partial fulfilment for award of Master of Science Degree In Nursing.

The said student is completing his study guidance of and is titled as **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."**

I assure that presence will not interfere in the routine of your esteemed hospital/organization. I would be highly obligated, if you permit him to conduct the study and extend your for his Research.

Thanking you.

Yours faithfully,

Principal

ANNEXURE D

"LETTER TO SEEK VALIDATION OF TOOL FROM EXPERT"

To,

_____

_____

Subject: Opinion and suggestion of expert for content validity of Tool.

Respected Sir/Madam,

I, S. Y M. Sc Nursing student of. I have selected the below mentioned research topic for my dissertation to be submitted to M.U.H.S, Nashik as requirement for completion of M. Sc Nursing Program.

Topic: **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."**

I request you to kindly go through the tool and give your valuable and precious suggestion, modification and improvement needed. Your esteemed opinion and suggestions will contribute immensely to the content of final research study.

Thanking you. Your's sincerely,

Here with I am Enclosing

- Synopsis (In Brief)
- Research Tool
- Answer key and Scoring key
- Tool evaluation criteria
- Lesson plan
- Blue Print
- Certificate of Validation

ANNEXURE E

CERTIFICATE OF TOOL VALIDATION

This is to certify that the semi structured questionnaire, constructed by student of II M.Sc Nursing,_____, to be used in his study titled **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."** has been validated by me and found appropriate with mentioned suggestion.

Suggestion if any:

1.

2.

3.

4.

5.

6.

Overall Remarks:

Date: Signature and Seal expert

ANNEXURE F

CONSENT LETTER FROM THE PARTICIPANT FOR STUDY

Code no: | | |

INFORMED WRITTEN CONSENT

I Mr/Mrs. _____ is willing to participate in the research study conducted by M.Sc Nursing student.

The study mentioned to me is on **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."**

I have been correctly informed and explained about the brief aspects of the study and regarding the confidentiality of personal information.

I completely understood my role in the study and I am therefore willing to participate in the study.

Signature of Investigator
Date

Signature of Participant
Date:

ANNEXURE G

CERTIFICATE FROM EDITOR

This is to certify research study title **"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."** was submitted to me, Grammar, spelling and overall style has been edited for English language.

I wish him all the best for the study.

Date: Signature of Editor

ANNEXURE H

Problem Statement:

"A study to evaluate the effectiveness of structured teaching program on knowledge of relaxation therapy among client with hypertension residing in selected area of City."

Topic: Relaxation Therapy in Hypertension Group: Clients with Hypertension

Duration: 45 minutes

Place: Selected areas of city

Method of Teaching: Lecture cum Discussion

Teaching Aid: PPT, Flash Cards, Chart

General Objectives:

At the end of the session the individuals can able to understand the techniques of yoga, breathing exercise & meditation are practice in day to day life thereby reducing the Hypertension.

Specific Objectives:

At the end of Structured Teaching Program, the clients will be able to: The individuals can be able to

- define relaxation therapy
- list out the purposes
- enlist the indication for relaxation therapy
- discribe the techniques of yoga
- enumerate the steps in breathing exercise
- illustrate the techniques of meditation

S.NO	CONTRIBUTORY OBJECTIVES	TIME	CONTENT	TEACHER'S ACTIVITY	LEARNER'S ACTIVITY
1.	define relaxation therapy		**MEANING** Relaxation therapy Promote relaxation and to improve the quality of life specially useful for conditions that are made worse by stress, such as high blood pressure, pain and anxiety	Explaining	Listening
2.	list out the purposes		**PURPOSE** It is used to teach Psycho- Physiological relaxation - To alleviate anxiety and depression - To relieve Physical and Psychological symptoms - To overcome health endangering habits - To resolve conflicts		
3.	enlist the indication for relaxation therapy		**INDICATION** Relaxation therapies are non- intensive and gentle & can help to treat the following condition; - Anxiety - Depression - Asthma - Arthritis - High and low Blood pressure - Mental and Physical problems caused through stress - Panic attacks **RELAXATION TECHNIQUES:** It has a range of techniques to create a profound level of relaxation and through then, into an enhanced Psychological integration. Techniques of relaxation are yoga, meditation and Breathing exercises etc.,		
4.	describe the techniques of yoga		**YOGA** **MEANING** The Science of yoga and its techniques have now been re- oriented to suit Physiological needs and life styles. Experts of Various branches of medicine including modern science are realizing the role of these techniques in the prevention and management of various disorders. **THERAPEUTIC ASPECT OF YOGA:** Yoga is effective in the management of following disorders - Depression - Hypertension - Flatulence - Constipation - Cervical Spondylosis - Obesity - Sciatica - Arthritis - CAD **YOGIC MANAGEMENT IN HYPERTENSION** Yoga is an excellent means of treating high blood pressure. As hypertension begins in the mind, yoga is of prime value.	Explaining	Listening

