

A STUDY TO ASSESS THE EFFECTIVENESS OF PRANAYAMA ON LIFE STYLE, HEALTH STATUS AND QUALITY OF LIFE AMONG ELDERLY WHO ARE LIVING IN SELECTED AREA AT JALNA, MAHARASHTRA.

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ABSTRACT: This study was conducted to assess the effectiveness of pranayama on life style, health status and quality of life among elderly to find out efficacy of pranayama on elderly. 40 people were selected by using simple random sampling method. The questionnaires was prepared to obtain the demographic profile, contributing age, gender, marital status, education, occupation, religion, monthly income, number of children, types of family and habits. Data was collected with the help of demographic profile and was done in Yogeshwari colony at Jalna, Maharashtra. Approach was made to the elderly and was explained regarding the benefits of pranayama in elderly. On 1st day, the pre-test was done with structured interview schedule. Each consecutive day, visit was done to the samples and pranayama practices were implemented on daily basis. On the 7th day i.e. monitoring of effectiveness of pranayama outcome was done by structured interview schedule. The result showed that there is correlation between pre and post-test of life style, health status and quality of life is effective among elderly and there is significant relationship between performance of pre and post-test outcome.

INTRODUCTION:

The number of elderly will continue to grow, and there will be increase number of older adults as compare to the number who are alive today. This will pose challenges for a variety of system, especially the health care system. The greater variety of health services to provide for the multiple types of needs of older adults, and creativity in devising and implementing novel ways of providing services will be given priority.

The elderly are a heterogeneous group who are affected by both health and non-health factors. The latter are largely social factors related to health that contribute to social problems faced by the elderly. This paper addresses these before looking at the care of the elderly.

Old bones are marked by "thinning and shrinkage". Chronic mucus hypersecretion (CMH) "defined as coughing and bringing up [sputum](#) is a common respiratory symptom in elderly persons. May have less [saliva](#) and less ability for [oral hygiene](#) in old age which increases the chance of [tooth decay and infection](#). [Essential tremor](#) (ET) is an uncontrollable shaking in a part of the upper body. Hair usually becomes grayer and also might become thinner. Hearts can become less efficient in old age with a resulting loss of stamina. In addition, atherosclerosis can constrict blood flow. Mobility impairment or loss. Skin loses elasticity, becomes drier, and more lined and wrinkled. Wounds and injuries take longer to heal.

"**Pranayama** is control of Breath". "Prana" is Breath or vital energy in the body. On subtle levels prana represents the pranic energy responsible for life or life force, and "ayama" means control. So Pranayama is "Control of Breath". One can control the rhythms of pranic energy with pranayama and achieve healthy body and mind.

In general, people practicing pranayama are said to benefit through improved blood circulation, mind and body relaxation, improved concentration, stress relief as well as relief from many diseases like asthma, headache, migraine, gastric issues etc. All these benefits can prove even more beneficial for the elderly people as it brings about a general wellness that improves the overall quality of life.

NEED FOR STUDY:

Pranayama is one of the important vital components of Yoga that directly or indirectly affects the proper functioning of different systems of the body. If you practice pranayama regularly, it shows beneficial impacts upon respiratory system, circulatory system, digestive system, and endocrine system. Pranayama ensures more oxygen to the lungs and good for hearts too. Pranayama tones up kidney and controls the functions of the nervous system. Kumbhaka or retention of breath helps the supply of oxygen or exchange of oxygen and carbon dioxide thus facilitates better work of lungs and helps the brain to work more efficiently. Pranayama affects the autonomic nervous system which controls heart rate, glandular secretions, respiration, digestion, and blood pressure.

STATEMENT OF PROBLEM:

A study to assess the effectiveness of pranayama on life style, health status and quality of life among elderly who are living in selected area at Jalna, Maharashtra.

OBJECTIVES:

- To assess the pre-test and post-test level of life style among elderly.
- To assess the pre-test and post-test level of health status among elderly.
- To assess the pre-test and post-test level of quality of life among elderly.
- To compare the effectiveness of pranayama on life style, health status and quality of life among elderly.
- To find out the pre-test association between effectiveness of pranayama and selected demographic variables among elderly.

HYPOTHESIS:

H1- There will be significant effectiveness between pranayama on life style, health status and quality of life among elderly.

H2- There will be significant pre-test association between the effectiveness of pranayama and their selected demographic variables.

METHODOLOGY:

The methodology is the blueprint of the study. In other words, it outlines how the study will be conducted. (Polit & Beck, 2014).

Research Approach: It is defined the approach as a general set of orderly discipline procedure used to acquire information. The quantitative approach was used in this study.

Research Design: Quasi experimental design (One Group Pre-test Post-test) was adopted for this study to determine the effectiveness of pranayama on life style, health status and quality of life among elderly.

