

The Burden of Debt for Canadian Dental Students: Part 4. The Influence of Debt on Program and Career Decisions

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ABSTRACT

In the 3 previous papers of this 4-part series, we explored the issue of debt among dental students in Canada to analyze the factors influencing levels of debt. The information was obtained from a national survey of all dental students enrolled in Canadian dental schools during the 2003–2004 academic year. The aims of this fourth paper were to investigate the influence of debt upon career decisions after graduation and to comment on future directions for research into the impact of the rising costs of dental education and dental students' increasing debt levels.

The results show that almost half of respondents found the costs of dental programs significantly higher than they anticipated. One-third of the respondents indicated that their anticipated debt level upon graduation had influenced their choice of career path within dentistry. Although this study provides baseline information about the degree of and influences on the indebtedness of students currently enrolled in dental programs across Canada, much remains to be learned about the impact of the higher costs of dental education on potential applicants to dental school and the effect of increased educational debt on practising dentists.

MeSH Key Words: education, dental/economics; students, dental; training support/trends

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In January 2004, students at Canada's 10 dental schools were invited to participate in an online survey of the costs of dental education. The first paper¹ in this 4-part series about dental students' debt reviewed the literature about the increasing costs of professional education and resulting student debt. The second paper² reported background information about the design of the survey and the dental student participants, as well as their reported educational costs; the third paper³ described dental students' debt and the influ-

ence of socioeconomic status on dental school education. The current and final paper of the series aims to review the influence of debt on the career choices of dental student respondents to this survey, and to raise policy issues and unanswered questions about the impact of higher costs and increased debt on dental education.

Materials and Methods

The materials and methods were described in full in the second paper in this series.² In

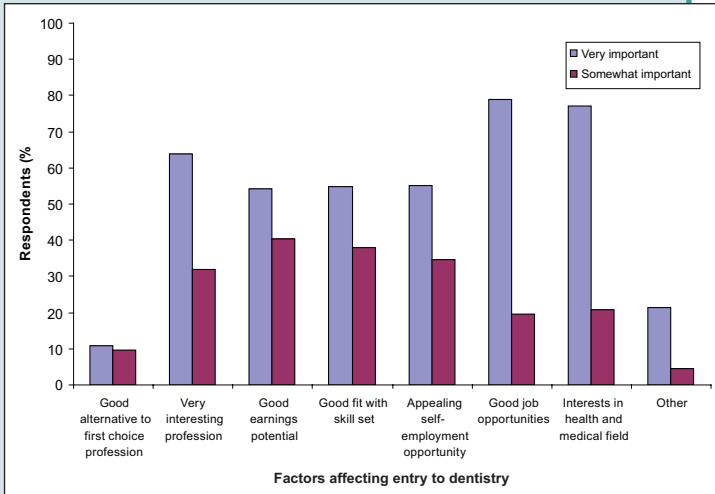


Figure 1: Importance of various factors in the decision to enter dentistry (for simplicity, only 2 points in the Likert scale are displayed to reflect the relative importance of factors thought to be important to the decision to enter dentistry).

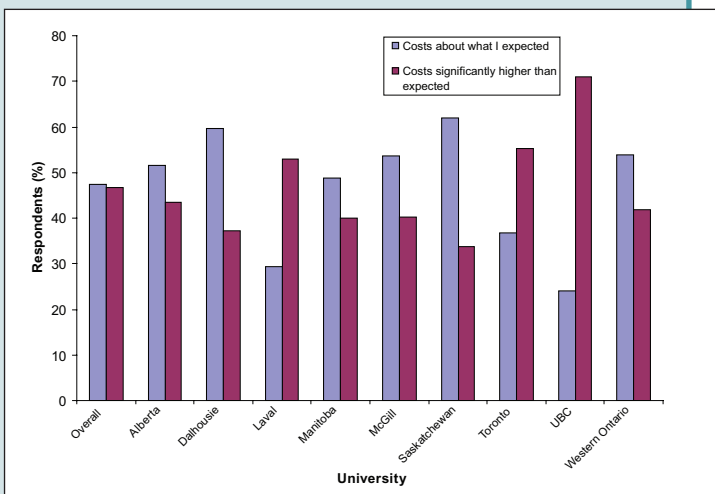


Figure 2: Students' awareness of cost when entering dentistry program.

