

## ORAL PAPER PRESENTATION 7: OTHERS

### Developing and selecting images to facilitate comprehension of hypertension educational materials for older adults

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**Purpose** Hypertension is the most common disease in the general population, highly prevalent after the age of 65, and it affects more than 60% of individuals in developed countries (Burnier et al, 2020; Uchmanowicz et al., 2018). There have been significant pharmaceutical and medical advancements designed to address this disease; however, medication nonadherence remains a significant barrier to hypertension management (Burnier et al. 2020; Dzau & Balatbat, 2019; Egan et al., 2019, Lo et al., 2016). Technology interventions can improve medication adherence and an increasing number of older adults are using smartphones (Kakulla, 2020). An important challenge for technology interventions that include educational materials is the incorporation of images that are both clinically appropriate and meaningful for older adults (Morrow et al., 2012). Hence, the focus of this presentation is on the process followed for developing and selecting images for educational materials used in a technology intervention to facilitate comprehension and motivate a wide range of older adults. **Method** An interdisciplinary team of clinical, cognitive aging, gerontechnology, community health, human factors, and health technology experts across multiple institutions collaborated to develop the Medication Education, Decision Support, Reminding, and Monitoring (MEDSReM<sup>®</sup>) system to improve hypertension medication adherence by older adults. MEDSReM is a theory-based and integrated digital system comprised of a mobile app and a companion website (Al-Saleh et al., 2022). The mission of the MEDSReM education team is to provide evidence-based education tailored to older adults, to educate them on hypertension, medications, and health self-management strategies. The educational materials were developed in three formats: (1) thirty-two brief educational tips, (2) fifteen mobile app articles, and (3) twenty-three detailed educational articles for the companion website. Images were developed or selected in an iterative process. First, initial images or concepts reviewed collectively by the MEDSReM education team as well by older adults and healthcare providers in pilot studies. Then, images were then revised and implemented on the mobile app and website. Lastly, older adults reviewed all educational materials and images to provide feedback and final validation prior to the use of these materials in an upcoming randomized controlled trial. **Results and Discussion** The finalized images include a wide range of older adults and health-care providers to ensure our audience see people who look like them. Challenges included identifying appropriate images and excluding cases that misrepresented medical and hypertension management recommendations. Our approach combined multiple strategies, including selection and use of free-stock images, development of drawings, and screenshots and photographs taken by team members. This approach can benefit future research projects that seek to design educational materials. Additionally, the usability testing with older adults is pivotal to ensure that these images appropriately convey the educational content and support its comprehension.

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