

請仔細閱讀下列文獻內容並回答問題 1-4。(摘錄自 JAMA Netw Open. 2023;6(6):e2320400.)

Importance: Self-management is a key element in the care of persistent neck and low back pain. Individually tailored self-management support delivered via a smartphone app in a specialist care setting has not been tested.

Objective: To determine the effect of individually tailored self-management support delivered via an artificial intelligence-based app (SELFBACK) adjunct to usual care vs usual care alone or nontailored web-based self-management support (e-Help) on musculoskeletal health.

Design, setting, and participants: This randomized clinical trial recruited adults 18 years or older with neck and/or low back pain who had been referred to and accepted on a waiting list for specialist care at a multidisciplinary hospital outpatient clinic for back, neck, and shoulder rehabilitation. Participants were enrolled from July 9, 2020, to April 29, 2021. Of 377 patients assessed for eligibility, 76 did not complete the baseline questionnaire, and 7 did not meet the eligibility criteria (ie, did not own a smartphone, were unable to take part in exercise, or had language barriers); the remaining 294 patients were included in the study and randomized to 3 parallel groups, with follow-up of 6 months.

Interventions: Participants were randomly assigned to receive app-based individually tailored self-management support in addition to usual care (app group), web-based nontailored self-management support in addition to usual care (e-Help group), or usual care alone (usual care group).

Main outcomes and measures: The primary outcome was change in musculoskeletal health measured by the Musculoskeletal Health Questionnaire (MSK-HQ) at 3 months. Secondary outcomes included change in musculoskeletal health measured by the MSK-HQ at 6 weeks and 6 months and pain-related disability, pain intensity, pain-related cognition, and health-related quality of life at 6 weeks, 3 months, and 6 months.

Results: Among 294 participants (mean [SD] age, 50.6 [14.9] years; 173 women [58.8%]), 99 were randomized to the app group, 98 to the e-Help group, and 97 to the usual care group. At 3 months, 243 participants (82.7%) had complete data on the primary outcome. In the intention-to-treat analysis at 3 months, the adjusted mean difference in MSK-HQ score between the app and usual care groups was 0.62 points (95% CI, -1.66 to 2.90 points; $P = .60$). The adjusted mean difference between the app and e-Help groups was 1.08 points (95% CI, -1.24 to 3.41 points; $P = .36$).

Conclusions and relevance: In this randomized clinical trial, individually tailored self-management support delivered via an artificial intelligence-based app adjunct to usual care was not significantly more effective in improving musculoskeletal health than usual care alone or web-based nontailored self-management support in patients with neck and/or low back pain referred to specialist care. Further research is needed to investigate the utility of implementing digitally supported self-management interventions in the specialist care setting and to identify instruments that capture changes in self-management behavior.

1. 請為此摘要下一個英文與中文標題。(10%)
2. 請將此摘要翻譯成中文。(20%)

見背面

3. 請說明本篇研究的限制。(10%)

4. 請問您會如何應用此篇研究的結果於臨床?(10%)

請仔細閱讀下列文獻內容並以中文回答問題 5-8。(摘錄自 Phys Ther. 2022 Dec 30;103(1): pzac143.)

Objective. Survivors of breast cancer with persistent cancer-related fatigue (CRF) report less exercise participation compared with survivors of breast cancer without CRF. Although CRF predicts other domains of self-efficacy among survivors, the effect of CRF on exercise self-efficacy (ESE)—an important predictor of exercise participation—has not been quantified. This study examined the relationship between CRF, ESE, and exercise participation and explored the lived experience of engaging in exercise among survivors of breast cancer with persistent CRF.

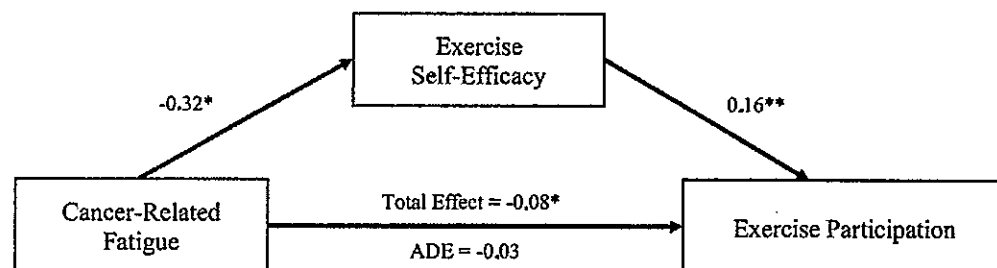
Methods. Fifty-eight survivors of breast cancer (3.7 [SD= 2.4] years after primary treatment) self-reported CRF, ESE, and exercise participation (hours of moderate-intensity exercise per week). Regression and mediation analyses were conducted. Survivors who reported clinically significant CRF and weekly exercise were purposively sampled for 1-on-1 interviews (N= 11). Thematic analysis was performed across participants and within higher versus lower ESE subsets.

Results.

Conclusions. Survivors of breast cancer with persistent CRF may experience decreased ESE, which negatively influences exercise participation. Clinicians should screen for or discuss confidence as it relates to exercise and consider tailoring standardized exercise recommendations for this population to optimize ESE. This may facilitate more sustainable exercise participation and improve outcomes.

5. 請將上列摘要之 Objective、Methods 與 Conclusions 翻譯成中文。(10%)

6. 請根據下圖，以中文撰寫本篇摘要之結果(Results)。(15%)



*P < .05.
**P < .001.

Figure. Exercise self-efficacy's mediation of the effect of cancer-related fatigue on exercise participation. Mediation model with standardized β coefficients. ADE = average direct effects; Total effect = direct and indirect effect of cancer-related fatigue on exercise participation.

7. 根據下列有關本篇所提 limitations，請說明研究設計時，應考量哪些重點。(10%)

The results of this study must be interpreted in the context of its limitations, including use of an unvalidated outcome measure (Self-Efficacy for Exercise scale), modest sample size, and cross-sectional study design. Although the Self-Efficacy for Exercise scale has not been validated among survivors with CRF, internal consistency was excellent in our sample. Although a clear inverse relationship was observed between CRF and ESE, clinical implications of our quantitative results are limited by the lack of MCID or established cutoff for this scale. Furthermore, our use of 70% as a delineator for higher versus lower ESE was chosen subjectively, which limits our ability to draw qualitative conclusions comparing these groups. Nevertheless, differences in experience between these groups emerged, and data saturation was achieved. Despite our modest sample size, observed effect sizes were large enough to achieve adequate power to draw statistical conclusions. Still, further investigation of these relationships is warranted, especially because the cross-sectional design of our study limits our ability to establish temporal cause-and-effect relationships between CRF, ESE, and exercise participation. Large longitudinal studies assessing CRF, ESE, and exercise participation before, during, and after treatment for cancer would greatly enhance our understanding of CRF's effect on ESE and exercise behaviors among survivors of cancer.

8. 請說明本篇研究結果對臨床意義及如何應用。(15%)

試題隨卷繳回