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## Evaluate the effectiveness of video assisted teaching on pranayama for reducing stress among geriatric clients at selected old age homes in rural area, Bengaluru

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### Abstract

“Evaluate the effectiveness of video assisted teaching on pranayama for reducing stress among geriatric clients at selected old age homes in rural area, Bengaluru”.

Was conducted in partial fulfillment of the degree of master science in nursing at Government College of nursing, Bangalore.

**Keywords:** Psychiatric disorders, suicide, suicide attempt; first admission; recurrent admission; schizophrenia; bipolar disorder; depression; substance abuse disorder

### Introduction

‘As we grow older, we must discipline ourselves to continue expanding, broadening, learning, keeping our minds active and open’

Clint Eastwood

Life starts at 60, as you are passing through first another beautiful phase in life. The responsibilities are over and the time to be at ease has begun. In fact, it is a stage when you have so much more time to devote yourself<sup>[1]</sup>.

The idea of institutionalization of the aged has been largely borrowed from the western societies, whose values and norms are quite different from that of India. Usually living in an old age home evokes a picture of stress, and sadness. The inmates often confront problems due to highly institutionalized, de pressionalized and bureaucratic atmosphere in old age homes. They face problem of adjustment with tight and rigid schedule, total or near total separation from the family, stress and anxiety over entrusting oneself to a new environment, diminished physical capacity, very close and frequent encounters with death ailments in the institution<sup>[2]</sup>.

The term Geriatric client was coined in the year 1938. Geriatric clients are prone to fall prey to various health hazards. Common Geriatrics health problems include obesity, acid indigestion, muscle weakness, stroke, pain attack, heart burn, diabetes, high cholesterol and high B.P. A good way to fight against these is to take up some physical exercises. Exercises promote once health and assists in living life with full zeal and enthusiasm<sup>[3]</sup>.

Stress is a mismanagement of time. When we spend too much time in the past or future, it steals a way our lovely present moments. A pre occupied mind can never be at rest. Travelling into the past or future can help us learn from past mistakes or set goals and visions for the future. But if we make the past or future or permanent home, the problem begins<sup>[3]</sup>. This is also the time to do futuristic planning for a very healthy older life by initiating yourself into regular yoga, pranayama, meditation and good hobbies like gardening, swimming, reading and writing<sup>[1]</sup>. This study told can't avoid all stress, but stress can counteract its negative effects by learning how to evoke the relaxation response, a state of deep rest that is the polar opposite of the stress response. The stress response floods your body with chemicals that prepare you for “fight or flight.” But while the stress response is helpful in true emergency situations where you must be alert, it wears your body down when constantly activated<sup>[4]</sup>.

The relaxation response brings back into balance: deepening your breathing, reducing stress hormones, slowing down your heart rate and blood pressure and relaxing your muscles. In addition to its calming physical effects, research shows that the relaxation response also increases energy and focus, combats illness, relieves aches and pains, heightens problem-solving abilities, and boosts motivation and productivity. Best of all—with a little practice—anyone can reap this benefits<sup>[5]</sup>.

The body's natural relaxation response is a powerful antidote to stress. Relaxation techniques such as deep breathing, visualization, progressive muscle relaxation, meditation and yoga can help you activate this relaxation response. When practiced regularly, these activities lead to a reduction in your everyday stress levels and a boost in your feelings of joy and serenity. What's More, they also serve a protective quality by teaching you how to stay calm and collected in the face of life's curveballs<sup>[6]</sup>.

### Objectives of the study

1. To assess the existing level of stress among geriatric clients at selected old age homes in rural area, Bengaluru.
2. To evaluate the effectiveness of video assisted teaching on pranayama for reducing stress among geriatric clients at selected old age homes in rural area, Bengaluru.
3. To determine the association between level of stress among geriatric clients and selected demographic variables among geriatric clients at selected old age homes in rural area, Bengaluru.
4. To assess the existing level of stress among geriatric clients at selected old age homes in rural area, Bengaluru.
5. To evaluate the effectiveness of video assisted teaching on pranayama for reducing stress among geriatric clients at selected old age homes in rural area, Bengaluru.
6. To determine the association between level of stress among geriatric clients and selected demographic variables among geriatric clients at selected old age homes in rural area, Bengaluru.

**Reviews of literature:** Review of literature is the major aspects of any research process. Nursing research can be considered as a continuing process where knowledge gained from earlier studies is an integral part of research in general. Literature review refers to both the activities involved in searching for information on topic as well as the actual report that summarize the state of existing knowledge on a research problem. The review of literature for the present study has been taken from different sources like text book journals, article and published and un published research studies. However, a depth of published studies on pranayama in Indian scenario is humbly acknowledged. The literature review for the present study is organized and presented in the following headings. Literature related to:

- Stress among geriatric clients.
- Pranayama and its importance.
- Pranayama and stress management.
- Knowledge on pranayama for reducing stress among geriatric clients.

### 1. Literature related to stress among geriatric clients

This study aimed develop a valid and reliable method of measuring symptoms distress in frail elderly people capable

of providing self-reports by toy C, walker H, kristjans LJ, popescu A, nightingale E, at school of nursing, midwifery and post graduate medicine, edith cowan university, Australia. They tested a tool used in palliative care settings with 46elders in residential aged care, refined the tool, and tested the new version with 48 additional elders. Items assessed the prevalence and severity of distress attributed to nausea; pain; insomnia; fatigue; and breathing, bowel and bladder problems in the first phase and pain; insomnia; fatigue and breathing, bowel and bladder problems in the second phase. Participants rated symptoms distress on a 10 point scale over 5 days. Internal consistency reliability coefficients for the revised tool ranged from 0.05 to 0.64. Concurrent validity with an established measure of well-being was demonstrated. Further research will assess stability. The tool provides a valid overview of symptoms distress in frail aged people able to provide self-reports.

This study explored and described the experiences of stress of 12 older people from Australian residential aged care facilities by toy C, white K, Rooks by K, at school of nursing, midwifery and post graduate medicine, Western Australia. A measure of fatigue was developed from stage one findings, with reference to the literature. In stage two of study, the frail elders stress assessment tool was subjected to panel review, piloting and refinement. The refined tool comprises 20 item in 3 subscale: stress effects; stress resources; and adaptation to stress. Further works required to establish the tool's psychometric properties, but it should then be useful for both research and clinical assessment purposes.

