

P102: Supporting Informal Carers to Undertake Regular Physical Activity from Home: a Co-design and Prototype Development Study of a novel app, "CareFit"

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Background: Informal carers (unpaid family members and friends), are critical to millions worldwide for the ongoing delivery of health and well-being needs. However, the physical and mental wellbeing of caregivers is often poor including low levels of physical activity, frequently owed to contributing factors such as lack of time, lack of support and motivation. Thus, accessible evidence-based tools to facilitate physical activity for carers are urgently needed.

Objective: The aim of this study was to co-design and develop a novel mobile app to educate and support carers in the undertaking of regular physical activity. This is achieved via integration of the transtheoretical model of behaviour change and UK physical activity guidelines across 8 weeks of use.

Methods: We co-designed a mobile app, "CareFit," by directly involving caregivers, health care professionals, and social care professionals in the requirements, capturing, and evaluation phases across a number of Agile Scrum development sprints. Requirements for CareFit were grounded in a combination of behavioural change science and UK government physical activity guidelines.

Results: Participants identified different barriers and enablers to physical activity, such as a lack of time, recognition of existing activities, and concerns regarding safely undertaking physical activity. Requirements analysis highlighted the importance of simplicity in design and a need to anchor development around the everyday needs of caregivers (eg, easy-to-use video instructions, reducing text). Our final prototype app integrated guidance for undertaking physical activity at home through educational, physical activity, and communication components.

Conclusions: Integrating government guidelines with models of behavioural change into a mobile app to support the physical activity of carers is novel and holds future promise. Integrating core physical activity guidelines into a co-designed smartphone app with functionality such as a weekly planner and educational material for users is feasible acceptable and usable. Here we will document the latest developments on the project including an ongoing national study currently taking place in Scotland to test the prototype with 50 carers.

P106: Palliative care for people with advanced dementia

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Objective: Dementia is currently the seventh leading cause of death and one of the major causes of disability and dependency among elderly. In Taiwan, there are at least 300,000 people live with dementia. However, only 1.64% of people with dementia received palliative care. In this paper, we describe a real-world experience of palliative care for people with advanced dementia.

Method: Case report.

Result: Mrs. H, A 90-year-old illiterate woman, was referred to Home Care team after several admissions for urinary tract infection. Her past medical history included cerebral infarction with left hemiparesis 4 years ago. Over one year prior our first visit, her family had begun to notice a problem with her recent memory. Thorough investigation for dementia was arranged. She scored 11/30 on the Mini-Mental State Examination. Mixed Alzheimer's and vascular dementia was impressed.

The Home Care service consisted of a once-monthly visit by physician and nurse. In the first year of service, we delivered active directed treatment for dementia. We also discussed nonpharmacological approaches for dealing with physical and behavior symptoms in each visit.

Then Mrs. H was hospitalized again due to fever and abdominal pain. Abdominal aortic aneurysm was diagnosed along with urinary tract infection. She had hypoactive delirium for two months after discharge. Meanwhile, Home Care team arranged a family meeting to discuss prognosis and appropriateness of palliative care. In the following two years, we focused on deprescribing and interventions for pain, dyspnea, eating problem, infection, and agitation to promote Mrs. H's comfort and quality of life. Psychological support was crucial to facilitate continuity in carer and care setting. Mrs.H did not have burdensome transition anymore and passed away peacefully at home as her preference.

Conclusion: The need for palliative care in dementia is anticipated to increase over the next decades in Taiwan. In the patient presented, Home Care team acknowledged and offered palliative care to help her to live as comfortably as possible until death and to help carers cope during the course. A multidisciplinary health care is highly recommended for complex needs in dementia.

P123: Cognitive Disorders and Impact on Caregivers: The COGCARE Study protocol

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