

## Effect of rhythmical activity program on cognition & quality of life among older adults: randomised control trial

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### Abstract

**Background:** Rhythm and auditory stimuli used in rhythmic movement program influences the movement system by stimulating the sense of rhythm through certain auditory stimuli using music this induces activation of various brain areas by synchronizing the motor and perceptual region on same time.

**Objectives:** The objective of this study was to examine performance of older adults in Cognition and Quality of life through Montreal Cognitive Assessment (MoCA) and World Health Organization Quality of Life (WHOQOL) respectively.

**Study Design:** Randomised control trial

**Methods:** Total 40 elderly fulfilling the inclusion criteria which mainly include age group between (60-75 years) with mild cognitive impairment are enrolled for the study. These subjects were randomly allocated between the experimental and control group using computer generated random number. MOCA and WHOQOL were used as outcome measure. The experimental group were given an intervention of rhythmical activities and the control group have to do daily 20 mins walk and 10 mins breathing exercises for 30 days.

**Results:** The elderlies in experimental group showed more improvement in cognition and quality of life than controlled group significantly ( $p < .001$ ) from the mean of  $18.80 \pm 1.322$  to  $27.50 \pm 1.504$  in MOCA, where as in sub domain1 of WHOQOL score of the experimental group improved significantly ( $p < .001$ ) from the mean of  $33.95 \pm 8.900$  to  $78.05 \pm 9.434$ , sub domain2 of WHOQOL score of the experimental group improved significantly ( $p < .001$ ) from the mean of  $54.30 \pm 10.584$  to  $79.85 \pm 7.184$ , sub domain3 of WHOQOL score of the experimental group improved significantly ( $p < .001$ ) from the mean of  $12.20 \pm 6.534$  to  $19.30 \pm 4.985$ , sub domain4 of WHOQOL score of the experimental group improved significantly ( $p < .001$ ) from the mean of  $50.25 \pm 15.814$  to  $58.30 \pm 12.938$ .

**Conclusion:** The rhythmical activities have a great impact on cognition as well as the quality of life of older adults. This implicate that in clinical practice, to promote geriatric care with healthy and active ageing the occupational therapy intervention comprising rhythmical activity should be incorporated.

**Keywords:** Cognition, Quality of life, Elderly, Healthy aging, Rhythmical activities, Rhythmic movement

### Biography:

Akshay Kumar Joshi is an occupational Therapist. He done his master's in occupational therapist (Neurosciences). He is worked at Max super speciality hospital vaishali, Uttar Pradesh, India as an occupational therapist and worked with cancer survivors. He is currently working in a research project on Stroke of (Indian Council of Medical Research) ICMR Under Dr Kamal Narayan Arya.

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