Press Release

“Swallowing difficulties in visually impaired elderly population”

Dissemination of Research Findings

The Faculty of Education, The University of Hong Kong (HKU), and The Hong Kong Society for the Blind (HKSB) Residential Services signed a Memorandum of Understanding (MOU) to establish a Partnership for Excellence in Communication & Swallowing Research on 25 August 2015, covering the period from 2015 to 2020. The partnership aims to conduct research studies in advancing assessment and treatment for acquired communication and swallowing disorders in elderly with visual impairment, and to promote multidisciplinary evidence-based assessment and treatment protocols for acquired communication and swallowing disorders in elderly with visual impairment to local and regional settings. Since signing the MOU, the University’s research team has begun to investigate swallowing difficulties in the nursing homes run by HKSB.

Swallowing difficulties can occur as a result of various medical conditions and ageing. Elderly individuals who experience swallowing difficulties are at high risk for malnutrition, dehydration, and reduced quality of life. The Swallowing Research Laboratory of the Division of Speech and Hearing Sciences, Faculty of Education, HKU, in collaboration with HKSB Residential Services, conducted a study that aimed to: 1) identify risk factors for swallowing difficulties; 2) investigate the elderly individuals’ self-awareness of swallowing difficulties; and 3) describe the impacts of swallowing difficulty on the quality of life.

From December 2015 to June 2016, the research team visited 4 branches of the HKSB Residential Services for the elderly. Out of a total of 398 residents in the 4 nursing homes, 61% of the residents were documented to have some level of swallowing difficulties. In terms of mealtime assistance, 70% of the residents required special food processing; 24% of the elderly required assistance with feeding during mealtimes; and 7% of elderly residents were unable to eat orally and required tube feeding. The research team conducted face-to-face clinical assessments with 109 elderly residents to further investigate the nature of their swallowing difficulties.

Risk factors
It was found that those elderly who presented with swallowing difficulties were more likely to have one or more of the following conditions: 1) dependency upon others for activities of daily living, especially for feeding; 2) present with unclear speech and hoarse voice when speaking; 3) reduced cognitive functions; and 4) elderly with a history of neurological conditions were also more likely to demonstrate swallowing difficulties compared to those who did not.
Self-Awareness of Swallowing Difficulties
Over 60% of the elderly who presented with swallowing difficulties were not aware of their swallowing problems. When comparing this finding with another similar study conducted by the HKU Swallowing Research Laboratory, the awareness of swallowing problems was poorer in elderly with visual impairment than in those without visual impairment. This highlights the need for raising awareness and education regarding the nature and symptoms of swallowing difficulties particularly in the visually impaired community.

Quality of Life
Those who had swallowing difficulties reported lower quality of life in relation to their mealtime experiences, including having a negative impact on their personal, social, and emotional experiences when eating and drinking. In particular to the visually impaired group, the elderly were more negatively affected in their interaction with friends.

Suggestions for Swallowing Management
Based on our research so far, it can be seen that swallowing difficulties affect the vision-impaired frail elderly population in similar ways compared to their seeing counterparts. We recommend that:
1) additional care is taken when looking after elderly who are at high risk for swallowing difficulties; 2) provide regular education for elderly and their carers to increase their awareness in swallowing difficulties and their consequences; 3) provide regular cross-disciplinary training for elderly individuals who experience swallowing difficulties to increase their quality of life; and 4) increases funding for allied health support in the nursing home sector.

Current and upcoming projects under the Partnership
1. Cognitive Test for Elderly with Visual Impairment
The current Partnership also conducted a study to validate a visually impaired (VI) version of a cognitive screening test (Montreal Cognitive Assessment, MoCA). 70 elderly residents with visual impairment were invited to complete the VI version of Hong Kong MoCA. Initial results suggest that the Hong Kong MoCA-VI version was a valid and reliable screening test to identify cognitive impairments in elderly with visual impairment.

2. Whole Body Vibration Therapy
In the coming year, the Partnership will investigate an innovative treatment method for improving elderly’s cognitive, physical and swallowing functions. This method will involve training on a whole body vibration platform, which aims to improve the cognitive functions, muscle strength for fall prevention and sitting posture during mealtimes.

3. Clinical training for student speech therapists
In the coming year, the HKSB nursing homes will be one of the clinical training sites for the undergraduate speech therapy training programme - Bachelor of Science in Speech & Hearing Sciences which is offered by the Division of Speech and Hearing Sciences, Faculty of Education, HKU.
For media enquiries, please contact Ms Yuki Wong, Swallowing Research Laboratory, Division of Speech and Hearing Sciences, Faculty of Education, HKU (Tel: 3917 1568; Fax: 2559 0060; email: yukiwyy@hku.hk) or Ms Carmen Ng, Communication Officer, HKSB (Tel: 3723 8208 / 9650 3552; Fax: 2788 0040; email: carmen.ng@hksb.org.hk). Please visit http://web.edu.hku.hk/press to view the e-version of the press release and photos.

August 24, 2016