THE CANADIAN DENTAL HYGIENISTS ASSOCIATION
L'ASSOCIATION CANADIENNE DES HYGIÉNISTES DENTAIRES

2022

Healthy Professional Worker Partnership:
Dental Hygiene & Comparative Findings

Examining the Pathway from Mental Health to Leaves of Absence & Return to Work and the Impact of the Pandemic



The Healthy Professional Worker Partnership

11/28/2022

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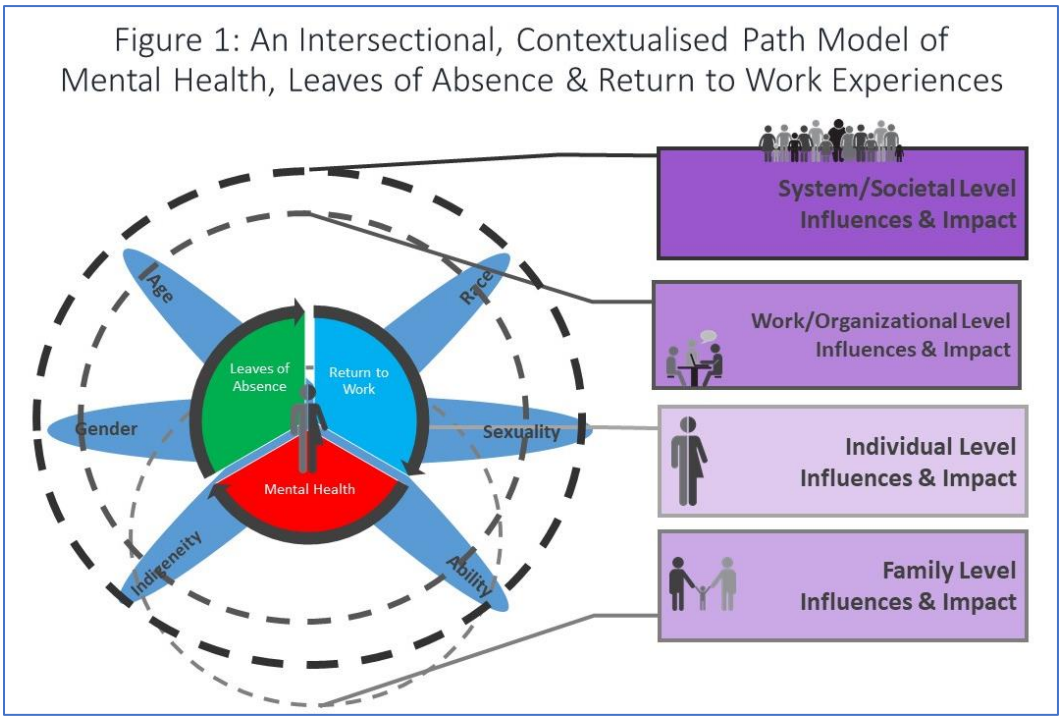
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Introduction

The Healthy Professional Worker (HPW) Partnership is an initiative that examines the mental health, leaves of absence and return to work experiences from an intersectional and comparative perspective. HPW focuses on the experiences of mental health at work, the decision to take a leave of absence from work (or not, what is called presenteeism), and how return to work is negotiated and facilitated. Its focus is inclusive of workplace stress, overload, and burnout to experiences of anxiety, depression, and other forms of mental illness along a trajectory. It seeks to understand how personal, familial, work, and organizational contexts influence the path from mental health to leaves of absence to return to work. This is informed by the following conceptual framework.

Conceptual Framework

Figure 1: An Intersectional, Contextualised Path Model of Mental Health, Leaves of Absence & Return to Work Experiences



Intersectional: At the centre of the framework an individual professional worker, of a particular age and (non-binary) gender identity who also has intersecting racial, Indigenous, ability and sexual identities affecting their experiences of mental health, leaves of absence and return to work. HPW also considers gender roles, norms, and relations and how these intersect with other identities.

Contextualized: Enveloping each worker are the different contextual influences at the individual level, at the level of their family, at the level of their work and organizational context, all situated within the broader system and societal level. The individual worker is situated between the work and family level to reflect the tensions that often exist amongst those factors.

Path: The pathway from mental health to leaves of absence to return to work is depicted in a cyclical fashion. This recognizes that any individual worker experiencing mental health may or

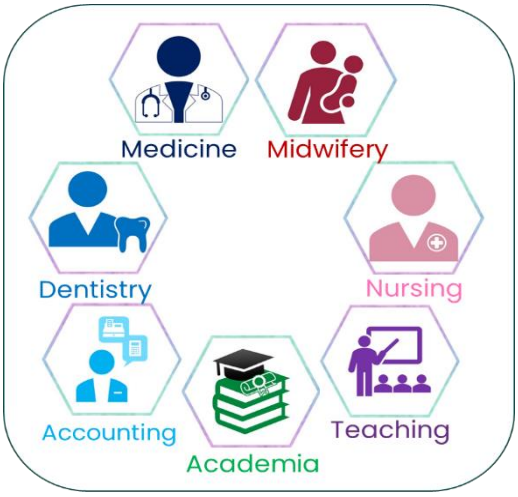
may not follow through with a leave of absence and in turn may or may not return to work. Indeed, although not represented here, we were interested in how professional workers change their work to avoid taking a leave of absence, and whether they contemplated taking a leave even if they did not follow through with that decision.

Depicting the pathway of mental health to leaves of absence to return to work and the influence of different factors and forces for professional workers with different identities can better enable the identification and development of targeted and more effective interventions to promote wellness and foster healthy return to work.

Case Studies

HPW focuses on seven case study professions within and outside of health care that vary by gender composition: academia, accounting, dentistry, medicine, midwifery, nursing, and teaching. Leadership was identified as a key cross-cutting focus from the outset (see Figure 2). While Academia, Accounting, Dentistry, and Medicine are typically masculine professions that are slowly feminizing with time, Midwifery, Nursing, and Teaching are traditionally considered as more feminine professions. These case studies can be compared and broken down into unionized salaried positions, regular and irregular work schedules, group, or solo practice.

Figure 2 Case Study Professions



Overview of Methods

The interdisciplinary methodological approach for HPW involves multiple phases and multiple methods. It began with a Partnership Development Phase, which involved a scoping review, pilot survey and interviews with workers, interviews with key stakeholders and a commissioned analysis of StatCan data on our case study professions. The full Partnership builds on this foundation and involves five key components: 1) Document Analysis; 2) Stakeholder Interviews; 3) Worker Surveys; 4) Worker Interviews; and Intervention Case Studies.

The Canadian Dental Hygienists Association (CDHA) partnered with the HPW Partnership to enable dental hygienists to participate in its bilingual (French-English) online, self-administered survey employing the ongoing survey, which was in the field from November 2020 to May 2021. The CDHA assisted in recruitment through crowdsourcing, direct email and through social media. The survey design included several cross-cutting questions asked of all case studies, including participating dental hygienists, focusing on the mental health, leaves of absence and return to work pathways, but also including a component which assessed mental health, distress, presenteeism, and burnout during the pandemic compared to status prior to the pandemic. The survey took approximately 20 minutes to complete. A total of 3759 surveys that yielded at least a 90% completion score for the seven case study professions were retained for analysis with the following breakdown by case study: Academia 379, Accounting 312, Dentistry 397, Medicine 310,

Midwifery 202, Nursing 1013, and Teaching 1146. Additionally, 527 responses were received from Dental Hygienists.

