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## **INTRODUCTION:**

*“A dental therapist is a highly skilled professional member of the oral health team who provides quality dental care to various sections of the community.”*

New Zealand Dental Therapists Association

Dental therapists examine and provide routine treatment of teeth under the general supervision of dentists; they also promote preventative dental health practices. They bring more complex dental health problems to the attention of dentists. In Australia and New Zealand, their primary target group is children, whose schools they visit on a regular basis. In Britain, they are responsible for the implementation of dental treatment plans to patients who are anxious, are medically compromised or mentally or physically disabled, who may have high levels of untreated decay, and have difficulties accessing regular dental care.

In Canada, dental therapists are licensed to practise only in certain jurisdictions. Their clientele, most of whom are Aboriginal, has limited access to dentists.

Related professions include:

- dentists, who examine, diagnose and treat dental health problems;
- dental assistants, who aid dentists and dental hygienists and maintain dental offices;
- dental hygienists, who treat gum and teeth problems and educate people about dental health; and
- denturists, who fit and repair dentures.

Dentists receive university educations, as do dental hygienists. Dental assistants and denturists train at colleges, as do dental therapists.

This paper focuses on the relatively new health profession of dental therapy. Specifically, it answers the following questions:

- What is dental therapy?
- How does one qualify as a dental therapist?
- What is the status of the profession in Canada?
- What changes are happening in the profession?
- What is the role of dental therapists associations?
- What is dental therapy’s relationship to the health of Canada’s Aboriginal people?

The paper will also include references to dental therapy in Australia and New Zealand, as well as First World countries with significant Aboriginal populations where the profession is more established. Britain, where dental therapy is well developed, will also be presented as an instructive case.

## **SECTION 1**

### **WHAT IS DENTAL THERAPY?**

#### **Dental therapy in New Zealand and Britain**

The dental therapy profession has its origins in New Zealand where “dental nurses” delivered dental care primarily to schoolchildren. Following the Second World War, there was a shortage of dental labour in Britain. At the same time, the National Health Service (NHS) was established to provide Britons with state medical care. Unlike Canadian medicare, it encompassed dental care, in recognition of the general poor dental health of people in Britain.

Given the shortage of dentists, the British government opted to train “dental auxiliaries” using New Zealand’s dental nursing program as a model. Many of the original instructors came from New Zealand to deliver the first two-year intensive course in London. There were 60 students, who developed skills in conservation, extraction, scaling and polishing, and dental education.

Today in Britain, the country’s 380 dental therapists are part of a team that also includes dentists, dental hygienists, dental surgery assistants, and dental technicians. Dental therapists treat patients who have already been examined by a dentist, who refers them with a clear treatment plan. The dental therapist has autonomy over the way the treatment plan is undertaken.

In Britain, the wide range of procedures that a dental therapist (or dental hygienist) can carry out includes:

- assessment of intra and extra oral health;
- recording of indices and monitoring of disease;
- scaling and polishing;
- application of materials such as fluoride to teeth;
- taking of dental radiographs;
- delivery of pulp therapy;
- placement of pre-formed crowns on deciduous teeth;
- emergency temporary replacement of crowns and fillings;
- delivery of dental education;
- restorations of teeth in children or adults;
- extraction of deciduous teeth under local infiltration analgesia (without the direct personal supervision of a dentist); and
- treatment of patients under conscious sedation (with the supervision of a dentist).

The profession is regulated by the General Dental Council (GDC), established in 1956, which also regulates dental hygienists and dentists. (Since 1984, the GDC has replaced the British Dental Board. By 2004, the GDC hopes to introduce a new register, which will cover all dental professions, including dental technicians.)

Parallel developments occurred in New Zealand, where the profession was known as dental nursing until 1995. At that time, the national professional association became known as the New Zealand Dental Therapists Association (NZDTA).

The list of services that New Zealand dental therapists can deliver is similar to the list for their British counterparts and includes:

- examination, diagnosis, and preparation of a care plan and medical history;
- informed consent procedures;
- dental diagnostic radiographs;
- local anesthetic;
- pulp therapy;
- restoration of primary and permanent (childhood and adult) teeth;
- extraction of primary teeth;
- preventative dentistry (cleaning, scaling, fluoride applications);
- basic periodontal care; and
- dental health education and promotion.