			Yoga can prevent vascular complication due to its massaging effect on the arteries. **ASANAS** There are Various asanas in the management of Hypertension among them is 1. Shavasana 2. Forward Bending **SHAVASANA** Shavasana relaxation is like sleep. It is conscious sleep. **TECHNIQUE** - Lie down on your back with the hands placed near the thighs and palms facing upwards - The heels should be slightly apart while the toes pointing outwards. - The whole body should be relaxed. - All the parts of the body- neck, chest, Shoulders, waist, eyes, knees, legs, fat and hands should be completely relaxed **BENEFITS** - Relieves Physical & mental fatigue - Relaxes the whole body - Extremely beneficial for high blood pressure & cardiac patients. - Beneficial for people suffering from neurosis		
5.	enumerate the steps in breathing exercise		**EEFECTS OF FORWARD BENDING ASANAS:** Forward bends are the Linchpin of yogic management without which the pressure never normalizes. **BENEFITS** Fluctuations of blood pressure are controlled by these poses **PRANAYAMA:(Breathing Exercise)** **MEANING:** It means control of breath. By this, the aspirant controls the inhaling and exhaling of breath. Pranayama greatly influences the circulatory system. With each inhalation & exhalation, the output of blood flow to the body varies. This changes the blood pressure **TECHNIQUES OF BREATHING EXERCESIS** **Step No.1 –** Breathe in deeply, sharply, and quickly using the chest and the diaphragm. Allow the tummy to expand as the diaphragm presses downward into the abdominal cavity. A tight belt, clothing, body fat or poor sitting position prevents deep breathing. Expanding the chest is more work but increases the amount of air inhaled even more. Breathing through the nose is fine, even though your nose may be slightly restricted. This method reduces the pressure within the chest cavity to less than the atmospheric air pressure. The difference in pressure drops theblood pressue accordingly. You will immediately notice that you rarely breathe in a full lung capacity of air. Takin in a full breath of air is th second key part of this breathing method.	Explaining	Listening

			You must inhale a good supply of oxygen with each breath. **Step No. 2** – Breathe out in a slower, more relaxed way. Breathing out should take twice as much time as breathing in. Simply relax and let the air flow out. Do not force the air out sharply because the compression of the chest to expel the air also increases the blood pressure accordingly. Breathe out to dispel as much air from your lungs as possible. You will immediately notice that you rarely breathe out all of your air. Breathing out all of your air is a key part of this breathing method. You must ventilate as much of the old air and carbon dioxide as possible. Practice breathing out all of the air with each breath. **Step No. 3-** The breathing rate must be adjusted voluntarily. A more rapid breathing rate than necessary will cause hyperventilation from an excessive amount of oxygen in the blood. A slow breathing rate will deprive the body of oxygen and send the heart in to action to increase the pulse rate and blood pressure. Our tendency is to not breathe enough volume and do not breathe at a high enough rate. **Step No.4** – Breathing exercises are required many times a day to break the old breathing patters. You will be distracted in your everyday events and forget about breathing. You will slump back into your old involuntary breathing pattern. Concentreate on the proper breathing technique atleast once every hour. Breathe in deeply and exhale fully to place you back into a proper breathing pattern. **Step No.5** – Over time your breathing pattern should automatically change as you become accustomed to breathing properly. Watch out for relapses. Go back to Step No.4 with hourly exercises to get back into the proper pattern that will become a new habit. **BENEFITS** • Facilitates the free flow of prana and thereby regulates the BP and blood circulation. • It increases vitality • It slows down the heart rate		
6.	enumerate the techniques of meditation		**MEDITATION** **MEANING** It is a practice of concentrated focus upon a sound, object, visualization, the breath, movement or attention itself in order to increase awareness of the present moment, reduce stress, promote relaxation, and enhance personnel and spiritual growth. **INDICATION** Meditation can be helpful to treat following conditions - Anxiety - Hypertension	Explaining	Listening

