

# Expert views on co-designing an mHealth app for family carers managing behavioural and psychological symptoms of dementia (BPSD): a qualitative study

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## 01 Introduction

- BPSD: highly prevalent among people with dementia
- BPSD: creates negative impacts on affected people & their family carers
- mHealth apps: multifaceted support for carers
- Few apps for BPSD care, globally & none in Sri Lanka
- Co-designing requires health & technology experts' input
- No needs-analysis studies are available in the Sri Lankan context.

## 02 Objective

To explore experts' views on the **challenges and needs of family carers** of people with dementia to inform the **app's content, its design features, and the ethical and legal frameworks** in the co-design and development of an mHealth app

## 03 Methodology

- Exploratory-descriptive qualitative study
- Followed reflective thematic analysis guidelines
- Conducted semi-structured interviews in a convenience place for the participants
- Purposive sampling
- Participants: health experts (medicine, hospital and community-based nursing, occupational therapy, clinical psychology, and psychiatric social work), app developers, legal experts (N=14)
- Quality: reflection, rigor, systematic methods, and in-depth engagement

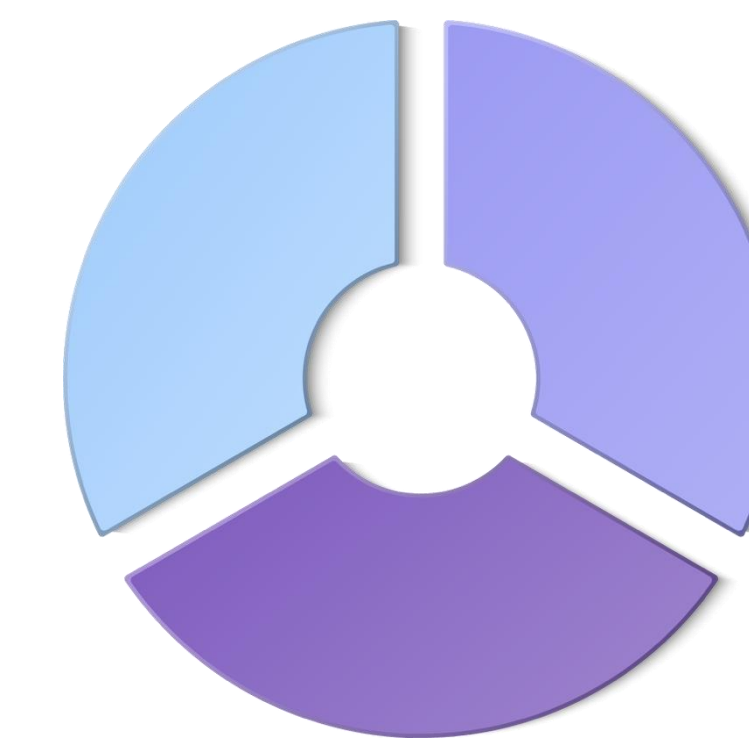
## 04 Analysis

- Health experts indicated that most carers, particularly in dementia care, are older adults.
- Main themes: Family carers' information needs; developing an elderly-friendly app, and ethical/ legal aspects of the app

### Theme 1: Personalised information needs

Health experts indicated:

- Insufficient knowledge in managing BPSD leads to suboptimal care delivery & worsens BPSD
- Carers experience negative emotional and psychosocial well-being, e.g., high stress and burden, poor social connections
- Lack or unaware of the successful use of supportive systems, e.g., utilising family support, counselling services
- Therefore, family carers require personalised, culturally appropriate information in local languages on
  - a) dementia
  - b) management of BPSD; e.g.,
    - observing and recording BPSDs,
    - improving communication skills,
    - environment modifications, and non-pharmacological therapies
  - c) reducing stress and enhancing coping measures of carers
  - d) supportive services



### Theme 2: Elderly friendly mHealth

Health and app development experts viewed:

- Carers could use mHealth apps to seek information
- Personalised app for BPSD care
- Elderly friendly app: e.g., simple navigation, text enlarging opportunity, and voice information
- Some carers may require training or help from family members to use an app

### Theme 3: Protecting users and developers

Law experts indicated:

- Medical negligence related to app: under Tort Law.
- The privacy policy and terms and conditions are to be included to protect app users' privacy and confidentiality.
- The app's content, designs, and logo: subject to the Personal Data Protection Law, the Intellectual Property Act, and the Copyright Law.

## 05 Conclusion

- Carers face challenges and negative impacts
- Carers need psychoeducation and psychosocial support to face challenges and difficulties
- Most carers would accept informative and supportive mHealth apps
- App designs: personalised & user-friendly apps, user confidentiality, no-harm to users or their care recipients

**Take-home message:**  
Family carers need personalised, culturally sensitive information in local languages on managing BPSD, utilising support services & carer self-care.

### References:

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