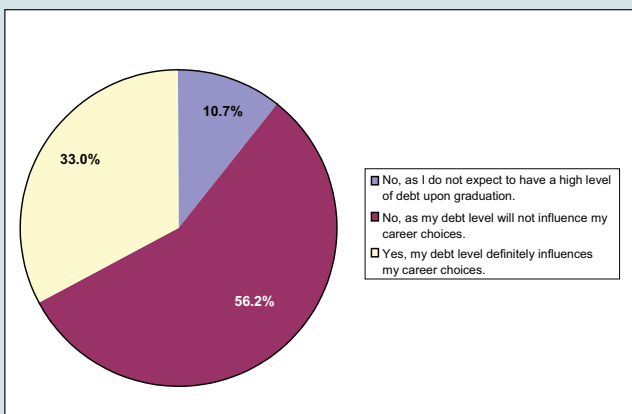


Figure 3: Influence of anticipated level of debt upon graduation on choice of career path.

essence, the online survey consisting of 48 questions was completed by about 42% of students enrolled in DMD or DDS programs across the country. Results were analyzed with SPSS version 13 (SPSS Inc., Chicago, Ill.).

Results

After answering questions about their background and their financial situation, students were asked to provide information about their career-path decisions.² **Figure 1** illustrates the factors influencing students' decisions to enter dentistry. Good job opportunities and alignment with personal interests were the factors rated by most respondents as "very important" (78.9% and 77.7%, respectively) to their decision to enter dentistry. Participants were questioned about their awareness of costs when they accepted their offer of admission to dental school (**Fig. 2**). Respondents were almost evenly split: about half indicated that costs were what they expected, and half stated that costs were significantly higher than they anticipated. About 70% of students from the University of British Columbia (UBC) thought that costs were higher than they expected, whereas only about a third of those from Dalhousie University expressed this view.

Participants were questioned about how their awareness of tuition costs and potential earnings influenced their career decisions (questions 27 and 28). The results are presented in **Table 1** (by university) and **Table 2** (by year of study). Although almost half of the respondents indicated that the costs of the dental program were higher than anticipated, only about 4% stated that they probably would not have entered the program had they been familiar with the costs and potential earnings (**Table 1**). Instead, about two-thirds responded that they would still enter the program and about one-fifth indicated that their expectations of costs and earnings had not changed since entering dental school. Respondents from UBC differed most from the overall pool: about 15% indicated that they probably would not have entered the program, based on their current knowledge of program costs and potential earnings. Overall, first- and fourth-year students (about 65%) were slightly less likely than second- or third-year students (about 70%) to indicate that they would still enter the program, whereas fourth-year students were most likely to say that they would probably not have entered the program (**Table 2**). First-year students seemed to be the best informed about program costs and potential earnings.

Table 1 Influence of actual program costs and potential earnings on students' decisions to enter dental school (by university)

School	Would still enter program (%)	Probably would not enter program (%)	Expectations of costs and earnings unchanged (%)	I don't know (%)
Alberta	51.6	4.8	40.3	3.2
British Columbia	63.3	15.2	7.6	13.9
Dalhousie	67.2	1.5	23.9	7.5
Laval	76.5	0.0	17.6	5.9
Manitoba	71.1	4.4	22.2	2.2
McGill	71.6	1.5	20.9	6.0
Saskatchewan	53.5	1.4	38.0	7.0
Toronto	78.1	2.6	13.2	6.1
Western Ontario	76.9	1.1	16.5	5.5

Table 2 Influence of actual program costs and potential earnings on student decisions to enter dental school (by year of study)

Year of study	Would still enter program (%)	Probably would not enter program (%)	Expectations of costs and earnings unchanged (%)	I don't know (%)
1	65.7	1.7	27.6	5.0
2	70.4	3.9	21.7	3.9
3	70.7	3.2	15.3	10.8
4	65.0	8.1	19.5	7.3

Table 3 Career path considerations and influence of debt

Career path	Career path student is considering (%)	Still preferred career path if debt were not a factor (%)
Research-focused graduate studies in dentistry or related area	4.9	6.4
General dentistry residency or internship	37.4	14.0
Specialty training in dentistry	40.1	27.2
Academic dentistry	16.6	11.6
General dentistry private practice	76.8	12.2
Specialty private practice	27.2	15.3
Salaried position in community dentistry	8.3	4.6
Military dentistry	6.0	0.7

Note: Since students could choose more than one option, the sum of percentages shown is not 100%.

