# Managing patient mental health disclosures in Canadian dental and dental hygiene programs

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#### **ABSTRACT**

**Objective**: This narrative literature review aims to explore the current landscape regarding the management of patient mental health disclosures and gaps in resources and protocols within Canadian dental and dental hygiene programs. Methods: CINAHL, Education Source, and the Journal of Dental Education databases were used to search for literature published between 2001 to 2023. Results: A total of 57 sources were included, primarily comprising original research articles, systematic and other literature reviews. **Discussion**: The prevalence of mental health disclosures is rising, with 1 in 5 Canadians living with mental health conditions. Current dental and dental hygiene programs lack explicit protocols for managing patient mental health disclosures, and the literature reveals a scarcity of research on students' preparedness. This review underscores the importance of adopting humanistic language to reduce stigma and emphasizes educational institutions' roles in evaluating and facilitating mental health services to support the mental health lived experiences of dental patients. **Conclusion**: The review identifies three key research gaps: the absence of qualitative research on the student experience managing patient disclosures, unclear integration of mental health education, and a scarcity of comprehensive evaluations of mental health services. Recommendations include incorporating mental health training in entry-to-practice curricula, aligning with established community support frameworks, and creating dedicated resources for the effective management of mental health disclosures for patients in educational settings. This review has culminated in the development of a clinical flowchart to assist student practitioners in the management of their patients' mental health disclosures.

**Keywords:** dental and dental hygiene education; dental school curricula; humanistic language; mental health; mental health disclosures; qualitative research; stigma reduction

CDHA Research Agenda category: capacity building of the profession

#### INTRODUCTION

Mental health is the psychological and emotional status of one's well-being. It can be influenced by experiences, relationships, employment or educational environments, physical health, and the trust, support, and/or stigma in that community. Currently, 1 in 5 Canadians live with mental illness. <sup>2,3</sup> Furthermore, recognizing this prevalence among healthcare patients, peers, and colleagues inspired an investigation into the management of patient mental health disclosures. A mental illness is a condition that impacts cognition, emotion, and behaviour where the understanding of mental health has shifted toward a more holistic perspective, emphasizing overall well-being rather than merely the absence of disease.<sup>4</sup> The evolving understanding of mental health in the 1960s and 1970s moved beyond limited diagnoses such as schizophrenia or depression to encompass a broader spectrum of conditions, reflecting a growing recognition of mental health as integral to overall health and wellbeing. <sup>4</sup> The Mental Health Commission of Canada estimates the current and projected Canadian population living with mental illness over the next three decades.<sup>3</sup> The data indicate that mental illnesses are most prevalent among individuals aged 20 to 40, with anxiety and mood disorders being the most common in this group.<sup>3</sup> A comparison between females and males reveals a consistent trend: as age increases across each decade, the prevalence of mental illness steadily rises for both groups.<sup>3</sup> In the next three decades, the number of people living with mental illness is forecasted to increase by 31%, reaching 8.9 million Canadians compared to the 6.9 million Canadians currently living with a mental illness.3

Using humanistic terms, such as; "individual" or "person with lived experience," can reduce the stigma associated with the terms "mental illness/disorder," which this narrative literature review aims to do. <sup>5,6</sup> The Canadian Journal of Psychiatry outlined the concern that poor oral health is correlated to mental health lived experiences due to a higher prevalence of becoming edentulous with higher rates of decayed, missing, or filled teeth. <sup>7,8</sup> Those with mental health lived experiences commonly have poor oral health outcomes due to medication side effects, smoking, drug misuse, and poor oral health self-care behaviours. <sup>8</sup> Moreover, substance use, economic hardship, sociodemographic, and behavioural factors have been consistently associated with mental health lived experience incidence and prevalence. <sup>9,10</sup> Individuals may reach a breaking point regarding their

mental health where immediate help and support are critical, such as experiencing suicidal ideations, self-harm, or anxiety attacks.<sup>11</sup>

Stigma can be a barrier to help-seeking amongst young people with mental health lived experiences; additionally, internalizing any prejudices against individuals can lead to higher levels of self-stigma. Patients expressing "I don't talk about myself much because I don't want to burden others with my mental illness," or "I feel out of place in the world because I have a mental illness," are examples of how self-stigma and stigma affect individuals to this day. 13,14

Stigma leads to avoidance and underuse of dental and medical services, including mental health care, which may exacerbate inequality among those who are most mentally ill. <sup>12,15,16</sup> As a dental team, regular ongoing continuing education occurs for medical emergencies; however, mental health emergencies are not introduced, resulting in discrepancies and challenges with managing all medical emergencies. <sup>11</sup> In Canadian educational institutions, a scarcity of research and protocols regarding the management of mental health emergencies among dental and dental hygiene patient populations exists. It is suggested that adequate management of stress and mental health disorders needs to be included in the treatment of clinical manifestations. <sup>17</sup> This review aims to explore resources and experiences that dental and dental hygiene students need to support their patients with mental health lived experiences and disclosures. The review of literature and gaps identified has culminated in the development of a clinical flowchart to assist student practitioners in the management of their patients' mental health disclosures.

#### **METHODS**

Databases including the Cumulative Index of Nursing and Allied Health Literature

(CINAHL), Education Source, accessed through the University of British Columbia's online Library,
as well as the Journal of Dental Education's website were used to search for relevant literature. The
Search terms included: mental health, mental illness, patient disclosures, oral health, dentistry,
Canada, prevalence, mental health emergency, mental health crisis management, mental health
resources, and healthcare. Fifty-seven sources published in the English language between 2001 and
2023 were included. The research articles included in this narrative literature review consisted of 9

literature reviews, 13 quantitative research studies (including 7 descriptive studies), 3 observational studies, and 3 qualitative research studies, along with a systematic review, 2 meta-analyses', mixed methods study, and program evaluations. Relevant data extracted from the selected articles encompassed mental health disclosures, the prevalence of mental health experiences among dental patients, management of mental health emergencies in dental settings, available healthcare resources, and any other pertinent information related to how mental health is addressed within Canadian dental and dental hygiene programs. Single descriptive case reports and opinion pieces as well as studies not published in English were excluded.