As in Britain, New Zealand dentists work as part of a team, one member of which must be a dentist. In both New Zealand and Australia, dental therapists work in particular geographic areas and visit a number of schools on a regular basis. In Australia, their practice is limited to children and adolescents at school. The (Australian) Victorian Dental Therapist Association (VDTA) argues that there is a great need for restorative treatment in adults, increasing because theirs is an aging population with more people retaining their natural teeth than before. In addition, significant portions of the population lack access to timely, appropriate, and affordable dental care. Yet because of pressure from the Australian Dental Association, which represents the country's dentists, dental therapists cannot deliver services to them. This is one reason, the VDTA says, why 60 per cent of dental therapists were not working in their field in 1998.

### **Dental therapy in Canada**

The profession has had similar difficulties in Canada, where it is less established. Here, dental therapists:

- provide limited dental services in First Nations and Inuit communities lacking dentists;
- conduct dental assessments in order to consult with a dentist;
- take impressions and X-rays of the teeth;
- fill caries, extract teeth, and replace portions of tooth crowns;
- remove stains and deposits from teeth and apply fluoride treatments; and
- teach oral hygiene to patients and the general public.

Dental therapists in Canada lack labour mobility and the sole employer of these professionals is government (federal or territorial) and through various Aboriginal health agencies. At present, dental therapists in Canada may practise only in the following locations:

- the Northwest Territories;
- the Yukon Territory;
- Saskatchewan;
- on Crown land in provinces;
- on reserves; and
- in Inuit communities.

They are not allowed to practise in Ontario or Quebec.

### **Dental therapy versus dental hygiene**

A commonly asked question is: how does dental therapy differ from the practice of dental hygiene? In many respects, the professions are similar. In Britain, dental therapists and dental hygienists carry out the same duties under new legislation, although the professions are not entirely merged. In Canada, dental hygienists qualify and work as dental assistants before entering a three- or four-semester program of study at a community college. The focus of their work is oral hygiene and education and they carry out the following:

- teeth cleaning (through scaling and polishing);
- patient education (individually and in schools);
- taking impressions and placing sealants; and
- exposing and processing X-rays.

In contrast to dental therapy, dental hygiene's emphasis is more on public health and education than clinical practice.

In addition, the professions have different histories. Dental hygiene began as early as 1819 when Dr. Levi Spear Parmly, an American dentist, emphasized preventative oral health practices. At that time, prevention was a radical notion in medicine. By the 1900s, most dentists were too busy dealing with high levels of disease and surgeries to promote oral health care. This is when Dr. Alfred C. Fones, "the father of dental hygiene," opened the first school of dental hygiene in the United States.

### **Salaries and working conditions**

Salaries vary for dental therapists; in New Zealand, they usually earn between \$25,000 and \$45,000NZ, depending on the region they work in. In Canada, they earn an average of \$42,000. Dental therapists working full-time year-round can expect to earn over \$50,000 annually. A recruitment advertisement of the Labrador Inuit Health Commission (LIHC) offers \$45,165 to \$56,456 to dental therapists. Inuvik Regional Health and Social Services Authority is currently offering \$56,784 to \$64,389 to experienced dental therapists. Both job ads stress the importance of cross-cultural communication; the LIHC ad notes that bilingualism in English and Inuktitut would be an asset.

Most dental therapists are women (96 per cent in New Zealand in 2001), a reflection of the profession's origins as a specialty within nursing. The figure is the same in Canada, except that the proportion of female dental therapists is increasing, according to the Canadian Occupation Projections System (COPS). Members of the profession experience a lower than average unemployment rate. Their numbers remain small. According to Health Canada, in 1996, there were:

- 54 dental therapists employed by Health Canada;
- 24 working for the Government of the Northwest Territories;
- five employed by the Saskatchewan Northern Health Services Program; and
- five employed by NSDT.