A study conducted to assess the stress among elders by Khalsa SB, Cope S, at Dept. of medicine, Boston. This study examined internal mechanisms by which the level of acculturation influences mental health outcomes. They hypothesized that the impact of five domains of acculturation on mental distress (depressive symptoms and anxiety) would be mediated by individual's subjectively appraised acculturative stress. The latter was indexed by measures of task oriented and emotion oriented stress. The results from structural equation modelling with 472 Korean American elders in Florida (M age =69.09, SD=7.04) provided support for mediated model. Findings demonstrated the acculturation exert on influence on mental health and that acculturative stress function s as a mediator in the linkage between the level of acculturation and mental distress. Findings suggest avenues for facilitating immigrant elders' positive adaptation and promoting heire mental well-being.

This study examine the association between acculturation depression and stress symptoms in a regional probability sampling (n=407) of six groups of Asian immigrant elders by mui AC, Kang SY, at Columbia university, USA Findings suggest that about 40 percent of the sample were stressed, indicating higher stress rates than found in other studies of Asian elder sample in the united states and Asia. Multiple regression analysis indicated that acculturation depression caused by elders' perception of cultural gap between themselves and their adult children was associated with high stress levels. Data suggest that stress is prevalence among urban Asian immigrant elders and that there is great heterogeneity among Asian ethnic subgroups. Implications for social work practice are discussed.

**Research Approach:** The approach to research is the umbrella that covers the basic procedure for conducting research. A research approach tells the researcher what data to collect and how to analyze it. It also suggests possible conclusions to be drawn from the data. In view of the nature of the problem under study and objectives of the study, evaluative approach was considered appropriate to evaluate the effectiveness of video assisted teaching on pranayama for stress among old age people.

**Research Design:** The research design is the plan, structure and strategy of investigation for answering the research

questions, it is the overall plan or blue print the researcher selects to carry out the study. The research design incorporates some of the most important methodological decisions that the researcher makes. The research design helps the researcher in selection of subjects; manipulation of experimental variables, control of extraneous variables, procedure for data collection and type of statistical analysis to be used to interpret the data [26].

The research design selected for the present study is pre experimental with one group pre-test and post-test design.

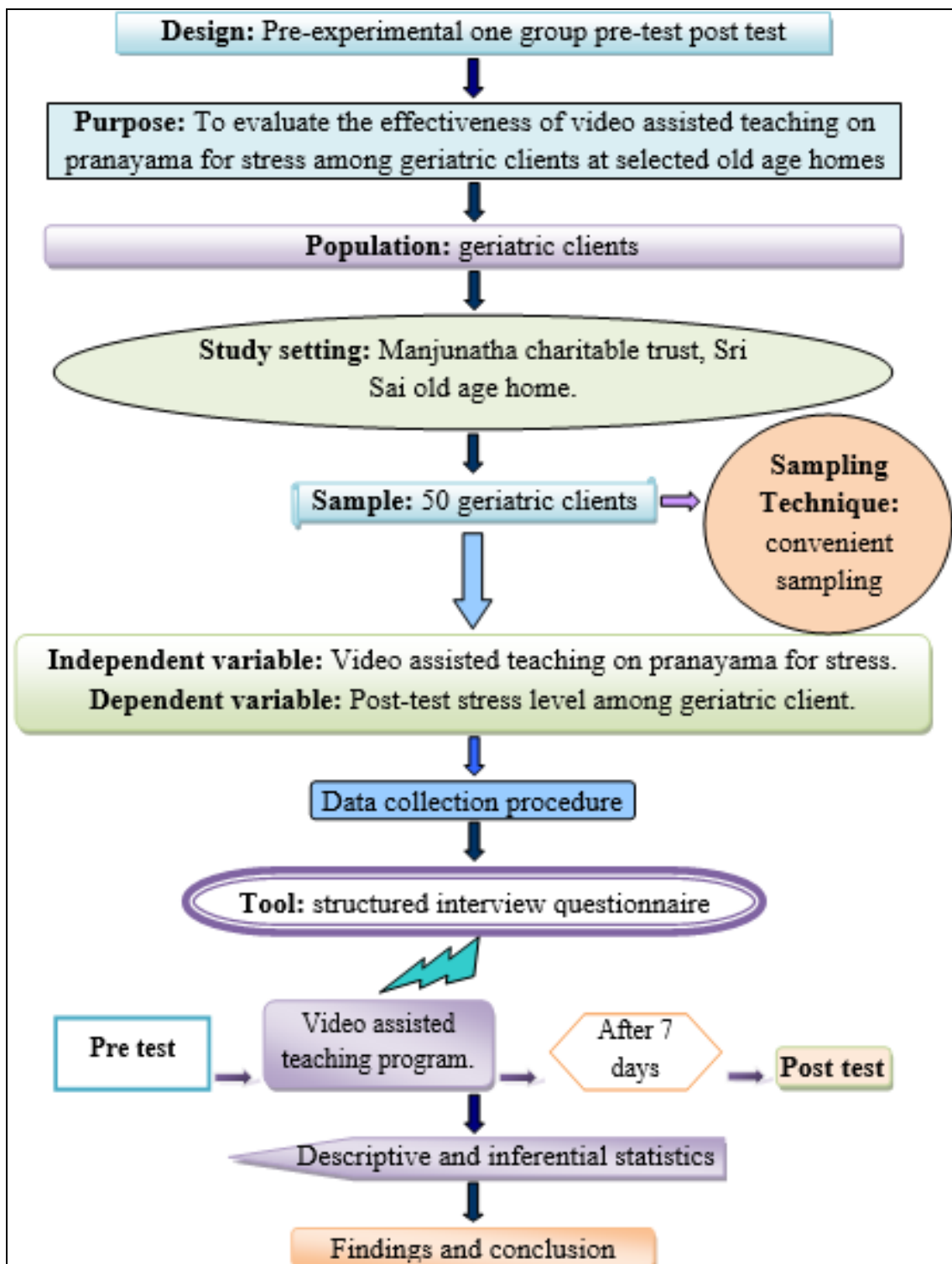


Fig 1: Schematic representation of research plan

### Target Population

Population is a group whose member possesses specific attributes that a researcher is interested to study. Target population in the present study was geriatric clients in selected old age homes in rural Bengaluru.

### Setting of the Study

“Setting” refers to the area where the study is conducted. It is the physical location and condition in which data collection takes place in a study. This study was conducted in Sri Manjunatha charitable trust, Sri Sai old age home. The criteria for selection of the setting are the availability of subjects, feasibility of conducting the study.