Figure 3 Structure of the HPW Survey



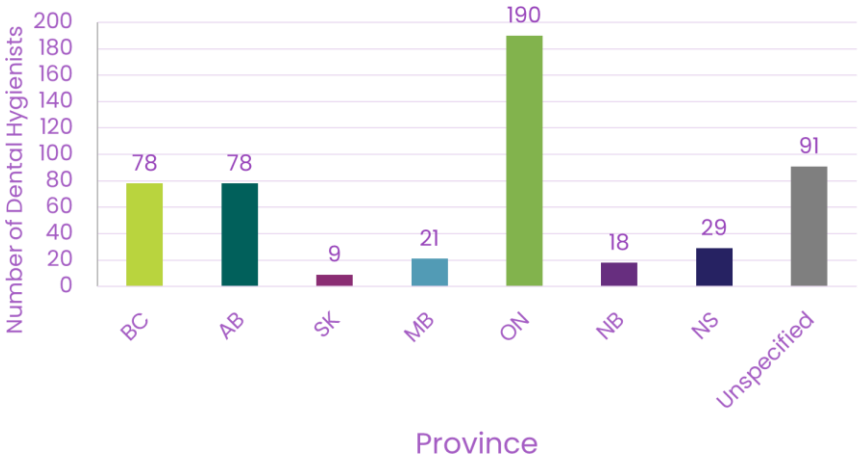
This report presents the findings from the participating dental hygienists and offers some key comparison to one or more of the seven HPW case studies for context. Analyses were conducted using cross-tabulations, means testing, regressions, and tests of association. A P-value <0.05 was used to determine significance.

Key Findings

Background of Survey Respondents

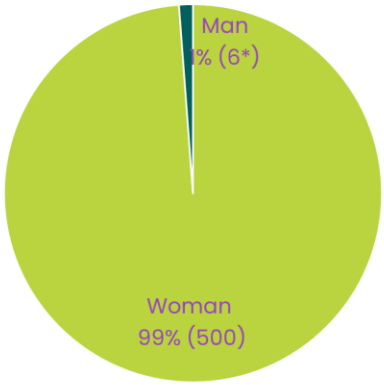
Figure 4 provides an overview of the Dental Hygiene survey respondents by province. We can see that the vast majority (190) of dental hygiene survey participants were from Ontario. The second largest number of responses came from the provinces of Alberta and British Columbia. Participants who did not provide their postal code are represented by the group "Unspecified", as their province could not be identified. The total number of dental hygienists (N=511) represented in the graph below is a sum of respondents from provinces with more than 5 respondents. Data from provinces with less than 6 respondents was suppressed for the purpose of confidentiality and privacy. As a result, data from Newfoundland and Labrador, Nunavut, Northwestern Territories, Prince Edward Island, Quebec, and Yukon was suppressed; this is representative of CHDA's membership with low numbers.

Figure 4: Dental Hygiene Survey Respondents by Province N=511

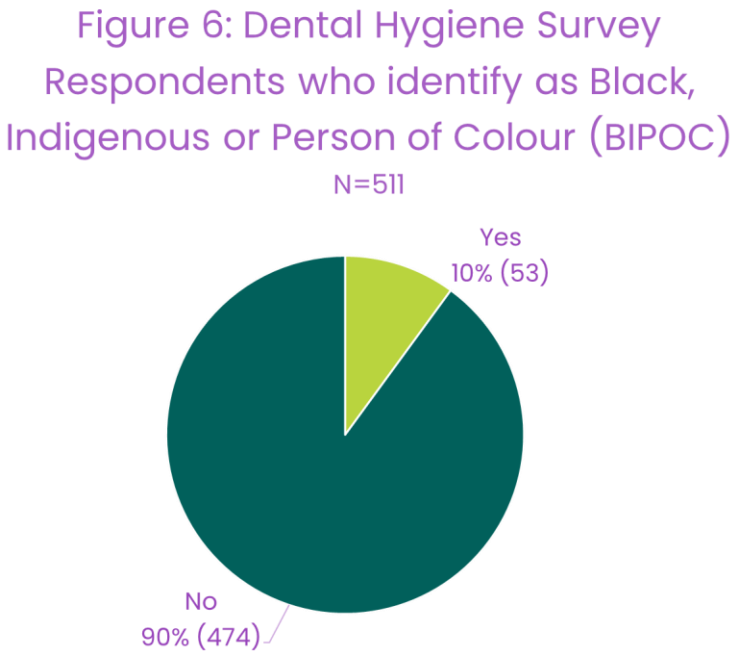


Also important for our consideration is the breakdown by gender identity where respondents who identify as women predominate (Figure 5). Only 6 respondents self-identified as men. The number of respondents who identified themselves as non-binary/gender fluid, preferred to self-describe or preferred not to answer was ≤5. As the numbers for non-binary group were small, this data was suppressed. Due to the small number of respondents who self-identified as men, no further gender analysis was undertaken.

Figure 5: Gender Identity of Dental Hygiene Survey Respondents N=511

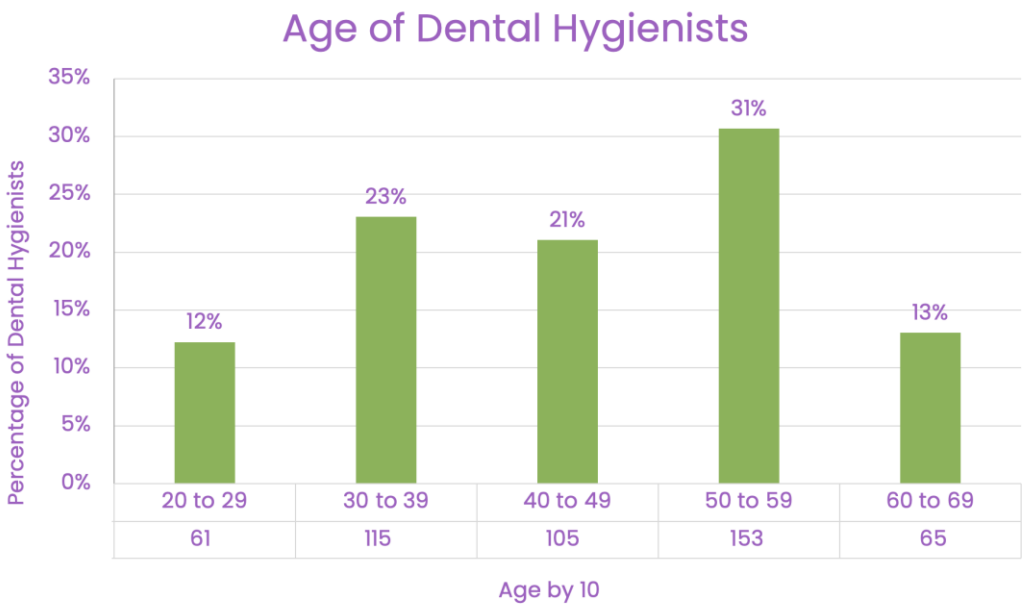


Of the total number of Dental Hygiene respondents, 10% (53) identified as Black, Indigenous or Person of Colour (BIPOC), and 90% (474) reported that they do not belong to the BIPOC group (Figure 6).



