Swallowing Difficulties in Healthy Ageing-Adults; A study in the Colombo and Gampaha Districts

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Background: Ageing affects swallowing with physiological, psychological, and functional changes. Disruption of any phase of the swallowing mechanism due to neurological, physiological, or psychological reasons can cause dysphagia. Swallowing disorders have a negative effect on health and quality of life, so early identification and early intervention are necessary for lifestyle support for elderly persons. This study aimed to gather data through a preliminary investigation of the presence of swallowing difficulties in otherwise healthy ageing adults in the Colombo and Gampaha districts. The findings of this study will contribute to raising awareness among these families/caregivers.

Methods: A mixed method approach, including a descriptive cross-sectional survey was used. Participants of the study were a hundred (n=100) healthy ageing-adults of 60 years or above who live in the Colombo and Gampaha districts. A convenience sampling technique was used. Data was collected through the interviewer-administrated questionnaire developed based on demographic data, swallow symptoms, and adaptations during mealtime, including open-ended questions, close-ended questions, and rating scales and a video of a single trial of the participant drinking 30ml.

Results: Of the 100 healthy ageing adults screened, 38 were males and 62 were females. Half (50%) of the participants (n=50) were aware that they had some difficulty during eating or swallowing. The interviewer-administered questionnaire, which included the Swallowing Disturbance Questionnaire (SDQ) with two sections was used to identify their swallowing difficulties. The more commonly reported characteristics were difficulty chewing solid foods and needing to masticate more before swallowing. The SDQ has a total score of 45, with higher scores indicative of a positive result suggesting the presence of swallowing difficulty. The subset 1 score was used to assess oral difficulties, and the subset 2 score indicated pharyngeal difficulties. A larger number of participants had pharyngeal difficulties than oral difficulties. Furthermore, people aged 70 and above had more difficulty swallowing than those aged between 60 to 69. Independent Mann-Whitney U test analysis showed statistically significant differences across age groups and sex. There was no correlation between the Swallowing Disturbance Questionnaire (SDQ) total and the Gugging Swallowing Screen (GUSS) total. In addition, changes to food choices (n = 37) and reduced food intake (n = 30) were the participants' most reported dietary habits and food preferences.

Conclusion: The findings of the study reveal the presence of swallowing issues in the healthy elderly, characterize by the type of age-related swallowing difficulties, and identified healthy

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ageing-adults' mealtime adaptations in the local context. This study adds to the evidence of preliminary data about the presence of swallowing challenges, their nature, and adaptations to meet the nutritional demands of healthy older adults.

Key words: Healthy ageing-adults, Dysphagia, Swallowing difficulties, Caregiver adaptations, Diet modifications