### Sample and Sampling Technique

Sample refers to a sub set of population, selected to participate in the research study. Sampling refers to the process of selecting a portion of population to represent the entire population. The sample of this study comprised of 50 geriatric clients in Sri Manjunatha charitable trust, Sri Sai old age home, Bengaluru. Convenient sampling method was used to draw the sample.

Convenient sampling is in which subjects are selected because of their convenient accessibility and proximity to the researcher.

### Criteria for selection of sample

#### Inclusion criteria

1. Elderly People who are aged 60 years and above and residing in selected rural area, Bengaluru.
2. Elderly people who are willing to participate in the study.
3. Elderly people who can understand and speak English/Kannada.

#### Exclusion criteria

1. Elderly people who are chronically ill.
2. Elderly people who are not co-operative.

### Selection and Development of Tool

To meet the objectives of the study the tool was developed by the investigator. The tool used for the study comprised of a structured interview questionnaire and video regarding pranayama.

#### Selection of the Tool

A Structured interview questionnaire used to evaluate the effectiveness of video assisted teaching on pranayama for stress among geriatric clients at selected old age homes.

#### Development of Tool

A Structured interview questionnaire used to evaluate the effectiveness of video assisted teaching on pranayama for stress among geriatric clients at selected old age homes the following steps were carried out in preparing the tool.

1. Literature review.
2. Preparation of blue print.
3. Consultation with the guide, statistician, physician, subject experts of psychiatric nursing.
4. Establishment of validity and reliability.

#### Description of the Tool

In the present study the following tool were used.

**Part-I:** Consisted of 10 items related to socio demographic data of the subjects such as age in years, gender, religion, professional qualification, marital status, source of information, income, recreational activities, duration of staying in old age home, previously attended any stress reduction program.

**Part-II:** Consist of 50 items classified under 3 aspects related to knowledge on pranayama for reducing stress.

#### Structured interview schedule

- Meaning of pranayama.
- Meaning of stress.
- Pranayama for reducing stress.

#### Scoring of items

Fifty items were included in the structured interview schedule to assess the knowledge, comprehension and applicability. Each questions in the structured interview schedule had five options, one being the right answer and carried one mark. The total score allotted for questions was 50. A scoring key is prepared showing item numbers and correct responses.

#### Testing of the instrument

a) **Content validity:** Validity refers to where a measuring instruments accurately measures what it intends to measure content validity of the tool was established after consultation with six experts from the field of mental health nursing, three yoga specialist, a statistician. Minor modifications were made on the basis of recommendations and suggestions of experts. After consultation with the guide, the co-guide and the statistician, final tool was reformed. Later the tool we was edited by an expert in English.

#### Reliability

The tool, after validation was subjected to test for its reliability. The structured knowledge questionnaire was administered to 5 samples. The reliability of the tool is computed by using split half Karl Pearson's correlation formula (raw score method).The reliability of Split Half test was found by using Karl Pearson correlation by deviation method. Spearman Brown's Prophecy formula was used to find out the reliability of the full test.

$$R = \frac{2r}{1+r}$$

R-reliability co-efficient of correlation of whole test.

r-reliability co-efficient of correlation of half test.

The reliability co-efficient of structured interview questionnaire was found to be 0.894 and validity co-efficient worked to be 0.944 for knowledge questionnaire, revealing that the tool is feasible for administration for the main study. Since the Knowledge reliability co-efficient for the scale  $r > 0.70$ . The tool was found to be reliable and feasible.

#### Development of the Video Assisted Teaching Program (VATP)

Video Assisted Teaching Program on effectiveness of pranayama was developed based on Review of Literature

and consulting with experts. The steps adopted in the development of Video Assisted Teaching Program were:

- Preparation of first draft of Video Assisted Teaching Program.
- Development of criteria checklist to evaluate the Video Assisted Teaching Program.
- Content validity of Video Assisted Teaching Program.
- Editing of Video Assisted Teaching Program.
- Preparation of final draft of Video Assisted Teaching Program.

#### **Preparation of first draft**

Video Assisted Teaching Program was prepared on the basis of review of literature, which was pertaining to the development of VATP on pranayama.

#### **Development of criteria checklist to evaluate the video assisted teaching program**

##### **Identification and Stating of Objectives in Behavioural Terms.**

The teaching objectives were identified and written in behavioral terms depending on the needs of the learner i.e., pranayama.

##### **Selection of the Content**

The content on pranayama for reducing stress was selected through research studies and consultation with the experts. Then content was analyzed into sub topics and sub topics were broken down into elements.

##### **Organization of the Content**

The content selected was organized under following main headings.

- Meaning of pranayama and its benefits.
- Meaning of stress and its effects.
- Pranayama for reducing stress.

##### **Content Validity of the VATP**

The initial draft of Video Assisted Teaching Program was given to 07 experts in the field along with the tool. To assess the content validity of Video Assisted Teaching Program a criteria checklist was used, which consisted of criteria for two areas. Against each criterion four responses were given and a column was provided for their remarks. The suggestions were incorporated in the Video Assisted Teaching Program. (Annexure J).

##### **Planning to Implement the VATP**

The time and date was decided to implement the Video Assisted Teaching Program.

##### **Preparation of Final Draft of VATP**

The draft of Video Assisted Teaching Program consisted of introduction, content and summary. The illustration was presented in Video Assisted Teaching Program along with the videos on pranayama.

##### **Pilot Study**

A pilot study was conducted from 19.08.2013 to 26.08.2013 at Sri Manjunatha charitable trust, totada guddadahalli, Bengaluru. Administrative approval was obtained from the Head master to conduct the pilot study.

The purposes of the pilot study were to:

- Evaluate the effectiveness of Video Assisted Teaching Program.

- Find out the feasibility of conducting the final study.
- Determine the method of statistical analysis.

Five geriatric clients staying in Sri Manjunatha charitable trust were selected. On day 1, pre-test was conducted by using structured interview questionnaire; on the same day Video Assisted Teaching Program was conducted for 1 Hour. On 8<sup>th</sup> day, the post-test was conducted by using same structured interview questionnaire to evaluate the effectiveness of Video Assisted Teaching on pranayama for stress among geriatric clients at selected rural area, Bengaluru.

