“An evaluative study of the effect of Pranayama on knowledge, life style, health status, Quality of Life and perceived symptom experiences of Elderly who are living in residences and in selected old age homes of Mangalore, Karnataka.”

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ABSTRACT

Ageing is a natural phenomena and it is considered as a normal, biological and developmental process. Quality of Life is a term used to indicate general wellbeing. The dimensions of a good Quality of Life for the elderly are health status, financial support, functional capabilities, low psychological distress and availability of supportive family and friends. Pranayama, in recent years, has emerged as an answer to the ever increasing chronic health problems of people, especially elderly. Hence, the investigator has taken up this measure as an attempt to make them feel reasonably comfortable within their own circumstances, which they may be unable to change.

Research Statement:

“An evaluative study of the effect of Pranayama on knowledge, life style, health status, Quality of Life and perceived symptom experiences of Elderly who are living in residences and in selected old age homes of Mangalore, Karnataka.”

HYPOTHESES

H₁₁: There will be significant differences in mean pre and post test scores of knowledge of Pranayama, Life-Style, physical health parameters, Quality of Life and Perceived Symptom Experiences of elderly who are living in residences and in old age homes

H₁₂: There will be significant correlation between the Pranayama Practice score and the changes in Elderly persons’ Life-Style, physical health parameters Quality of Life and perceived symptom experiences.
H₃: There will be an association between the elderly’ pre- intervention knowledge, Life-Style, physical health parameters, Quality of Life, Perceived Symptom Experiences and selected socio- demographic variables.

MATERIALS AND METHODS

Approach- Evaluative
Research design: Quasi experimental interrupted time series.

Tools Developed by the investigator --
1. Demographic profile of the elderly
2. Structured Knowledge questionnaire on Pranayama.
3. Life style practices
4. Physical Health parameter scale
5. Perceived symptom experiences check list
6. Performance check list for Pranayama practice
7. Planned teaching programme on Pranayama
8. Pranayama practice experience Oppionnaire

The Standardized tool used was QOL questionnaire (WHO-BREF)

Pranayama intervention

Phase I
- The elderly in two control and two experimental groups were enrolled from family unit in community and old age homes and subjected for pre-assessment $O_1$.

Phase II
- Pranayama methods were taught to the study groups in 24 classes of 40-60 minutes duration, three times a week. Pranayama training was given to the elderly in the experimental group- demonstrations and video.
- Guided Pranayama practice for a period of 60 day three times per week.
- Simultaneously, these measurements were also administered to the control groups in both settings.

Phase-III (Self- practice –I)
- The elderly were Post-Practice measurements-II ($O_3$) was done after 30 days
Phase-IV (Self-practice-II)

- The post-measurements-III ($O_4$) was done at the end of their self-practice of 60 days
- At the end of their self-practices, the elderly were asked to give their opinion on their experience of Pranayama practice through Pranayama Opinnaire.

RESULTS

Demographic characteristics
According to the study findings 66% of elderly were in the age group of 66 years and above, 53% of the elderly were females, 51% of them were Hindus, 62% of them had high school and less than high school education, 56% of the elderly were widow/widower and 83% of elderly were having less than Rs.6000 as monthly income. The 80% of elderly from old age home expressed that “not able to stay with family members” was the reason to stay in old age home.

The other findings of the study

1. **Knowledge**: The analysis shows that there was significant difference found in experimental groups ($p<0.01$) than control groups ($1.000$). Hence the research hypothesis $H_1$ was accepted with regard to knowledge.

2. **Pranayama and life style**: The findings indicated that there was significance found between non chewers of tobacco of experimental group (E2) and weight and also in over all life style ($p<0.016$ and $p<0.006$). There was no significance found in E1. Hence the sub hypothesis was accepted partially with regard to E2.

3. **Pranayama and Physical Health Parameters**: There was a significant change found in all the physical health parameters except in diastolic BP. It showed that Pranayama was equally effective in both study groups. Therefore the research hypothesis was partially accepted.

4. **Pranayama and quality of life**: According to ANOVA and post hoc test by Bonferroni, $p$ value of physical, psychological, social and over all QOL dimensions of quality of life in experimental groups shows significant difference between pre and post measurements ($p<0.000<0.01$). Hence the research hypothesis was accepted.

5. **Pranayama and Perceived Symptom Experiences**: According to ANOVA and post hoc test by Bonferroni, $p$ value shows that there was significant difference ($p<0.000<0.01$) found in experimental groups. Hence the research hypothesis was accepted.
6. The 't' value for comparison of elderly according to the specific components of physical dimensions of QOL between the experimental groups shows significant difference in all the three areas (p=0.000<0.01). It shows that the elderly at residences had better QOL scores than the elderly in old age homes.

7. According to the 't' value shows that there was significant difference found in guided Pranayama techniques between practice sessions except in few techniques. In case of home practice there was highly significant difference found with in the experimental groups, but there was no significant difference found between the experimental groups.

8. There was a co-relation found between over all life style and observed Pranayama practice among elderly in E2 (r=-.403). Hence the research hypothesis was accepted with regard to Pranayama and life style in E2.

9. There was significant positive co-relation between over all life style and post PSEI of elderly in E2 (r=.296). It indicated that better the life style and lesser the perceived symptom experiences among the elderly in E2.

10. There was an association found between marital status and life style of elderly in C1 ($\chi^2=4.641$, p<0.05). There was an association found between age and physical health parameters of the elderly in E2 ($\chi^2=4.973$, p<0.05). There was no association found between QOL and selected demographic variables of elderly from four groups. There was an association found between gender and PSEI of the elderly in E2 ($\chi^2=7.936$, p<0.05). There was an association found between educational status and PSEI of the elderly of C2 ($\chi^2=5.352$, p<0.00).

11. The elderly in E1 expressed their opinions regarding Pranayama practice and its benefits on physical and psychological health. Accordingly, the findings showed that 95-100% of the elderly who had various physical and psychological symptoms before Pranayama practice expressed decreased symptoms in the physical and psychological areas after the regular practice of Pranayama. The elderly were satisfied with health related benefits of Pranayama. In E2 similar findings were observed, where 90-100% of the elderly who had various physical and psychological symptoms before Pranayama practice opined that decreased symptoms after the regular practice of Pranayama. It concludes that the elderly, irrespective of their place of living equally benefitted from Pranayama practice.

CONCLUSIONS
• It could be concluded from the study findings that Supervised and regular Pranayama practices had improve elderly persons' life-style, physical health parameters and Quality of Life, and PSEI to certain extent, if not in all aspects.

• Since the elderly were from two different settings the findings indicate that, irrespective of their living situation, the elderly were able to practice Pranayama and improve their life-style, physical health parameters, Quality of life and perceived symptom experiences. As expressed by the elderly from study groups it indicates that they were benefited by the regular practice of Pranayama. According to the observations some of the elderly from both settings were not able to achieve the desired results may be due to, lack of concentration and inner awareness while practicing Pranayama. However majority of them were able to reap the benefits of this Pranayama intervention.

**Implications:** All can equally benefit from Pranayama practice so it should learnt by one and all

**LIST OF REFERENCES**


