

Dementia and Technology

S. Maarouf. *Khadija Care: A caregiver-developed mobile app blueprint for home-based dementia support.* S.Maarouf, G.Maarouf. *Gerontechnology* 25(s)

Purpose Family caregivers provide most support for people living with dementia, yet home-care guidance is often fragmented and difficult to apply in real daily situations, particularly in resource-limited contexts. *Khadija Care* is a caregiver-developed conceptual mobile app blueprint translating evidence-informed psychosocial dementia care principles into practical, home-based digital support (1,2). The aim is to formalize lived caregiving experience into a structured gerontechnology design framework to inform future co-design and evaluation. **Method** The blueprint was developed through prolonged home caregiving for an older adult living with dementia, using iterative observation and reflective documentation of recurring challenges and effective responses. These insights were organized into modular content aligned with person-centred communication, emotional regulation, routine stability, environmental adaptation, and caregiver wellbeing (1). To sensitize the design to broader caregiver priorities, informal exploratory input was gathered through discussions within online dementia caregiver communities; these interactions were not conducted as formal research and did not involve systematic data collection. The app concept delivers short modules using scenarios, checklists, templates, caregiver scripts, and optional tracking tools. The structural framework underlying the app design is outlined in Table 1. **Results and Discussion** The output is a six-module conceptual app blueprint addressing: (1) emotional safety and caregiver self-regulation; (2) routine stabilisation; (3) person-centred communication; (4) home safety and environmental adaptation; (5) mobility and activities of daily living support; and (6) caregiver wellbeing and burnout prevention. The design prioritises usability through simple navigation, offline-friendly access, and culturally adaptable guidance. This contribution represents an early-stage conceptual framework rather than a validated intervention. Informal caregiver discussions supported the relevance of the proposed modules, while future work will require formal co-design, usability testing, and empirical evaluation.

References

- 1.Livingston G, Huntley J, Sommerlad A, et al. Dementia prevention, intervention, and care: 2020 report of the Lancet Commission. *Lancet*. 2020;396(10248):413–446.
- 2.World Health Organization. Risk reduction of cognitive decline and dementia: WHO guidelines. Geneva:World Health Organization; 2019.

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Affiliation: Independant Caregivers

Email: selma.maarouf@gmail.com

Table 1. Conceptual domains of Khadija care mobile App

Domain	Included modules
Person focused care support	Routine stabilisation; Person-centred communication; Home safety & environmental adaptation; Mobility & daily living support
Caregiver focused support	Emotional safety and self-regulation; Caregiver wellbeing and burnout prevention