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ORIGINAL RESEARCH

A Clinical Study on the Impact of Exercise on Psychological Well-being and Quality of Life Among the Elderly Population in India

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ABSTRACT

Introduction: The elderly are more inclined to encountering different unfriendly occasions. Therefore, physical, social, monetary prosperity issues have a tendency to be interrelated to a substantially more noteworthy degree than among other age group. The aim of the present study was to determine the effect of exercise on HQL of older. **Materials and Methods:** It included 70 subjects. All were informed regarding the study and written consent was obtained. Patients with neurological disorder, hypertension, congestive heart failure, unstable chronic illness (diabetes mellitus, malignancies), severe musculo-skeletal impairment were excluded from the study. They were divided into 2 groups. Group I consisted of 35 subjects (exercise group) and group II control (no exercise) group had 35 subjects. The test group was involved in a 10 weeks aerobic exercise program. **Results:** The difference was non- significant. Group I and group II had 17 males and 17 females each. In group I, 8 were employees and 9 non worker, in group II 9 were employees and 8 non worker. 4 in group I and 2 in group 2 had education up to primary school while 7 in group I and 3 in group II had upto high school education. **Conclusion:** The aerobic activity condition (walking) appeared to benefit slightly more than the strengthening and flexibility condition, however maintenance in both conditions is promising.

Keywords: Exercise, Walking, Elderly, Hypertention

INTRODUCTION

global quality of life (QOL) is an overall, affective judgment of one's satisfaction with life compared to health-related quality of life (HRQOL), which assesses physical and mental health status.[1] Given the connection between these constructs and traditional medical health outcomes such as morbidity, clinicians regularly use global QOL and HRQOL status to gain a more complete understanding of the process of disease and general care in older adults.[1] Physical activity is a behavioral modality associated with reduced disease risk and enhanced physical function and quality of life in older adults. Reviews of the physical activity and QOL literature are quite consistent in their conclusions that being more active is associated with greater global QOL,[1,2] although these conclusions have their foundation largely in cross-sectional and observational studies. The evidence from randomized controlled trials is both limited and equivocal.[2,3]

In the following years, the number of individuals over years old will twofold, raising the issue of finding doable means for their autonomous living. Indeed, the maturing populaces are the individuals who need particular consolation to participate in physical action. Exercise and physical movement have been recommended as compelling intends to look after free living in seniority. Wellbeing related quality is characterized as ideal levels of physical, mental, part, social working including word related and life parts, connections, what's more, individual view of wellbeing, wellness, life fulfillment and prosperity.[4]The elderly are more inclined to encountering different unfriendly occasions.

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Therefore, physical, social, monetary prosperity issues have a tendency to be interrelated to a substantially more noteworthy degree than among other age group. Exercise can enhance and keep up wellbeing nature of life (HQL) and expanding the HQL is one of the essential objectives for wellbeing change in more seasoned people.[5] Different methods of activity have been offered to move forward physical capacities and HQL in more seasoned grown-ups. The objective of practice for more seasoned grown-ups is to build their save limits also, along these lines keep up the capacity to perform every day exercises. As HQL is identified with body work and structure, movement and cooperation, practice programs may prompt critical change in quality, continuance and body mechanics in more seasoned grown-ups.[6]

A recent study assessing physical activity and HRQOL in older adults reported a positive dose-response relationship with HRQOL outcomes improving with increasing levels of physical activity. [7]However, a recent meta-analysis examined exercise intervention effects on HRQOL, as measured by the Short-Form (SF)-36,[8] in community-dwelling older adults[9] and found differing results. The authors concluded that exercise had a significant effect only on physical functioning but little effect on other components of HRQOL. All 11 studies included in the meta- analysis compared either supervised or non-supervised exercise with a no-contact usual care control condition. Additionally, the longest intervention was 6 months with the majority lasting 3 months or less. Moreover, few interventions compared different types of exercise intervention (aerobic vs. anaerobic) in terms of improving HRQOL.The aim of the present study was to determine the effect of exercise on HQL of older.

MATERIALS AND METHODS

This study was conducted in the department of Psychiatry. It included 70 subjects. All were informed regarding the study and written consent was obtained. Patients with neurological disorder, hypertension, congestive heart failure, unstable chronic illness (diabetes mellitus, malignancies), severemusculo-skeletal impairment were excluded from the study. They were divided into 2 groups. Group I consisted of 35 subjects (exercise group) and group II control (no exercise) group had 35 subjects. The test group was involved in a 10 weeks aerobic exercise program. The exercises included a 10 minutes warm-up, a 15 minutes walking, and a 5 minutes cool-down period. The exercises were for 3 times/ week at the rehabilitation unit. No exercise program was prescribed for the control group. Both groups were assessed before and after the exercise program. The questionnaire was used for both groups. The questionnaire included the LEIPAD questionnaire for measuring HQL at week 0 and 1.It had 31 items used to measure seven main HQL dimensions or domains. Each item was scored from 0 (the worst condition) to highest (the best condition). The physical function dimension, scores ranging (0-15) the self-care dimension, scores ranging 0- 15, the depression and anxiety domain, scores ranging 0- 12; the cognitive functioning domain, scores ranging 0-15; the social functioning domain, scores ranging 0-9, the sexual functioning domain, scores ranging 0-6 and the life satisfaction domain, scores ranging 0-18. Results were tabulated and analyzed. P value less than 0.05 was considered significant.