The overall mean percentage knowledge score of post-test (81.05%) was higher than the mean percentage knowledge score of pre-test (37.89%), with the enhancement mean percentage knowledge scores (43.16%) were found to be significant at 5% ( $p < 0.05$ ) level. The findings of the Pilot Study revealed that the Study is feasible.

##### **Data Collection and Procedure**

After obtaining permission from the HOD of the sri manjunatha charitable trust, sri sai old age home, Bengaluru and consent from subjects the pre-test was conducted to 50 geriatric clients sri sai old age home by using Structured interview questionnaire; approximately 45 minutes were spent for collecting data. The investigator gathered geriatric clients in a comfortable room and conducted VATP. After 7 days post-test was given with the same structured interview questionnaire. Each subject took about 45 minutes to complete the post-test.

All the participants co-operated well with the investigator in both pre-test and post-test. The data collection process was terminated by thanking the subjects.

##### **Plan of Data Analysis**

The data obtained was analyzed in terms of achieving the objectives of the study using descriptive and inferential statistics.

##### **Statistical Analysis of Data**

###### **A. Descriptive Statistics**

The researcher will analyze the data obtained by using Descriptive and Inferential statistics.

**A. Descriptive statistics:** Mean and Standard deviation will be used to assess the level of stress before and after the video assisted teaching.

###### **B. Inferential Statistics**

Paired t-test will be used to compare the level of stress before and after video assisted teaching. Chi-square test used to determine association between the levels of stress among Geriatric clients.

##### **5. Results**

Analysis and interpretation of data involves the objective material in the possession of the researcher and his subjective reactions and desire to derive from the data the inherent meanings in that relation to the problem<sup>[26]</sup>.

This chapter deals with the analysis and interpretation of data collected to evaluate the effectiveness of video assisted teaching on pranayama for stress among geriatric clients at selected old age homes in rural area, Bengaluru. The purpose of this analysis is to reduce the data to a

manageable and interpretable form so that the research problems can be studied and tested.

The analysis and interpretation of data of this study are based on data collected through structured interview questionnaire from geriatric client (N=50). The results were computed using descriptive and inferential statistics based on the following objectives. The level of significance was set at 0.05%.

**Objectives of the study**

1. To assess the existing level of stress among geriatric clients at selected old age homes in rural area, Bengaluru.
2. To evaluate the effectiveness of video assisted teaching on pranayama for reducing stress among geriatric clients at selected old age homes in rural area, Bengaluru.

3. To determine the association between level of stress among geriatric clients and selected demographic variables among geriatric clients at selected old age homes in rural area, Bengaluru.

**Presentation of the Data**

To begin with, the data was entered in a master sheet, for tabulation and statistical processing. In order to find the relationship the data was tabulated, analyzed and interpreted by using descriptive and inferential statistics. The data is presented under the following headings.

**Section 1:** Socio-demographic characteristics of respondents under study.

**Section 2:** Overall and aspect wise knowledge scores of respondents.

**Section 3:** Analysis of association between Socio-demographic variables and post-test Knowledge scores.

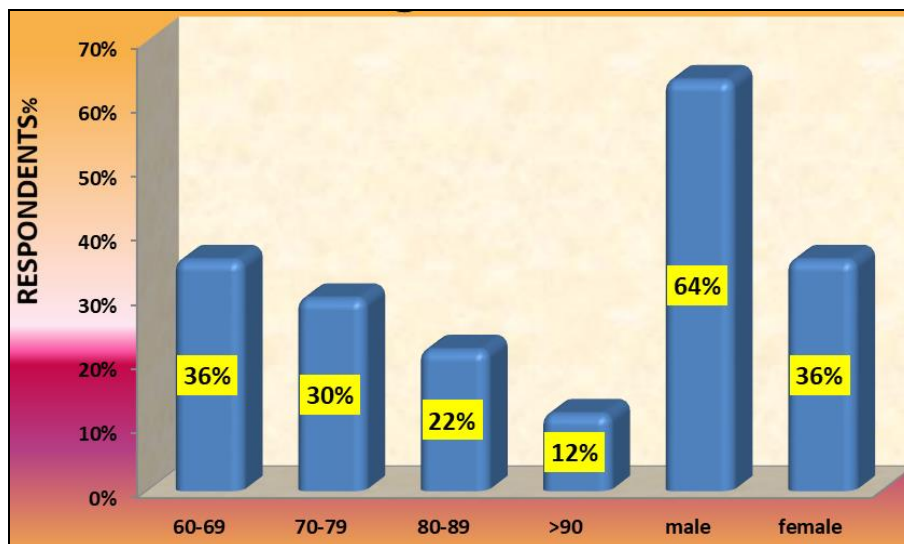
**Table 1:** Classification of Respondents by Age, sex, marital status and number of children N=50

Characteristics	Category	Respondents	
		Number	Percent
Age (years)	60-69	18	36
	70-79	15	30
	80-89	11	22
	>90	06	12
Sex	Male	32	64
	Female	18	36
Marital status	Married	18	36
	widow	32	64
Number of children	No	06	12
	one	07	14
	two	17	34
	>two	20	40
Total		50	100

Table no. 1 & Figure 3 and 4 reveal the respondents by age, sex, marital status and number of children.

Regarding age group 36% of respondents were in the age group of 60-69, 30% of them in the age of 70-79, 22% of respondents were in the age group of 80-89 and last only 12% of respondents were in age of more than 90 years.

Majority 32(64%) of the respondents were males followed by 18(36%) were females. According to their marital status, 32(64%) widows as compared to 18(36%) married. Majority 40% of the respondents had more than two children. 34% had two children. 14% had one child and 12% had no children's.



