The cost of dental education in the US: Is the return on investment still worth it?



I graduated from the University of Michigan School of Dentistry in 1985 owing \$25,000 in student loans. At that point in life it seemed like an overwhelming burden that would handicap my financial health for years to come. I look at the cost of tuition and the daunting debt facing today's graduates and have serious concerns about their future careers and the impact this financial dilemma will have on the field of dentistry.

At present, there are 68 accredited dental schools in the United States and total enrolment is at its highest level historically. The class of 2020 had 6609 graduates, up from 6350 in 2019¹. Unfortunately, the rise in population and demand for dental care is not keeping pace with the growing surplus of dental graduates. In 2018, a committee of dental school deans published a report recommending schools reduce their class sizes in an orderly way before market forces spur a collapse of the qualified applicant pool². However, in response to losses in state revenues, schools are doing just the opposite. They are increasing class size, raising tuition fees and implementing high-cost international dentist programmes. This response may benefit the institutions and their faculty but it may well have a negative impact on the dental profession at large.

Tuition rates for dental school continue to increase each year and dentistry has become the most expensive professional-degree programme in the US. In 2019–20, the average first-year cost of dental school was \$55,395 for in-state residents and \$72,219 for non-residents¹. In general, public dental schools offer lower tuition rates than private dental schools. For example, a 4-year dental degree from the University of Southern California (a private school) will cost over \$425,000³. Add in cost of living expenses and most students will need to take out substantial loans to afford a degree. If

a student elects to pursue postgraduate education to specialise, the added costs can have a dramatic impact on their future lifestyle and professional options.

Many dental students have accrued debt from obtaining their undergraduate degree. A survey of dental school seniors found graduates in 2018 had 500% more educational debt than dental students who graduated in 1990⁴. According to the American Dental Education Association (ADEA), the average educational debt for dental school graduates in 2019 was \$292,169, with the average for public and private schools at \$261,305 and \$321,184 respectively⁵. It is important to add that statistics on dental student debt do not include accrued interest so the actual payback is much higher. Many students entering a career in dentistry naively take out exorbitant loans assuming they will easily pay off the debt, only to find later they have become indentured servants. The Wall Street Journal published an article on one orthodontist that accrued over a million dollars in debt for his training⁶.

Debt can affect many career decisions for graduates. Studies found that dental practitioners with higher education debt were more likely to enter into private practice over government service, teaching or advanced education⁷. Enrolling into speciality training will postpone income and often requires taking additional loans. Dental students who received minimal exposure to areas such as implant dentistry may have to take continuing education courses, which can also be expensive. The high cost of purchasing or opening a practice may make this option unaffordable. A 2020 ADEA survey found almost a third of graduates intended to join a corporate dentistry office⁵. There has also been a sharp increase in partnering with dental practice-management companies as

an alternative way for dentists to practise without the added task of practice management; however, this option can limit the dental practitioner's control and reduce income. Many new clinicians are forgoing practising in rural areas and small cities with low reimbursement rates in favour of the more populated and affluent suburbs. One cannot help but question the effect of financial pressures on ethical treatment. A staggering amount of debt can put new dental practitioners in a precarious position to meet their bottom line and fiscal obligations.

Credible, a financial services company, found dental practitioners tend to have student loan debt that is out of balance with their earnings after graduation, and on average they take almost 15 years to pay back their loans⁸. If incomes grew at the same rate as debt, then younger professionals would be able to pay off their debt and still maintain the same standard of living as their predecessors. However, there is evidence that debt-to-income levels are rising. The average education debt held by dental students graduating in 1996 was 70% of the contemporaneous median income in the profession, versus 103% for 2011 graduates⁷. To make matters worse, the annual increase in dental practitioner incomes has also slowed.

According to the 2020 US Bureau of Labor Statistics, the reported median annual wage for general dental practitioners is \$158,940 per year⁹. However, the income for new graduates will likely be less, especially if employed by a dental service organisation. High debt repayment can have a significant negative impact on a young dentist's lifestyle. Having a family, buying a home or new car or taking vacations may have to be deferred. There are strategies that can reduce the monthly payment or debt amount. Federal income-driven repayment plans cap monthly payments at 10% to 20% of income and extend the loan repayment period from 10 years to 20 or 25 years. They also forgive the remaining balance at the end of the repayment period, but the forgiven amount is taxed. The Public Service Loan Forgiveness programme offers tax-free loan forgiveness to borrowers who make 10 years' worth of payments while working for the government or a nonprofit.

Although the US News and World Report consistently ranks dentist as one of the "Best Jobs"¹⁰, the rising cost of dental school has raised questions on the financial benefit of obtaining a dental degree. As educational costs increase higher than income, there is a decrease in the return on investment (ROI) for a dental education. The number of new dental schools and expansion of existing schools floods the market with new graduates and this could potentially exert a downward pressure to the ROI of a dental education¹¹.

Dentistry remains a great career choice and respected profession. However, we must recognise that new graduates are facing challenges brought on by the high cost of dental education. Unfortunately, as long as the number of applicants remains high, students are willing to borrow, and the government provides loans with few restrictions, dental schools will likely continue to raise tuition fees. This model is not sustainable as many will reach a breaking point where they can never repay their debts. As George Bernard Shaw said, "The surest way to ruin a person who doesn't know how to handle money is to give them some."



Craig M. Misch Editor in Chief



References

- 1. American Dental Association. Education: How many dental schools are there in the U.S. and Canada? https://www.ada.org/en/science-research/health-policy-institute/dental-statistics/education. Accessed 25 July 2021.
- Formicola AJ. Considering students' cost of a dental education: return on investment and debt to income ratio. J Dent Educ 2017;81:eS28–eS32.
- Herman Ostrow School of Dentistry of USC. Admission: Paying for dental school. https://dentistry.usc.edu/admission/paying-for-dental-school. Accessed 25 July 2021.
- American Student Dental Association. Student debt infographic. https://www.asdanet.org/images/infographics/studentdebt_infographic_may15_2019. png?sfvrsn=b7fe64dd_4. Accessed 25 July 2021.
- Istrate EC, Slapar FJ, Mallarapu M, Stewart DCL, West KP. Dentists of Tomorrow 2020: An Analysis of the Results of the 2020 ADEA Survey of U.S. Dental School Seniors Summary Report. ADEA Education Research Series

2021;1. https://www.adea.org/data/seniors/2020-Survey. Accessed 25 July 2021.

- Mitchell J. Mike Meru Has \$1 million in student loans. How did that happen? Wall Street J 2018;May 25.
- Nicholson S, Vujicic M, Wanchek T, Ziebert A, Menezes A. The effect of education debt on dentists' career decisions. J Am Dent Assoc 2015;146:800–807.
- Carter M. Credible. Which graduate degrees deliver more debt than income? 10 Apr 2018, updated 18 Dec 2019. https://www.credible.com/blog/data-insights/graduatedegree-debt-income. Accessed 25 July 2021.
- US Bureau of Labor Statistics. Occupational Outlook Handbook: Dentists. https://www.bls.gov/ooh/healthcare/dentists.htm#tab-5. Accessed 25 July 2021.
- U.S. News & World Report. 100 Best Jobs. https://money. usnews.com/careers/best-jobs/rankings/the-100-bestjobs. Accessed 25 July 2021.
- Stafford GL, Nourzad F, Lobb WK, Beall JR. The economic costs and benefits of dental education: an empirical analysis. J Dent Educ 2014;78:1497–1507.