RESULTS

Table I shows that group I and II had 35 patients each. The difference was non- significant. Group I and group II had 17 males and 17 females each. In group I, 8 were employees and 9 non worker, in group II 9 were employees and 8 non worker. 4 in group I and 2 in group 2 had education upto primary school while 7 in group I and 3 in group II had upto high school education. Table II shows that after intervention (exercise), the overall level of HQL, measured by seven domains of the LEIPAD questionnaire, showed statistically significant improvement in the LEIPAD score in the group I. In contrast, the level of HQL did not change and neither of scores obtained by the LEIPAD was significant so that no improvement in the LEIPAD score was found in the group I. The results clearly indicate that an exercise program has a positive effect on HQL in older adults.

Group 1	Group II	P Value
35	35	0.03

Table 2- LEIPAD questionnaire for measuring HQL

	Group I		Group II		P Value
	Pre	Post	Pre	Post	
Physical function	4.3	6.4	6.2	5.4	0.05
Anxiety	5.2	6.2	4.1	4.4	0.09
Cognitive function	3.6	5.5	2.4	4.2	0.03
Sexual function	2.8	7.8	5.6	2.6	0.05
Social function	4.9	5.3	6.8	5.8	0.04
Life satisfaction	2.2	3.4	2.9	3.9	0.03

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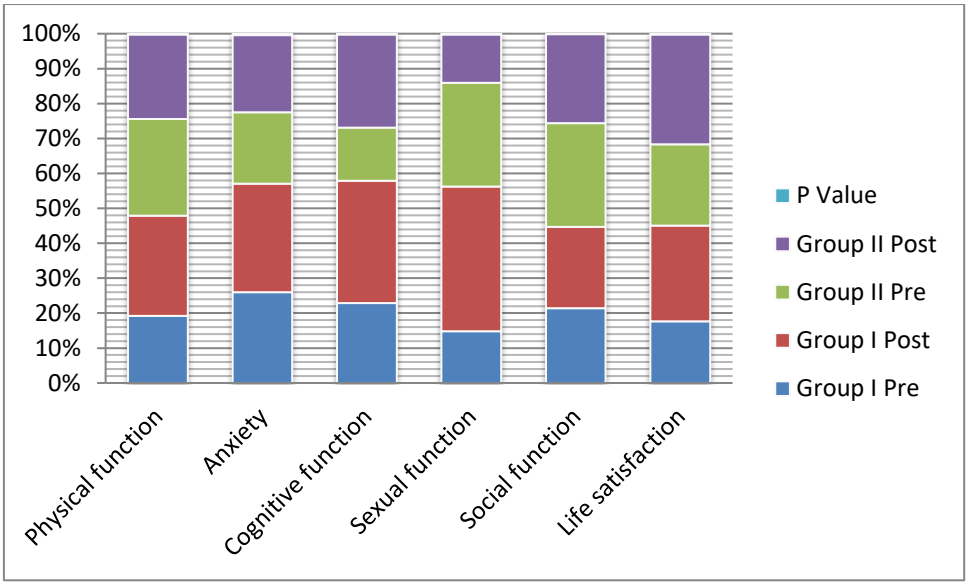

Figure 1:questionnaire for measuring HQL

DISCUSSION

Anecdotal reports from community activity programs and interview responses from a sub-sample of women in a larger study on activity and falls suggest that women cite psychological values, such as maintaining cognitive function, social relations and mood, as reasons for participating. Recent research by Segar et al. confirms that middle-age women are more motivated and likely to stay with activity with a focus on social psychological needs. The aim of the present study was to determine the effect of exercise on HQL of older.[10]In this study we included 68 subjects which were divided into 2 groups. Group I was test group and group II was control. Each group had 34 subjects (17- males and 17- females). We found that in group I, 8 were employees and 9 non worker, in group II 9 were employees and 8 non worker. 4 in group I and 2 in group 2 had education upto primary school while 7 in group I and 3 in group II had upto high school education. This is in accordance to Rubersteinet al.[11] We found that test group after exercise showed more improvement in form of LEIPAD score as compared to control group. The results of our study are in agreement with Diego et al.[12] Numerous more established individuals are hesitant to take part in the activity programs as a result of medicinal snags for example, weakness, damage and transportation issues. For grown-ups, there is significant proof archiving the medical advantages related with physical movement. Physical action enhances wellbeing not withstanding for incessantly sick or delicate more established grown-ups.[13]

Many older people are reluctant to participate in the exercise programs because of medical obstacles such as poor health, fear of injury and transportation problems. For adults, there is substantial evidence documenting the health-benefits associated with physical activity. Physical activity improves health even for chronically ill or frail older adults. Indeed, exercise is a tool to help older adults to overcome their disabilities and improve all aspects of HQL particularly to maintain their health conditions and perform activities of daily living. Meta-analytic reviews have proven that exercise is associated with a variety of health improvements such as decreased risk of coronary heart disease and stroke, improved cognition in sedentary older adults, a modest benefit in HQL for frail or older adults, and a positive association with successful aging.

CONCLUSION

Physical activity in form of exercise improves the quality of life in older individuals. Exercise has additional effect in reducing depression and anxiety.The aerobic activity condition (walking) appeared to benefit slightly more than the strengthening and flexibility condition, however maintenance in both conditions is promising. In addition, exploratory analyses uncovered differential patterns of change in global QOL and HRQOL trajectories across the trial. Our findings are in contrast to previous reports that these outcomes change a little or not at all in randomized trials.

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