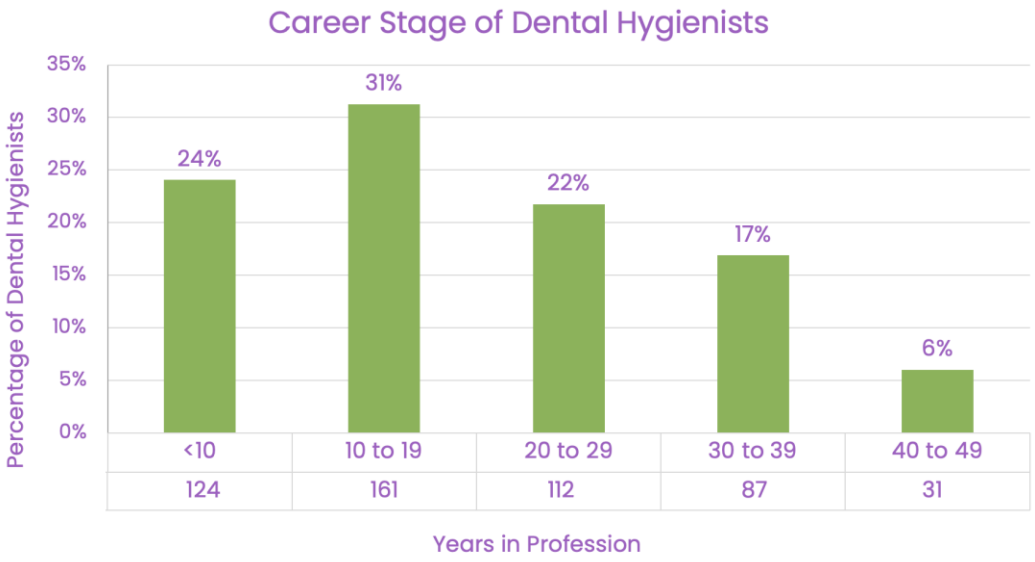
Overall, there was a good representation of the different age groups between 20 and 69 years of age among the respondents. Most respondents (75%) were aged between 30 to 59 years. However, the largest number of respondents (31%) fell into the 50 to 59 age group. There were ≤5 respondents who over 70 years old (Figure 7).

Figure 7: Age of Dental Hygienist Survey Respondents



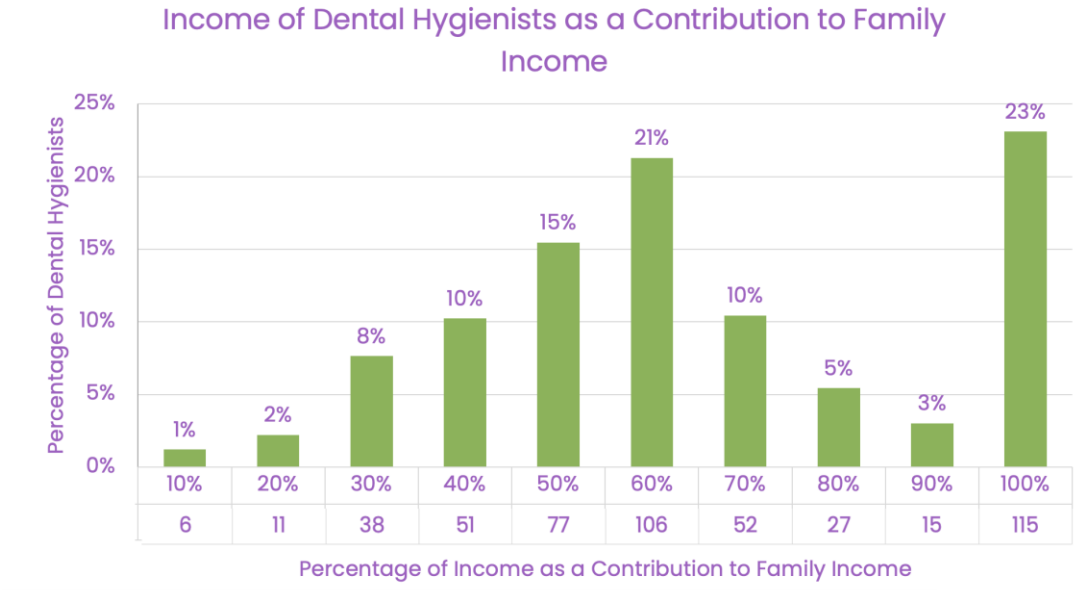
The greatest percentage of dental hygiene respondents are in their mid-career, as 31% reported that they have been working in their profession between 10 and 19 years. Only 6% of participants have spent 40 to 49 years in their profession (Figure 8).

Figure 8: Career Stage of Dental Hygienist Survey Respondents



Most dental hygiene respondents (62%) indicated that their income as a contribution to family income is equal to or greater than 60%. Of those, almost a quarter of the participants (23%) are breadwinners, as they reported that their contribution to family income is 100%. Less than 5% of respondents stated that their income contribution as a percentage of their family's income is less than 20% (Figure 9).

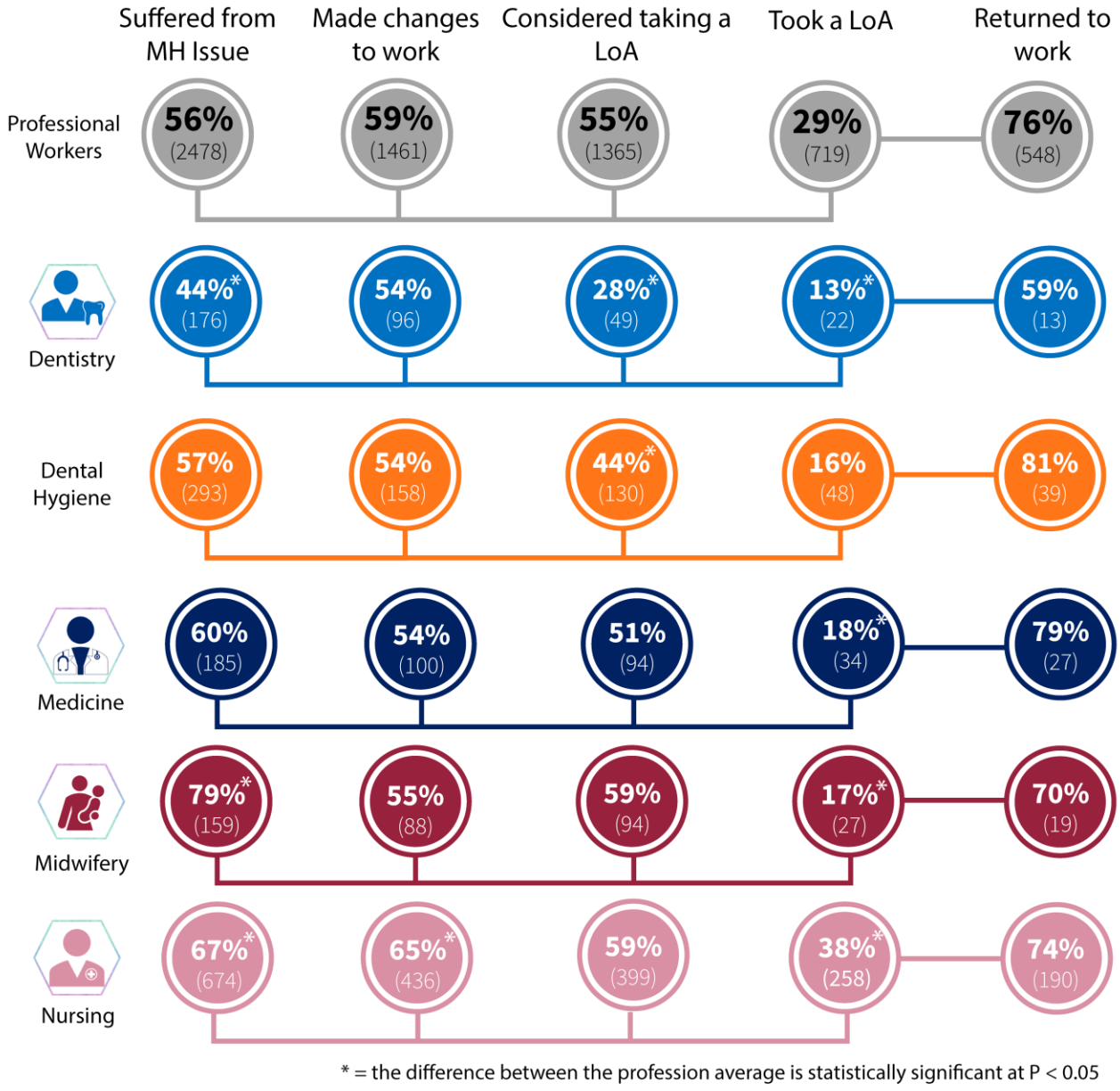
Figure 9: Contribution to Family Income of Dental Hygienist Survey Respondents