Group	Pre-test	Intervention	Post-test
Quasi experimental design (one group pre-test post-test)	Level of life style, health status and quality of life before intervention.	Pranayama	Level of life style, health status and quality of life after intervention.
Design	O1	X	O2

Population:

The target population of the study includes all the elderly.

Description of the Study:

The study was conducted in Yogeshwari colony at Jalna. It is located 500 m away from Vasant Rao Naik College of Nursing.

SAMPLING:

- **Sample:** Elderly those who were residing in Yogeshwari colony and who fulfilled the inclusion criteria.
- **Sampling technique and sample size:** The investigator selected 40 elderly peoples through simple random sampling technique.
- **Criteria for Sample Selection:** The sample selection was based on the following inclusion and exclusion criteria.

Inclusion Criteria: Elderly peoples those who were,

- Willingness to join.
- Able to understand Marathi and Hindi.
- Available during the study period.
- Aged above 45 years.

Exclusion Criteria: Elderly peoples who were

- Physically unfit
- Severe comorbid conditions

VARIABLES:

Independent variable: Pranayama

Dependent variables: Level of life style, health status and quality of life.

Description of the Tool: The tool consists of 2 sections.

Section- A: Demographic Variables

- The demographic variables comprised 8 items such as age, education, occupation, monthly income, religion, number of children, type of family and bad habits.

Section-B: Structured Interview Schedule to assess the life style, health status and quality of life

- It comprised of 30 items. Each item had five responses 'very dissatisfied', 'dissatisfied', 'neither satisfied nor dissatisfied', 'satisfied', 'very satisfied', the score was interpreted as 1,2,3,4 and 5 respectively. The minimum and maximum scores were 30 and 150 respectively.

5-Point Likert Rating Scale (Score Interpretation)

Sr. no	Score	Outcome Values	Percentage
1.	114-150	High soothing	75% and above
2.	75-113	Moderate soothing	50-74%
3.	1-74	Low soothing	49% and below

TECHNIQUES OF DATA COLLECTION: Data collection is the process of acquiring and collecting information needed for the practicing pranayama from elderly. There is collection of data as controlled population and accessible population. Samples were selected from experimental group by simple random sampling method.

INTERVENTION:

Pranayama was practiced for 30 minutes per day for 7 days to the Experimental group.

- Introduction to pranayama.
- Warm up exercise.
- Activity session included
 1. Natural breathing
 2. Basic abdominal breathing
 3. Deep breathing
 4. Fast breathing
 5. Anulom vilom
 6. Bhramari
 7. Bhastrika

METHOD OF DATA ANALYSIS:

- **Paired 't' Test:** Analysis of 'T' test is applied to test the effectiveness of pranayama on life style, health status and quality of life among elderly who are living in selected area at Jalna.
- **Chi-Square Test:** Chi-square was used to measure an association between Socio demographical variables post-test and level of life style, health status and quality of life among elderly.

RELIABILITY AND VALIDITY OF TOOL:

- **Reliability:** Reliability has to do with the quality of measurement. In its everyday sense, reliability is the "consistency" or "repeatability" of measures. Reliability is the consistency of a set of measurements or measuring instrument. Reliability does not imply validity.
- **Validity:** A validity refers to getting results that accurately reflect the concept being measured. A valid measure to degree to which and instrument measure what it is supposed to be measuring. In practice, validity can also refer to the success of the research in retrieving "valid" result.

PILOT STUDY: Pilot study was conducted in Yogeshwari colony, Jalna. 5 samples were selected for pilot study through simple sampling technique. The pre-test was conducted and the samples were taught about Pranayama in a calm and quite environment. Each day the samples were made to practice Pranayama for about 30 minutes in the morning in the presence of the researcher. The researcher conducted post-test on 7th day of intervention. The data analysis was done with statistics. The tool was found feasible and practicable.

METHOD OF DATA COLLECTION: Structured Interview Schedule was used to collect the data based on the study objectives.

DATA COLLECTION PROCEDURE: The study was conducted at selected area, Jalna. In the beginning survey was done from which samples were selected by simple sampling technique based on sampling criteria. Introduction about investigator was given to samples. Verbal consent was obtained and confidentiality was assured.

The pre-test was conducted. Researcher selected 40 samples through simple random sampling technique. Total samples were divided into 4 groups for the convenience of implementing pranayama. Structured interview schedule was used to assess the life

style, health status and quality of life among elderly. The time taken by the researcher to complete the tool for each sample was 10-15 minutes. The samples were asked to choose the correct response from the given options.

After the pre-test samples were taught about Pranayama in a calm and quiet environment daily. The duration of the procedure was 30 minutes. The samples were made to practice the technique daily in front of the researcher. Each day the samples were made to practice Pranayama in front of the researcher. The post test was done on the 7th day of intervention.

