World Health Organization, South-East Asia Regional Office – Integrated Care for Older People Application for Nurses

A mobile application (Android and iOS version) was developed by Tripod Information Systems on World Health Organization's (WHO's) Integrated Care for Older People (ICOPE) to promote self-learning and wider distribution of the ICOPE guidelines. A digital workshop to field test the mobile application on ICOPE (package for nurses) was organised by Tripod Information Systems in collaboration with Survival for Women and Children (SWACH) Foundation from 3rd March, 2023 to 7th March, 2023. The objectives of the workshop were to develop familiarity of the participants with the installation process and utilization of the application, field testing of the application (with a particular focus on content delivery and self-learning), evaluating the feasibility of the use of the application and assessing the change in knowledge of the participants after using the application to go through the contents of the package and collecting feedback from participants regarding any concerns or difficulties they may have faced and gathering their suggestions.

A total of 22 graduates of nursing having 2-5 years of working experience in a clinical setting, possessing smart phone (iOS/ Android) with working internet connection and having written and spoken knowledge of the English language participated in the workshop. The workshop was facilitated by two members from Tripod Information Systems, a medical doctor, a public health expert and two doctors in the allied sciences from SWACH Foundation.

Initially, facilitators were trained by the Tripod development team on how to install and use the application. Then, WhatsApp group was formed where selected participants and facilitators could communicate. The participants were informed about the purpose of study and their role, and written consent was obtained from all of them. A pre-test consisting of 22 questions (two questions from each module) was administered through a Google form and the link was shared on whatsapp group. Tutorial video was shared with the participants to provide them guidance on installing and using the application. On the first day of workshop, participants were instructed to install the application and were guided through Module 1 by the facilitators which included showing different sections of the module and how to access the content. Participants were given 48 hours to complete the remaining 10 modules on their own. Two review meetings were held spaced 24 hours apart to monitor the progress and address any concerns. On completion of training, a post-test, consisting of the same 22 questions as the pre-test, was administered through Google forms. Subsequently, participants' experiences with the application were quantitatively analyzed on Likert scale through google form. At the end of workshop, focus group discussion (FGD) was conducted to qualitatively summarize the experiences of participants.

The results of pre-and-post tests were evaluated on Microsoft Excel and Google spreadsheets with averages and means being calculated. The percentage gain in knowledge of the participants with respect to the contents of the module was found to be~14%. The experience of the participants on various parameters of the application (installation process, installation speed, user interface, operationalization, overall quality of the application and willingness to recommend it to others) was measured both quantitatively and qualitatively. Quantitative evaluation was done with the help of Likert scale of 1 to 5 (1= Poor experience, 2 = Fairly poor experience, 3 = Neutral, 4 = Fairly good experience and 5 = Good experience). The response to all the questions was rated as 'Good experience' by the participants except for one question (i.e. Did you require any help to operate the application for learning the content?). This could be attributed to the unclear understanding of the wording/rating by the participants (as they may have considered the facilitation provided to be part of the assistance). Qualitative

evaluation was done by focus group discussion (FGD) which was held through virtual mode (Zoom meeting) for about an hour. A total of 10 themes were discussed during the FGD. The respondents recognized the importance of both traditional and self-learning methods. Traditional learning was appreciated for its immediate teacher support, while self-learning allowed for additional personal effort such as internet searches to clarify doubts. They acknowledged the convenience of self-learning, as it could be done anywhere and at any time. The application was well-received for being relevant to their work field and language was easily understandable. The assessments and role plays within each module helped maintain their interest, with the role-play videos being particularly effective in relating topics to real-life scenarios. Participants were able to use the application independently, with most of them not experiencing any device or connectivity issues. The graphical content and role-plays were liked by participants and some mentioned that the application was visually appealing and helped captivating their interest. Some participants suggested an increase in the number of role-plays. The speakers' accent caused some discomfort for a few participants but was well-received by majority of participants. The content's visual appearance was considered legible and readable, with easy-to-understand language. Few participants found the content near-perfect in quality. The only suggestion for improvement was to reveal the correct answers in the results of module-specific assessments.

Overall, the workshop successfully provided invaluable feedback and insights from nurses regarding the usability, functionality, and relevance of the ICOPE mobile application. Nurses highlighted the mobile application's relevance and potential to improve integrated care for older people. They accepted that application could facilitate better coordination among healthcare professionals and enhance communication between healthcare teams and older patients.