

## **Pre-Admission Exercise and Heart Failure Outcomes**



Heart failure is a major health concern, particularly for ageing populations. It increases mortality rates and severely impacts quality of life. While exercise therapy has proven beneficial for patients after a heart failure diagnosis, little is known about the role of physical activity before hospitalisation.

A recent study, published in the *European Journal of Preventive Cardiology*, explores this gap. Study researchers investigated the relationship between pre-hospitalisation exercise habits and post-discharge outcomes in older heart failure patients.

The goal was to determine whether even a small but consistent amount of physical activity before hospitalisation could be linked to better post-discharge health outcomes. This could make exercise more accessible and practical for a broader range of heart failure patients."

To examine this, the team analysed data from the FRAGILE-HF study, conducted across 15 hospitals in Japan. The study included 1,262 patients aged 65 and older who were hospitalised for heart failure. Researchers also assessed their exercise habits prior to hospitalisation.

The findings revealed that 675 patients (53.4%) reported engaging in regular physical activity before hospitalisation—defined as either 30 minutes of moderate exercise or 20 minutes of vigorous activity at least once per week. These patients had a lower risk of death compared to those who did not exercise regularly. They also demonstrated greater grip strength and faster gait speeds, suggesting better overall physical function.

These results underscore the importance of promoting regular physical activity among older adults, even at minimal levels. Although this study cannot establish causation, it supports more inclusive and feasible exercise recommendations for older patients. Study findings also highlight the concept of 'muscle banking,' which may help prevent further health deterioration.

Beyond influencing clinical guidelines, the study opens opportunities for collaboration with the fitness and wearable technology industries. Devices that track physical activity, provide personalised exercise recommendations, and detect early signs of physical decline could play a crucial role in heart failure management.

Given the rising global burden of heart failure, these insights have important implications for healthcare policy, rehabilitation programmes, and patient education. Ultimately, the study reinforces a vital message: even small amounts of regular exercise can serve as an investment in long-term health and resilience against physical decline.

Source: Juntendo University Research Promotion Center

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