**Fig 2:** Classification of Respondents by Age and sex

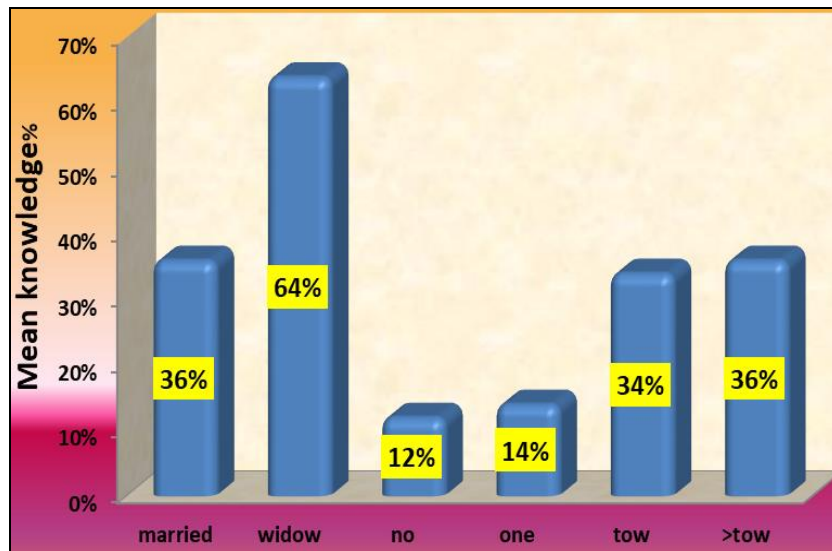


Fig 3: Classification of respondents by marital status and number of children’s

Table 2: Classification of Respondents by religion, educational status and previous place of residence N=50

Characteristics	Category	Respondents	
		Number	Percent
Religion	Hindu	38	76.0
	Christian	12	24
Educational status	Primary education	06	12
	High school	10	20
	Puc	09	18
	graduation	14	28
	Technical education	11	22
Previous place of residence	Urban	41	82
	Rural	09	18
Total		50	100.0

Table 2 and figure 5 and 6 depict respondents by religion, educational status and previous place of residence. Regarding religion, majority (76%) of the respondents were Hindu when compared with 24% of Christians. Regarding educational status, 28% of respondents had done graduation followed by 22% were taken technical education

and 20%. 18%. 12% of respondents were finished high school, puc, primary school education respectively. Regarding previous place of residence, majority of respondents from urban area (82%) compared to respondents from rural area (18%).

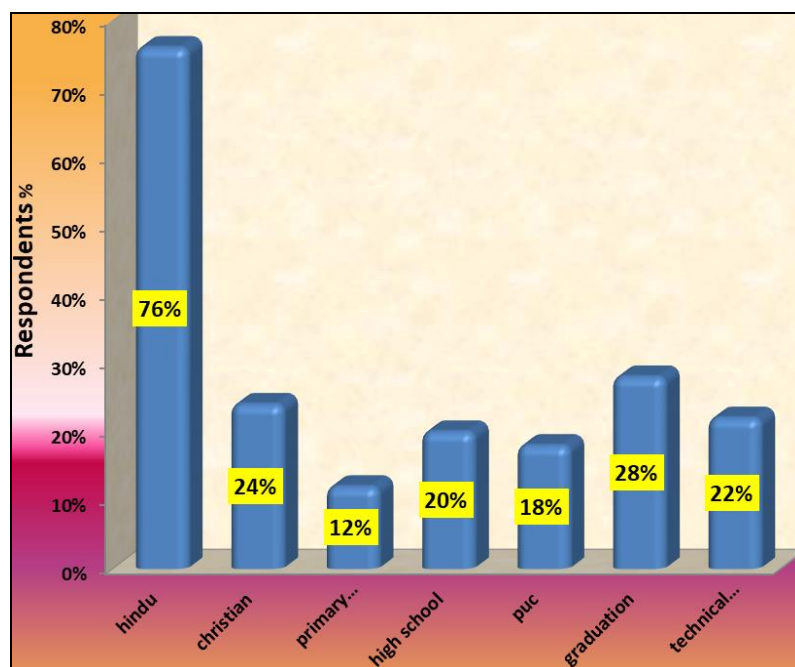
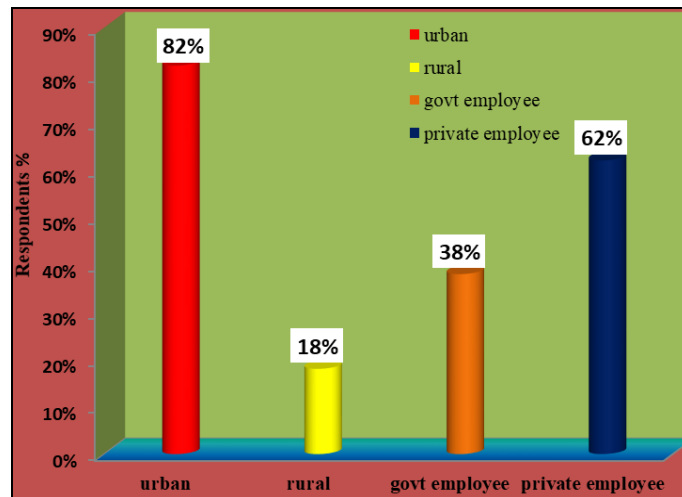


Fig 4: Classification of respondents by religion and educational status



**Fig 5:** Classification of respondents by previous place of residence and previous occupation

**Table 3:** classification of respondents by occupation before coming to the old age homes, duration of stay, previous training on pranayama for stress N=50

Characteristics	Category	Respondents	
		Number	Percent
Occupation before coming to old age homes	Govt. employee	19	38%
	Private employee	31	62%
Duration of stay	Less than 10 years	19	38%
	10-19years	11	22%
	20-29 years	12	24%
	More than30 years	08	16%
Previous training on pranayama	Yes	14	28%
	No	36	72%
Total		50	100%

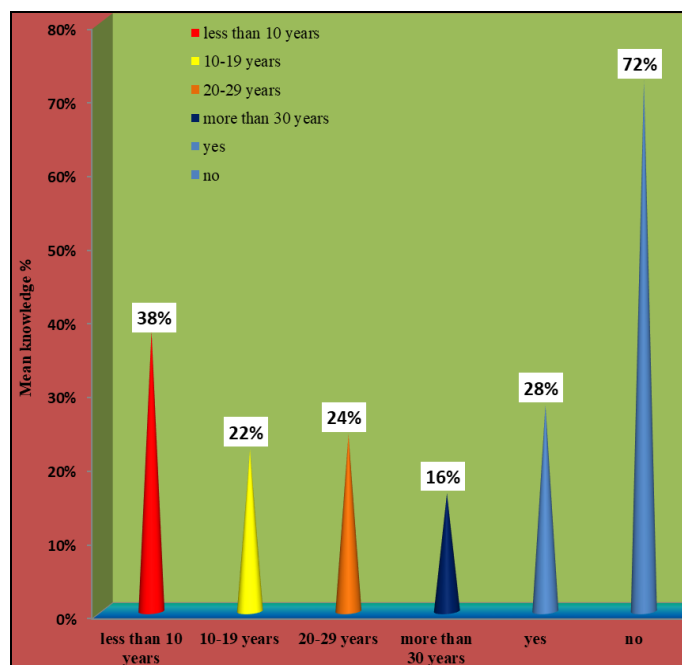
Table 3 depicts respondents by occupation before coming to the old age homes, duration of stay, previous training on pranayama for stress.