#### **RESULTS**

This narrative literature review synthesizes a comprehensive exploration of mental health and its implications within Canadian dental and dental hygiene contexts. The review encompasses several key themes: prevalence and incidence trends, the impact of stigma on healthcare delivery, experiences in healthcare environments, educational preparedness, and protocols for managing mental health emergencies. This paper highlights the need for integrated approaches that prioritize patient well-being and enhance healthcare provider educational preparedness in the management of patient mental health disclosures. These sections underscore the complexity of addressing mental health within educational and dental care settings, advocating for integrated approaches that prioritize patient well-being and healthcare provider preparedness.

# **Prevalence and Incidence**

RiskAnalytica documented Canadians' mental health experiences over 30 years in a

December 2011 publication.<sup>3</sup> The American Journal of Public Health more recently analyzed mental health emergencies during the COVID-19 pandemic, indicating a potential increase based on historical data from previous public health crises.<sup>9</sup> Longitudinal data is necessary for confirmation, as a document estimating mental health impacts in Canada from 2011 to 2041 also suggested rising challenges.<sup>3,9</sup> While this trajectory did not anticipate COVID-19, an updated report by the Mental Health Commission of Canada emphasized the exacerbated mental health challenges during the

pandemic, including increased suicidal ideation and attempts.<sup>18,19</sup> In 2020, 50% of Canadians reported that their mental health had worsened since the pandemic.<sup>20,21</sup> Later that year, Statistics Canada reported a 14% decline in rating mental health as "very good" or "excellent" since 2018.<sup>20,21</sup>

Risk factors such as low education and income levels increased the likelihood of developmental disabilities and mental health lived experiences. 12 However, studies have shown that poverty alone may not always be directly linked to mental health lived experiences; factors such as economic hardship, societal pressures found in the workplace (workload, job control, and social support), gender, service needs, and help-seeking behaviour also play significant roles. 9,12,22 In local communities, mental health resources may be insufficient, contributing to barriers in accessing care. 12 The WHO Assessment Instrument for Mental Health Systems (AIMS) highlights that disadvantaged populations, such as the homeless and refugees, often face higher rates of mental health lived experiences due to inadequate strategies for delivering equitable care across all demographics and locations. 12 Assessing the susceptibility towards mental health emergencies, the precipitators of stress have been noted as possible opportunities, goals, and life events. 23

# Stigma

Caution should be used when referring to individuals with mental illness.<sup>24</sup> Currently, health care providers are urged to ask and recommend consulting their patients when asking how they would prefer to be addressed.<sup>5,24</sup> Considering using the person's name, "person," or "individual with a ... (specific illness)" is suggested.<sup>24</sup> Furthermore, the terms "individual" or "person with lived experience" were identified in various Australian studies as the preferred terms.<sup>5,24</sup> These terms allow for empowerment and are focused on recovery.<sup>5</sup>

The word stigma originates from ancient Greece, whereas today, it can be conceptualized as an individual being stereotyped and/or socially excluded. 16,25,26 Stigma is associated with an individual's mental health lived experience and is often held by populations, even healthcare providers. 13,27 For Canadian families, stigma could include fear, shame, inability to cope, helplessness, and hopelessness. 16 Mental health professionals see stigma as mental health outlets being scrutinized or viewed with disgust or suspicion. 16 In Canada, education on culturally sensitive approaches and trauma-informed care is essential to ensure healthcare providers can work effectively with stigmatised

groups. 15,27 Without proper awareness, stigma can hinder improving Canada's mental health services. 13,16 Implementing anti-stigma interventions can lead to system improvement and mental health reform. 13 Having philosophical or cultural beliefs can be a barrier to recovery from mental health lived experiences; further research is needed to inform strategies to reduce stigma while increasing the quality of care. 13,16

#### **Experiences in Healthcare Environments**

In Canada, the life conditions of all patients (e.g. mental health lived experience and addiction) may not be fully understood by healthcare professionals, thus contributing to stigma.<sup>27</sup> Dental providers have limited access to complete medical histories, as that information is recorded following the patient's disclosure.<sup>27</sup> Consequently, patients often debate whether to disclose their entire history, fearing the negative stereotypes a healthcare provider can display toward them.<sup>27</sup> Outside of the dental profession, individuals may stigmatize patient populations (e.g. substance use disorders and HIV) in healthcare settings, leading to a reduced likelihood of receiving treatment toward health promotion.<sup>26-28</sup> What worked for participants in the dental office was noticing when the dental professional maintained eye contact, spoke in a caring voice, attempted to manage the pain, and allocated time to explain the procedure(s).<sup>27</sup> Having an increased social awareness of mental health by dental professionals can improve care experiences with marginalized populations.<sup>27</sup>