Pathway from Mental Health, Leaves of Absence to Return to Work

The purpose of this study was to understand the pathway from experiencing mental health problems, making changes to work in response to mental health challenges, contemplating or taking a mental health leave of absence and finally, returning to work. In the context of this study, a mental health issue refers to: mental or psychological stress or distress, burnout, anxiety, depression, other mood disorders, substance use or dependence, post-traumatic stress disorder, or serious thoughts of suicide.

Figure 10 Pathway from Mental Health to Leave of Absence, and Return to Work – Dental Hygienists & All and Specific Health Professional Workers



* = the difference between the profession average is statistically significant at P < 0.05

Figure 10 above illustrates this pathway from experiencing mental health problems to taking a leave of absence and then returning to work, as well as the intermediate steps such as making changes to work and contemplating on taking a leave of absence. Overall, 57% of dental hygienists who participated in our survey report having suffered from mental health issues at least once during their professional career or training. Of those who experienced mental health challenges, 54% made changes to their work, 44% contemplated on taking a leave of absence, but only 16% took a leave of absence from their work their mental health challenges. Of those who took a leave of absence, the vast majority (81%) returned to their work.

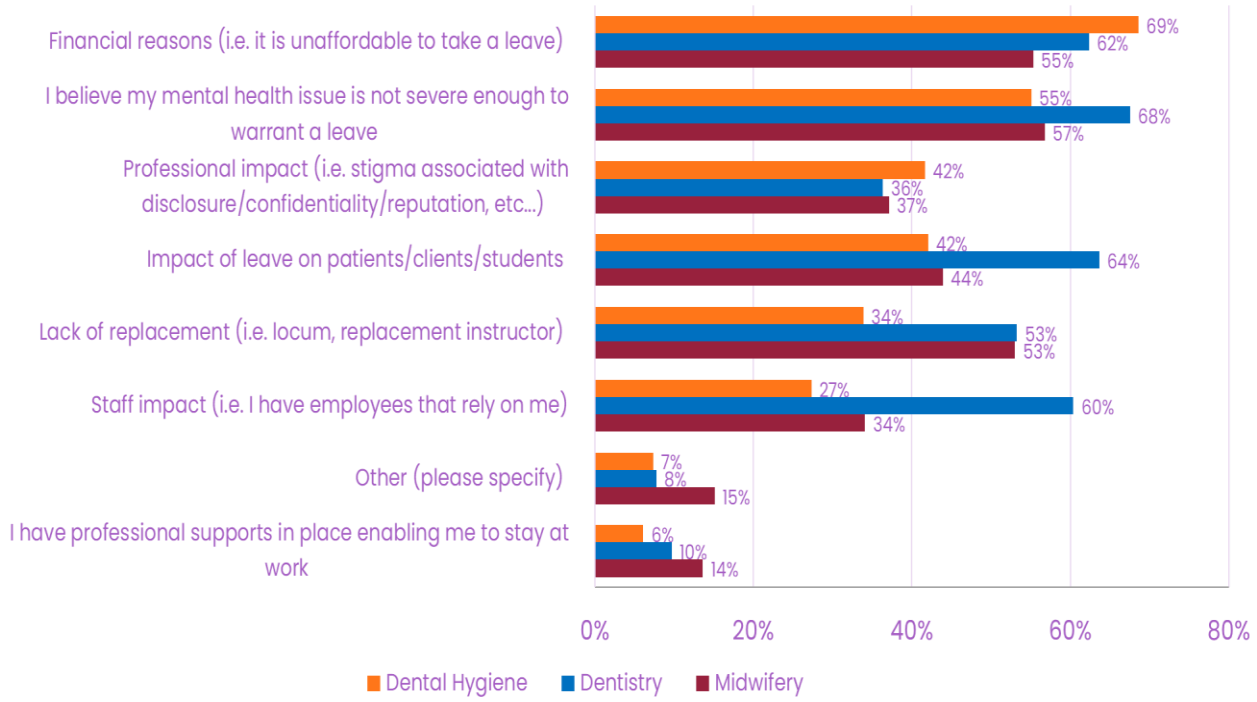
We can see a comparison between the pathway for all professional workers, which includes all the respondents from the seven other different case studies that participated in the survey, and for dental hygiene. The results show that dental hygienists were significantly less likely to consider taking a leave of absence when compared to all other professions (44v55%). Otherwise, there was no significant difference for dental hygienists and all other professionals in suffering from mental health issues, making changes to work in response to a mental health problem, and returning to work. Although dental hygienists were almost significantly less likely to take a leave of absence in comparison to all professional workers, the p-value was 0.0526, and, therefore, the difference is not statistically significant.

When comparing dental hygienists to dentists, the findings of our survey revealed that dental hygienists were significantly more likely to report experiencing a mental health issue than dentists (57v44%). Moreover, dental hygienists were almost significantly more likely to consider taking a leave of absence in comparison to dentists at p-value equal to 0.051.

In comparison to health professions, dentists were significantly more likely to report suffering a from mental health problem (44v61%). Interestingly, both dentists (28v52%) and dental hygienists (44v52%) are significantly less likely to contemplate on taking a leave of absence in response to a mental health challenge than other health professionals. Unlike dentists, dental hygienists are also significantly less likely to take a leave of absence when compared to health professionals (16v27%).

