

# Effectiveness of Dance and Movement Therapy (DMT) and Progressive Muscle Relaxation (PMR) on Depression and Quality of Life (QOL) among elderly: A Systematic Review

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## ABSTRACT

**Background:** Physical as well as psychological interventions such as dance and movement therapy and progressive muscle relaxation may reduce depressive symptoms both in healthy aged populations and in elderly, but few specific analysis were conducted on the efficacy of dance and movement therapy and progressive muscle relaxation as an adjunctive treatment which may be probably more useful in clinical practice, considered the high prevalence of treatment resistant depression, the low cost and safety of physical activity interventions. With this background, systematic literature search and Meta- Analysis was carried out.

**Objective:** To establish the new findings on the effectiveness of dance and movement therapy and progressive muscle relaxation on depression and quality of life among elderly, with particular focus on the efficacy of the dance and movement therapy and progressive muscle relaxation as an adjunctive treatment.

**Methodology:** The search of significant articles was carried out in Pub Med/Medline, SCOPUS, CINAHL, PsycINFO, Embase, Elsevier and Google Scholar with the following key words: “depression”, “quality of life”, “dance and movement therapy”, “progressive muscle relaxation”. Systematically searched for studies including depression and quality of life among elderly of age 60 years and above.

**Inclusion criteria:** The included studies were evaluated according to predefined quality criteria.

**Exclusion criteria:** the study excludes the studies those discussed about the other method to deal with depression and quality of life among elderly.

**Results:** 35 papers were retrieved by the search. Among the 26 were evaluated to be of higher quality. Studies recruiting samples of elderly with a mild depressive disorder, moderate or severe cognitive impairment or those who were dependent on care were insufficient.

**Conclusion:** Depression has also been shown to be associated with various psychosocial factors, lifestyle and dietary factors, and presence of chronic physical illness. There are very few therapeutic interventions. The efficacy of dance and movement therapy and progressive muscle relaxation on depression and quality of life among elderly, due to persistent lack of high quality research, in part to clinical issues of management of depression to establish effectiveness of exercise on depressive symptoms.

**Key Words:** Elderly, Depression, Quality of Life, Dance and Movement Therapy, Progressive Muscle Relaxation

## INTRODUCTION

Depression is a situation where a person feels enormously sad, distressed and

hopeless with little to no energy for normal physical or mental activities. It is

accompanied by a feeling of loss of guilt and lowering of self-esteem. [1]

The aim of the study was to find out the debilitating factors causing the increase in the prevalence of depression and poor quality of life and the effects of dance and movement therapy and progressive muscle relaxation. [2]

However, there is lack of data on symptom profile and limited data is available on various therapeutic interventions for the management of depression among elderly. [2]

Based on the research evidences the researcher has done the systematic review and meta-analysis study on depression and quality of life among elderly and the effects of physical exercise. The review of literature was arranged under two sections.

## MATERIALS AND METHODS

Relevant articles based on the topic of depression, quality of life and the effects of dance and movement therapy on elderly were identified by search of significant articles Pub Med/Medline, SCOPUS, CINAHL, PsycINFO, Embase, Elsevier and Google Scholar with the following key words: “depression”, “quality of life”, “dance and movement therapy”, “progressive muscle relaxation”.

### INCLUSION:

The included studies were evaluated according to predefined quality criteria. Data not pertaining to depression and quality of life were excluded. Information from these 26 studies was extracted.

### EXCLUSION:

The study excludes the studies those discussed about the other method to deal with depression and quality of life among elderly.

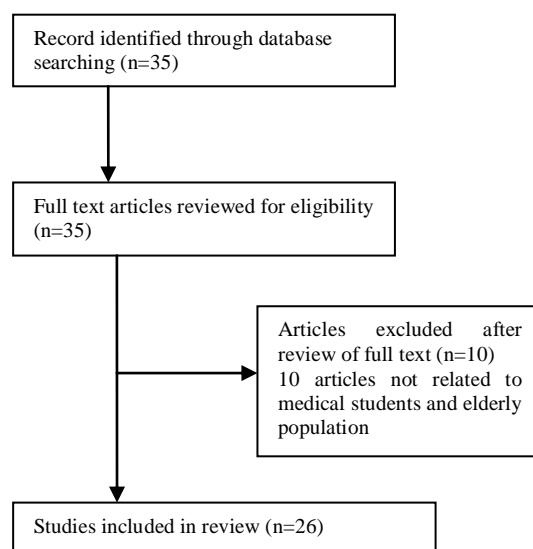


Figure1: A flow chart for the 26 articles retrieved and reviewed for this research strategy in the depression and quality of life

