



Review Paper

Beneficial Effect of Flexibility Exercise and Physical Activity on Cognitive Function of Older Adults: An Overview

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Abstract

Now a days neuro psychological disorder of older adults is common problem in the world and also it is increasing medical costs. Most of the aged person facing various mental diseases. World wise over 20% aged people facing neurological disorder. cognitive function seems to benefit from a healthy lifestyle, most importantly from regular physical activity. The aim of this project was to review the scientific literature o flexibility exercise and physical activity and its effect on cognitive function of older adults. According to methodological quality in the basis of criteria reviewer evaluated the studies. The five criteria are (i) Age 50 to 90 years (ii) Flexibility exercise/ stretching Exercise (iii) subject men and women (iv) Physical Exercise (v) Cognitive function. Executive function can improve by the flexibility Exercise, stretching exercise and various physical activities of older adults when mental function started decline.

Keywords: Beneficial, Flexibility Exercise, Physical Activity, Cognitive Function, Older Adults.

Introduction

Now a days neuro psychological disorder of older adults is common problem in the world and also it is increasing medical costs. Most of the aged person facing various mental diseases. World wise over 20% aged people facing neurological disorder. The common neuro Psychological disorder facing older people are dementia and depression. It is estimated that 47.5 million people in the world are living with dementia. The total number of people with dementia will be increase up to 75.6 million in 2030 and 135.5 million in 2050, majority of low- and middle-income countries.

The percentage of anxiety disorder of older people 3.8% worldwide. Chronic pain, mental problem, physical problem is creating stress and after retirement from the socioeconomic status ageing comes quickly. The physical health as well as mental health of older adults rapidly declined around the world. In medical science in the past few years have remarkably developed life expectancy but have also heralded a broad set of challenges that accompany an aging population. Age-related cognitive decline producing psychological, social, and economic consequences both individual and population level. Age-related neuro cognitive-decline should not be seen as fixed or immutable. Rather, cognitive function seems to benefit from a healthy lifestyle, most importantly from regular physical activity.

It is observed that a well balance and healthy life style, exercise or physical activity helps individuals up to a great extent that is if an individual exercise regularly than he/ she can keep fit for

longer time and delay the onset of aging as behaviors there by tan slow the decaying process of older age. Delaying the process of ageing and to maintain a lifelong fitness, it is necessary for every individual to do physical activity do regular basic.

Methodology

Search Strategy: Pub Med, Google related data based papers examined by using randomized trials teams used cognition or memory and physical activity or exercise, mild cognitive impairment or flexibility training or stretching or flexibility review or flexibility elderly. The search was performed I march 2015 to October 2015. Most of the previous review papers were very carefully examined.

Inclusion Criteria: For selection of the papers the reviewers made some inclusion criteria: Flexibility exercise, stretching, physical exercise and cognition of older adults.

Methodological Quality: According to methodological quality in the basis of criteria reviewer evaluated the studies. The five criteria are (i) Age 50 to 90 years (ii) Flexibility exercise/ stretching Exercise (iii) subject men and women (iv) Physical Exercise (v) Cognitive function.

Results and Discussion

Results: Identification and selection of studies:

In the following RCT research study was presented for ready reference in Table –1.