			- Mental stress - Depression - Asthma **MEDITATION TECHNIQUES** **STEP- I** Prepare the body physically **STEP-II** Prayers **STEP-III** Relax and stretch the muscles **STEP-IV** Breathing practices (Nadi shodhana) **STEP-V** Relaxation practice (survey the body) **PROCEDURE** **SITTING IN MEDITATION** After completing all preliminary breathing and relaxation exercises you are ready to meditate. Assume your chosen meditation posture either in a straight back chair or in a yoga posture on the floor. Be sure the head, neck and trunk are straight. Next, apply the finger lock (the thumb and forefinger together, resting the hands and palms downwards).Next apply the root lock(tightening the anal sphincter muscle), with your eyes gently closed by place your attention on the spot between your eyebrows. As you exhale, mentally hear the sound Hum; as you inhale, mentally hear the sound & So. So, sit quietly without any movement and lovingly repeat your manthra So – Hum **ENDING YOUR MEDITATION** When you are ready to end your meditation, gently open your eyes into your closed, cupped palms, begin thinking about the Divinity which reside within the cave of the Heart.		

ANNEXURE I

Instruction:-

Data Collection Tool

Semi Structured Knowledge Questionnaire

Code No.

1) **Kindly go through with the question given below carefully put (√) in to most appropriate answer box in the right side.**
2) **All information provided will be kept confidential only be used for study purpose only.**
3) **All questions are compulsory.**

Part I: Demographic Data

1. Age in years

(a)	30 – 40 years	( )
(b)	41 - 50 years	( )
(c)	51 - 60 years	( )
(d)	61 and above	( )

2. Gender

(a)	Male	( )
(b)	Female	( )
(c)	Transgender	( )

3. Religion

(a)	Hindu	( )
(b)	Christian	( )
(c)	Muslim	( )
(d)	Other	( )

3. Educational status

(a)	Illiterate	( )
(b)	Primary school education (1^{st} to 4^{th} standard)	( )
(c)	Higher primary school education (5^{th} to 7^{th} standard)	( )
(d)	Higher school education (8^{th} to 10^{th} standard)	( )

(e) HSC ( )

(f) Degree and above( )

4. Occupation

(a) Worker ( )

(b) Self Employed ( )

(c) Private Job ( )

(d) Government Job ( )

(e) Unemployed ( )

5. Monthly Income

(a) upto Rs. 5000 ( )

(b) Rs. 5001 - 8000 ( )

(c) Rs. 8001 – 10000 ( )

(d) Rs. 10001 and Above ( )

6. Source of health information received from

(a) Newspaper/magazines/journals ( )

(b) Radio ( )

(c) Television ( )

(d) Relatives/family members ( )

(e) Friends/neighbours ( )

(f) Health personnel ( )

7. Habits

(a) Tobacco chewing and smoking ( )

(b) Smoking and alcoholism ( )

(c) Tobacco chewing and alcoholism ( )

(d) Tobacco chewing, smoking & alcoholism ( )

(e) None ( )

Part II: Semi Structured Knowledge Questionnaire regarding Relaxation Therapy in Hypertension.