## **SECTION 2**

### **HOW DOES ONE QUALIFY AS A DENTAL THERAPIST?**

#### **Skills and education**

The following skills are desirable in dental therapists:

- technical skills, including good hand-eye co-ordination;
- good health, including a strong back (dental therapists have to carry heavy equipment) and good eyesight (with or without glasses);
- problem-solving and decision-making abilities;
- manual dexterity;
- technical knowledge; and
- communication skills.

#### **The National School of Dental Therapy**

Besides these skills, academic qualifications are also necessary. As stated, there is only one program of study in dental therapy in Canada: a two-year course (about 2,245 hours) offered by the National School of Dental Therapy (NSDT) at the Northern Campus of the Saskatchewan Indian Federated College (SIFC) in Prince Albert, Saskatchewan. Dental therapy training has been offered at SIFC since September 1995. SIFC is the country's only First Nations-controlled and governed degree-granting institution. It was created in 1976 through a federation agreement with the University of Regina. SIFC began operations with 10 students; today, it has more than 1,300 students and the number increases annually.

The National School of Dental Therapy operates with an advisory board consisting of First Nations peoples, Inuit, and a dental therapist. The NSDT is contracted by the federal government through Health Canada to deliver dental therapy training, in co-operation with the College of Dentistry of the University of Saskatchewan. The contract is \$9 million for five years and was awarded under the Procurement Strategy for Aboriginal Business. In awarding the contract in 2000 (for the second time), then Health Minister Alan Rock said: "Graduates from the NSDT are able to provide basic restorative and preventative dental care services for First Nations and Inuit communities. We believe this is one of the keys to communities successfully developing and implementing their own solutions to the serious health issues facing Aboriginal people in Canada."

Entry requirements to the dental therapy program in Prince Albert include:

- a Grade 12 diploma;
- qualifications in biology;
- qualifications in English;
- proof of a current tuberculin test and/or negative chest X-ray; and
- proof of immunization against rubella, tetanus, polio, and hepatitis B.

The program trains students to provide basic oral health care services including:

- fillings;
- extractions;
- preventative care; and
- education in dental health.

Students develop their skills in these areas through a wide range of courses in:

- administration;
- dexterity projects;
- patient examination;
- dental morphology;
- medical evaluation;
- infection control;
- equipment maintenance;
- restorative dentistry;
- community dentistry;
- radiology;
- head and neck anatomy;
- oral diagnosis;
- treatment planning;
- local anesthesia;
- oral surgery;
- case presentation;
- periodontics; and
- Native health studies.

In addition, the program has a clinical component consisting of a six-week placement in remote, northern communities. As part of their practical training, students provide additional treatment services for the local Prince Albert community.

Each year between 15 and 20 students are accepted into the NSDT program; a significant proportion is Aboriginal. There are currently 20 students in the first-year class and there are expected to be 13 graduates 2003. The number of Aboriginal dental therapy students is increasing; more than half of each graduating class is Aboriginal.

The dental therapy program has recently undergone a total curriculum review. In addition, with the University of Saskatchewan, the NSDT was involved in a survey of 100 randomly selected First Nations and Inuit communities to determine if residents were aware of dental therapy and the NSDT program, and if they would be interested in services offered. Researchers found that those who had some knowledge were indeed interested in dental therapy. According to Dr. Glen Schnell, Dean of NSDT, there is still the challenge of facilitating buy-in. The school also has to effectively spread information about what a viable health program is.

In addition to Canada's unique dental therapy program, one- and two-year training programs in dental assisting and dental hygiene are offered at several colleges and universities in various parts of the country. In British Columbia, for example, dental hygienists can train at Camosun College, Vancouver Community College, or the College of New Caledonia. Dental hygiene programs usually have one year of work as a dental assistant as a prerequisite. Admission to dental assistant programs normally requires high school courses in biology, chemistry or physics, math, and English.