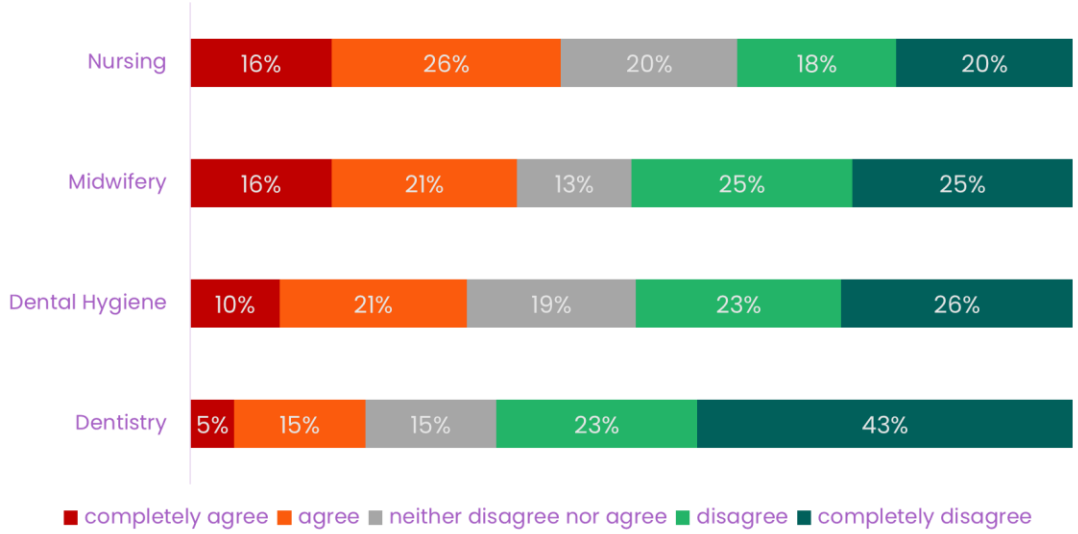
As discussed previously, many professional workers who encounter mental health problems decide not to take a leave of absence from work. Figure 11 below illustrates the barriers faced by dental hygienists, dentists, and midwives, when deciding whether to take a leave of absence from work in response to a mental health issue or not. Dental hygienists reported that financial barriers and believing that the mental health issue they are experiencing is not severe enough to warrant them a leave, are among the most prominent factors impeding them from taking a leave of absence from work. The same reasons why a mental health leave of absence was not taken were also common amongst dentists and midwives, although dentists reported that the impact of their potential leave of absence on their patients and staff play a significant role as barriers as well. Notably, having professional supports in place enabling the professional workers to stay at work was the least frequently chosen response for dental hygienists, dentists, and midwives. This exposes the lack or insufficiency of the necessary professional support that needs to be established at work to support the mental health of professional workers.

Figure 11 Barriers to taking a Leave of Absence - Dental Hygienists, Dentists and Midwives



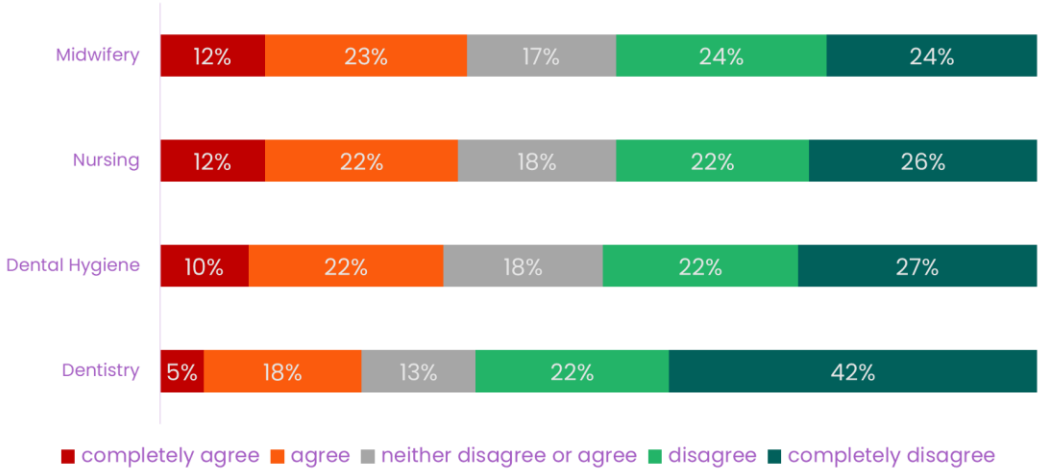
Experiencing mental health problems and facing barriers that limit access to taking a leave of absence may lead to professional workers wanting to change the current work setting and an increase in the intention to leave either the practice or the profession entirely. Figure 12 below demonstrates the intention to ***quit the organization or practice*** among dental hygienists and dentists (Figure 12). Our findings reveal that 31% of the dental hygiene participants completely agree or agree with the following statement: "I am thinking of leaving my organization/practice." When comparing the intention to quit their organization/practice among dentists, dental hygienists, nurses, and midwives, our findings showed that nursing participants were the most likely to consider quitting their current work setting, followed by midwives and dental hygienists. Of the four health professions that were compared, dentists reported the lowest intention to quit their current organization/practice. It is important to note that of these four professions, dentists are more likely to own their practices or work in one getting paid commissions, typically with no company benefits.

Figure 12 Dental Hygienists, Dentists, Midwives and Nurses – Intention to Quit Organization/Practice



When looking at the intention to ***quit the profession entirely***, the number of dental hygiene respondents who completely agreed or agreed that they are considering leaving their profession was higher than the number of dentists (32v23%). These findings reveal the prevalence of job dissatisfaction among dental hygienists, and it is likely to be linked with higher rates of distress and burnout as well as a worse mental health state in general (Figure 13).

Figure 13 Dental Hygienists, Nurses, Midwives & Dentists – Intention to Quit Profession



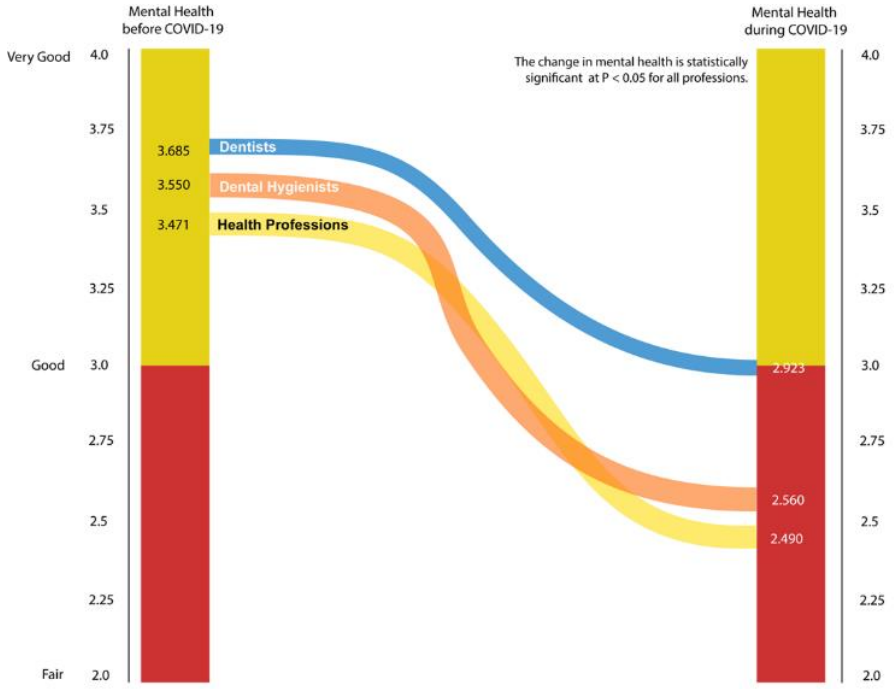
While the participants of our survey reported that they are more likely to leave their current organization or practice than to leave their profession entirely, there is still an important proportion of respondents who either agreed or completely agreed with this statement. The intention to quit their profession entirely was most common among midwifery respondents, followed by nurses and

dental hygienists. Notably, dentists were the least likely to consider quitting their profession when compared to the other three health professions.