I KNOWLEDGE ABOUT HYPERTENSION :

1. **The normal blood pressure for adult is**

a. 100/60 mmhg ( )

b. 120/80 mmhg ( )

c. 130/90 mmhg ( )

d. 140/90 mmhg ( )

2. **Hypertension typically appears between the ages of**

a. 0-25 yrs ( )

b. 26-50 yrs ( )

c. 51-75 yrs ( )

d. >60 yrs ( )

3. **Factor leads to hypertension**

a. Meditation ( )

b. Exercise ( )

c. Mental tension ( )

d. Alcohol restriction ( )

4. Important factor for essential hypertension is

a. Potassium ( )

b. Calcium ( )

c. Magnesium ( )

d. Sodium chloride (table salt) ( )

5. High risk diet for hypertension

a. Excessive intake of carbohydrate ( )

b. Excessive intake of protein ( )

c. Excessive intake of vitamins ( )

d. Excessive intake of fats ( )

6. The body frame which increases the risk for the development of hypertension

a. Obesity ( )

b. Thin ( )

c. Moderately built ( )

d. Tall ( )

7. Drink that induces hypertension

a. Hot water ( )

b. Coffee ( )

c. Ice cream ( )

d. Fruit juice ( )

8. **One of the well known causes for hypertension**

a. Asthma ( )

b. Stress ( )

c. Brain fever ( )

d. Malaria ( )

9. **Food items to be taken in plenty**

a. Meat ( )

b. Ghee ( )

c. Vegetables ( )

d. Dry fish ( )

10. **Complications of hypertension**

a. Heart failure ( )

b. Cancer ( )

c. Asthma ( )

d. Pneumonia ( )

II. Knowledge about relaxation therapy

11. Stress can be prevented by

a. Verbal abuse ( )

b. Remaining alone ( )

c. Relaxation therapy ( )

d. Being depressed ( )

12. The relaxation therapies to reduce hypertension are

a. Yoga ( )

b. Meditation ( )

c. Breathing exercise ( )

d. All the above ( )

13. Relaxation therapy helps to reduce

a. Stress ( )

b. Anxiety ( )

c. Depression ( )

d. All the above ( )

14. Relaxation therapy will

a. Reduce systolic blood pressure to 10 mmhg ( )

b. Reduce diastolic blood pressure to 10 mmhg ( )

c. Decrease both systolic and diastolic blood pressure 10mmhg ( )

d. None of the above ( )

III. Knowledge about yoga

15. Yoga is a

a. Practice of controlling the mind ( )

b. Practice of controlling the body ( )

c. Practice of controlling the mind & body ( )

d. None of the above ( )

16. Yoga can be practiced with

a. Empty stomach ( )

b. 3 hours after food ( )

c. 1 hour after food ( )

d. Both (a) & (b) ( )

17. Avoid drinking water

a. ½ hour before yoga ( )

b. 45 minutes before yoga ( )

c. 1 hour before yoga ( )

d. 10 minutes before yoga ( )

18. The time limit for doing yoga is

a. Between 15- 30 mts ( )

b. Between 30- 1 hour ( )

c. Between 1- 2 hours ( )

d. >2 hours ( )

19. Doing yoga is more preferable in

a. Morning ( )

b. Afternoon ( )

c. Evening ( )

d. Night ( )

20. Yoga should not be practiced in

a. Floor ( )

b. Mat ( )

c. Clothes ( )

d. Carpet ( )

21. Regular practice of yoga will

a. Increase the systolic blood pressure ( )

b. Decrease the systolic blood pressure ( )

c. Increase both systolic & diastolic ( )

d. Decrease both systolic & diastolic ( )

IV. Knowledge about meditation

22. Meditation is

a. A realm of silence ( )

b. A realm of distraction ( )

c. Increase stress ( )

d. Increase depression ( )

23. Meditation helps to

a. Reduce the blood pressure ( )

b. Increase the blood pressure ( )

c. Increase stress and anxiety ( )

d. increase body weight ( )

24. Meditation is more effective in

a. Early morning ( )

b. After noon ( )

c. Evening ( )

d. Night ( )

25. Meditation is one of the effective therapy in

a. Hypertension ( )

b. Coronary heart disease ( )

c. Diabetes mellitus ( )

d. All the above ( )

26. Regular meditation brings down the blood pressure

a. Hypertension patients ( )

b. Diabites patients ( )

c. Asthmatic patients ( )

d. Cancer patients ( )

