

Enhancing Physical Activity in South Asian Older Adults: Insights From Cultural Adaptation of the Keep On Keep Up (KOKU) Digital Strength and Balance Programme

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Purpose: To share insights from the co-creation and community engagement processes involved in culturally adapting the Keep On Keep Up (KOKU) digital strength and balance programme for older South Asian communities in the United Kingdom.

Background: Falls and fragility fractures cost the United Kingdom National Health Service £4.4 billion annually and \$50 billion in the United States (CDC, 2018). Hip fractures are the most serious injury among older adults, with 30% mortality and 50% losing mobility within a year (WHO, 2007). Older South Asians in the United Kingdom tend to have lower physical activity levels, increasing their fall risk (Raleigh, 2023). The KOKU digital programme combines OTAGO/FaME-based exercises (Skelton et al., 2005) with interactive health literacy games on safety, nutrition, hydration, and more, using behaviour change techniques to support ongoing physical activity and prevent falls.

Methods: A mixed method feasibility study was conducted with 33 older South Asian adults (65+) from Indian, Pakistani, Bangladeshi, Nepalese, and Bhutanese backgrounds. Patient and public involvement and engagement with 16 older Pakistani participants informed study design. Community engagement with 37 grassroots organisations and 11 deaf Bangladeshi individuals was conducted to raise awareness of KOKU and the importance of physical activity in healthy ageing.

Results: Findings highlight the acceptability and perceived usefulness of KOKU within South Asian communities. The study explored participants' fall risk, digital habits, and quality of life, offering valuable lessons for developing inclusive digital health interventions.

Conclusion: Co-production approaches can enhance digital intervention and research design for older and marginalised populations. It provides strategies for inclusive research, community engagement, and digital accessibility.

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