Impact of the Pandemic on the Mental Health of Professional Workers

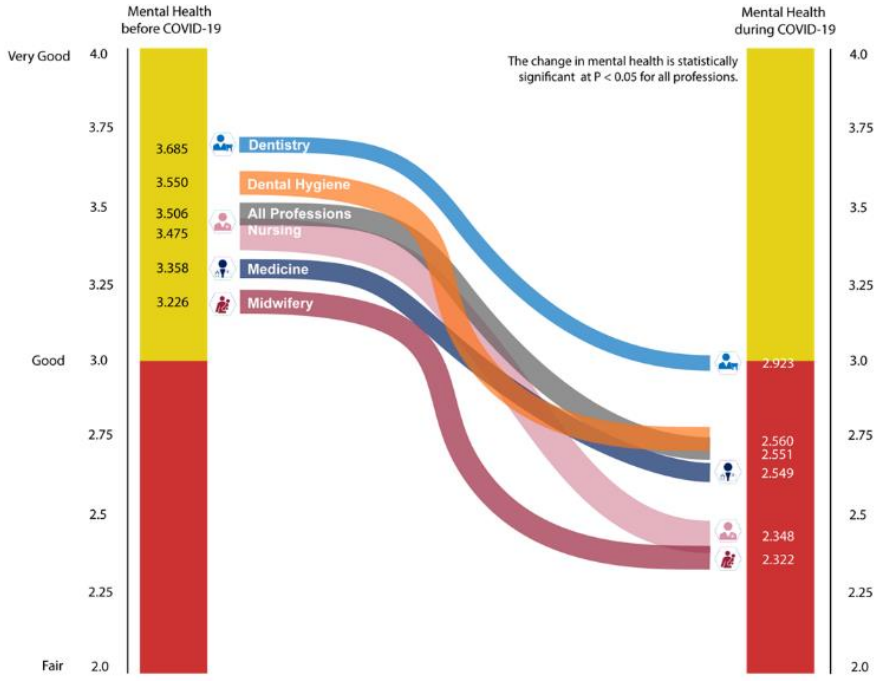
Mental Health

Figure 15 Mental Health Pre & During Pandemic



To study the impact of the COVID-19 pandemic on the mental health wellbeing, survey participants were asked to assess and compare their mental health from poor (1) to excellent (5) prior to the start of the pandemic and since the start of the pandemic. In Figure 15 to the right, we can see that before the COVID-19 pandemic the mean mental health score for dental hygienists was 3.550. Notwithstanding, the mental health state of dental hygienists worsened during the pandemic as the self-reported average score dropped to 2.560. Overall, dental hygienists reported worse mental health wellbeing in comparison to dentists both before and since the onset of the COVID-19 pandemic, but better than all the professions combined prior to the start of COVID-19. For dentists, dental hygienists, and all other professionals the mental health declined at about the same magnitude as it transitioned from the range "good" to "fair" during COVID-19.

In comparison to the other health professions (midwives, physicians, and nurses), the mental health state worsened less for dentists than for dental hygienists and other health professionals. When looking at all health professions and the change in their mental health, dental hygienists ranked second before the start of COVID-19 and during COVID-19. The change in the mental health state of dental hygienists was close to the average change of mental health of all professionals.



Examining some of the differences within the dental hygiene profession, dental hygienists from all provinces excluding Ontario reported worse mental health before and during the COVID-19 pandemic in comparison to dental hygienists from Ontario.