#### **Management of a Mental Health Emergency**

Alongside students, dental professionals also need to know the available support networks to access when patients present with urgent mental health needs, known as a mental health emergency. <sup>11</sup> In Canada, Wellness Together Canada (WTC), is a free, online, bilingual (French/English), 24/7 mental health and substance use support that offers confidential counselling, resources, and tools from social workers, psychologists, and other professionals. <sup>29</sup> Similarly, the newly available (as of December 2023) Canada 9-8-8 Suicide Crisis Helpline delivers 24/7 support that is bilingual, trauma-informed, and culturally sensitive, for anyone in Canada who may have suicidal thoughts or is seeking help for someone they care about. <sup>30</sup> Dental professionals must understand their patients' full medical

histories, including medications, diagnoses, and support from specialists.<sup>11</sup> Nursing care plans and hospital admissions go one step further to use standard checklists that screen patients for risk factors.<sup>7</sup> The checklists often include information on psychotropic medication, tobacco, or substance use.<sup>7</sup> In a mental health emergency, having a flowchart or model of care on the management techniques can offer a streamlined referral process.<sup>11,31</sup> Thus, providing dental teams with the skills and confidence to address and manage these high-pressure situations appropriately.<sup>11,31</sup> In addition, having appropriate follow-up services and strategies to monitor all patients provided with mental health services can ensure adequate support for the at-risk patient(s).<sup>11,31</sup> The dental team needs to be prepared to improve oral health status and contribute to public health emergencies, thus, preventing life-threatening diseases.<sup>32</sup>

#### **Current Protocols/Procedures at UBC and other Universities**

This narrative literature review was conducted by a student in the University of British Columbia's (UBC) Dental Hygiene Degree Program, where a patient experience inspired recognition and investigation into the current and future direction that policies regarding the management of mental health emergencies can be employed within the university, province, and nationally. Three key sources have significantly contributed to addressing the research question on "Managing Patient Mental Health Disclosures in Canadian Dental and Dental Hygiene Programs" by offering valuable insights and practical strategies. The Canadian Mental Health Association's Guide and Framework both emphasize a structured approach to enhancing mental health within educational settings, advocating for comprehensive integration of mental health support tailored to the needs of both students and patient populations.<sup>33</sup> Furthermore, publications from the Canadian Dental Association Essentials and The Centre for Addiction and Mental Health (CAMH) underscore the importance of integrating mental health services within dental education, promoting student wellbeing and enhancing patient care outcomes.<sup>34</sup> Lastly, Yates's publication on managing mental health crises in dental practices emphasizes the value of implementing clinical flowcharts and models of care to streamline referral processes and enhance dental teams' capabilities to address high-pressure situations appropriately. 11 Similarly, the Suicide Awareness and Intervention Training (SAIT) and Mental

Health First-Aid provide essential training and resources for handling mental health crises, equipping dental professionals with the necessary skills to identify and manage these situations effectively.<sup>29,35</sup>

#### **Comprehensive Mental Health Resources at Canadian Post-Secondary Institutions**

Currently, Canadian educational institutions offer Suicide Awareness and Intervention Training (SAIT) as well as mental health first-aid courses to enhance confidence in responding to mental health emergencies and building rapport. 11,35 Suicide Awareness & Intervention Training (SAIT) is a free introductory course allowing UBC Vancouver and Okanagan students, faculty, staff and alumni to engage in supportive conversations with anyone having suicidal thoughts and how to identify appropriate resources for them. 35 Aside from SAIT, UBC has a Green Folder (https://wellbeing.ubc.ca/sites/wellbeing.ubc.ca/files/u9/2021.01 Green%20Folder with date.pdf) that promotes student health and well-being within British Columbia and other provinces.<sup>36</sup> A resource similar to UBC's Green Folder was created by the Schulich School of Medicine & Dentistry, which offers guidance on responding to a student having a mental health emergency.<sup>37</sup> Practical resources developed by institutions like the University of British Columbia's Faculty of Dentistry (Figure 1) demonstrate effective approaches to managing patient mental health emergencies in dental settings, ensuring comprehensive care and support for both students and patients. Collectively, these sources offer a holistic framework and practical tools that are essential for addressing patient mental health disclosures in Canadian dental and dental hygiene programs, fostering supportive environments and enhancing overall care.

#### DISCUSSION

Patients who visit dental teams should not only expect to have their oral health needs met but also other health needs such as lived experiences with mental health as part of a holistic personcentred approach to care.<sup>7,27</sup> As a dental team, it is crucial to recognize the profound impact that oral hygiene can have on overall health outcomes across all ages, cultures, socio-economic statuses, and genders, where stress and mental health lived experiences can result in poor oral hygiene due to behaviour modifications.<sup>3,17,31,38,39</sup> Medications for mental health lived experiences (e.g., psychotropic

medications) commonly have adverse effects directly affecting oral health status, with xerostomia being the most prevalent, followed by excessive salivation, dysgeusia, and tardive dyskinesia.<sup>7,40</sup> Current research suggests a relationship between mental health and oral health; however, the significance of that relationship needs further examination, as outlined by many studies in this narrative literature review.<sup>7,41-43</sup> One evidence-supported conclusion is that poor oral health significantly contributes to the quality of life patients have.<sup>7,41</sup>

#### Gaps in Providing Care

An essential finding to support this narrative literature review pertains to the efforts health and dental care providers can employ when supporting vulnerable populations, beginning with the support of health and dental care workers' mental health. The consequences of anxiety and stress that dental students experience can influence their ability to manage patient anxieties adequately. To alleviate that concern, educational institutions offer support to students with mental health lived experiences; however, in a dental setting and within the Faculty of Dentistry at UBC, there was no protocol for helping students manage patients with such mental health experiences and disclosures.