Dental therapy programs in other countries are offered in centres that are remote or partly remote; by British standards, Leeds, the location of one of eight schools, qualifies as such. Offering the dental therapy program in Prince Albert is therefore in keeping with an idea that recurs through the history of dental therapy. Throughout its history, the profession has also demonstrated an awareness of the health needs of marginalized people. This, too, is a feature of the NSDT program, responding as it does to Aboriginal people as students and patients.

The program has broad support throughout Indigenous Canada. In 1999, the Assembly of First Nations Confederacy of Chiefs passed the following resolution: "...be it resolved that the AFN Confederacy of Chiefs support the retention of the NSDT in Saskatchewan and that it remain under the administration of the SIFC."

### **The development of the dental therapy profession**

In other countries where dental therapy is established, the discipline is moving squarely to professional status. This is reflected in the expanded list of services British dental therapists can offer, and in changes to training programs for dental therapists in New Zealand.

Currently in New Zealand, dental therapists must hold at least a two-year diploma in dental therapy (DipDentTher); this is offered at the University of Otago. During their program of study, dental therapy students spend time in designated clinical practice settings throughout New Zealand.

The university has recently introduced a three-year Bachelor of Health Sciences, with a specialization in dental therapy (BhealSciDentTher); this is expected to have an impact on the practice of dental therapy in New Zealand. This program, too, has a clinical component.

First-year academic courses include:

- biology;
- English;
- chemistry; and
- three from anthropology, biochemistry, education, Maori, physics, psychology, and statistics.

Second- and third-year students do courses in dental therapy including:

- preclinical sciences;
- clinical practice;
- oral biology;
- dental therapy practice;
- community oral health; and
- applied research.

The University of Otago also offers a postgraduate diploma in dental therapy that emphasizes management issues. Some dental therapists elect to study for the Master of Health Science, Master of Public Health, and Ph.D. degrees.

New Zealand's Auckland University of Technology offered a three-year degree program. The university plans to offer a three-year Bachelor of Oral Health.

In Australia and New Zealand, continuing education for dental therapists consists of participation in seminars and conferences. In Australia, dental therapists also benefit from the monthly newsletter and biennial journal of the Victorian Dental Therapist Association Inc. (VDTA). The VDTA also sponsors meetings, workshops, and conferences. In addition, the NZDTA publishes a journal.

In New Zealand, the Ministry of Health offers Maori Health Scholarships. Each year, it provides 15 scholarships of \$2,500NZ to Maori studying towards a diploma in dental therapy or dental hygiene or the Bachelor of Dental Technology. (For more information on the Maori Health Scholarships, see Appendix III.)

## SECTION 3

### WHAT CHANGES ARE HAPPENING IN THE PROFESSION?

#### International changes

Dental therapy is a health profession that is changing rapidly, both in Canada and abroad. As already noted, however, dental therapy is barely established in this country. This contrasts to its long history in New Zealand and Australia and, to a lesser degree, in Britain.

With the passage of the *Health Practitioners Competency Bill 2002*, dental therapists in New Zealand may practise privately, with *iwi* health providers, or community trusts; prior to this, they were employed only by district health boards. This reflects changes in health services as well as the expanding role of dental therapy in health care.

With the July 2002 revisions to the British *Dentists Act 1984*, the list of services that can be delivered by British dental therapists expanded. This was in response to need. Another change allows dental therapists to work in general dental practice, instead of only in the NHS. This is related to the ongoing privatization of health services in Britain, and the development of a private health system operating alongside the national system.

#### Developments in Canada

In Canada, only Saskatchewan, the Yukon, and the Northwest Territories (NWT) have enabling legislation for dental therapy. The NWT *Dental Auxiliaries Act 1990* regulates the practice of both dental hygiene and dental therapy in the territory. According to the Act, dental therapy means “the performance of dental services under the direction and control of a dentist” and allows dental therapists to perform:

- uncomplicated dental restorations;
- uncomplicated removal of teeth;
- dental prophylaxes;
- application of fluorides and other topical agents; and
- X-ray taking and development.<sup>1</sup>

Note that the work of dental therapists must be done under the supervision of a dentist. This is more restrictive than in the other countries mentioned, and reflects the fact that the profession is in an earlier stage of development in Canada.