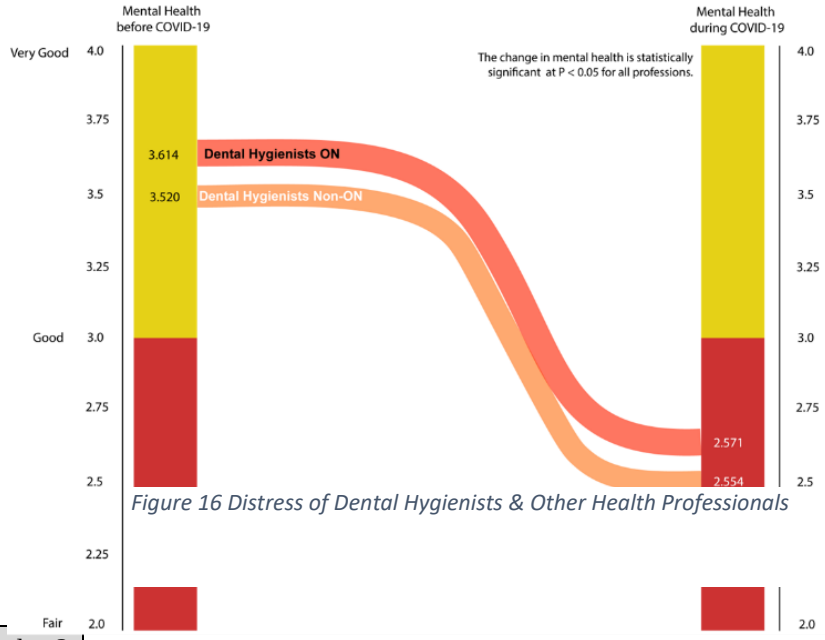


Figure 16 Distress of Dental Hygienists & Other Health Professionals

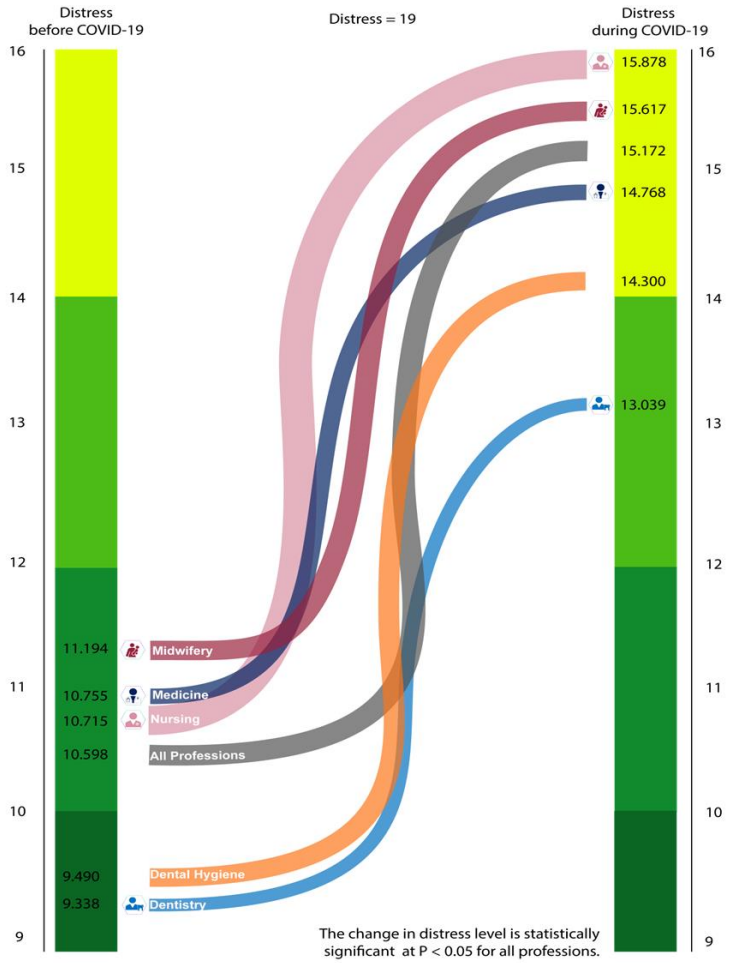
Distress

Distress was measured by the Kessler 6 scale, where the score 19 and above signals the presence of distress symptoms.

> How often have you felt nervous? hopeless? restless or fidgety? so depressed that nothing could cheer you up? everything was an effort? worthlessness?

Distress level increased significantly for all health professions during the pandemic, including dental hygienists and dentists, although dental hygienists reported higher levels than dentists both before and during COVID-19. The increase in distress during the pandemic was also greater for dental hygiene respondents (Figure 16).

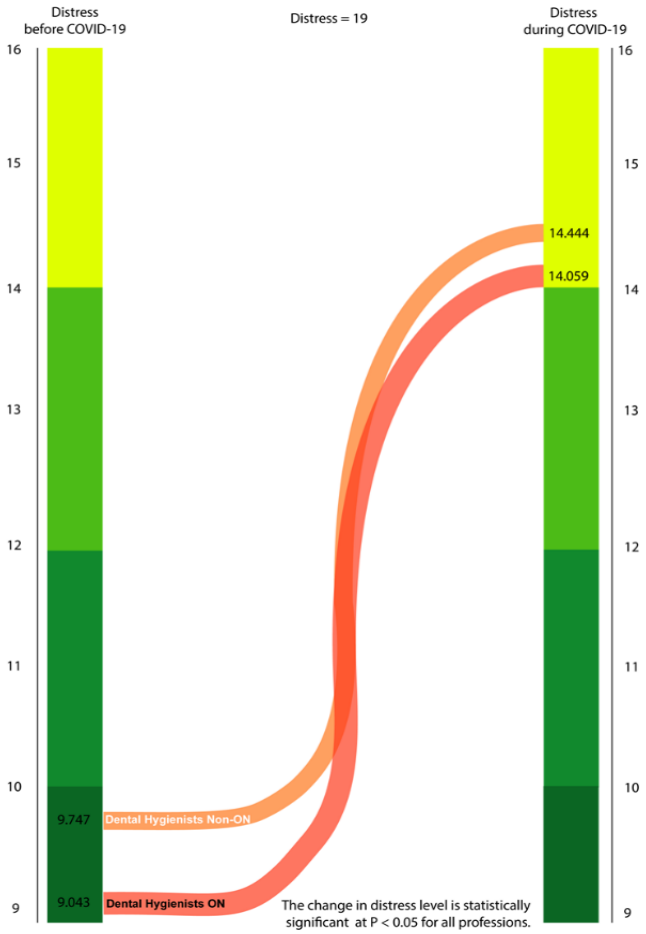
In comparison other health professions, dental hygiene and dentistry had lower levels of distress both before and during the times of the pandemic. Despite the scores for dental hygienists, dentists, and all health professionals still being below the cut-off value at 19, the sharp increase in distress during the pandemic is a cause of concern



Dental hygienists and dentists reported the lowest distress levels before and during the pandemic among the health professions and other professional workers from the seven case studies that were studied, with dentistry reporting the least distress pre and during COVID-19.

Dental hygiene respondents from all provinces excluding Ontario experienced higher levels of distress both before the beginning and during the pandemic when compared to dental hygienists from Ontario. However, our findings showed that the change in distress level was greater for respondents from Ontario even if still lower overall (Figure 17).

Figure 17 Ontario & All Dental Hygienists Level of Distress Pre and During the Pandemic



Burnout

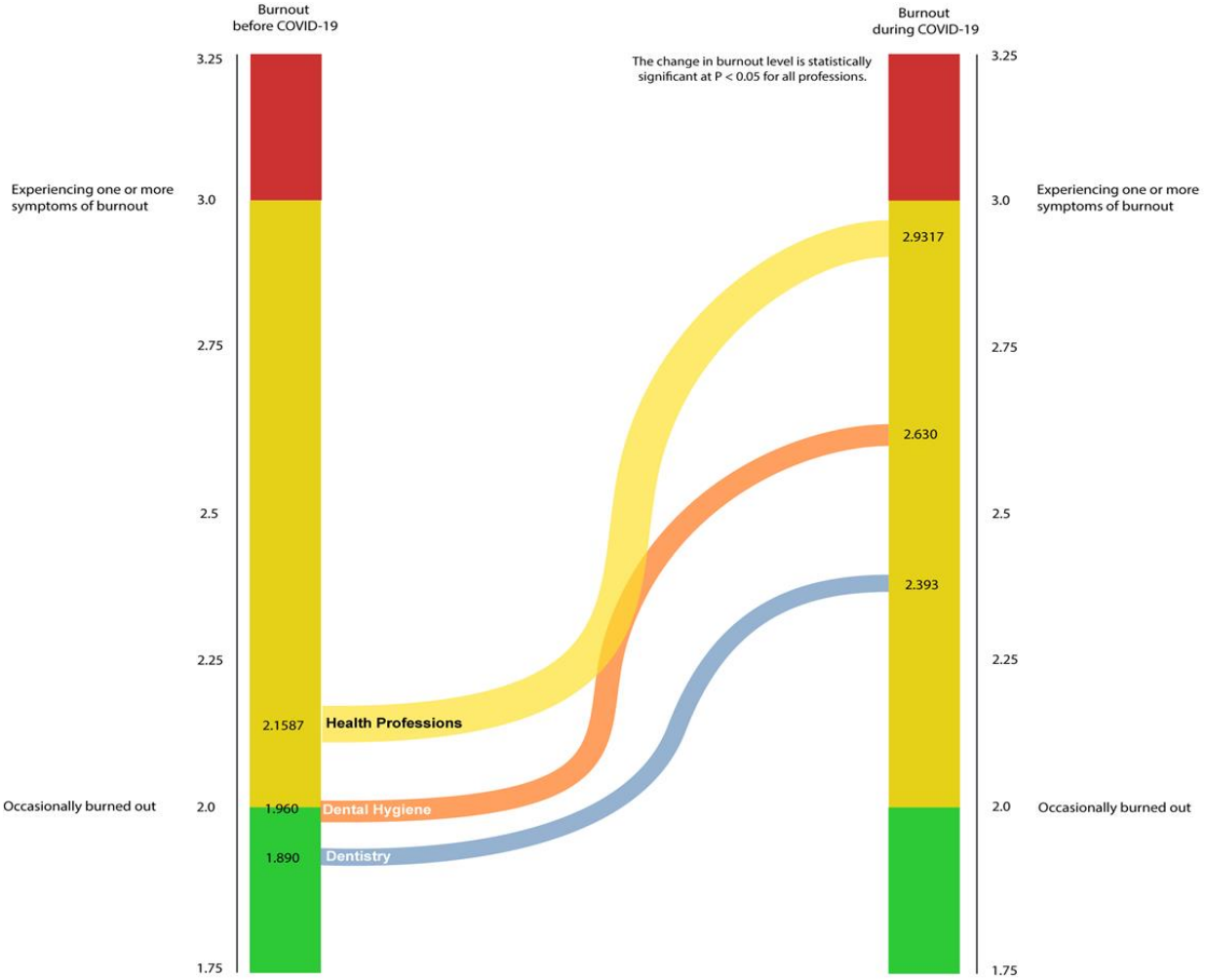
Burnout is a psychological syndrome of emotional exhaustion (feeling drained, tired, or unable to cope), depersonalization (feeling detached, alienated, or cynical), and reduced personal accomplishment (feeling ineffective, negative, or irritable) that can occur among individuals who work with other people in some capacity. Rates of burnout have also increased during the pandemic according to responses to the Physician Worklife Survey Single Item Burnout Question.[1]

