

DHYG 210: Literature Review:

**Understanding the Differences between a Dental Hygiene Baccalaureate
Degree and Diploma**

Belinda Yip

30109145

Vicky Wang

22757158

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Instructor: Professor J. Karan

Introduction

Individuals who wish to become a dental hygienist have the option of doing a two to three year diploma program. If desired, they could advance their diploma into a degree by entering a degree completion program. The entry-to-practice baccalaureate option has recently become available to those with no previous dental background. There exists very little literature detailing the differences between doing the associate degree and the baccalaureate degree therefore the aim of this paper is to provide a thorough analysis. Areas explored include additional baccalaureate competencies, use of research and the need for advocacy.

Methods

A search was conducted on PubMed using the keywords dental, hygiene, baccalaureate, education, and diploma. Several articles appeared which fit the topic and we selected the ones that were most relevant to the topic. These articles were a mixture of peer reviewed and experimental articles. Upon gathering enough research, we summarized the main findings of each article and located common themes present throughout.

Additional Baccalaureate Competencies

The Canadian Dental Hygiene Association (CDHA) has outlined specific competencies in which registered dental hygienists (RDH) need to fulfill. These competencies do not discriminate between associate graduated and baccalaureate graduated RDHs. In addition to these, there are competencies which are expected of graduates from baccalaureate, master's and doctoral programs, including:

1. Depth and breadth of knowledge
2. Knowledge of methodologies and research
3. Application of knowledge;
4. Communication skills

5. Awareness of limits of knowledge; and
6. Professional capacity/autonomy¹

These are outlined in a document by the Council of Ministers of Education, Canada in 2007.

A study done by Kanji *et al.* found that the key differences between a diploma and bachelor dental hygiene education included increased abilities to communicate and negotiate, think critically and work with other professionals while area specific competency improvements included critiquing and using of literature (89%), using literature (87%) and critical thinking/problem solving (79%).² These were agreed upon by more than 75% of respondents. In another study done by Sunell *et al.*, respondents reported an increased depth of knowledge, quality of decision-making, action, and standard of care.¹ Overall, respondents that completed the baccalaureate degree felt a deeper understanding of the scientific knowledge which helped center client care and work to advance the profession.

A recurring competency that was highlighted throughout many studies was the need to improve interprofessional communication and include dental hygiene in the team. A study done at the Pacific University Dental Hygiene Program listed “work together with other health care professionals as part of an interprofessional collaborative team to enhance patient care” as one of the core competencies required to obtain the baccalaureate degree.³ Cross-training is also occurring among the entire medical/dental team, as dental hygienists are working in interprofessional teams performing risk assessments, oral health evaluations, preventive interventions, and education.⁴

Participants in the study by Kanji *et al.* felt that with the additional knowledge they gained from the baccalaureate degree, they were able to provide more thorough care while at the same time being regarded as more knowledgeable professionals. This increased their confidence and willingness to take act on their knowledge whether it be in the clinical setting or in the research setting. Ultimately, the participants felt that completing the baccalaureate degree not only advanced their

own personal career, but also progressed the professionalization of dental hygiene in Canada.²

Career Opportunities outside Traditional Private Practice

Baccalaureate programs often offer a more diverse range of career opportunities than associate programs. This is because longer programs have more exposure to research during the four year program.⁵ In a study by Catlett, the parameters of work for graduated dental hygienists in the US were collected:

Table 1: Comparison between Baccalaureates vs. Degree Completion⁶

	<u>Baccalaureate</u>	<u>Degree Completion</u> <u>(Associate's</u> <u>Degree)</u>
Obtained or obtaining master's degree or more advanced degrees	12%	4.3%
Avg. Days Worked in Clinical Settings	3.3 days/week	3.6 days/week
Graduates with Faculty Positions	30.3%	4.3%
Involvement in Research	8%	3.6%

The purpose was to use evidence based theories to “emphasize research as part of the curriculum.” An important finding from the data is most faculty positions went to baccalaureate trained hygienists rather than associate trained ones. As a result, the demand for associate degree program instructors increase; while there are too many baccalaureate program instructors and not enough schools to employ them. This resulted in the closure of baccalaureate programs, which may imply insufficient number of qualified dental hygiene instructors in the future.⁵ Baccalaureate trained hygienists were also more interested in utilizing research and continuing education at the master's or doctoral level.

Need for Advocacy

The diversity in which citizens are accessing care in North America is increasing and health care professionals must change as well in order to accommodate. In the United States, the Affordable Care Act is allowing a greater variety of patients to be treated, and it is imperative that the dental hygienists are equipped with “a variety of skill sets including strategic thinking and systems planning.”⁴ The key is not in preparing more dental hygienists in less time (in the case of associate degree education) but in preparing more knowledgeable hygienists with a broader range of skills which could be achieved through a baccalaureate degree.

Unfortunately, both diploma baccalaureate dental hygienists still lack the independence and autonomy of professional practice. In a study by Rowe *et al.* researchers claimed that “dental hygienists do not have a higher level of autonomy... due to bureaucratic restrictions where they are employed.” Another possible explanation for the lack of independence and autonomy is gender; in one study that included 156 participants, 98% were female and the rest were male.⁶

For dental hygienists to arise as political advocates, dental hygienists need to show “the knowledge of policy and political processes in order to influence those who have the power to affect change.”⁸ RDHs are typically in a position to only be client advocates, but the changing societal conditions prompt for a need to change public health policy. Baccalaureate degrees give dental hygienists the best education in terms of policy use and advocacy. The degree also allows for the RDH to gain a greater depth of understanding of the scientific research.¹ With this additional understanding, RDHs are able to link research information with clinical experience to provide the best evidence based approach to practice.⁵ Prevention is key and by educating caregivers of this fact may allow them to realize the importance of prevention and infection control in order to maintain health.

Future Direction

The main role of dental hygienists is to increase the access to oral healthcare, which will help to improve the overall health of the public. Some rural areas still lack this access, as reported by government documents. The shortage of dentists in marginalized populations is not due to the lack of trained professionals; but due to the curriculum being taught; most schools prepare dentists for the clinical settings and very little to no preparation for other settings. The problem can be solved by allowing dental hygienists to work within those communities. Dental hygienists can further their education with a master's level degree which would expand access to primary oral care in rural communities.¹⁰

Conclusion

The option of obtaining a dental hygiene baccalaureate with no previous dental knowledge has exposed a new perspective of the role of a primary health care provider. Dental hygienists with a baccalaureate degree have improved confidences in making the best choice possible for their clients. RDHs with the degree are more comfortable working in interprofessional teams as they feel their educational level is equivalent to their team members. In addition, baccalaureate trained practitioners have more career opportunities outside of the traditional clinical practice, such as educating or researching. However, dental hygienists are still only focused on patient advocacy and in order to provide more comprehensive care, dental hygienists must be more involved in policy change. The training for this facet is focused more during the baccalaureate degree program.

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