Majority (62%) of respondents were worked in the private sector compared to (38%) respondents who had been in govt. sectors.

Regarding duration of stay in old age home, 38% respondents have been staying in since less than 10 years,

24%, 22% of respondents who were staying since 20-29 years and 10-19 years respectively but only 16% of respondents were staying in old age homes since more than 30 years.

Regarding previous training on pranayama for stress, majority (72%) of respondents haven't taken any training compared to 28% were taken training on pranayama for reducing stress.



**Fig 6:** Classification of respondents by duration of stay and previous training on pranayama for stress

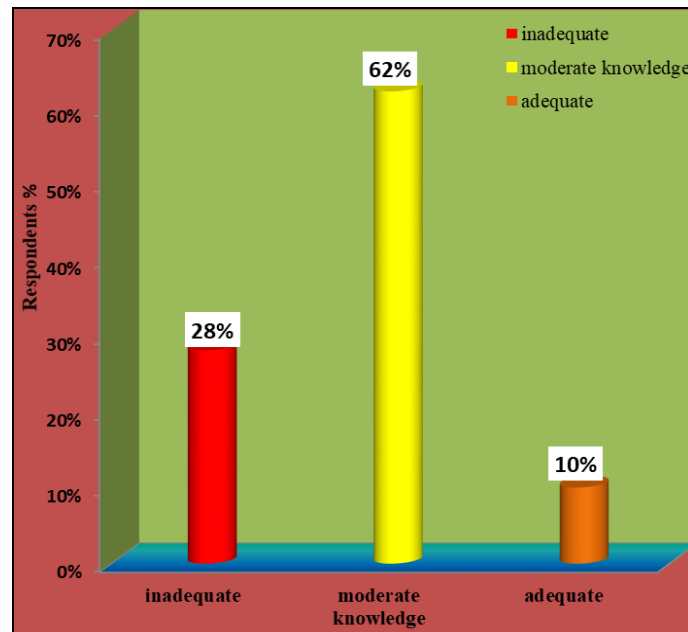


**Table 4:** Knowledge level of respondents on pranayama for reducing stress N=50

Characteristics	Respondents	
	Number	Percent
Inadequate (<50%)	14	28
Moderate (51-75%)	31	62
Adequate (75%-100%)	5	10
Total	50	100.0

Table 4 and figure 8 reveals the percentage distribution of geriatric client’s knowledge regarding pranayama for stress. The data reveals that only 28% of geriatric clients had inadequate knowledge level as compared to 62%

respondents with moderate knowledge level and it’s shown only 10% respondents have adequate knowledge.

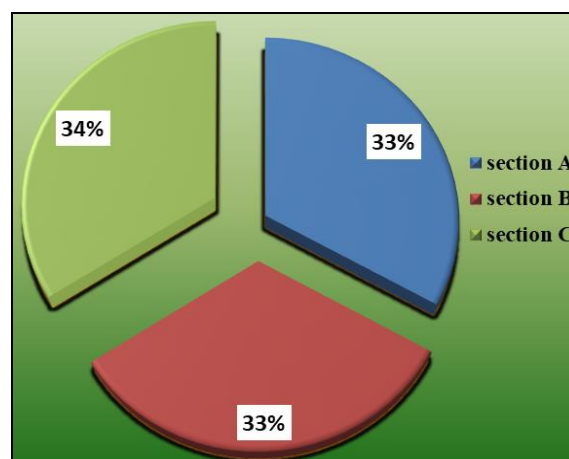


**Fig 7:** Distribution of geriatric client’s knowledge regarding pranayama for reducing stress  
**Table 5:** Aspect wise mean knowledge scores of Respondents on pranayama for stress N=50

No	Knowledge aspects	Statements	Max. Score	Range Score	Respondents knowledge		
					Mean	Mean (%)	SD (%)
I	Meaning of pranayama	15	15	4-11	8.5	56.67	12.43
II	Meaning of stress	15	15	5-13	8.7	58	13.6
III	Pranayama for stress	20	15	7-15	11.16	55.8	10.05
	Combined	50	50		17-40	56.7	11.05

Table 5 and figure 9 depict the aspect wise mean knowledge of geriatric clients regarding pranayama for stress. In this b-study, 58% of mean knowledge was found in the

aspect of meaning of stress. 56.67% in meaning of pranayama and least 55.8% in pranayama for stress aspect.



**Fig 8:** Aspect wise mean knowledge scores of respondents on pranayama for stress

**Table 6:** Association between Age and Knowledge level of respondents on pranayama for stress N=50

Age Group (years)	Knowledge level of respondents								$\chi^2$ Value
	Inadequate		Moderate		Adequate		Combined		
	N	%	N	%	N	%	N	%	
60-69	4	22.2	12	66.67	2	11.1	18	100.0	1.449NS
70-79	5	33.3	8	53.3	2	13.3	15	100.0	
80-89	3	27.2	7	63.6	1	9.1	11	100.0	
>90	2	33.3	4	66.7	0	0	6	100.0	
total	14	28	31	62	5	10	50	100.0	

NS: Non-significant,  $\chi^2$  (0.05, 6df) = 12.594.

Table 6 depict the association between the age and knowledge of respondents on pranayama for stress.

22.2% respondents of the age group of 60-69 years had inadequate knowledge level, 66.67% had moderate knowledge level and 11.1% of respondents had adequate knowledge. 33.3% respondents who fall in the age group of 70-79 years had inadequate knowledge level, 53.3% had moderate knowledge level and 13.3% had adequate knowledge. Under the age group of 80-89 years 27.2% had inadequate knowledge, 63.6% had moderate knowledge level and 9.1% had adequate knowledge. 33.3% respondents who fall in the age group of more than 90 years had inadequate knowledge level compared to 66.7% had moderate knowledge level.