Responses to the question, “Did your anticipated level of debt upon graduation influence your career path choice(s)?” are shown in **Fig. 3**. More than half of respondents were not influenced in their career path by their levels of debt. Only about 11% of respondents indicated that anticipated debt did not influence their choice of career path because they did not expect a high level of debt on graduation.

Table 3 compares planned career paths with choices that might have been made if debt were not an influence. Respondents were permitted to choose as many career options as applicable. Although almost three-quarters of respondents indicated that they were planning to enter private practice in general dentistry, only 12% indicated that they would choose this option if debt were not a consideration. If debt were not a factor, approximately

one quarter of the respondents would consider specialty training; however, the results highlighted in **Table 3** show that most students were firm in their career choice of a private practice in general dentistry.

Discussion

The data from this survey established the cost and consequent debt load that Canadian dental students incur. To explore the impact of these financial factors on students' decision making, survey participants were asked questions about their decision to enter dentistry and their career plans upon graduation. Not surprisingly,

good job opportunities and alignment with personal interests were the factors rated by most respondents as "very important" in their decision to enter dentistry (**Fig. 1**).

It is worth speculating on whether a heightened awareness of the level of debt that might be incurred at dental school would discourage some applicants. Future studies might demonstrate significant differences in the data shown in **Fig. 2**. Students at UBC have in recent years experienced large increases in tuition costs as a result of the provincial Liberal government's relaxation of tuition fees, previously frozen by a former NDP government. This

Future Directions and Policy Implications

Without private-sector funding, primarily bank-issued lines of credit that require payment of monthly interest costs while the student is in school, it is reasonable to hypothesize that many dental students would not be able to finance their dental education. According to the results of the current survey, about 40% of dental students' costs are financed by private loans and up to 70% of their costs are financed by some form of debt. These current survey data spark some policy-related questions. What are the government's responsibilities in the provision of financial assistance to students studying in any university program? If education is a matter of provincial jurisdiction, supported by federal transfer payments, what role, if any, should each province play in ensuring that student assistance rises to the level of true educational costs? Is it appropriate in a country where the education of its citizens is seen as fundamental to its future growth for students to have to rely on private-sector financing, with the greater associated costs of borrowing? Is it appropriate for students to have to service debt while they are still in school? What pressure does this add to an already stressful program of study?

Although dental schools may take some steps to reduce the burden of debt for students, they also require the support of other community-based or government-funded agencies. For example, it is estimated that a 20% reduction in student debt could be achieved simply by sending students to extramural clinics that provide dental treatment for the underserved population and realistic hands-on experience caring for patients in the community.⁴ Such debt reductions would presumably come from decreased spending on staff and faculty salaries, and consumable items for an intramural, faculty-oriented clinic. In future, dental schools may also be obliged to turn more to the private sector for sponsorship of clinical activities, teaching facilities and educational equipment because of concerns about potential conflicts of interest.

Aside from increasing government loans to dental students to match the cost of tuition, adopting other models could provide financial support to dental programs that fill the unmet needs of the population who cannot afford fee-for-service dental care. For example, in Britain, National Health Service funding is injected into dental schools, in addition to

university funding, so that dental students can provide patients with subsidized dental treatment. This model, however, presupposes much greater government funding of dental care than currently occurs in North America.

Despite recent increases in tuition fees that are many times greater than inflation, no significant current reduction in applicants to Canadian dental schools is apparent. Prospective dental graduates should derive reassurance from the projected shortage of dentists in Canada.⁵ Moreover, there is no indication that this will change in the near future, given current federal immigration policies. However, without government intervention, increases in tuition seem likely to continue, making increased indebtedness almost a certainty.