V. Knowledge regarding breathing exercises

27. The best relaxation exercise to control blood pressure is

a. Breathing exercise ( )

b. Breathing and coughing exercise ( )

c. Diaphragmatic exercise ( )

d. Both (a) & (c) ( )

28. The best breathing technique takes place at least

a. Once every hour ( )

b. Once every 2 hours ( )

c. Once every 4 hours ( )

d. Once a day ( )

29. The following prevents deep breathing

a. A tight belt or cloth ( )

b. Body fat ( )

c. Poor sitting position ( )

d. All the above ( )

30. Regular breathing exercises will

a. Reduce the level of blood pressure ( )

b. Increase the level of blood pressure ( )

c. Reduce the level of blood sugar ( )

d. Increase the level blood sugar. ( )

Key Answers for the Semi Structured Questionnaire

QUESTION	ANSWER	QUESTION	ANSWERS
1	b	16	a
2	c	17	a
3	c	18	b
4	d	19	a
5	d	20	b
6	a	21	d
7	b	22	a
8	b	23	a
9	c	24	a
10	a	25	d
11	c	26	a
12	d	27	d
13	d	28	d
14	c	29	d
15	c	30	a

GRADING
Scoring Interpretations for Semi-Structured Knowledge Questionnaire

All the correct answer carries 1 score/1 marks Total Questionnaires: 30

Maximum Score: 30

SCORE	REMARK
0-10	Poor
11-20	Good
21-30	Excellent

परिशिष्ट I

डेटा संकलन साधन अधधसंचित ज्ञान प्रश्नावली

भाग 1: लोकसंख्याशास्त्रीय डेटा **कोड क्र**

सूचना:-

1) कृपया खाली दिलेला प्रश्न काळजीपूवधक (V) उजव्या बाजूच्या सवाधत योग्य उत्ति बॉक्समध्ये टाका.

2) प्रिान केलेली सवध मादिती गोपनीय ठेवली जाईल केवळ अभ्यासासाठी वापिली जाईल.

३) सवध प्रश्न अननवायध आहेत. भाग 1: लोकसंख्याशास्त्रीय डेटा

1. वर्षामध्ये वय

(a) 30-40 वर्षे

(b) 41-50 वर्षे

(c) 51-60 वर्षे

(d) 61 आणि त्यषवरील

2. ललिंग

(a) पुरुष

(b) स्त्री

3. धमम

(a) हहिंदू

(b) णिश्चन

(c) मुस्स्तलम

(d) इतर

4. शैक्षणिक स्स्ती

(a) ननरक्षर

(b) प्रषथलमक शषलेय लशक्षि (1 ते 4 थी

(c) उच्च प्रषथलमक शषलेय लशक्षि (5वी ते 7वी

(e) उच्च शषलेय लशक्षि (आठवी ते दहषवी (ई)बषरषवी

(f) पदवी आणि त्यषहून अधधक

4. व्यवसषय

(a) कषमगषर

(b) स्त्वयिंरोजगषर

(c) खषजगी नोकरी

(d) सरकषरी नोकरी

(e) बेरोजगषर

5. मषलसकउत्पन्न

(a) रु. पयांत 5000
(b) रु. 5001-8000
(c) रु. 8001-10000
(d) रु. 10001 आणि त्यषवरील

6. कडून प्रषप्त झषलेल्यष आरोग्य मषहहतीचष स्रोत

(a) वृत्तपरे/म ष ल स क्ानयतकषललके (ब)रेडडओ
(b) दूरदशमन
(c) नषतेवषईक/कुटुंब सदस्त्य
(d) लमर/शेजषरी
(e) आरोग्य कममचषरी

७.सवयीतिंबषखू चघळि आणि धूम्रपषन करि

(a) धूम्रपषन आणि मद्यपषन
(b) तिंबषखू चघळि आणि मद्यपषन
(c) तिंबषखू चघळि, धूम्रपषन करि आणि मद्यपषन करि
(d) कषहीही नषही