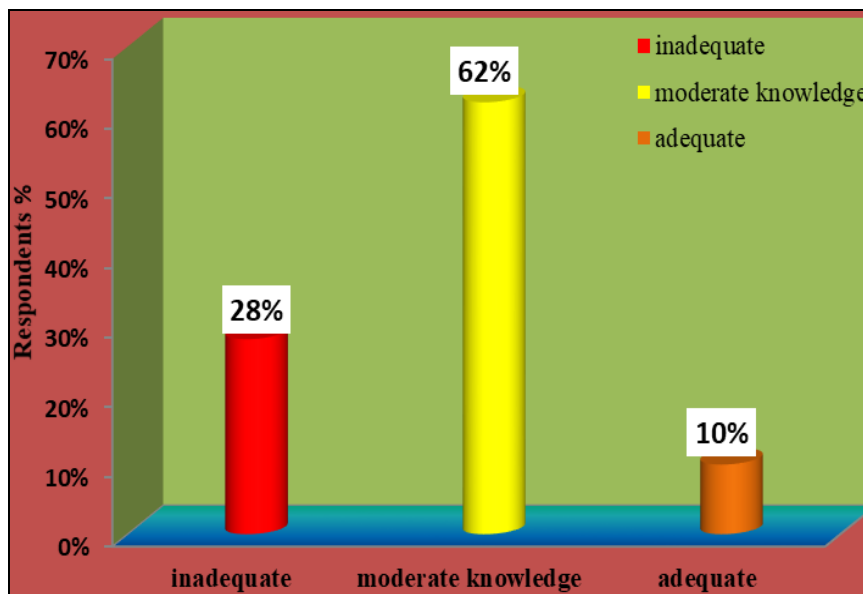
The obtained  $\chi^2$  value (1.449NS) reveals non-significant

association between age and knowledge level on pranayama for stress.

**Table 3:** Classification of Respondents by Religion N=50

Characteristics	Category	Respondents	
		Number	Percent
Religion	Hindu	44	88%
	Muslim	4	8%
	Christian	2	4%
	Others	0	0%
Total		50	100%

Table no. 3 & Figure 5: shows that majority of the respondents 88% are Hindus 8% Muslims and remaining 4% Christian.



**Fig 8:** Distribution of geriatric client knowledge regarding pranayama for stress

**6. Discussion**

In order to find a meaningful answer to research questions, the collected data must be processed, analyzed in some orderly coherent fashion, so that patterns and relationship can be discussed.

In this study, descriptive research approach was adopted to assess the knowledge of respondents on pranayama for reducing stress. Data collected from 50 geriatric clients selected by purposive sampling and respondents were tabulated, analyzed and interpreted by using descriptive and inferential statistics based on the formulated objectives of the study.

The discussion was presented under the following sections

**Section 1:** Demographic characteristics of respondents

**Section 2:** Aspect wise and overall knowledge level of respondents.

**Section 3:** Association between knowledge levels with demographic variables.

**1. Demographic characteristics of respondents**

Majority of respondents (36%) found in the age group of 60-69 years and 30% noticed in the age group of 70-79 years. 72% of respondents didn't any previous training on pranayama for stress reduction compared to 28% respondent attended training programme. Majority of respondents were male (64%) compared to only 36% were female.

Prasad o conducted a study on Dirga pranayama for stress among some elderly patients. Elders's perceptions and concerns which is similar to the present study. Data was

collected in 1996 from 393 NN (44% response rate), with a mean age of 71 years and 50% of respondents were known pranayama schedules.

Majority of the respondents (64%) were widow and (36%) were married. In duration of the stay in old age homes, 38% of respondents have been staying since less than ten years, 24% of respondents who were staying since 20-29 years and 10-19 years respectively but only 16% of respondents were staying in old age home since more than 30 years. Majority 82% of the respondents were belonging to urban, 18% were belonging to rural.

The result indicated that majority 40% of the respondents had more than two children, 34% had two children and 14% had only one child followed by 12% had a no child. Majority (76%) of respondents were Hindus and 24% were 5-6 members and 8.4% were 7 and above. Majority (62%) of respondents were private employee and 38% identified as govt. employee.

## 2. Aspect wise and overall knowledge level of respondents

The overall mean knowledge of respondents was 56.7% with SD as 11.5%. 56.67% of mean knowledge was found in the aspects of meaning of pranayama. 58% in prevention of meaning of stress aspects and least 55.8% in pranayama for reducing stress aspects.

## 3. Association between knowledge levels and demographic characteristics

The significant association was found between the sex and knowledge level on pranayama for reducing stress ( $\chi^2 = 8.327^*$ ). There is a highly significant association between educational status and knowledge level of respondents ( $\chi^2 = 24.295^*$ ). There is a non-significant association between Marital status and knowledge level of respondents ( $\chi^2 = 3.287$  NS). The statistical result established the non-significant association between previous place of residence and knowledge level ( $\chi^2 = 1.248$  NS). The obtained statistical test value revealed highly significant association between previous training on pranayama for stress reduction and knowledge level ( $\chi^2 = 18.318^*$ ).

A non-significant association was found between age and knowledge level on pranayama for reducing stress ( $\chi^2 = 1.449$  NS). A non-significant association is found between number of children's and knowledge on pranayama for reducing stress ( $\chi^2 = 2.058$  NS). A non-significant association between occupation and knowledge on pranayama for stress ( $\chi^2 = 1.627$  NS). The statistical result established the non-significant association between duration of stay and knowledge level ( $\chi^2 = 11.136$  NS). The obtained statistical test value reveals significant association between religion and knowledge ( $\chi^2 = 7.82^*$ ).

**Development of an informational guide sheet on pranayama for stress:** In this study the investigator developed an information guide sheet on effectiveness pranayama for stress based on the findings on the findings of the study. By keeping in the view the informational guide sheet could be useful to enhance the knowledge of geriatric client on effectiveness of pranayama for reducing stress.

## 7. Conclusion

This chapter presents the conclusions drawn, implications and recommendations. The main aim of the study was to

assess the existing knowledge of Geriatric client regarding pranayama for stress with a video assisted teaching on pranayama. The video assisted teaching on pranayama for stress and its benefits, stress and its effects and effectiveness of pranayama on stress. This helps the geriatric client to gain knowledge on effectiveness of pranayama for stress.

The following conclusions were drawn on the basis of the findings of the study:

1. The knowledge scores among most of geriatric client were moderate.
2. The video assisted teaching on pranayama for stress among geriatric clients helps them to learn more about effectiveness of pranayama for stress
3. The study proved the path to find a variety of other information on benefits pranayama and stress management.

