Text Messages to Support Exercise Adherence for People With Knee Osteoarthritis

Intervention Design Applying Behaviour Change Theory

To improve OA exercise outcomes, **novel interventions that facilitate exercise adherence** are needed.



We sought to develop a **behaviour change mobile phone SMS program** to support people with knee OA to exercise.

Phase 1 involved identifying the active ingredients to use in the SMS program. We used the Behaviour Change Wheel Framework, a synthesis of 19 behaviour change theories. It guided our selection of 13 exercise barriers, 9 facilitators & 19 behaviour change techniques to use in the SMS program.

Phase 2 involved designing the 24-week SMS program & the 198 text message library.



*message prompts selection of one barrier, from a pre-specified list, which best explains low exercise adherence. Barriers: forgot, too tired, knee hurts so can't exercise, worried exercise is causing pain, exercise isn't helping, boring, lack of time, life stress, and none apply. ^ message suggests participants re-try or contact program staff, if needed.



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