This survey has yielded key data that should facilitate an understanding of the magnitude and burden of current dental students' debt. However, many issues remain unexamined. For example, longitudinal studies could provide comparative data to assess whether the issue of dental students' debt is worsening. Maintaining contact with recent graduates could help establish how quickly debt is paid off after graduation, and whether graduates who choose to defer specialty training until debts are diminished ever go back to school. For those graduates who do commit to specialty training, it would be helpful to learn whether debt becomes more acute after so many years of schooling or whether it is necessary to undertake some other form of employment during specialty training to manage the debt.⁶

Of vital importance to the integrity of future dental education is the need to somehow engage some of today's graduates in an academic career. Further studies might focus in more detail on factors influencing career choices in dentistry. As baby boomers retire in the next few years, dental schools face a potentially worldwide shortage of faculty.⁷ It will likely take initiatives funded by both government and the dental profession to encourage more young graduates to consider dental academia as a serious career alternative.

Perhaps most importantly, now that information exists about the extent of debt for current students, studies should be implemented to examine the impact of higher costs of dental education on potential applicants to dental school and the effect of increased educational debt on practising dentists.

may explain why UBC students ranked highest in rating tuition costs as higher than expected and why 15.2% of UBC students indicated that they probably would not have entered the DMD program if they had known the actual costs.

Although almost half of the respondents indicated that the costs of the dental program were significantly higher than anticipated (Fig. 2), only about 4% stated that they probably would not have entered the program had they been familiar with costs and potential earnings. A large majority responded that they would still have entered the program (Tables 1 and 2); about a quarter indicated that their expectations of costs and earnings had not changed since entering dental school. Again, UBC respondents differed most from the overall pool: about 4 times more students indicated that they probably would not have entered the program, given what they now know about program costs and potential earnings.

Most survey participants were considering a private practice career in general dentistry, although that number decreased considerably when anticipated debt was removed from the picture (Table 3). When students were asked directly whether their anticipated debt level upon graduation had influenced their choice of career path, one-third responded affirmatively (Fig. 3). However, in answering this question, some students may have been reflecting on their decision to enter dentistry and, ultimately, a well-paying career, whereas others may have been considering their specific career choices within the dental profession.

Overall, the survey results demonstrate that debt influenced dental students' career choices. This finding is consistent with similar concerns in the United States.⁴ But does debt load pose a real threat to the future of Canadian dentistry? Most Canadian dental graduates, in keeping with the international trend, pursue a career in general dental practice on leaving dental school. As the population of Canada increases because of its immigration policies, so too will the need for dentists in the community. As long as dental graduates can repay their debts because they earn a good income after graduation, dental students will likely have little concern about the perceived rising cost of debt. However, if debt repayment stretches over many years because of diminishing career opportunities, a sharp and significant decrease in applications to dental school could ensue.

Conclusions

Almost half of the survey's respondents indicated that the costs of a dental education were significantly higher than they anticipated, whereas a third responded that the anticipated debt level upon graduation influenced their career path choices. ♦

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References

1. Matthew IR, Walton JN, Dumaresq C, Sudmant W. The burden of debt for Canadian dental students: Part 1. Review of the literature. *J Can Dent Assoc* 2006; 72(7):635. Available from URL: www.cda-adc.ca/jcda/vol-72/issue-7/635.html.
2. Walton JN, Matthew IR, Dumaresq C, Sudmant W. The burden of debt for Canadian dental students. Part 2: A report on survey participants and an analysis of dental education costs. *J Can Dent Assoc* 2006; 72(8):729. Available from URL: www.cda-adc.ca/jcda/vol-72/issue-8/729.html.
3. Walton JN, Matthew IR, Dumaresq C, Sudmant W. The burden of debt for Canadian dental students. Part 3. Student indebtedness, sources of funding and the influence of socioeconomic status on debt. *J Can Dent Assoc* 2006; 72(9):819. Available from URL: www.cda-adc.ca/jcda/vol-72/issue-9/819.html.
4. Meskin LH. A debt service. *J Am Dent Assoc* 1999; 130(4):460-2.
5. Brown TA, Raborn W. Is there an adequate supply of dentists in Canada? *J Can Dent Assoc* 2001; 67(7):373-4.
6. Li J, Tabor R, Martinez M. Survey of moonlighting practices and work requirements of emergency medicine residents. *Am J Emerg Med* 2000; 18(2):147-51.
7. O'Keefe JP. Moving forward together. *J Can Dent Assoc* 2001; 67(11):627.