#### The future of dental therapy in Canada

It is somewhat difficult to predict the outlook of dental therapy in Canada. On the one hand, the need is there (as we shall see) and the Aboriginal population is increasing. According to *British Columbia Occupational Outlooks*,<sup>2</sup> population growth will account for over 90 per cent of the new dental therapy jobs created. The federal government has made some commitment to providing dental therapy services to Aboriginal people through its funding of the NSDT; the most recent five-year agreement was signed in June 2000.

Dr. Schnell of the NSDT says that demand would exceed the school’s capacity to produce dental therapists if every community that indicated an interest in dental therapy was able to hire a graduate. However, this is not the case. The establishment of dental therapy depends on further

funding of dental therapist positions by Health Canada; transfer agreements can also complicate the process.

Furthermore, in Saskatchewan, provincial legislation that allows dental therapists to enter private practice has made it even more difficult to recruit dental therapists to remote communities.

On the other hand, government is the only employer of dental therapists in most jurisdictions in Canada (excepting Saskatchewan), which may restrict the growth of the profession.

In addition, there is opposition from dentists' associations, who see dental therapy as a threat to their profession. This is particularly true of dental associations in Ontario and Quebec, where dental therapists are not permitted to practise at all. Recent indications from Health Canada are that the Quebec Dental Association is softening its stance against dental therapy somewhat, due to the shortage of dentists in the province.

Given these factors, the path of dental therapy in other countries, such as Britain and New Zealand, may be instructive. The New Zealand Dental Therapy Association warns of a national shortage of dental therapists by 2005 in New Zealand, given these factors:

- the predicted increase in the population of pre-school and school-age children;
- the closure of dental therapy training programs in Christchurch and Wellington;
- health services restructuring;
- the moderate rate at which people leave the profession to retire and raise families; and
- the small number of annual graduates (45 at maximum).

There is currently a shortage in certain regions of the country. In 2001, there were 784 dental therapists in New Zealand. Projected shortages of dentists and dental therapists in Britain, coupled with the demonstrated need for dental services, propelled the government in 2002 to expand the list of services dental therapists can offer. Given the high growth rate of the Aboriginal population and the fact that there is just one training school, it is difficult to imagine that there will not be a shortage of dental therapists in the coming years.

## **SECTION 4**

### **WHAT IS THE ROLE OF DENTAL THERAPY ASSOCIATIONS?**

#### **Dental health professional associations in Canada**

There has been a national professional association for dental therapists in Canada for some time now; membership is voluntary. The Canadian Association of Dental Therapists (CADT) has had a low profile but that is expected to change with the recent election of new, more active leadership. For instance, the CADT is currently in the process of developing a Web site. There are also two provincial associations – in Saskatchewan and Manitoba.

Dental therapists may also join the Canadian Association of Public Health Dentistry (CAPHD). This is an association of dentists, dental hygienists, dental therapists, and administrators of dental public health programs. The organization operates a listserv and sponsors research and scientific sessions each year; thus, its function is mainly professional education.

The history of the Canadian Dental Hygienists Association (CDHA) may be instructive on the future of the CADT. Founded in 1964, the CDHA represents more than 14,000 dental hygienists. Membership is voluntary in all provinces and territories except Saskatchewan, Alberta, Nova Scotia, and Newfoundland and Labrador, where it is mandatory. The CDHA promotes dental health education, partnerships between hygienists and other health professionals, and presses for the development of national standards.

Note that development of the CDHA was incremental, as is typical of professional associations:

- 1963: graduates of the School of Dental Hygiene, University of Toronto try to organize dental hygienists nationally
- 1964: the first convention and general meeting is held in Edmonton
- 1965: the CDHA adopts a constitution
- 1967-1978: provincial dental hygienists associations join the CDHA (e.g. Saskatchewan in 1970, New Brunswick in 1974, etc.)