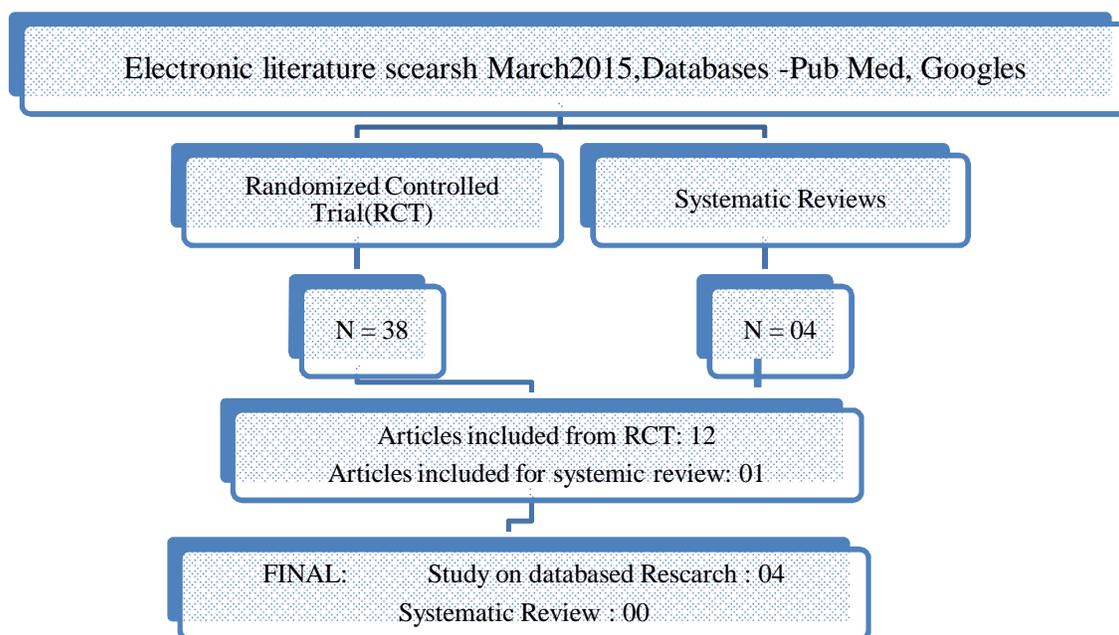


Table-1
Randomized control trail study

References No.	Participants	Interventions	Outcomes
1	Sedentary adults age 70 to 89. Inclusion Criteria: Community-living sedentary older peoples those were disable but can walk 400 mt. Exclusion Criteria: Those were not Community-living sedentary older peoples or disable or disable but not to walk 400 mt.	24 Months physical activity program. There was two groups. i. Physical activity program group using moderate Intensity (N = 818) inflexibility Exercise group (N = 817)	24 month moderate – intensity physical activity program compared with a flexibility exercise did not improve in specific cognitive function of sedentary older adult peoples.
2	Older adult Peoples mean age 66.4 years Inclusion Criteria: Older adult peoples(Community-dwelling). Exclusion Criteria: Those are not older adult peoples.	Total number of subjects 179, Participated in walking, Flexibility exercise, toning and balance group for one year report was measured at six months and one year	Subject memory impairment (SIM) remain stable across the intervention and not significantly impacted by participation in exercise training.
3	Middle aged individual, mean age 53.7 yr. Inclusion Criteria: Healthy middle age individual. Exclusion Criteria: not healthy middle age individual	22 healthy subjects (i) High intensity interval training session, 101min cycling bouts (intensity 80%) (ii) A control session (active stretching exercise).	Interval training session can improve cognitive function (high intensity).
4	Healthy older adult peoples. Inclusion Criteria: Healthy older adult peoples. Exclusion Criteria: Those who are not older adult people.	Total subject 64 healthy subjects using short term combination exercise training (aerobic, strength and stretching exercise training) total twelve work out days out of four weeks, each weeks three days.	Short term combination exercise training improving cognitive functions of healthy older peoples.

Discussions: Total 1987 older adults age 53 to 89 years were studied. Researcher observed that flexibility exercise, stretching and other physical exercise or activity have the relation with executive function. Analyses showed that there is a relationship between flexibility exercise, stretching exercise, and other physical activity. Neuro cognitive performance appeared to be strongest in the direction from executive function to flexibility exercise, other physical activity. Study suggested that executive abilities may have positive effects on flexibility exercise, stretching exercise, other physical activity in older people. The present researcher found that the relationship between flexibility exercise, stretching exercise, other physical activity and cognitive function. This study strengthens and extends existing evidence demonstrating that flexibility exercise, stretching exercise, other physical activity can delay the aging process on cognitive decline, particularly in relation to the executive function.

Conclusion

Cognitive function may improve by the flexibility exercise, stretching exercise and various physical activity of older adults when mental function start decline.

References

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