

A Pilot Study to Evaluate the Effectiveness of Guided Imagery Technique on Quality Of Life among Hypertensive Patients in Selected Rural Areas in Kodaikanal Taluk, Tamilnadu

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ABSTRACT

This study examined the effect of guided imagery visualization on Quality of Life (QOL) of individuals with hypertensive patients. A randomized control trial, pre and post test group design was selected for this study. Subjects of mini health centers were randomly assigned through simple lottery method thirty samples in each group: the study group received the intervention of guided imagery and the other group control received a usual treatment care. The two groups were pre tested then followed up till 3 months to see if there are any differences between them in outcome. Simple lottery method was used from primary health centers for randomization. Subjects underwent guided imagery visualizations preliminary training program of 1 week through DVD followed by GI audio relaxation. Individual attention had been given to subjects to clarify their doubts. Thereafter 20 to 25 minutes of Guided imagery audio relaxation was given daily for 7 weeks. Study conducted at villages of pannaikadu and Mangalmgombu, Kodaikanal, Tamilnadu. Experts validated the tool of DVD and CD of Guided imagery relaxation and reliability of Standardized tool of WHO BREF 26 items scale reliability was .83. Descriptive and inferential statistics were used for analysis. Results: Pre test mean and standard deviation of control group was 67.9 and 5.9617 and in study group was 68.4 and 6.688. In post test it's observed that mean and standard deviation of study group QOL level was found to be enhanced distinctly in 3 months, mean and standard deviation was 97.43 and 7.7446. Ethical clearance obtained from the study center and from the subjects. Post test t value 16.5108 was found to be significant at $p < 0.05$ level. Conclusion: Studies outcomes suggest after 3 months the guided imagery program significantly improved quality of life of hypertensive patients.

Key words: Effectiveness, Guided imagery, Quality of life, RCT, WHO BREF scale, Rural Hypertensive Patients

INTRODUCTION

Hypertension is closely related to psychological and emotional problems, particularly in severe life stresses. Studies have found that people with hypertension had a poorer quality of life indicator than people without the condition. By establishing a proven link between the disease and health related quality of life

(HRQOL), then developing interventions programs aiming at improving HRQOL will become a new relevant therapeutic objective in hypertensive subjects. ^[1]

An estimated 1.13 billion people worldwide have hypertension, most (two-thirds) living in low- and middle-income countries. In 2015, 1 in 4 men and 1 in 5 women had hypertension. Fewer than 1 in 5

people with hypertension have the problem under control. Hypertension is a major cause of premature death worldwide. One of the global targets for non-communicable diseases is to reduce the prevalence of hypertension by 25% by 2025.

Individuals with hypertension have lower quality of life than normotensive participants, particularly when BP is controlled by drug treatment. Awareness of being sick and adverse events attributed to BP agents may be responsible for this association and not high BP. A systematic review of 20 original contributions identified lower quality of life among hypertensive individuals in most but not all studies. [2]

Studies that could be included in a meta-analysis, and that had HRQoL evaluated by The Short-Form Health Survey (SF)-36 or its reduced version SF-12, identified lower scores among individuals with hypertension or that reported to be hypertensive. Moreover, some aspects on the relationship between high blood pressure (BP) and quality of life are still unsolved. Among them are the influence of awareness of hypertension versus high BP itself, the influence of drug treatment in real conditions of use, the influence of control of BP, and the association with different domains and components of quality of life. The association between hypertension and quality of life, with particular attention to these aspects, was investigated in this population-based study. [3]

Focus on the things that are grateful in life. It's important to deal with these negative feelings, but try to focus on the positive things in life, too. Some research has shown that having a positive outlook can improve the quality of life and give body health a boost. Mental health is the successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and providing the ability to adapt to change and cope with adversity. Mental health and stability is a very important factor in a person's everyday life. Health professionals

will need new approaches to assessment and treatment if the goal is promoting well-being rather than treating illness. [4]