Another professional association for dental auxiliaries in Canada is the Dental Assistants Association (CDAA). All Canadian dental assistants are members of this internationally recognized body. Unlike dental therapists, dental assistants have professional recognition and labour mobility throughout Canada. Thus, unlike the CDHA and the CADT, the CDAA is able to promote a nationally accepted scope of practice for its members and otherwise foster opportunities for the growth of the profession and its practitioners.

#### **Dental therapists associations internationally**

The dental therapists associations in Britain, Australia, and New Zealand are well developed. Britain's dental auxiliaries formed a professional association in 1963. In 1973, the name of the profession was changed to dental therapy and the association became known as the British Association of Dental Therapists (BADT).

The VDTA represents dental therapists in the state of Victoria, Australia, where the profession has existed for 25 years. Membership is voluntary; thus, the association focuses on raising the profile and professional standing of dental therapists, linking with other dental associations, etc.

The New Zealand Dental Therapists Association (NZDTA) is more established and more influential. According to articles in its newsletter, it has access to the country's minister of health and is involved in lobbying for legislative and educational improvements, usually successfully. The *Health Professionals Competency Assurance Bill 2002*, which expanded the scope of practice of dental therapists, is an example of this. At the same time, however, the NZDTA had difficulties in its relationship with the School of Dentistry, University of Otago, as it developed its Oral Health degree program. The New Zealand Dental Association (NZDA) has opposed the development of degree programs in dental therapy. This kind of conflict is not unusual among related professions, particularly as a lower-status profession rises in status.

## **SECTION 5**

### **WHAT IS DENTAL THERAPY'S RELATIONSHIP TO THE HEALTH OF ABORIGINAL PEOPLE IN CANADA?**

#### **Aboriginal dental health**

Prior to the European invasions, Inuit had excellent dental health. Their diet did not include sugar or refined carbohydrates or fat. This was not necessarily true of other Aboriginal peoples, particularly those whose diet was high in carbohydrates, such as corn. They likely experienced more tooth decay. In sum, dental health varied for Aboriginal groups historically.

Aboriginal dental health tends to be poor in the modern era. Inuit dental health deteriorated in the latter half of the 20<sup>th</sup> century, as their diets changed.<sup>3</sup> Several recent studies point to high rates of tooth decay among children, even those who had seen a dentist. Many Aboriginal children suffer toothaches and bleeding gums. According to Dr. Tom Breneman, the president of the Canadian Dental Association, the average 12-year-old Aboriginal child has between seven and nine teeth missing, filled or decayed.<sup>4</sup> This contrasted with Ontario where the average child of 13 has only one tooth missing, filled, or decayed.<sup>5</sup> A study of Labrador Inuit youth aged five to 22 found that only three per cent were free of caries; even worse, 88 per cent of those with caries had untreated dental decay.<sup>6</sup>

The 1997 First Nations and Inuit Regional Health Survey found that 48 per cent of adults said they needed some dental care. Interestingly, this proportion did not vary with community size, location (remote or not), or whether respondents lived in a community with a transfer agreement.

The most common types of dental care required included:

- restoration (fillings, crowns) – 15 per cent
- maintenance (check-ups or cleaning) – nine per cent
- prosthetic work (dentures) – five per cent
- extraction – five per cent.

Almost a quarter of respondents had a dental problem or pain within the last month; this did not change as variables did, although people in transferred communities were slightly less likely to report having had dental pain.

According to the Regional Health Survey, Aboriginal people were interested in better prevention. Survey analysts identified several ways to improve dental health:

- dental screening;
- treatment;
- fluoridation of water (or individual fluoride supplements); and
- community education or other programs that would help people change their diet and brushing habits.

#### **Dental services for Aboriginal people**

As recently as 25 years ago, there were few dental services for people living in remote locations.<sup>7</sup> This began to change in the mid-1970s when the University of Toronto opened a national school of dental therapy, whose graduates served Aboriginal people in isolated communities.

Dental therapy is one of many services available to Aboriginal people, although Métis, Non-Status Indians, and people living off-reserve cannot access it. The Non-Insured Health Benefits (NIHB) plan administered by Health Canada pays for the following dental services for individual Inuit and status Indians:

- diagnostic services (exams, X-rays);
- preventative services (cleanings);
- restorative services (fillings);
- endodontics (root canal treatments);
- periodontics (gum treatments);
- prosthodontics (removable dentures and fixed bridges);
- oral surgery (teeth removal);
- orthodontics (teeth straightening); and
- adjunctive services (additional services, such as sedation).