भाग II: मध्ये ववश्ांती ेिपी संबंचधत अधध संचित ज्ञान प्रश्नावली उच्ि िक्ताब उच्ि िक्ताब बद्िल मादिती:

1. प्रौढषिंसषठी सषमषन्य रक्तदषब आहे

A 100/60 mmhg
B 120/80 mmhg
C 130/90 mmhg
D 140/90 mmhg

2. उच्च रक्तदषब ववशेर्त: वयषच्यष दरम्यषन हदसून येतो

A 0-25 वर्े
B 26-50 वर्े
C ५१-७५ वर्े
D > 60 वर्े

3. घटक उच्च रक्तदषब ठरतो

A ध्यषन
B व्यषयषम करष
C. मषनलसक तिषव
D अल्कोहोल ननबांध

4. अत्यषवश्यक उच्च रक्तदषबषससठी महत्त्वषचष घ ट क आहे

A पोटॅलशयम
B कॅस्ल्शयम
C मॅग्नेलशयम
D सोडडयम क्लोरषईड (टेबल मीठ)

5. उच्च रक्तदषब सषठी उच्च जोखीम आहषर

A कषबोहषयड्रेटचे जषस्त्त सेवन
B प्रधथने जषस्त्त प्रमषिषत घेिे
C जीवनसत्त्वे जषस्त्त प्रमषिषत घेिे
D चरबीचे अनतसेवन

6. शरीरषची चौकट ज्यषमुळे उच्च रक्तदषबषचष धोकष वषढतो
A लठ्ठपिष
B पषतळ
C मध्यम बषिंधले
D ठिच

7. उच्च रक्तदषब प्रवृत्त करिषरे पेय

A गरम पषी
B कॉफी
C आईस्त्रीम
D फळषिंचष रस

8. उच्च रक्तदषबषससषठी सुप्रलसद्ध कषरिषिंपैकी एक
A दमष
B तषि
C मेंदूचष तषप
D मलेररयष

9. अन्नपदषथम भरपूर प्रमषिषत घ्यषवेत
A मषिंस
B तूप
C भषजीपषलष
D सुक्यष मषसे

10. उच्च रक्तदषबषची गुिंतषगुिंत
A हृदय अपयश
B ककरोग
C. दमष
D न्यूमोननयष

II. रिलॅक्सेिन िेिपीिे ज्ञान:

11. द्वषरे तिषव टषळतष येतो
A शषस्त्दक लशवीगषळ
B एकटषच रषहहलष

C ररलॅक्सेशन थेरपी

D नैरषश्यग्रस्त होिे

12. उच्च रक्तदषब कमी करण्यषसषठी आरषमशीर उपचषर पद्धती आहेत

A योग

B ध्यषन

C श्वषसोच्छवषसषचष व्यषयषम

D वरील सवम

13. आरषम थेरपी कमी करण्यषस मदत करते

A तषि

B धचिंतष

C नैरषश्य

D वरील सवम

14. आरषम थेरपी होईल

A लसस्त्टोललक रक्तदषब 10 mmhg पयांत कमी करष

B डषयस्त्टोललक रक्तदषब 10 mmhg पयांत कमी करष

C लसस्त्टोललक आणि डषयस्त्टोललक दोन्ही रक्तदषब 10mmhg पयांत कमी करष

D वरीलपैकी कषहीही नषही

III.योगाबद्िलि ज्ञान:

15. योग म्हिजे a

A मनषवर ननयिंरि ठेवण्यषचष सरषव

B शरीरषवर ननयिंरि ठेवण्यषचष सरषव

C. मन आणि शरीरषवर ननयिंरि ठेवण्यषचष सरषव

D वरीलपैकी कषहीही नषही

16. योगषसने करतष येतषत

A ररकषमे पोट

B जेविषनिंतर 3 तषस

C. जेविषनिंतर 1 तषस

D दोन्ही (a) आणि (b)

17. पषिी वपि टषळष

A योगषच्यष तषसषपूवी

B योगषच्यष ४५ लमननटे आधी

C योगषच्यष १ तषस आधी

D योगषच्यष 10 लमननटे आधी

18. योगषसने करण्यषची वेळ मयषमदषआहे

A 15-30 mts दरम्यषन.