The Emergency Medical Response Plan (2022-2023) allows all clinical instructors, students and employees at the UBC Dental Clinic to follow an organized flowchart on the management of medical emergencies (e.g. unresponsive person, fainting/collapse, chest pain, shortness of breath, seizure, presumed overdose, and severe allergic reaction (anaphylaxis)); however, the management of a mental health emergency is not identified in this resource.<sup>44</sup>

## **Educational Preparation in Entry-to-Practice Programs**

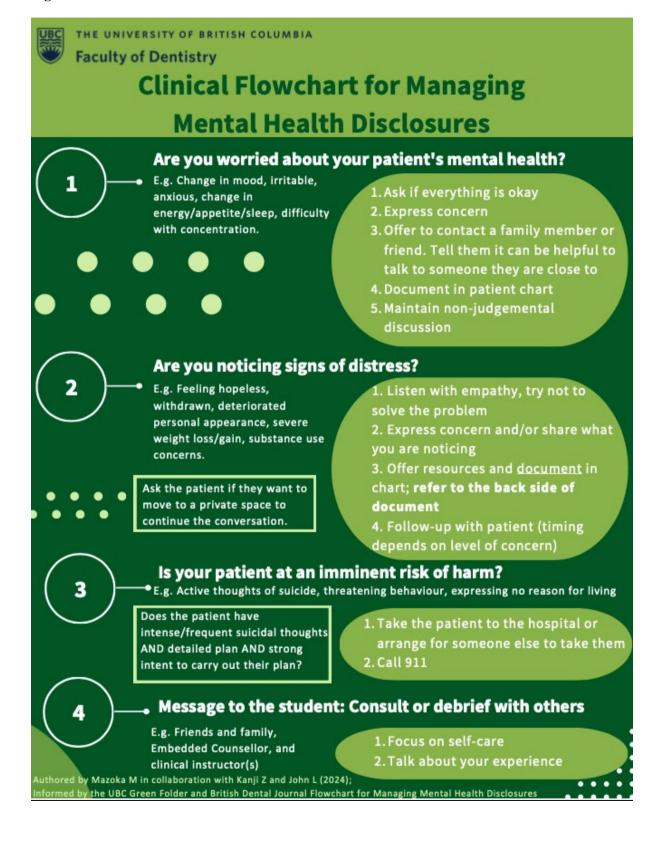
The research reviewed in this paper identified a gap in providing patient-centred care by considering the mental well-being of patients at UBC. 45-51 To be competent, Canadian dental and dental hygiene programs should consider the most vulnerable populations to ensure the beneficence of all patients. 45,46 Identifying this gap provides impetus for Canadian educational institutions to adopt a standardized protocol to manage mental health emergencies of their patient populations. To effectively address mental health lived experiences within educational institutions, it is essential to

integrate provincial and nationwide emergency resources accessible to students, faculty, staff, and alumni, similar to an emergency medical response plan. This comprehensive approach ensures that all members of the academic community receive timely and appropriate support.

Before introducing the proposed resource and Figure 1, it is important to evaluate the current state of educational preparation in dental and dental hygiene programs regarding the management of patients' mental health. Existing curricula often lack sufficient education on the mental health needs of patients and do not consistently include clinical resources for referring individuals with mental health lived experiences. 7,11,16,27 To address this deficiency, the establishment of a specialized clinical resource tailored for dental and dental hygiene students is proposed. This resource would provide targeted guidance for student practitioners needing to manage their patients who experience mental health emergencies.

The first author, who was enrolled in the University of British Columbia's Dental Hygiene Degree Program, developed Figure 1. This clinical resource was informed by the literature reviewed and developed in collaboration with the UBC Faculty of Dentistry's Director of Student Affairs and the Faculty's Embedded Counsellor. This student was inspired by a patient experience involving a mental health disclosure, leading to the development of a resource intended for implementation within the Faculty of Dentistry. The aim was to provide a tool for recognizing, assisting, and resolving mental health emergencies. Their objective was to make this resource accessible to UBC Dentistry students so they could effectively support their patients during such mental health disclosures.

Figure 1





# Clinical Flowchart for Managing Mental Health Disclosures

# **Reminders to Faculty members:**

- · Keep the area clear
- · Find a wheelchair for possible transportation
- Notify other clinical instructors that a mental health disclosure is occurring; be mindful of not drawing in other students in the process
- Remind student of supports available to them (e.g. Embedded Counsellor)

24/7, counselling regarding mental health **Wellness Together Canada** and substance use by phone, text, or video (multilingual) **Phone Line:** Text Line: Text "WELLNESS" to 1-866-585-0445 741741 **Phone Line:** Website: Crisis Centre of BC 1-800-784-2433 crisiscentre.bc.ca 9-8-8: Suicide Crisis Helpline Call or text 9-8-8 **Hope for Wellness Helpline Phone Line:** 1-855-242-3310 (For Indigenous People) Suggest a visit to the nearest medical doctor and/or mental health professional Authored by Mazoka M in collaboration with Kanii Z and John L (2024): Informed by the UBC Green Folder and British Dental Journal Flowchart for Managing Mental Health Disclosures Green Folder - University of British Columbia [Internet]. [cited 2023 Oct 9]. Available from: . Yates C, Furtado V. Managing mental health crises in dental practice. British Dental Journal. 022;232(6):375-8. doi:10.1038/s41415-022-3936-0

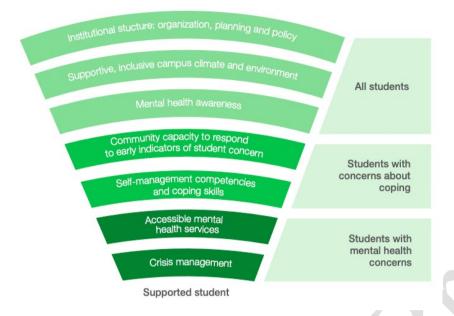
#### **Dental and Dental Hygiene Student Wellbeing**