Federal expenditures for dental services increased through the 1990s until 1996 when caps were placed on the frequency of certain dental services. There have been other problems with the program. This may be related to the fact that utilization of the NIHB dental health program dropped from 43 per cent in 2000 to 39 per cent in 2001. “The plan is onerous to administer and therefore costly to dental offices and the government and does not recognize the needs of most of these patients,” said Dr. Wayne Chou, president of the Association of Dental Surgeons of B.C. (ADSBC) earlier this year.<sup>8</sup> For example, patients from remote areas are expected to travel for a dental exam and then return for treatment once Health Canada determines that the prescribed treatment is appropriate.

Also in 2002, the Canadian Dental Association (CDA) and the AFN criticized the NIHB dental health program for its failure to guarantee equal access to dental care; increasing numbers of dentists are dropping out of the plan and asking for payment up front, which many Aboriginal people cannot afford. According to Dr. Tom Breneman, many Inuit and status Indians have stopped going to the dentist as a result.

### **Focusing on prevention in dental health**

Both the CDA and the AFN also pointed to Health Canada’s failure to address prevention in dental health.<sup>9</sup> As the 1997 First Nations and Inuit Regional Health Survey concluded, prevention is important. A study of the dental health of Keewatin Inuit reached similar conclusions: “In isolation from preventive services, treatment alone has been insufficient to control ongoing dental decay.”<sup>10</sup>

Happily, prevention is increasingly important in policy thrusts. In 1998/1999, Health Canada funded five First Nations communities to implement water fluoridation systems including Pelican Narrows, Southend, Dechambault Lake, and Split Lake. A fissure sealant pilot project was launched in Alberta the same year and expanded to Ontario, Quebec, and the Maritimes the next year. Also in 1999/2000, three Manitoba communities received further funding for fluoridation including Sandy Bay and Ospasquayak.

Another project of interest is a \$260,000, 18-month Dental Health Promotion demonstration project of the Manitoba government. Other partners include:

- the Winnipeg Regional Health Authority;
- Burntwood Regional Health Authority;
- the Children's Hospital Foundation; and
- Health Canada (the First Nations and Inuit Health Branch).

The project's focus is two northern and two southern First Nations communities:

- Thompson;
- Norway House;
- Point Douglas; and
- Roseau River.

Baby tooth decay is one of the targets of the demonstration project. The partners, including representatives from St. Theresa Point First Nation, have developed educational material that is culturally relevant and focuses on the prevention of tooth decay in infants and very young children.

In the United States, the Indian Health Service (IHS) has begun an Oral Health Initiative aimed at improving dental health through better access to care. The goals of the initiative include:

- improving recruitment and retention of dental health professionals into the His;
- improving dental public health infrastructure;
- enhancing health promotion and disease prevention (i.e. through water fluoridation, sealants, etc.); and
- improving data quality.

Researchers and health care providers are increasingly aware of the importance of good dental health. We know now that dental problems impact other systems of the body. For example, three recent studies suggest that gum disease in pregnant women may increase the rate of pre-term babies by three to eight times.<sup>11</sup> Being born premature can be a lifelong quality of life issue. Thus, dental health must be included in any serious discussions of health. Dental therapists can play a central role in improving dental health, particularly for Aboriginal people.