Meditation is a form of guided thought. It can take many forms. To have good emotional health, it's important to take care of body by having a regular routine for eating healthy meals, getting enough sleep, and exercising to relieve pent-up tension. [5]

Guided imagery has a beneficial effect on mood and thereby will tend to improve physical health, mental state and reduce stress level. It is responsible for regulating the biochemical processes and the release of so-called happiness hormones. are endorphins, dopamine and serotonin. Guided imagery is linked to attention control, showed increases in the limbic circuits, which processes emotions, and the anterior insula, which helps bring emotions into conscious awareness. Perspective-taking training boosted regions involved in theory of mind. [6] Guided imagery can help relieve symptoms caused or made worse by stress, such as: chest pain (angina), high blood pressure, high blood glucose, headaches and digestive and breathing problems. Guided imagery is safe, most effective when the person has training in guided imagery technique. Hence the study is taken to see the effectiveness of guided imagery on quality of life among rural hypertensive patients.

OBJECTIVES:

To determine the effectiveness of guided imagery on quality of life among hypertensive patients of selected rural areas in experimental group.

HYPOTHESIS:

There will be a significant difference in pre and post test quality of life among hypertensive patients of selected rural areas in experimental and control group.

MATERIALS AND METHODS

The evaluative research approach was adopted for this study. A pre and post test group design was selected for this study. The randomized control trial (RCT) in which subjects was randomly assigned to

one of two groups thirty samples in each groups: the study group received the intervention of guided imagery that is being tested, and the other group control received a usual treatment care. The two groups were pre tested then followed up till 3 months to see if there are any differences between them in outcome. Simple lottery method was used from primary health centers for randomization. Subjects underwent guided imagery visualizations preliminary training program of 1 week through DVD followed by GI audio relaxation. Individual attention had been given to subjects to clarify their doubts. Thereafter 20 to 25 minutes of Guided imagery audio relaxation was given daily for 7 weeks. Study conducted at

villages of Pannaikadu and Mangalmgombu, Kodaikanal, Tamilnadu. Experts validated the tool of DVD and CD of Guided imagery relaxation and reliability of Standardized tool of WHO BREF 26 items scale reliability was .83. Descriptive and inferential statistics were used for analysis.

Ethical clearance: Ethical clearance was taken from Institutional Ethical Committee Board of Jayaraj Annapackium Christian college of Nursing, Madurai and from Government officer of Pannaikadu government hospital, Written consent of each subject was obtained before the study. Confidentiality was maintained throughout the study.

RESULTS AND DISCUSSION

Table 1 ; Comparison of Mean and Standard deviation of Quality of life in control group and study group

PRETEST		POST TEST- 21 days		t value	
Control Group	Study Group	Control Group	Study Group		
Mean & SD	Mean & SD	Mean & SD	Mean & SD	Pre test	Post test
67.9 5.9617	68.4 6.688	67.8 5.9616	97.43 7.7446	0.3464	16.5108
				P > 0.05 ^{NS}	P < 0.05*

^{NS} Non significant * Significant

Study findings of the QOL mean and standard deviations in between the group are recapitulated in table1. Pre test mean and standard deviation of control group was 67.9 and 5.9617 and in study group was 68.4 and 6.688. In post test it's observed that mean and standard deviation of study group QOL level was found to be enhanced distinctly in 3months, mean and standard

deviation was 97.43 and 7.7446. Whereas in control group QOL level changes were not noted it's found to be same level. In pretest t test (0.3464) was found to be non significant. Whereas in post test t value 16.5108 which was significant at p<0.05 level .It shows that guided imagery is effective to enhance the QOL of patients with hypertension.

