

Effect of Mind – Body program on Chronic Low Back Pain

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ABSTRACT :Chronic back pain is one of the most expensive medical problems facing the industrialized world today. It confronts the physician with the challenge of treating without a clear diagnosis. The incidence of chronic back pain may correlate more closely with psychosocial factors than structural abnormalities. Chronic pain and poor treatment outcomes may correlate with somatization. An Evaluatory study was conducted to assess the effectiveness of complementary medicine like mind-body program in chronic low back pain clients from the community. The calculated Wilcoxon sign rank test value (Z = 4.786 at the degree of freedom (DF) 30 with the level of significance P = 0.0001)stated Mind Body Program was effective in reducing the chronic low back pain among elderly residents of a selected community.

Keywords: *Mind Body Programme, Chronic low back pain, Elderly residents.*

Introduction:

Chronic low back pain (CLBP) is one of the most common, poorly understood, and potentially disabling chronic pain conditions from which older adults suffer. A U. S. national survey of physician visits among patients aged 75 and older revealed that back pain is the third most frequently reported symptom in general and the most commonly reported musculoskeletal symptom. In another study, 17.3% of total back problem visits occurred in the 65 years and older age group. Thus in this study the investigator assesses the effectiveness of a complementary medicine that is mind-body program on chronic low back pain among elderly residents. This study would help to reduce expenditure on medical services and avoid the

use of over the counter drugs to alleviate chronic low back pain.

Problem Statement

An evaluatory study to assess the effectiveness of Mind – Body Program on chronic low back pain among elderly residents from a selected community of the Metropolitan city.

Objectives:-

- To assess the level of chronic low back pain before and after intervention of Mind -Body Program among elderly residents.
- To compare the level of chronic low back pain before and after intervention of Mind – Body Program among elderly residents
- To associate level of chronic low back pain with selected demographic variables.

Hypothesis

H1: There is a significant effect of mind-body program on reduction in the level of chronic

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low back pain among elderly residents from a selected community of the Metropolitan city.

Research Methodology:

A evaluatory approach was used in this study with a single group pre test and post test design. This study was conducted for a total sample of 30 elderly residents of a selected community. A Non Probability Convenient Sampling technique was used in this study. The investigator used the technique of self reporting interview by administering a structured questionnaire, Aberdeens's standardized tool for low back pain and opinionnaire to collect the data for the study. Aberdeen's standardized tool was used to assess the level of chronic low back pain. It contains of 19 items which includes: analgesia use, aggravating factors, distribution of symptoms and the effect of pain on physical functionality. The validity of the tool was obtained by giving it to the experts in various fields. A Mind body Program was developed by the investigator based on the review of literature and guidance from experts in the field and nurses. mind – body program refers to mindfulness meditation with spine erect in a relaxed sitting position wherein the chronic low back pain is acknowledged and observed non judgmentally to gain insight and awareness in order to reduce the low back pain. The Mind Body Program was scheduled for 30 minutes for 15 days. Subjects having mild, moderate or severe low back pain, whose cause was mechanical in nature for minimum 6 months according to Aberdeen's low back pain scale were included in the study.

Results And Discussions

66.7% of the subjects belonging to age group 60-70 years had chronic low back pain. It was seen that 80.0% of females suffered with chronic low back pain compared to 20.0% of

Males. Majority of subjects (60.0%) were Widow or Widower. 76.7% of subjects were unemployed, while 80.0% subjects with sedentary lifestyle suffered with chronic low back pain . It was seen that 50.0% of subjects with 25-30 Kg/ m² Body mass index suffered with chronic low back pain. Also 43.3% of subject had pain for more than 2 year. Majority of subjects (23.3%) had Spondylolisthesis followed by 13.3% of the subjects with other findings, Lumbar Spondylosis and Spinal Stenosis each.6.7% subjects had Disc Space reduction followed by 3.3% subjects with Scoliosis.