In addition to addressing the mental health needs of patients, educational institutions must ensure that comprehensive and accessible support mechanisms are available for their student body, where mental health lived experiences are common. <sup>19,32,52</sup> The release of The World Health Report 2001 significantly raised awareness about mental health concerns, but this heightened awareness has not yet led to the necessary investment in adequate resources. <sup>12,53</sup> To effectively support vulnerable populations and address mental health lived experiences, Partido et al. emphasized the urgent need for targeted interventions to combat burnout among dental hygiene students, where notably, 38% of students at one institution reported experiencing symptoms of burnout. <sup>54</sup> This study examined the reciprocal relationship between healthcare students' mental well-being and the quality of patient care they provide. <sup>54</sup> It is crucial for public health stakeholders, mental health agencies, government bodies, and policymakers to allocate appropriate resources. <sup>55</sup> This section underscores the importance of having a clinical resource dedicated to dental and dental hygiene students to manage patients experiencing mental health emergencies, highlighting the critical need for such support in educational settings.

Currently, at Canadian Universities, a unified framework regarding mental health promotion appears to be absent. The Canadian Mental Health Association's Guide (Figure 2) offers a systemic approach to improving student mental health, recovery, and well-being in institutional settings.<sup>33</sup> It is equipped to target various student populations so that all learners can integrate through their decision-making, skill-building, and mental health lived experiences.<sup>33</sup> Universities offer mental health supports, such as mindfulness activities, stress relief days, and animal therapy to decrease stress and increase social engagement.<sup>56</sup> Effective mental health support is crucial for better managing mental health disclosures, enhancing overall student well-being, and improving patient outcomes.

## Figure 2

Figure 2: Framework for Post-Secondary Student Mental Health



Canadian Association of College & University Student Services and Canadian Mental Health Association. Post-secondary student mental health: Guide to a systemic approach. 2013. Available from: <a href="https://healthycampuses.ca/wpcontent/uploads/2014/09/The-National-Guide.pdf">https://healthycampuses.ca/wpcontent/uploads/2014/09/The-National-Guide.pdf</a>

To effectively address mental health disclosures within educational institutions, it is crucial to integrate nationwide emergency resources accessible to students, faculty, staff, and alumni, similar to an emergency medical response plan. This comprehensive approach ensures timely and appropriate support for all academic community members. In addition, it is imperative to establish a specialized resource specifically for dental and dental hygiene students to manage patients experiencing mental health emergencies. As depicted in Figure 2, such a resource would offer targeted guidance, allowing these students to address mental health crises while upholding their professional duties. This dual strategy—broad integration of mental health resources and specialized support—may significantly enhance mental health management across educational settings. While these initiatives represent significant strides in addressing mental health within dental education, there remains a critical need to broaden and standardize such approaches across all Canadian dental and dental hygiene schools.

#### Recommendations for Canadian Dental and Dental Hygiene Schools

- 1. Incorporate Suicide Awareness and Intervention Training, mental health first-aid, and traumainformed care into the curriculum.
- 2. Align with The Canadian Mental Health Association's framework for addressing the needs of both post-secondary students and patient populations.
- Integrate nationwide mental health emergency resources accessible to students, faculty, staff, and alumni.
- 4. Create a dedicated resource to support dental and dental hygiene students in effectively managing patients experiencing a mental health emergency (as depicted in Figure 1).

#### **Research Gaps and Future Research Directions**

The narrative literature review has highlighted a scarcity of resources for managing patient mental health emergencies, particularly evident in the lack of qualitative research on how dental and dental hygiene students approach such crises, with a predominant reliance on quantitative methodologies. Three primary research gaps emerge: first, a lack of investigation into how dental health programs, especially in Canada, manage mental health emergencies, emphasizing the need for comprehensive assessments into the protocols and practices employed. Second, a lack of clarity on how the integration of mental health education into curricula contributes to students' well-being as they transition into professional roles.<sup>19</sup> Third, a scarcity of comprehensive evaluation of the effectiveness of various student mental health and wellness services. 19,43,57 Public health stakeholders, mental health agencies, government officials, and policymakers should recognize the limited availability of mental health emergency protocols, and the uncertain contribution of skills acquired in an educational setting to students' well-being as they transition into future professionals. 19,57 Future research should adopt humanistic terms to reduce stigma associated with mental health, exploring their impact on public perception.<sup>5,6</sup> The evaluation of student mental health services, understanding factors influencing service utilization, and optimizing support systems for diverse student populations represent critical areas for future investigation. 19,43,57 Recommended research methods encompass surveys, interviews, content analysis, longitudinal studies, and case studies to comprehensively evaluate mental health interventions.

#### **CONCLUSION**

When working with the public, especially within educational institutions, it is essential that all students, faculty, and staff are familiar with the existing procedures, including the protocols for managing patient mental health emergencies.<sup>33</sup> This awareness is crucial, given the current of evidence regarding the educational preparedness among dental and dental hygiene students in managing mental health emergencies when treating patients. Therefore, developing a decision-making framework to support students in these situations is imperative. The insufficient support for dental and dental hygiene students in addressing their mental health underscores the impact on the quality of patient care, highlighting the pressing need for developing comprehensive resources to effectively promote their mental well-being.<sup>54</sup> Therefore, a new clinical resource for managing patient mental health disclosures for Canadian dental and dental hygiene programs has been developed and introduced in this paper (Figure 1).