## Literature related to depression and quality of life among elderly

All of the articles based on depression and quality of life among elderly were checked based on the inclusion and exclusion criteria. Depression is most prevalent global health problem among every individual. It affects mainly age group of 60-80 years. Each study was reviewed by independent researchers and any case of disagreement was sorted. Result revealed that depression and QOL was clearly describes in sixteen studies, which fulfilled inclusion criteria. There were eleven (68.75%) cross sectional studies that shows depression level is common among elderly population that also affects the quality of life among elderly [4-12] one of retrospective studies (6.25%) that shows the prevalence of depressive disorder which shows 21.9% Indian population is suffering from depressive disorder, [12] two were descriptive studies (12.5%) which shows that depression is more prevalent among elderly aged 60 years and above and most of elderly were having fair quality of life and poor quality of life [13] along with one systematic review and one is pilot study (6.25%) [14] that showed maximum number of elderly were having mild to moderate level of depression whereas very few elderly were having severe depression, and there

are majority of elderly were having poor quality of life among elderly. It has been considered that prevalence of depression is more among females as compared to males. It is also seen that elderly residing in old age homes are more prone to depression and poorer quality of life than those staying in day care centres.

### **Literature related to Dance and movement therapy and Progressive muscle relaxation on depression and quality of life.**

There are very few studies that are carried out to find out the effects of dance and movement therapy and progressive muscle relaxation in developing countries like India. But in developed countries these therapies have been regularly used in clinical. So based on this there are few study which had showed the effect of therapies is been discussed. Our literature search yielded nine studies about dance and movement therapy and progressive muscle relaxation on depression and quality of life among elderly. Each study was reviewed by independent researchers. Result revealed that effects of dance and movement therapy and progressive muscle relaxation on depression and QOL was clearly describes in ten studies, which fulfilled inclusion criteria. There were three (30%) quasi experimental studies [16-17] one prospective study (10%), [19] two were randomized controlled trial (20%), [19] two were systematic- meta analysis study (20%), [20] two were experimental study (20%), [22,23] These articles reviewed that dance and movement therapy and progressive muscle relaxation is effective in reduction of depression level and improves the quality of life among elderly.

Based on the above research evidences it has been identified that Dance and movement therapy and progressive muscle relaxation is a cost effective and efficient procedure that is performed to reduce depression and improving quality of life. Dance and movement therapy is also beneficial in reducing anxiety, depression, and thus helping in improvement of quality

of life and cognitive functions of the every individual.

### **SAMPLE REVIEW:**

A cross-sectional study was conducted on depression among elderly in old age home of Briddashram living in Devghat area Nepal. Total 185 subjects were taken for the study by convenient sampling of those aged 60 years and above and the data was collected by Geriatric Depression Scale (GDS) by face to face interview method. Thus the result of the study showed that Mean age of the subjects was 73.67 years old, S.D is ( $\pm 3.23$ ) and 51% were male and maximum number (94%) elderly belong to Khas ethnicity. Whereas nearly one third (31%) elderly were from nuclear family back ground, 25% were married, and only 18% elderly were literate. Maximum number of the elderly (93%) had health problems and self reported health shows 86% elderly reported their health fair. The study shows mean functional disability score was 2.53 ( $\pm 2.05$ ) thus prevalence of depression was 57.8% in elderly. Out of which 46.7% had mild, 8.9% had moderate and 2.2% had severe depression. Study also concluded that elderly living in Briddashram are suffering from depression. So it is necessary for concerned authority for their interruption so that depression can be reduced and quality of life can be improved among elderly. [24]

A randomized control trial study was conducted to evaluate the effects of dance on depressive symptoms in institutionalized older adults aged 60 years and above in nursing homes of 7 NHs in the Czech Republic. Total of 1278 eligible individuals were included in the study with the help of probability sampling technique. The data was collected by using GDS scale to assess the depression among elderly and MMSE for cognitive disability. The results showed comparison of participants with MMSE of 15 or higher showed that GDS scores in the intervention group significantly improved ( $P = 0.00$ ), whereas the control group had a trend of further worsening of depressive symptoms ( $P =$

0.08). So the study concluded that dance based exercise can reduce the amount of depressive symptoms in nursing home residents as this form of dance seems to be very suitable and beneficial for this population. <sup>[25]</sup>

## CONCLUSION

Depression is most prevalent global health problem among every individual. It affects mainly age group of 60-80 years. It has been considered that prevalence of depression is more among females as compared to males. Dance and movement therapy is also beneficial in reducing anxiety, depression, and thus helping in improvement of quality of life and cognitive functions of the every individual.

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