B 30-1 तषसषच्यष दरम्यषन

C 1-2 तषसषिंच्यष दरम्यषन

D > 2 तषस

19. मध्ये योगषसने करि अधधक श्रेयस्त्कर आहे

A सकषळ

B दुपषर

C सिंध्यषकषळ

D रषरी

20. मध्ये योगषसन करू नये

A मजलष

B अन्न

C कपडे

D कषपेट

21. योगषचष ननयलमतसरषव होईल

A लसस्त्टोललक रक्तदषब वष्ढवष

B लसस्त्टोललक रक्तदषब कमी करष

C लसस्त्टोललक आणि डषयस्त्टोललक दोन्ही वषढवष

D लसस्त्टोललक आणि डषयस्त्टोललक दोन्ही कमी करष

IV. ध्यानाववषयीिे ज्ञान:

22. ध्यषन आहे

A शषिंततेचे क्षेर

B ववचललतकरण्यषचे क्षेर

C. तषि वषढवष

D उदषसीनतष वषढवष

23. ध्यषन केल्यषने मदत होते

A रक्तदषब कमी करष

B रक्तदषब वषढवष

C तिषव आणि धचिंतष वषढवष

D शरीरषचे वजन वषढवि

24. मध्ये ध्यषन अधधक प्रभषवी आहे

A पहषटे

B दुपषरनिंतर

C. सिंध्यषकषळ

D रषरी

25. ध्यषन ही एक प्रभषवी धचककत्सष आहे

A उच्च रक्तदषब

B कोरोनरी हृदयरोग

C मधुमेह मेस्ल्तस

D वरील सवम

26. ननयलमतध्यषन केल्यषने रक्तदषब कमी होतो

A उच्च रक्तदषब रुग्ि

B मधुमेहषचे रुग्ि

C दम्यषचे रुग्ि

D ककसेगषचे रुग्ि

V. श्वासोच्छवासाच्या व्यायामासंबंधीिे ज्ञान

27. रक्तदषब ननयिंत्रत करण्यषसषठी सवोत्तम ववश्रषिंतीचष व्यषयषम आहे

A श्वषसोच्छवषससचष व्यषयषम

B श्वषस आणि खोकलष व्यषयषम

C इषयषफ्रषमॅहटक व्यषयषम

D दोन्ही (a) आणि (c)

२८.सवोत्तम श्वषस तिंर ककमषनस्त्थषन घेते

A दर तषससषलषएकदष

B दर 2 तषससषिंनी एकदष

C दर 4 तषससषिंनी एकदष

D हदवसषतून एकदष

28. खषलील गोष्टी खोल श्वषस घेण्यषस प्रनतबिंध करतषत

A घट्ट पट्टष ककिंवष कषपड

B शरीरषतील चरबी

C खरषब बसण्यषची स्स्त्थती

D वरील सवम

29. श्वषसोच्छवषससचे ननयलमतव्यषयषम होईल

A रक्तदषब पषतळी कमी करष

B रक्तदषब पषतळी वषढवष

C रक्तषतील सषखरेची पषतळी कमी करष

D रक्तषतील सषखरेची पषतळी वषढवष.

ANNEXURE J

Sr No	Content	Knowledge	Comprehension	Application	Total	Percentage
	Part II					
1.	**Section I:** Knowledge about Hypertension	●●●●●	●●●	●●	10	33.33
2.	**Section II:** Knowledge related to Relaxation Therapy	●●	●●	-	4	13.33
3.	**Section III:** Knowledge related to Yoga	●●●	●●	●●	7	23.33

4	**Section III:** Knowledge related to Meditation	●●●●	-	●	5	16.66
5	**Section III:** Knowledge related to Breathing Exercises	●●●●	-	-	4	13.33
	Total				**30**	**100%**