Plan for Data Analysis: Data were collected, arranged and tabulated. Descriptive statistics like frequency, percentage and mean were used for categorical data. Inferential statistic was used to find out the effectiveness of Pranayama on life style, health status and quality of life and Chi-Square test was used to associate the life style, health status and quality of life with the demographic variables.

RESULT:

- Most of the 17 (42.5%) elderly were between the age group of 45 and 50 years.
- The many of the 26 (65%) samples were men.
- Most of the 40 individuals (100%) were married.
- The majority of the elderly 21(52.5%) studied at the undergraduate level.
- Most of the 23 (57.5%) peoples were employed.
- The majority of samples 37 (92.5%) were Hindus.
- Most of the 23 (57.5%) had an income of over Rs. 10,001 per month.
- Majority of 29 (72.5%) samples had 2 or more children
- The most of elderly 23 (57.5%) having nuclear family.
- The many of 33 (82.5%) elderly were having no any habits.
- The calculated t value of life style is 4.52, health status is 4.29 and quality of life is 3.83 were more than tabulated value at 0.05 level which shows that there is significance between pre and post-test of quality of life among elderly. **Hence the stated Hypothesis H₁ was accepted.**
- The chi square test was used to find out association between effectiveness of pranayama and selected demographic variables among elderly.
- The calculated p value were greater than 0.05 which confirmed the fact that there is no significance association between effectiveness of pranayama and selected demographic variables among elderly. The variables such as age, education, marital status, occupation, religion, monthly income, number of children, type of family and type of habits are not associated with pretest pranayama score.
- The calculated p value was less than 0.05 which confirmed the fact that there is significance association between effectiveness of pranayama and selected demographic variable among elderly. The variable gender is associated with pre-test pranayama score. **Hence the stated Hypothesis H₂ was accepted.**

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TOOLS:**Section-A: The Demographic Profile for Elderly****N=40**

Sr. No.	Demographic Variables		No. of samples
1	Age	45 - 50 years	
		51 – 60 years	
		Above 61 years	
2	Gender	Male	
		Female	
		Transgender	
3	Marital status	Married	
		Unmarried	
		Widow / Widower	
4	Education	Graduate	
		Under graduate	
		Illiterate	
5	Occupation	Working	
		Retired	
		Unemployed	
6	Religion	Hindu	
		Muslims	
		Others	
7	Monthly income	≤ Rs 5000	
		Rs. 5001 – Rs. 10,000	
		≥ Rs 10,001	
8	No of children	2 or above	
		1	
		No child	
9	Types of family	Joint family	
		Nuclear family	
		Extended family	
10	Habits	Alcoholism	
		Smoking/ tobacco chewing	
		No habits	

Section-B: Structured Interview Schedule to assess the life style, health status and quality of life
(Developed by researcher)

I) HEALTH STATUS

Sr. no.	Properties	Very Dissatisfied (1)	Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Satisfied (4)	Very Satisfied (5)
1.	How satisfied are you with your health?					
2.	How satisfied are you with your physical functioning?					
3.	How satisfied are you with your appetite?					
4.	How satisfied are you with your home safety?					
5.	How satisfied are you with your emotional support from family?					
6.	How satisfied are you with your currently medical treatment?					
7.	How satisfied are you with your participation in group activities?					
8.	How satisfied are you with your general health perception?					
9.	How satisfied are you with your energy for everyday life?					
10.	How satisfied are you with your working capacity in day-to –day life?					

II) LIFE STYLE

Sr. no.	Properties	Very Dissatisfied (1)	Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Satisfied (4)	Very Satisfied (5)
1.	How satisfied are you with your body and physical condition?					
2.	How satisfied are you with your daily exercise?					
3.	How satisfied are you with your bodily appearance?					
4.	How satisfied are you with your daily meal?					
5.	How satisfied are you with your sleep pattern?					
6.	How satisfied are you with your job?					
7.	How satisfied are you with your financial affairs in life?					
8.	How satisfied are you with your family members?					
9.	How satisfied are you with your activities of daily living?					
10.	How satisfied are you with your life events?					

III) QUALITY OF LIFE

Sr. no.	Properties	Very Dissatisfied (1)	Dissatisfied (2)	Neither Satisfied nor Dissatisfied (3)	Satisfied (4)	Very Satisfied (5)
1.	How satisfied your life to be meaningful?					
2.	How satisfied are you with your ability to perform your daily living activities?					
3.	How satisfied are you with your capacity for work?					
4.	How satisfied are you with yourself?					
5.	How satisfied are you with your personal relationship?					
6.	How satisfied are you with your sex life?					
7.	How satisfied are you with the support you get from your friends?					
8.	How satisfied are you with the conditions of your living place?					
9.	How satisfied are you with your access to health services?					
10.	How satisfied are you with your mode of transportation?					

Score Interpretation:

Sr. no	Score	Outcome Values	Percentage
1.	114-150	High soothing	75% and above
2.	75-113	Moderate soothing	50-74%
3.	1-74	Low soothing	49% and below