The ability to disseminate timely and accurate information to members involved during a mental health emergency can ensure the crisis is averted and handled with care.<sup>33</sup> Crisis management protocols are crucial to ensure that the campus community can respond to the risk of self-harm.<sup>40</sup> Incorporating mental health awareness initiatives within a supportive and inclusive campus climate can ensure adequate self-management, responses, and capacity to manage a mental health emergency within Canadian educational institutions effectively.<sup>33</sup>

#### PRACTICAL IMPLICATIONS OF THIS RESEARCH

- Healthcare professionals need to adopt humanistic and inclusive language to reduce stigma related to mental health.
- Dental and dental hygiene educational programs need to integrate appropriate training to prepare practitioners to manage patient mental health disclosures.
- The review has culminated in the development of a new clinical flowchart for the management of patient mental health disclosures which can be used by Canadian oral health students and practitioners.

#### REFERENCES

- Canada Public Health Agency of Government of Canada [Internet]. Gouvernement du Canada; 2020 [cited 2023 Aug 23]. Available from: <a href="https://www.canada.ca/en/public-health/services/about-mental-health.html">https://www.canada.ca/en/public-health/services/about-mental-health.html</a>
- Mental Health Commission of Canada. The Mental Health Commission of Canada 2017—
   2022 strategic plan [Internet]. Ottawa (CA): Mental Health Commission of Canada; 2016.
   [cited 2023 Dec 2]. Available from: <a href="https://canadacommons.ca/artifacts/1218659/the-mental-health-commission-of-canada-2017-2022-strategic-plan/1771734/">https://canadacommons.ca/artifacts/1218659/the-mental-health-commission-of-canada-2017-2022-strategic-plan/1771734/</a>
- Smetanin P, et al. The life and economic impact of major mental illnesses in Canada: 2011 to 2041. [Internet]. Toronto (CA): RiskAnalytica, on behalf of the Mental Health Commission of Canada 2011. [cited 2023 Dec 2]. Available from: <a href="https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/MHCC">https://www.mentalhealthcommission.ca/wp-content/uploads/drupal/MHCC</a> Report Base Case FINAL ENG 0 0.pdf
- 4. Manderscheid RW, Ryff CD, Freeman EJ, McKnight-Eily LR, Dhingra S, Strine TW. Evolving definitions of mental illness and wellness. Prev Chronic Dis. 2010;7(1).
- 5. Lyon AS, Mortimer-Jones SM. Terminology preferences in Mental Health. Issues Ment Health Nurs. 2020;41(6):515–24. doi:10.1080/01612840.2020.1719248
- Lyon AS, Mortimer-Jones SM. The relationship between terminology preferences, empowerment and internalised stigma in mental health. Issues Ment Health Nurs. 2021;42(2):183-195. https://doi.org/10.1080/01612840.2020.1756013
- 7. Kisely S. No Mental Health Without Oral Health. Can J Psychiatry. 2016;61(5):277–82. doi:10.1177/0706743716632523
- 8. Turner E, Berry K, Aggarwal VR, Quinlivan L, Villanueva T, Palmier-Claus J. Oral health self-care behaviours in serious mental illness: A systematic review and meta-analysis. Acta Psychiatr Scand. 2022;(145):29-41. <a href="https://doi.org/10.1111/acps.13308">https://doi.org/10.1111/acps.13308</a>
- Holingue C, Kalb LG, Riehm KE, Bennett D, Kapteyn A, Veldhuis CB, et al. Mental distress in the United States at the beginning of the COVID-19 pandemic. Am J Public Health. 2020;110(11):1628–34. doi:10.2105/ajph.2020.305857

- 10. Ylipaavalniemi J, Kivimäki M, Elovainio M, Virtanen M, Keltikangas-Järvinen L, Vahtera J. Psychosocial work characteristics and incidence of newly diagnosed depression: A prospective cohort study of three different models. Soc Sci Med. 2005;61(1):111–22. doi:10.1016/j.socscimed.2004.11.038
- 11. Yates C, Furtado V. Managing mental health crises in dental practice. Br Dent J. 2022;232(6):375–8. doi:10.1038/s41415-022-3936-0
- Saxena S, Thornicroft G, Knapp M, Whiteford H. Resources for mental health: Scarcity, inequity, and inefficiency. Lancet. 2007;370(9590):878–89. doi:10.1016/s0140-6736(07)61239-2
- Lv Y, Wolf A, Wang X. Experienced stigma and self-stigma in Chinese patients with schizophrenia. Gen Hosp Psychiatry. 2013;35(1):83-88.
   http://dx.doi.org/10.1016/j.genhosppsych.2012.07.007
- Ghanean H, Nojomi M, Jacobsson L. Internalized stigma of mental illness in Tehran, Iran.
   Stigma Res Action. 2011;1:11-7. doi: 10.5463/SRA.v1i1.10
- 15. Canadian Mental Health Association. Stigma and discrimination. [Internet]
  <a href="https://ontario.cmha.ca/">https://ontario.cmha.ca/</a> [cited 2023 Aug 23]. Website.
  <a href="https://ontario.cmha.ca/documents/stigma-and-discrimination/">https://ontario.cmha.ca/documents/stigma-and-discrimination/</a>.
- 16. Brondani MA, Alan R, Donnelly L. Stigma of addiction and mental illness in healthcare: The case of patients' experiences in dental settings. PLOS ONE. 2017;12(5). doi:10.1371/journal.pone.0177388
- 17. Ball J, Darby I. Mental Health and Periodontal and peri-implant diseases. Periodontol. 2022;90(1):106–24. doi:10.1111/prd.12452
- 18. Bauer J. Roots of Hope: A uniquely Canadian approach to suicide prevention. J Community Saf Well-Being. 2023.8(2):107–109.
  - https://www.journalcswb.ca/index.php/cswb/article/view/335
- Maragha T, Donnelly L, Schuetz C, Bergmann H, Brondani M. Mental health and wellness in Canadian dental schools: Findings from a national study. J Dent Educ. 2022;86(1):68-76.
   DOI: 10.1002/jdd.12768