There was a significant change in the pre test and post test Aberdeen's score. i.e. in the pre test 24 subjects were having moderate pain while in the post test 22 subjects had mild pain. The mean level of chronic low back pain was 31.83 at pre test and at post test, mean level of chronic low back pain decreased significantly by 64.8% from pre test. The calculated Wilcoxon sign rank test values was $Z = 4.786$ at the degree of freedom (DF) 30 with the level of significance $P = 0.0001$. Thus H1 is accepted stating that Mind Body Program was found effective in reducing the chronic low back pain among elderly residents of a selected community. At the post test, the mean level of chronic low back pain showed significant decreased of 66.4%from the pre test in the age group 60-70 years and 65.4 % in female.

Table no1.

Comparison Of The Pre-Test And The Post-Test Scores

Sr. No	Score	Pre-Test		Post-Test	
		No.(f)	%	No.(f)	%
1	No pain	-	-	04	13.3

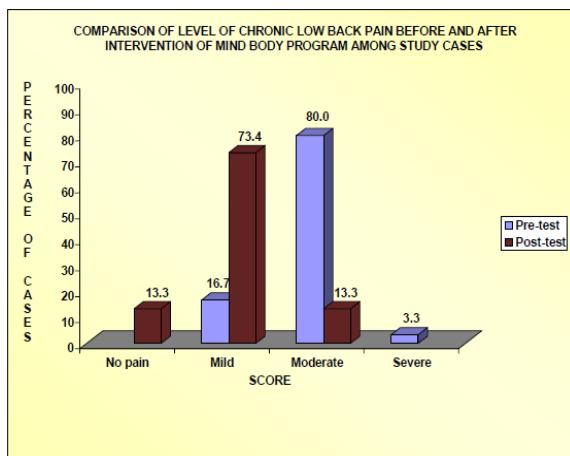
2	Mild	05	16.7	22	73.4
3	Moderate	*24	80.0	04	13.3
4	Severe	01	03.3	-	-

By Chi – Square Test $\chi^2 = 26.78$,

P = 0.000

*Significant

Fig No 1



The data analysis at the post test showed 65.0% reduction in the mean level of chronic low back pain from the pre test of the married subjects. The decrease in the mean level of chronic low back pain at the post test was more in the employed subjects than in unemployed subjects. Subjects with sedentary lifestyle at the post test had decrease of 65.0% in the mean level of chronic low back pain from the pre test. There was significant decrease of 50.6 % and 65.3% in the mean level of chronic low back pain among subjects with body mass index above 30 kg/m^2 and other health habits respectively. Subjects with pain duration of >1 year – 2 year had a higher significant decrease in the mean level of chronic low back pain from the pre test at the post test as compared to subjects with 6 months -1 year and more than 2 years of pain. The maximum decrease in the mean level of chronic low back pain from the pre test was seen in subjects with Disc space reduction.

Interpretation

Mind Body program was found to be effective in reducing the chronic low back pain among elderly residents of a selected community. The study reveals that there was a significant association between level of chronic low back pain and selected demographic variables.

Conclusion

The research study was conducted with the purpose of implementing the Mind Body Program, to reduce the chronic low back pain among elderly residing in a community. The findings suggested that there was a significant reduction in the chronic low back pain among the elderly residents after the intervention and there was a significant association between chronic low back pain and selected demographic variables.

References

- Miller C.A. Nursing for wellness in Older adults: Theory and Practise.4th edition. Newyork .Lippincott Williams and Wilkins ; 2004
- Dr Daizy K. Ekka D.P. Socio-economic Status Of Elderly People In India. International Referred Research Journal ISSN-0974-2832. April 2010. VOL. II
- Prasad.S.Deprivation and vulnerability among elderly in India. July 2011. Available from : <http://www.igidr.ac.in/pdf/publication/WP-2011-013.pdf>
- Hartvigsen J, Christensen K, Frederiksen H. Back pain remains a common symptom in old age. A population-based study of 4486 Danish twins aged 70–102. Eur Spine J. 2003;12:528–534
- Austrian J.S., Kerns R.D., Reid M.C.: Perceived barriers to trying self-management approaches for chronic pain in older persons. Journal of the American Geriatrics Society 53. (5):856-861.2005;
- A Mind-Body Treatment Program for Chronic Back Pain alternative therapies, Sep/Oct 2007, vol. 13. no.5