Thinking of the time prior to the start of the COVID-19 pandemic, how would you rate your level of burnout?

1 Williams, E S; Konrad, T R; Linzer, M; McMurray, J; Pathman, D E; Gerrity, M; Schwartz, M D; Scheckler, W E; Van Kirk, J; Rhodes, E; Douglas J. (1999). Refining the measurement of physician job satisfaction: results from the Physician Worklife Survey. *Medical Care*,37(11), 1140-1154.

Both dentistry and dental hygiene respondents self-assessed their state as "occasionally burned out" before and during the pandemic, however the burnout scores increased because of COVID. Dental hygienists reported higher burnout rates than dentists but lower than all health professionals before and during the pandemic. Again, the increase in burnout rate was greater for dental hygiene respondents than for dentistry. In comparison to other health professions, the burnout rates for dental hygienists and dentists were the lowest with dentists reporting the lowest burnout prior to and during the COVID-19 pandemic (Figure 18).

Figure 18 Experiences of Burnout, Pre & During Pandemic, Dental Hygiene and Other Health Professions



Dental hygienists outside of Ontario reported slightly higher burnout rates both before and during the pandemic than dental hygienists from Ontario, but the difference is minimal.

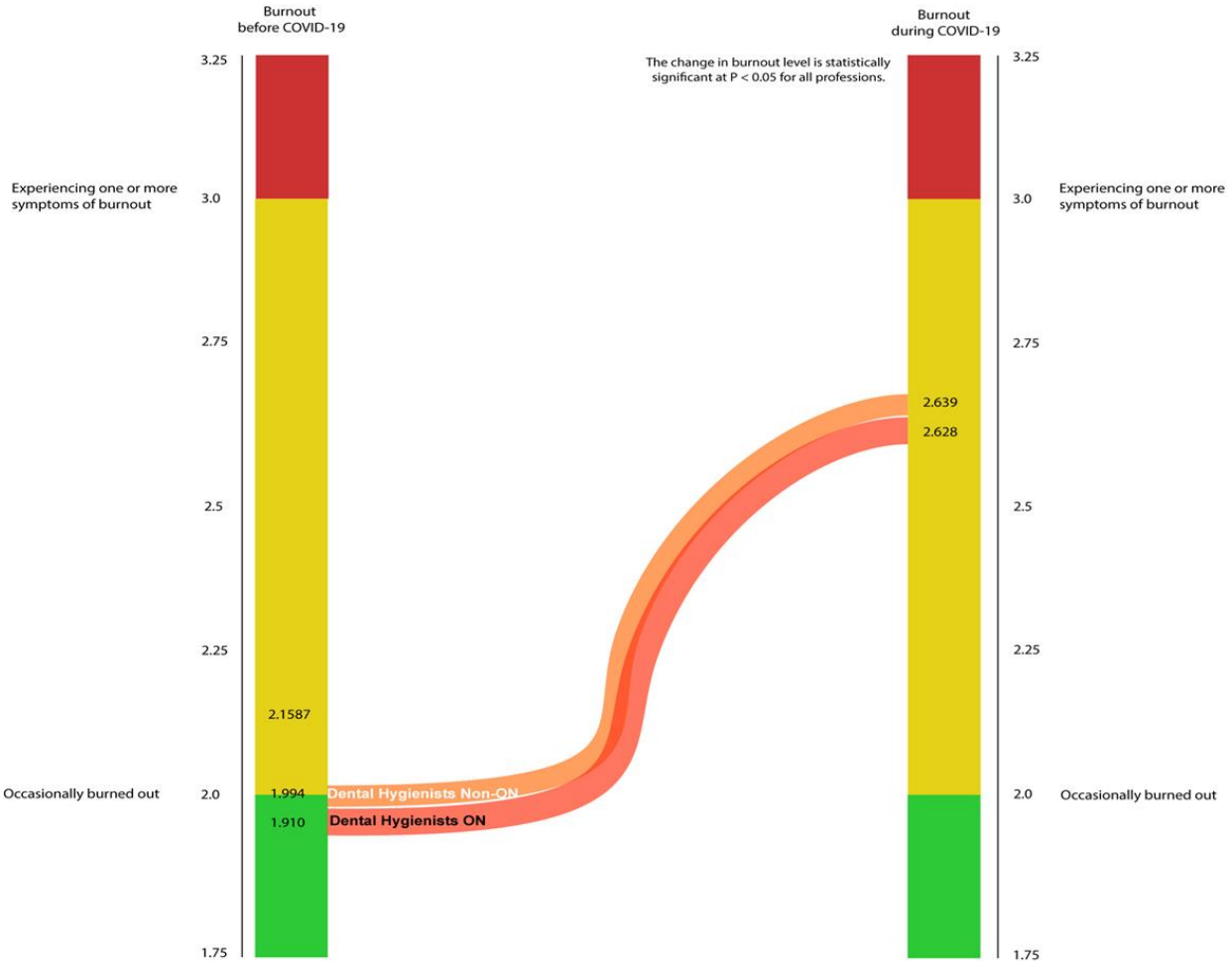


Figure 19 Burnout Pre & During Pandemic Ontario & All Dental Hygienists

Summary

In sum, the preliminary findings from our research on the pathway from the experience of mental health and the subsequent decisions to take a leave of absence from work (or not) and then to return reveals some important areas for improvement. These findings are critical to consider considering the significant mental health concerns that have arisen from the pandemic. Here, we find that the impact of the pandemic on the mental health of dental hygienists, as with other health professional workers has been significant and felt particularly by those professions where women predominate.

The findings presented here are remarkable and speak to the need for specifically targeted interventions to address ongoing mental health experiences of all health workers including dental hygienists. Building on these comparative findings the HPW team will be curating these resources into an online, open access and searchable inventory to be released in the coming months.

Acknowledgements

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