

Development and implementation of teledentistry to support clinical practice and structural competence among undergraduate dental and dental hygiene students

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Abstract

- Dental care is traditionally delivered in-person; however, teledentistry provides an option to access dental providers when access is challenging.^{1,2}
- Yet teledentistry is not widely taught in undergraduate dental education.
- A dental helpline service, called Dental Link (DL), was established within the faculty offering:
 - oral health information
 - referrals to suitable dental offices
 - aid navigating public dental insurances
 - virtual consultations
- This project will educate and train undergraduate dental and dental hygiene students in providing one modality of teledentistry to support the needs of underserved populations.

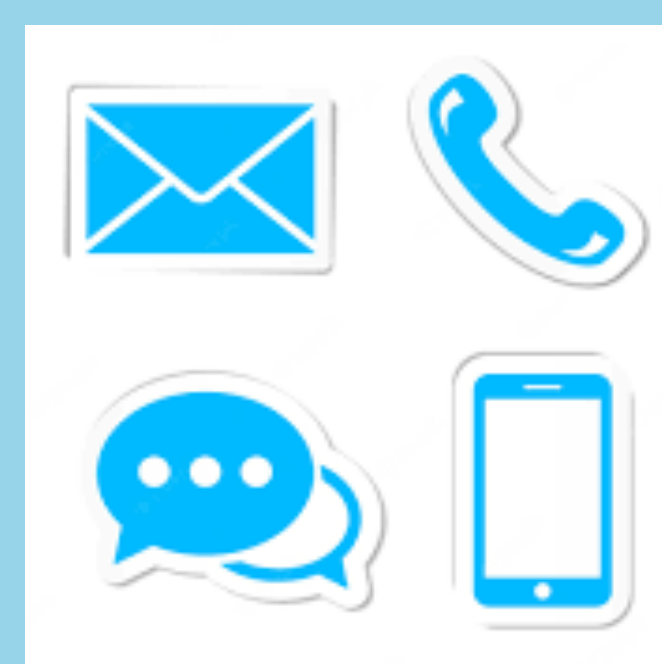
Objectives

- To implement teledentistry curriculum and experiential training to increase awareness of telehealth services and structural barriers to care.
- To foster more interprofessional education opportunities both within and outside of the Faculty of Dentistry.
- To increase dental and dental hygiene students' knowledge of teledentistry and structural barriers.

Development of DL



Teledentistry services and resources informed by our 6 partnered community-based organizations.



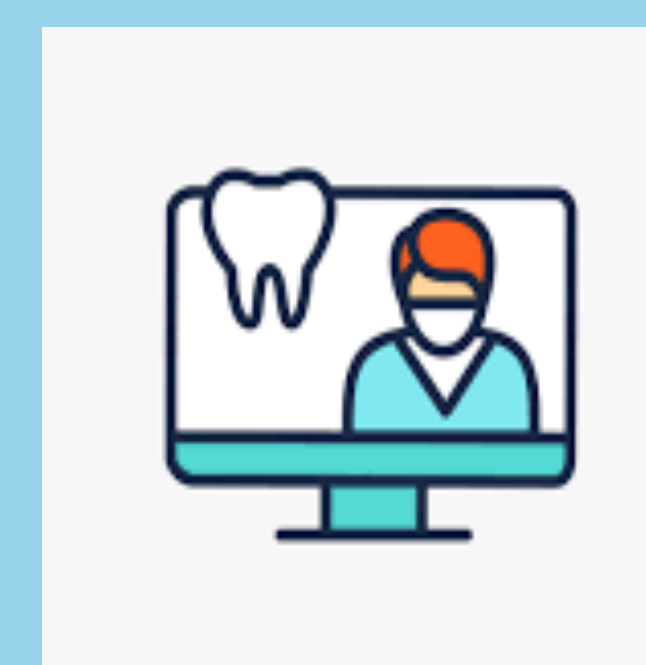
Accessible by phone, email, and video conference through Zoom software.

Development of Curriculum



Developed 1 lecture to increase knowledge on:

- Teledentistry, its various applications, its relation to public health concepts, and important considerations for different applications
- Dental Link and conducting virtual care



Developed 1 experiential rotation to practice being virtual providers and to increase awareness of teledentistry service provision and structural barriers to care.



Developed 1 observation to increase awareness of the teledentistry process and DL service.



Quality assurance through surveys, interviews, and focus groups.



Collaboration with CHANGE BC for more Interprofessional education opportunities.

Implementation

Academic year 2021/2022

Dental hygiene 4th year students

- Added 1 introductory lecture on Teledentistry and Dental Link
- Added 1 experiential rotation as virtual providers for Dental Link
- Conducted surveys and focus group

Dental hygiene 3rd year students

- Added 1 observation of 4th year experiential rotations

Academic year 2022/2023

Dental hygiene 4th year students

- Revised 1 introductory lecture on teledentistry
- Revised 1 lecture on being a virtual provider for DL
- Revised 1 experiential rotation with past case scenarios and role-playing cases
- Conducted surveys and interviews

Dental hygiene 3rd year students

- Revised 1 observation of fourth-year experiential rotations
- Added 1 introductory lecture on Teledentistry and Dental Link
- Conducted surveys

Academic years 2023/2024, 2024/2025

Dental and dental hygiene students

- 1st Years: Revise 1 introductory lecture on teledentistry with case scenarios
- 3rd Years: Revise observations
- 4th Years: Revise 2 lectures and 2 experiential rotations
- Conduct surveys and interviews or focus groups with students

Future implementation

References

- Estai M, Kanagasingam Y, Tennant M, Bunt S. A systematic review of the research evidence for the benefits of teledentistry. *Journal of telemedicine and telecare*. 2018;24(3):147-56.
- Irving M, Stewart R, Spallek H, Blinkhorn A. Using teledentistry in clinical practice as an enabler to improve access to clinical care: A qualitative systematic review. *Journal of telemedicine and telecare*. 2018;24(3):129-46.

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