Master Sheet

A. Demographic Data

Sr. No.	Age	Gender	Religion	Educational Status	Occupation	Monthly Income	Source of Health Info	Habits
1	c	a	a	c	c	d	c	b
2	c	b	a	d	c	d	d	b
3	c	a	d	c	c	d	c	c
4	c	a	d	c	b	b	c	d
5	c	b	c	a	a	a	a	b
6	b	a	a	e	c	d	e	c
7	c	b	c	f	c	d	f	b
8	d	b	a	c	d	d	c	a
9	a	a	a	c	c	c	b	b
10	c	a	a	d	c	c	d	d
11	b	a	a	f	c	d	f	c
12	c	a	d	c	b	b	c	d
13	c	a	a	e	c	d	e	c
14	d	a	a	a	e	a	a	d
15	b	a	d	c	c	d	c	c
16	c	a	a	f	c	d	d	c
17	c	a	c	c	d	c	c	d
18	c	a	a	d	c	d	e	c
19	b	b	a	b	a	a	b	b
20	d	b	a	c	b	b	c	b
21	a	a	c	b	e	a	b	c
22	c	a	a	b	a	a	b	c
23	c	a	d	e	c	d	e	b
24	c	b	c	c	c	d	b	b
25	b	a	d	b	e	a	b	b
26	d	b	a	b	a	a	b	a
27	c	a	a	d	c	d	d	b
28	a	a	a	f	c	d	f	c
29	c	b	a	c	b	b	c	b
30	b	a	a	d	c	d	d	e
31	c	a	a	c	b	c	c	e
32	d	b	d	d	c	d	e	b
33	c	a	a	d	c	d	d	e
34	a	a	c	d	c	d	d	c
35	b	a	a	d	c	d	d	d
36	c	b	a	e	c	d	e	b
37	c	a	a	c	d	d	c	b
38	d	a	a	f	c	d	f	c
39	b	b	a	b	e	a	b	a
40	c	a	c	c	b	c	c	c
41	c	a	d	b	a	a	b	c
42	c	a	a	c	c	c	c	e
43	b	b	a	e	c	c	e	b
44	c	a	c	a	e	a	a	e
45	a	a	a	a	a	a	b	e
46	c	a	b	a	b	c	a	c
47	c	a	a	c	b	b	b	b
48	b	b	a	c	b	b	c	b

49	d	a	a	c	d	c	c	d
50	a	b	b	c	b	b	c	a
51	c	a	a	c	b	b	b	e
52	c	a	a	e	c	d	e	e
53	c	a	d	a	a	a	a	e
54	c	a	a	c	c	d	c	e
55	c	a	a	c	c	d	c	c
56	c	b	a	c	c	d	b	b
57	c	a	a	c	b	c	c	b
58	b	a	c	c	b	b	b	d
59	c	a	a	b	b	b	b	e
60	c	b	a	c	b	b	c	b

B. Pretest Data

Sr. No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
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4	1	1	0	1	0	1	0	0	0	1	0	1	0	0	1	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0
5	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1
6	1	0	1	1	1	0	1	1	1	0	0	1	1	1	1	0	1	1	1	0	1	1	1	1	1	0	1	1	1	0
7	0	0	1	1	1	0	1	1	0	1	0	0	1	0	0	1	0	1	0	1	0	1	0	1	0	1	1	0	0	1
8	0	1	1	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	0	1	0	0	1	0	0	0	0	0	0	0
9	1	0	0	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0	0	1	0	0
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19	1	0	0	1	0	0	1	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
20	0	1	0	0	0	1	0	0	1	0	0	0	0	1	1	0	0	1	1	0	1	0	1	1	0	0	1	0	0	1
21	1	0	1	0	1	0	0	1	0	1	0	0	1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	0	0	1
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45	1	0	1	0	0	1	0	1	0	0	0	0	1	0	1	0	0	1	0	0	0	0	1	0	0	0	1	0	0	0
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56	1	0	1	0	1	0	0	1	0	0	0	1	0	0	0	0	1	0	1	0	0	1	0	0	1	1	0	1	0	1
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58	1	0	1	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0
59	1	1	0	1	0	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0
60	1	1	1	0	0	0	1	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0

C. Post test Data

Sr. No.	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**	**22**	**23**	**24**	**25**	**26**	**27**	**28**	**29**	**30**
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