DHYG 400b: Policy Analysis and Change

Assignment 2 Part 1

Belinda Yip

30109145

October 1, 2017

Introduction

At the University of British Columbia (UBC), the Faculty of Dentistry is proud to be the first post secondary institution in Canada to offer a Dental Hygiene Entry-to-Practice Baccalaureate degree. The program focuses on developing graduates directed towards using evidence based research in settings such as clinical therapy. Students are taught to practice using a Process of Care Model: assessment, diagnosis, planning, implementation, and evaluation (ADPIE). A component of the assessment and evaluation stage is the utilization of O’Leary’s plaque index (PI) to determine the client’s efficacy in personal self care. However, after the completion of the index, it is not required by the faculty that the clinician scans the document into the client’s Romexis file. This policy should be amended for improved quality of client care. The purpose of this document is to outline the reasons in which this policy change is necessary.

Policy Overview

At UBC, O’Leary’s PI is used to document the presence of plaque on six surfaces of each tooth for a client’s full dentition. This is completed on a physical paper copy of the index. After the index is conducted, the PI score is recorded in the client’s file to use for the diagnosis and the paper copy of the PI is discarded. This data can be scanned into the electronic file if the clinician prefers, but is not mandatory according to the faculty. As a result, there are deficiencies in the client's medical file which could inhibit further research involving PI scores for the client's treatment.

Rationale

UBC was a pioneer in advancing dental hygiene education from diploma to degree competency, and was instrumental in developing the “Canadian Competencies for Baccalaureate Dental Hygiene Degree Programs” (2015). The competencies outlined in this document are practiced at all degree programs in Canada. However, UBC added several other competencies for its own program: leadership, disease prevention, research use, integration of knowledge, policy use, and scientific investigation. With these competencies added, it is assumed that graduates will have greater interest in research and public health. Therefore, the policies at UBC should embody and reflect these competencies as well.

Many research articles make use of the PI in determining whether certain aides are effective. In a study conducted by D’Cruz and Aradhya, efficacy of oral health education was evaluated on adolescents in Bangalore city. They measured PI on children because “the cornerstone of the prevention of the two major oral diseases, dental caries and periodontal disease, is maintenance of a clean mouth or a clean tooth surface to be particular, that is, a tooth surface free from dental plaque.”1 Indeed, plaque scores affect dental disease, with a complete section of gingivitis characterized as “dental plaque induced.”2 Although gingivitis is reversible, it is at this stage that disease progression should be halted; an intervention is most essential in improving the client’s oral health to avoid permanent damage. O’Leary’s PI also allows the clinician to calculate the client’s oral hygiene effectiveness by first counting all the tooth surfaces without plaque, then dividing by the total number of surfaces and finally multiplying by 100%. By documenting the physical PI, the clinician will be able to determine exactly where the client is ineffective in their oral hygiene techniques and can compare the indices from the past to confirm whether the changes are significant. In other contexts, improper use of the PI may be indicated and without evidence, may be overlooked. An example of this can be found in a study conducted by Al-Anezi and Harradine. in which different plaque indices are compared in regards to orthodontic treatment. In the case of O’Leary’s PI, it is less appropriate for bracketed teeth.3 With only the PI value and no true data to indicate where plaque was identified, this value may become less valid. Finally, the PI is important for determining the efficacy of dental hygiene aides. In a clinical trial documented by Triratana *et al*., three different dentifrices were compared and the results showed that triclosan/copolymer/fluoride dentifrices “exhibited statistically significant reductions in… plaque index scores.”4 Without the proper use of plaque indices, it would be difficult to determine the reliability of such clinical trials.

Conclusion

Currently, UBC’s Dental Hygiene Degree program does not require clinicians to scan the physical copy of the client’s PI into his or her Romexis file. This paper has demonstrated several reasons in which this policy should be changed. This policy can also be amended by electronically adding the PI document in the client’s Romexis file and omitting the physical copy altogether. However, it has not been explored in this paper since this would be the responsibility of the Romexis software developers. Ultimately, the proposed change will positively impact the health of clients and prompt graduates to engage in critical thought with emphasis on integration of knowledge and research.

References

1. D'Cruz A, Aradhya S. Impact of oral health education on oral hygiene knowledge, practices, plaque control and gingival health of 13- to 15-year-old school children in Bangalore city. International Journal of Dental Hygiene. 2012;11(2):126-133.

2. Oakley C, Larjava H. Undergraduate periodontics clinic manual. Vancouver: Division of Periodontics and Dental Hygiene Faculty of Dentistry; 2005. Available from: https://secure.dentistry.ubc.ca/intranet/undergrad\_periodontics\_manual/documents/Chapter\_3\_Assessment.pdf

3. Al-Anezi S, Harradine N. Quantifying plaque during orthodontic treatment:. The Angle Orthodontist. 2012;82(4):748-753.

4. Triratana T. Comparing three toothpastes in controlling plaque and gingivitis: A 6-month clinical study. American Journal of Dentistry. 2015;28(2):68-74.