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The Use of a Train-The-Trainers Model to Educate non-dental Healthcare **Professionals in Oral Care**

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Introduction

Associations between oral health and systemic conditions have been well established in recent literature. Improvements in oral hygiene have consistently been shown to significantly reduce the incidence of aspiration pneumonia, which has high morbidity and mortality rates in the frail elderly.

However, the simple low cost intervention of good oral care has often been overlooked in the provision of daily care by healthcare institutions. This is due to the lack of awareness of the impact of oral hygiene on general health and the lack of knowledge in carrying out proper oral hygiene measures.

This, coupled with insufficient time, cognitive and behavioral impairment, makes the provision of oral care inconsistent with best practice standards. To overcome these challenges, we utilized the train-the-trainers model, where 7 senior nurses from the chronic care wards of Bright Vision Hospital were educated on the importance of good oral health and comprehensive oral care protocol in patients requiring assistance.

Method

A total of 7 senior nurses from Bright Vision Hospital (BVH) participated in our one-day Oral Health Education Program (OHEP). The Modified Plaque Index (MPI), which is indicative of the thoroughness of oral hygiene, was measured at two time points, before OHEP (baseline) and 6 months after OHEP (Figure 1). Figure 2 depicts the content of the Oral Health Education Program.

Pre-workshop Oral Health Post-intervention Questionnaire **Education Program** Assessment Questionnaire given to the nurses in Oral Health Education Program MPI of BVH patients BVH to assess their for one day after 6 months were knowledge on oral condition and hygiene Mar2019

Sep 2018 **Jun 2018 July 2018** Aug 2018 **Jan 2019**

Pre-intervention Assessment MPI of BVH patients

were measured

Site visit Site visit to BVH at 3rd month to provide assistance and guidance to implement changes in ward

Figure 1: Timeline of the project

LECTURES

Pre-intervention

Site visit to BVH to

assess oral hygiene care

Assessment

in the ward

Lectures on common dental conditions, Oral Health Assessment Tool, Oral Hygiene Instruction for adults and patients with special medical conditions.











DEMONSTRATION

Hands-on practice of

Oral Health Assessment

Tool and Oral hygiene

instruction.

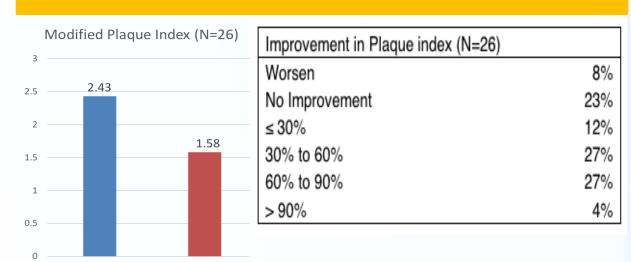




Clinical case discussion related to scenarios in the ward combined with relevant dental conditions.

CASE DISCUSSION

Results and Discussion



Graph 1: Plaque Index before and after intervention

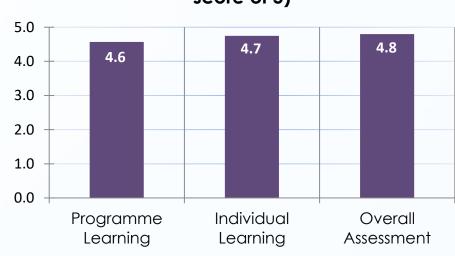
Table 1: Improvement in Plaque Index

Twenty-six patients completed both examinations. The average plaque score for patients in BVH. has reduced from 2.43 to 1.58 (Graph 1).

Eighteen (69%) patients showed improvement, six patients (23%) showed no change and two patients (8%) showed deterioration. Seven patients (27%) had reduction in plaque scores ranging from 30-60% and a same number of patients had 61-90% reduction in plaque scores (Table 1).

At the end of the education program, all the nurses participated a pen-to-paper survey on their level of satisfaction on program learning, individual learning and overall assessment based on 5point Likert scale (5= strongly agree and 1= strongly disagree) (Graph 2). Most participants found the hands-on practice, content and clinical case discussions to be helpful in their nursing practice.

AM.El Programme Evaluation (Max score of 5)



Graph 2: Oral Health Education Program evaluation

Conclusion

Previous efforts for oral care training for non-dental healthcare professionals have been largely limited to sporadic efforts, with little impact and reach to the majority of the medical fraternity. This interprofessional education collaboration, using the train-the-trainers model allows a standardized curriculum, while allowing autonomy for the trainers to customize modules relevant to their respective institutions. This partnership model allows better sustainability of the program.

Figure 2: Content of Oral Health Education Program



SECRETARIAT



