

Effectiveness of Selected Intervention for Senior Citizens Suffering from Osteoarthritis at Selected Old Age Homes in Lucknow, Uttar Pradesh

Dr. Sherin P. K., Principal,

Shri K. L. Shastri Smarak Nursing College, Mubarakpur, Mutkkipur, Uttar Pradesh

Introduction:

As people age, they will unavoidably enter a phase of decline. This decline is unavoidable, but there are things we can do to shorten its duration. Successful aging means maintaining both physical and mental capacities as long as possible. According to UNESCO's latest demographic projection, the number of seniors would increase by about 600 million people by 2025. Of the whole population, about 8% are 60 years old. In fact, the percentage of people above the age of sixty-five is steadily increasing. Approximately 5.3% of males and 4.8% of females in India are aged 65 and beyond. There is no cure for becoming older, no matter how hard you try. They can complete most of their daily living (ADL) tasks with the help of the health providers' assistance. Joint discomfort and diminished mobility are the greatest impediments for elderly people when they attempt to perform ADLs. Widespread osteoarthritis is one of the most prevalent joint diseases found in older adults, and it is a significant source of impairment in India.

Methodology:

A quasi-experimental study was performed on elderly individuals with osteoarthritis in order to examine the efficacy of isometric exercise in the elderly. We collected data from 100 people. Prior to introducing isometric exercise, a self-structured questionnaire was utilized to determine older adults' functional abilities. Only the elderly people in the experimental group participated in the exercise regimen.

Statistical Analysis:

According to the statistical analysis, the experimental group obtained a higher score after the post-test than the control group. When the pre-test value was compared to the post-test value, the

experimental group had a gain in functional ability, but the control group did not. A statistically significant 't' value was calculated at $p < 0.001$ level, which suggests that before and after a group of older adults was given isometric exercise, there was a substantial difference in their functional ability.

In the experimental group, the majority (67.6 percent) of participants were in the age category of 60-65, while in the control group, the majority (80 percent) were in the age group of 66-70. The majority of the older residents in the experimental group were widows (56.67 percent). In the control group, the majority of the older residents were widows (36.67 percent).

Because the duration of joint pain was equal in the experimental and control groups, majority 14 (46.67 percent) of the joint pain duration was approximately one to two years in the experimental group and majority 16 (53.33 percent) of the joint pain duration was approximately one to two years in the control group. Overall, almost a third of those who developed osteoarthritis in the experimental group were diagnosed with osteoarthritis on the left knee and about half of those who developed osteoarthritis in the control group were diagnosed with osteoarthritis on the left knee.

Compared to senior citizens in the experimental group, majority (66.67 percent) of senior citizens in the experimental group had normal body constructed. In contrast, most (63.33 percent) of senior citizens in the control group had normal body built. Regarding family history of osteoarthritis in the experimental group, the majority (66.67%) of individuals had no family history of osteoarthritis, while in the control group (4) somewhat more individuals (11.11%) had experienced the condition before.

Pre test mean score: 83.07 with SD: 7.39. Post test mean score: 48.17 with SD: 7.67. The "30.722" calculation revealed a statistically significant gain in functional ability before and after isometric exercise was given to seniors in the experimental group.

After taking the post-test functional ability levels into consideration, the estimated functional ability level for the two groups was calculated and it was calculated to be -13.015. This figure had a statistical significance of $p < 0.001$.

It can be shown that, as a result of performing the isometric exercise, older adults in the experimental group saw a far greater rise in functional capacity than those in the control group. At the statistical significance level of $p < 0.001$, the demographic variable body built was found to have a statistically significant correlation with functional ability among senior citizens. Neither the other demographic variables nor the experimental group's results showed any correlation with functional ability among senior citizens.

Conclusion:

According to the study, isometric workouts increased the functional ability level of seniors in the experimental group to a greater extent than it did in the control group. Upon establishing that the hypothesis proposed is acceptable.

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