Interprofessional Education: No More Tower of Babel?

he health professions, including dentistry, medicine, nursing, occupational therapy and social work, have been separated on multiple levels for well over a century, more so in North America than in Europe. This arbitrary separation is evident in undergraduate, graduate and post-graduate teaching programs, licensure and governance, health delivery systems, payment and compensation schemes, and, equally as important, research.

A major and negative impact of this partitioning of health care professions is the less than optimal overlap of research activities carried out by members of all faculties. In many instances, researchers have little awareness of what other groups are doing. Discoveries and ideas generated in these separate, yet parallel, endeavours become missed opportunities for complementary collaboration. Consequently, synergistic educational and research opportunities that could improve the health of Canadians are lost. Professionals in many health disciplines do not communicate effectively with one another, which can negatively affect patient care. Even when there is communication, different "languages" are frequently spoken so that as often as not, the individual professionals likely do not fully appreciate or understand the concerns of the other professions. We believe this results in a "Tower of Babel" style of health care.

The Oral Health-Systemic Health Link

The impact of oral health on systemic health is a newly emerging field of research that will continue to have a profound effect on disease management in the future. For example, studies of diabetes, an important metabolic disease affecting a growing number of Canadians, have reliably revealed the complex and important interactions that exist between oral and systemic health. In a separate context, contemporary understanding of many diseases has led to the development of biopsychosocial models. These models suggest that any disease or disorder is not 'merely' a pathobiological phenomenon but also includes psychological effects (often negative) on patients. From the psychosocial point of view, it has also been recognized that a disease (e.g., chronic pain syndromes) can lead to defined problems in relation to the patient's functional ability within a normal family or societal framework. It is important to address the full spectrum of challenges that impact the general well-being of patients. However, the current separations between the health professions have prevented many health professionals from addressing biopsychosocial outcomes of disease management in general, and diabetes in particular.

Improving Health Care Outcomes

In an effort to address these issues, the University of Toronto has committed itself to interprofessional education in health



Howard Tenenbaum, DDS, Dip Perio, PhD, FRCD(C)



Christopher McCulloch, BSc, DDS, PhD, FRCD(C)

"Even when there is communication,
DIFFERENT 'LANGUAGES' ARE FREQUENTLY SPOKEN
SO THAT AS OFTEN AS NOT,
THE INDIVIDUAL PROFESSIONALS LIKELY
DO NOT FULLY APPRECIATE OR UNDERSTAND
THE CONCERNS OF THE OTHER PROFESSIONS.
WE BELIEVE THIS RESULTS IN A
'TOWER OF BABEL' STYLE OF HEALTH CARE."



Interprofessional education, Drs. Tenenbaum and McCulloch believe, must not only improve communication among health professionals but also translate into positive health care outcomes.

sciences through the creation of the Office of Interprofessional Education, headed by Dr. Ivy Oandasan. The faculty of dentistry at the University of Toronto is drafting a proposal to create an interprofessional clinical unit that will permit direct interaction between students and mentors from relevant health professions as they assess and treat patients with diabetes. This program would be complemented by lectures on important issues and ideas underpinning essential diagnostic and treatment paradigms from each profession. The objective of this program is to enable not only interprofessional competence, but also transprofessional competence. Imagine a neurologist tapping teeth or a dentist doing a basic neurological assessment!

Of course, such an interprofessional unit must yield positive health care outcomes. Patients

undergoing treatment in such units will be monitored using outcome measures that reflect the interests and expertise of the various health sciences. Some of these measures may include biopsychosocial outcomes, which will be compared against outcomes derived from patients treated in more traditional clinical settings. We also need to learn whether interprofessional education initiatives like this one actually improve communication among health professionals. It is hoped that these newly minted professionals will understand one another more clearly than their predecessors. If this initiative demonstrates improvements in the competency of health care professionals (at least with respect to diabetes), as well as improvements in health-related outcomes for patients, it is hoped that similar training concepts will be applied to other diseases.

Will this novel type of training program produce better health care clinicians, while also leading to overall improvements in health care for Canadians? Time will tell.

THE AUTHORS

Dr. Tenenbaum was associate dean of biological and diagnostic sciences from 2001–2007. He is professor of periodontology in the faculty of dentistry, professor of laboratory medicine and pathobiology in the faculty of medicine, and head of the research division in the department of dentistry at Mount Sinai Hospital at the University of Toronto, Toronto, Ontario. Email: howard.tenenbaum@dentistry.utoronto.ca

Dr. McCulloch is Canada Research Chair in Matrix Dynamics and director of the Canadian Institutes of Health Research Group in Matrix Dynamics at the University of Toronto, Toronto, Ontario. Email: christopher.mcculloch@utoronto.ca.