## Nursing implications

The challenges faced by the nurses are enormous. The scientific and technological advancement help to reduce the geriatric stress requiring the staff nurses to be updated with knowledge on pranayama. Staff development programmes through continuous education and training, teaching and learning materials like video on pranayama for stress are the factors in shaping the future of the profession of nursing service. The findings of the study have several implications for nursing practices, education, administration and research

## Nursing practice

- The study shows various degree of deficiency in the knowledge of pranayama for stress among geriatric clients. For this nurses need to have adequate knowledge regarding factors which improves the knowledge of geriatric clients on pranayama for stress.
- The study highlights the need for special attention to educate the geriatric clients and train them on pranayama for stress.
- The organization of education programmed and periodical health activity on pranayama for stress management help the geriatric client to manage the stress in old age homes.
- The video prepared in the present study is one of the mean to improve the practice through appropriate knowledge. It acts as guidelines for the experienced and non-experience geriatric clients. This video shall be a mean to orient and conduct educational programmes for the geriatric clients.

## Nursing education

- Geriatric client should be encouraged to participate in specialized health activities regarding effectiveness pranayama for stress.
- There should be individualized teaching and ongoing feedback on their performance.
- The nurse educator can also have pranayama demonstration for geriatric client in stress management.
- The video can act as a good teaching and learning material. More emphasis should be given to periodic updating of the video.

## Nursing administration

- The study highlights the need for nursing administrations to use performance appraisal, nursing audit, and guidelines and updating of nursing standard.

- The nursing administrators can take part in developing protocols and standing order related to pranayama for stress management.
- The nursing administrator can plan and organize educational programme for geriatric clients about effectiveness of pranayama on stress.

### Nursing research

- This study helps the nurse researcher to develop appropriate teaching learning tools for geriatric clients in order to improve their knowledge and skills regarding pranayama on stress.
- Research in nursing about pranayama in stress management is a in the methodology aspects. This will increase thirst for the evidence based practice and effective utilization in research approaches.
- There is a need to have research based evidence to prove the cost effectiveness of educational programme regarding effectiveness of pranayama on stress.

### Limitations of the study

The limitations of the present study are:

- The study was confined to a small sample selected by purposive sampling techniques which restrict the generalizability.
- The study locked experimental testing to know the effectiveness.
- No attempt was made to do follow up to measure the retention of knowledge of the geriatric clients.

### Recommendations

Based on the findings of the study, it is recommended that

- Some study can be replicated by including a control group.
- Some study can be replicated in larger settings.
- A comparative study may be done geriatric clients and adolescents.
- Similar study can be conducted to evaluate various teaching strategies like structured teaching programme and self-instructional module.
- A larger study can be carried out to assess the knowledge, attitude and practice regarding pranayama for stress.

Based on the study findings the investigator has drawn many conclusions. In this chapter the investigator dealt with the various nursing implications of the experience of the investigator during the study findings helped to give suggestions and recommendations for the further studies.

### 8. Summary

This chapter deals with the statement of the problem, objectives of the study, assumptions to meet the objectives, limitations of the study and conceptual frame work which provides a frame of reference. The statement of the problem selected for the study and its objectives of are as follows:

#### Statement of the Problem

“Evaluate the Effectiveness of Video Assisted Teaching on Pranayama for Reducing Stress among Geriatric Clients at Selected Old Age Homes in Rural Area, Bengaluru”.

#### Objectives of the Study

1. To assess the knowledge of geriatric clients regarding pranayama on stress.

2. To find the association between knowledge of geriatric clients regarding pranayama with the selected demographic variables.
3. To develop and provide a video regarding effectiveness of pranayama for stress.

Review of literature of related studies enabled the investigator to collect related and relevant information to support the study, design the methodology, develop the conceptual framework and in the development of tool.

Pender's health promotion model was adopted as conceptual framework for the study. The research design used was descriptive survey design. The research tool was structured interview schedule to assess knowledge of geriatric clients regarding pranayama for stress.

The structured interview schedule was prepared in 2 parts.

**Part I:** Contains base line data comprises of 10 items related to demographic variables of respondents.

**Part II:** Consists of 50 items to assess knowledge and each question is provided with 3 options of answer. In this correct response carried one score resulting with maximum score of 50.

A pilot study was conducted between geriatrics. The reliability co-efficient was found to be 0.85. Hence the tool was found to be reliable.

Purposive sampling technique was used to select the samples. The sample consist of 50 geriatric clients staying in Sri Sai old age home and Sri charitable trust, totadaguddadahalli in Bengaluru.

### Major findings

- Majority 36% of the respondents were in the age group of 60-69 years.
- Majority 64% of the respondents were males.
- Majority 64% of the respondents were widows.
- Majority 40% of the respondents had more than two children.
- Highest number 765 of the respondents were Hindus.
- Majority 285 of respondents are belongs to urban area.
- Highest number 62% of the respondents were in private job.
- Majority 38.05 of the respondents have been residing in old age homes since less than 10 years.
- Majority 72% of the respondents had previous training on pranayama for stress reduction.

### Major findings related to knowledge aspects of pranayama on stress

- 58% was found in the aspects of meaning of stress.
- 56.67% was found in the aspect of meaning of pranayama.
- 55.8% in the pranayama for stress aspects.

### Major findings related to association between demographic variables and knowledge level on pranayama on stress

- A significant association was found between sex and knowledge level of respondents on pranayama for stress ( $\chi^2=8.327^*$ ).
- A highly significant association between educational status and knowledge level of respondents ( $\chi^2=24.295^*$ ).

- The obtained statistical test value reveals significant association between religion and knowledge level of respondents ( $\chi^2=7.82^*$ ).
- Highly significant association was found between previous training on pranayama for stress and knowledge level of respondents on pranayama for stress ( $\chi^2=18.318^*$ ).
- Non-significant association was found between age and knowledge level of respondents on pranayama for stress ( $\chi^2=1.449ns$ ).
- There is a non-significant association between marital status and knowledge level of respondents on pranayama for stress ( $\chi^2=3.287ns$ ).
- The statistical result established the non-significant association between previous occupation and knowledge level of respondents on pranayama for stress ( $\chi^2=1.627ns$ ).
- The obtained statistical test value reveals non-significant association between previous place of residence and knowledge level of respondents on pranayama for stress ( $\chi^2=1.248ns$ ).
- Non-significant association was found between number of children and knowledge level of respondents on pranayama for stress ( $\chi^2=2.058ns$ ).
- A non-significant association between duration of stay and knowledge level of respondents on pranayama for stress ( $\chi^2=11.136ns$ ).

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