- 20. Jenkins EK, McAuliffe C, Hirani S, Richardson C, Thomson KC, McGuinness L, et al. A portrait of the early and differential mental health impacts of the COVID-19 pandemic in Canada: Findings from the first wave of a nationally representative cross-sectional survey. Prev Med. 2021;145:106333-. https://doi.org/10.1016/j.ypmed.2020.106333
- 21. Angus Reid Institute. Worry, gratitude & boredom: As COVID-19 affects mental, financial health, who fares better; Who is worse? 2020 [cited 2023 Aug 23]. <a href="http://angusreid.org/wp-content/uploads/2020/04/2020.04.27">http://angusreid.org/wp-content/uploads/2020/04/2020.04.27</a> COVID-mental-health.pdf
- 22. Ylipaavalniemi J, Kivimäki M, Elovainio M, Virtanen M, Keltikangas-Järvinen L, Vahtera J. Psychosocial work characteristics and incidence of newly diagnosed depression: A prospective cohort study of three different models. Soc Sci Med. 2005;61(1):111–22. doi:10.1016/j.socscimed.2004.11.038
- 23. Thomas R, Evans S, Gately C, Stordy J, Huxley P, Rogers A, et al. State–event relations among indicators of susceptibility to mental distress in Wythenshawe in the UK. Soc Sci Med. 2002;55(6):921–35. doi:10.1016/s0277-9536(01)00226-x
- 24. Gardiner M, Radian E, Neiman A, Neiman R. Declaring label preferences: Terminology research in mental health. Can J Community Ment Health. 2011;30(1):121-137. Available from: https://www.cjcmh.com/doi/10.7870/cjcmh-2011-0009
- 25. Link BG, Phelan JC. Conceptualizing stigma. Annu Rev Sociol. 2001;27(1):363-385. https://doi.org/10.1146/annurev.soc.27.1.363
- 26. Hoover K, Lockhart S, Callister C, Holtrop JS, Calcaterra SL. Experiences of stigma in hospitals with addiction consultation services: A qualitative analysis of patients' and hospitalbased providers' perspectives. J Subst Abuse Treat. 2022;138.
  <a href="https://doi.org/10.1016/j.jsat.2021.108708">https://doi.org/10.1016/j.jsat.2021.108708</a>
- 27. Stuart H. Fighting stigma and discrimination is fighting for mental health. Can Public Policy.
  2005;31:21-28 [Internet]. [cited 2023 Aug 23]. Available from:
  <a href="https://mdsc.ca/documents/Publications/Fighting%20Stigma%20and%20Discrimination%20is%20Fighting%20for%20Mental%20Health.pdf">https://mdsc.ca/documents/Publications/Fighting%20Stigma%20and%20Discrimination%20is%20Fighting%20for%20Mental%20Health.pdf</a>

- 28. Poku OB, et al. "It's better if I die because even in the hospital, there is a stigma, people still gossip": Gossip as a culturally shaped labelling process and its implications for HIV-related stigma in Botswana. AIDS Behav. 2023; <a href="https://doi.org/10.1007/s10461-023-03980-x">https://doi.org/10.1007/s10461-023-03980-x</a>.
- 29. Wellness together Canada. Available from: <a href="https://www.wellnesstogether.ca/en-ca/">https://www.wellnesstogether.ca/en-ca/</a>.
- 30. Public Health Agency of Canada. Government of Canada 2024. Available from:

  <a href="https://www.canada.ca/en/public-health/services/mental-health-services/mental-health-get-help.html">https://www.canada.ca/en/public-health/services/mental-health-services/mental-health-get-help.html</a>.
- 31. Webster S, Harrison L. The multidisciplinary approach to Mental Health Crisis Management:

  An Australian example. J Psychiatr Ment Health Nurs. 2004;11(1): 21-29.

  <a href="https://doi.org/10.1111/j.1365-2850.2004.00647.x">https://doi.org/10.1111/j.1365-2850.2004.00647.x</a>.
- 32. Vergara-Buenaventura A, Chavez-Tuñon M, Castro-Ruiz C. The mental health consequences of coronavirus disease 2019 pandemic in Dentistry. Disaster Med Public Health Prep. 2020;14(6): 803-807. <a href="https://doi.org/10.1017/dmp.2020.190">https://doi.org/10.1017/dmp.2020.190</a>.
- 33. Canadian Association of College & University Student Services and Canadian Mental Health Association. Post-secondary student mental health: Guide to a systemic approach. 2013.

  Available from: <a href="https://healthycampuses.ca/wp-content/uploads/2014/09/The-National-Guide.pdf">https://healthycampuses.ca/wp-content/uploads/2014/09/The-National-Guide.pdf</a>.
- 34. CDA Essentials Volume 8 issue 1. 2021. Available from: <a href="https://www.cda-adc.ca/en/services/essentials/2021/issue1/20/">https://www.cda-adc.ca/en/services/essentials/2021/issue1/20/</a>.
- 35. Suicide awareness & intervention training (SAIT). Available from: <a href="https://wellbeing.ubc.ca/sait">https://wellbeing.ubc.ca/sait</a>.
- 36. Green Folder University of British Columbia. Available from:
  <a href="https://facultystaff.students.ubc.ca/sites/facultystaff.students.ubc.ca/files/2021.01\_Green%20">https://facultystaff.students.ubc.ca/sites/facultystaff.students.ubc.ca/files/2021.01\_Green%20</a>
  Folder with date.pdf.
- 37. Identifying and responding to a student in distress: A Guide for Faculty and Staff. Available from: <a href="https://www.schulich.uwo.ca/learner\_experience/wellness\_resources/Identifying-a-Learner-In-Distress-Tips-for-Staff-and-Faculty.pdf">https://www.schulich.uwo.ca/learner\_experience/wellness\_resources/Identifying-a-Learner-In-Distress-Tips-for-Staff-and-Faculty.pdf</a>.