TABLE 2; COMPARISON OF GRADING OF STRESS IN CONTROL GROUP AND STUDY GROUP

Aspect	Grading	Control group n=30		Study group n=30	
		F	%	f	%
Pre test	Poor QOL 50%	18	60	14	47
	Fair QOL 50 to 75%	12	40	16	53
	Good QOL Above 75 %	0	0	0	0
Post test 3months	Poor QOL 50%	17	57	0	0
	Fair QOL 50 to 75%	13	43	14	47
	Good QOL Above 75 %	0	0	16	53

Table 2 concluded the comparison of grading of quality of life in control group with study group. In control group pretest 60% of them were rate poor quality of life and 40% of them in control group. While in study group pretest 47% of them rated poor quality life and 53 % in fair QOL. Subjects who underwent guided imagery relaxation

47% found in improved QOL 40% of them enhanced good QOL. This shows guided imagery enhanced study group's quality of life.

Study findings found guided imagery effectively improves the QOL of patients with hypertension.

Study findings are consistent with the findings of this study. It was a randomized controlled trial in which 50 elderly patients with breast or prostate cancer were randomized into study and control groups. Progressive muscle relaxation, guided imagery, and deep diaphragmatic breathing were given to the study group, but not to the control group. The effect of the progressive muscle relaxation, guided imagery and deep diaphragmatic breathing was measured at three different time points. European Organization for Research and Treatment of Cancer and QoL Questionnaire-Core questionnaires was completed before, after and 6 weeks after the intervention for the patients in both groups simultaneously. The data were analyzed by SPSS. Results: There was statistically significant improvement in QoL ($P < 0.001$) and physical functioning ($P < 0.001$) after progressive muscle relaxation, guided imagery and deep diaphragmatic breathing intervention.^[7] Conclusions: The findings indicated that concurrent application of progressive muscle relaxation, guided imagery, and deep diaphragmatic breathing would improve QoL in the elderly with breast or prostate cancer.

CONCLUSION

Nurses actively engage patients in care using a combination of strategies to prevent, recognize, and respond to adherence problems and thereby maximize long-term adherence and BP control^[8] The ultimate goal is for the hypertensive patient to have the necessary skills and resources, including knowledge, to follow treatment recommendations, positive emotional health and sustain BP control. Guided imagery

interactively used in *Community-based settings to help hypertensive patients relax by means of mental images to realize and promote positive healing intention to improve their Quality of life.* Studies outcomes suggest the imagery program significantly improved quality of life.

REFERENCES

1. Xianglong Xu, Yunshuang Rao, Zumin Shi, Lingli Liu et.al. Hypertension Impact on Health-Related Quality of Life: A Cross-Sectional Survey among Middle-Aged Adults in Chongqing, China, International Journal of Hypertension. Volume 2016, Article ID 7404957, 7 pages
2. Trevisol DJ, Moreira LB, Kerkhoff A, Fuchs SC, Fuchs FD . Health-related quality of life and hypertension: a systematic review and meta-analysis of observational studies. *J Hypertens* 2011; 29: 179–188.
3. Fayers P. Quality of life. Assessment, Analysis and Interpretation, 2nd edn. John Wiley & Sons: Chichester, England, 2000.
4. "Mental Health". *medlineplus.gov*. Retrieved 2019-11-20
5. Mind/Body Connection: How Your Emotions Affect Your Health (American Academy of Family Physicians)
6. <https://www.newscientist.com/article/21494-89-different-meditation-types-train-distinct-parts-of-your-brain/#ixzz66iJBa7em>
7. Shahriari M, Dehghan M, Pahlavanzadeh S, Hazini A. Effects of progressive muscle relaxation, guided imagery and deep diaphragmatic breathing on quality of life in elderly with breast or prostate cancer. *J Edu Health Promot* 2017;6:1
8. F.H. Gwady-Sridhar, E. Manias, L. Lal, et al. Impact of interventions on medication adherence and blood pressure control in patients with essential hypertension: a systematic review by the ISPOR medication adherence and persistence special interest group *Value Health*, 16 (2013), pp. 863-871

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