Exercise program in senior centers helps decrease participants' pain and improve mobility
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It may seem counterintuitive that exercise could help people with arthritis and other musculoskeletal conditions, but a new study finds that a low-impact exercise program is improving quality of life for many older adults with these conditions.

The program, offered by Hospital for Special Surgery (HSS) in senior centers in New York City's Chinatown and Flushing, Queens communities, has helped decrease pain, improve mobility and enhance the overall health of many participants.

The study, titled, "The Effectiveness of a Low-Impact Exercise Program on Musculoskeletal Health of Asian Older Adults," will be presented at the American College of Rheumatology/Association of Rheumatology Health Professionals annual meeting on November 9 in San Francisco.

"Getting seniors to be active in any way will generally improve their quality of life and help them function better in their everyday activities," said Linda Russell, MD, a rheumatologist and chair of the Public and Patient Education Advisory Committee at Hospital for Special Surgery. "People believe that if you have arthritis you shouldn't exercise, but appropriate exercises actually help decrease pain."

Fifty percent of adults age 65 and older have received a diagnosis of arthritis, according to the Centers for Disease Control and Prevention. Previous studies have shown that participation in low-impact physical activity can improve pain, function, mood and quality of life without worsening arthritis symptoms or disease severity. However, individuals with arthritis are less likely to be physically active.

In 2010, 25 percent of Asian seniors age 65 and older in New York City lived in poverty and were affected by musculoskeletal conditions. "To help those in underserved communities better manage these conditions, Hospital for Special Surgery developed its Asian Community Bone Health Initiative in 2011," said Sandra Goldsmith, senior director of Education and Academic Affairs at HSS. "The goal is to help seniors decrease musculoskeletal pain, stiffness and fatigue; improve balance; reduce falls; and increase physical activity."

The eight-week low-impact exercise program, led by bilingual, certified instructors, is held once a week in community-based organizations largely serving older Asian adults. Between September 2011 and July 2015, 370 individuals took part in the program, and 204 participants completed surveys both before and after taking the exercises classes. Ninety percent of respondents were female, and 76 percent were between the ages of 65 and 84.
Eighty-eight percent of participants had a musculoskeletal condition.

In the survey, many respondents reported that they experienced less pain and were better able to perform activities of daily living after participating in the exercise program. Participants reported that their muscle and joint pain was significantly reduced by 32 percent.

**In terms of mobility and function, after completing the program:**

- 88% more participants could climb several flights of stairs
- 66% more participants could lift/carry groceries
- 63% more participants could bend, kneel, or stoop
- 91% of participants felt the program reduced their fatigue
- 97% of participants felt that the program reduced their stiffness
- 95% of participants felt their balance improved
- 96% of participants felt more confident that exercising would not make their symptoms worse

"The study results indicate that the hospital's Bone Health Initiative has a positive impact on the musculoskeletal health of the Asian senior population," said Huijuan Huang, MPA, program coordinator. "Providing free exercise programs to the community can play an important role in helping adults manage musculoskeletal conditions."

**More information:** Study Title: "The Effectiveness of Low-Impact Exercise Program on Musculoskeletal Health of Asian Older Adults"

Provided by Hospital for Special Surgery