- 38. Heaton LJ, Mancl LA, Grembowski D, Armfield JM, Milgrom P. Unmet dental need in community-dwelling adults with mental illness. J Am Dent Assoc. 2013;144(3). https://doi.org/10.14219/jada.archive.2013.0122.
- 39. Khokhar MA, Khokhar WA, Clion AV, Tosh GE. Oral health education (advice and training) for people with serious mental illness (Review). Cochrane Database Syst Rev. 2016;9. doi: 10.1002/14651858.CD008802.pub3.
- 40. Crisis Management and Section 136 of the mental health act. J Med Ethics. 2017;44(5): 349-353. https://doi.org/10.1136/medethics-2016-103994.
- 41. Poornachitra P, Narayan V. Management of dental patients with mental health problems in Special Care Dentistry: A practical algorithm. Cureus. 2023; https://doi.org/10.7759/cureus.34809.
- 42. Oral Health Advice (education and training) for people with serious mental illness. Available from: https://www.cochrane.org/CD008802/SCHIZ\_oral-heath-advice-education-and-training-people-serious-mental-illness.
- 43. Macnamara A, Mishu MP, Faisal MR, Islam M, Peckham E. Improving oral health in people with severe mental illness (SMI): A systematic review. PLOS ONE. 2021;16(12): e0260766. https://doi.org/10.1371/journal.pone.0260766.
- 44. Emergency Medical Response Plan University of British Columbia. Available from:

  <a href="https://secure.dentistry.ubc.ca/intranet/operations\_manual/documents/Section\_IE\_Emergency\_Procedures.pdf?ver=Aug2022.">https://secure.dentistry.ubc.ca/intranet/operations\_manual/documents/Section\_IE\_Emergency\_Procedures.pdf?ver=Aug2022.</a>
- 45. Dental hygienists' code of ethics. Canadian Dental Hygienist Association. Available from: https://www.cdha.ca/pdfs/Profession/Resources/Code\_of\_Ethics\_EN\_web.pdf.
- 46. Canadian competencies for baccalaureate dental hygiene programs. Canadian Dental Hygienist Association. Available from: https://files.cdha.ca/profession/CCBDHP report.pdf.
- 47. Canadian competencies for baccalaureate oral health practitioner: Combining dental hygiene and dental therapy Education. Canadian Dental Hygienist Association. Available from: https://files.cdha.ca/education/OHP-Competencies.pdf.

- 48. ACFD educational framework for the development of competency in dental programs. Association of Canadian Faculties of Dentistry. 2019;83(4): 464-473. https://doi.org/10.21815/jde.019.045.
- 49. Charbonneau A, Walton JN, Morin S, Dagenais M. Association of Canadian Faculties of Dentistry educational framework for the development of competency in dental programs. J Dent Educ. 2019;83(4):464-473. doi:10.21815/JDE.019.045.
- 50. ACFD educational framework for the development of competency in dental programs. 2016. Available from: https://acfd.ca/wp-content/uploads/ACFD-Educational-Framework-for-the-Development-of-Competency-in-Dental-Programs\_2016.pdf.
- 51. Graduate dental hygiene program aims and outcomes. American Dental Education

  Association. Available from: <a href="https://www.adha.org/wp-content/uploads/2022/11/Graduate\_Dental\_Hygiene\_Program\_Aims\_and\_Outcomes\_March\_2021.pdf">https://www.adha.org/wp-content/uploads/2022/11/Graduate\_Dental\_Hygiene\_Program\_Aims\_and\_Outcomes\_March\_2021.pdf</a>.
- 52. Auerbach RP, Mortier P, Bruffaerts R, Alonso J, Benjet C, Cuijpers P, et al. WHO world mental health surveys international college student project: Prevalence and distribution of mental disorders. J Abnorm Psychol. 2018;127(7): 623-638.

  <a href="https://doi.org/10.1037/abn0000362">https://doi.org/10.1037/abn0000362</a>.
- 53. World Health Organization. World health report 2001. Mental health: new understanding, new hope. 2001. Available from: <a href="https://apps.who.int/iris/handle/10665/42390">https://apps.who.int/iris/handle/10665/42390</a>.
- 54. Partido BB, Owen J. Relationship between emotional intelligence, stress, and burnout among dental hygiene students. J Dent Educ. 2020;84(8): 864-870.

  <a href="https://doi.org/10.1002/jdd.12172">https://doi.org/10.1002/jdd.12172</a>.
- 55. Dragioti E, Li H, Tsitsas G, Lee KH, Choi J, Kim J, et al. A large-scale meta-analytic atlas of mental health problems prevalence during the COVID-19 early pandemic. J Med Virol. 2022;94(5): 1935-1949. <a href="https://doi.org/10.1002/jmv.27549">https://doi.org/10.1002/jmv.27549</a>.
- 56. Dell CA, Mills S, Goodfellow H, Cruz M. A novel approach to supporting student mental health in the university classroom with therapy dogs. Can J Community Ment Health. 2022;41(2): 97-101. <a href="https://doi.org/10.7870/cjcmh-2022-010">https://doi.org/10.7870/cjcmh-2022-010</a>.

57. Pich J. Oral Health Education (advice and training) for people with serious mental illness (review). Issues Ment Health Nurs. 2019;40(10): 929-930. https://doi.org/10.1080/01612840.2019.1619204.