## **SECTION 6**

### **WHERE DO WE GO FROM HERE?**

#### **Review of Main Points**

- Dental therapy has a long history in other Commonwealth countries, particularly New Zealand.
- The profession developed in response to generally poor dental health and poor access to dental care.
- The profession is less established in Canada.
- The most progressive legislation pertaining to dental therapists is in Britain, where they may work without supervision by a dentist.
- Dental therapy sometimes faces opposition from dentists' associations, especially in Australia but also in Canada.
- Unlike in other countries, there is only one dental therapy training school in Canada: the National School of Dental Therapy (NSDT) in Prince Albert, Sask.
- Dental therapists in Canada lack labour mobility.
- The profession is closely associated with Aboriginal people; over half of NSDT graduates are Aboriginal (thus it is an Aboriginal health success story).
- Poor dental health is a serious problem among Canada's Aboriginal populations.
- Dental therapy helps meet the dental care needs of Aboriginal people and could do so even more.
- Access to all dental services continues to be a problem: for Métis and urban Aboriginal people, and even for Aboriginal people eligible to participate in Health Canada's NIHB program.
- Canada's dental therapists may belong to the Canadian Association of Dental Therapists (CADT) and may also join the Canadian Association of Public Health Dentistry.

#### **Identification of Issues**

1. Lack of labour mobility may hamper efforts to recruit people to the dental therapy profession (lack of labour mobility for their members has been cited as an issue of concern by the National Indian and Inuit Community Health Organization).
2. Many Aboriginal people cannot access the services of a dental therapist; this includes Métis and urban Aboriginal people. Given generally low-income levels and the costs of dental services, it is likely that these people cannot access dentists either.
3. Recent research clearly identifies serious ongoing dental health problems among the Aboriginal populations of Canada.
4. Dental therapy is not yet generally well-known or understood in Canada. It is much less established here than in some other Commonwealth countries.

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Canadian Dental Hygienists Association: [www.cdha.ca](http://www.cdha.ca)

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## **APPENDIX I**

### ***GLOSSARY AND ACRONYMS***

**Aboriginal:** the collective name for the original people of Canada and their descendants

**Assembly of First Nations (AFN):** the political organization representing most of the status Indians of Canada

**Association of Dental Surgeons of British Columbia (ADSBC):** a professional association for dental surgeons working in British Columbia

**British Association of Dental Therapists (BADT):** the professional body for the dental therapists of Britain

**Canadian Dental Association (CDA):** the professional body for the dentists of Canada

**Canadian Dental Hygienists Association (CDHA):** the professional body for the 14,000 dental hygienists of Canada

**Caries:** cavities in the teeth

**Dental assistants:** para-professionals who assist dentists and maintain dental offices

**Dental auxiliary:** the old name for dental therapists in Britain; now refers to all members of the dental team, except the dentist

**Dental hygienist:** a para-professional providing various dental health services, especially oral hygiene education

**Dental nurse:** the old name for dental therapists in New Zealand

**Dental therapist:** a para-professional providing various dental health services, including restoration of teeth (fillings), etc.

**Dentist:** a professional health provider trained to offer the full range of dental services

**Denturists:** dental health professionals who fit and repair dentures

**First Nations:** those people formerly known as Indians; includes status and non-status Indians

**First World:** western countries with a high degree of economic development

**General Dental Council (GDC):** the regulatory body for all the dental professions and para-professions in Britain, including dental therapy

**Inuit:** the Aboriginal peoples of Arctic and sub-Arctic Canada and the international circumpolar region

**Iwi:** an Indigenous nation or national organization in New Zealand (e.g. *Te Runanga A Iwi O Ngapuhi* is the representative body for all Ngapuhi descendants)

**Maori:** the Indigenous people of New Zealand, singular or plural

**Métis:** one of the three Aboriginal Peoples of Canada according to the 1982 Constitution; the descendants of European and First Nations (or Inuit in the case of the Labrador Métis) people

**National Health Service (NHS):** Britain's state-owned and operated health service, providing a range of health services to all Britons, founded in 1948

**National School of Dental Therapy (NSDT):** the only training school in Canada for dental therapists

**New Zealand Dental Therapists Association (NZDTA):** the professional body for practising dental therapists in New Zealand

**Non-insured Health Benefits (NIHB):** a program through which Health Canada pays for non-insured health services, such as dental work, for individual Inuit and status Indians

**Saskatchewan Indian Federated College (SIFC):** the only First Nations-controlled and -governed degree-granting institution in Canada; it administers the NSDT at its Northern Campus in Prince Albert, Sask.

**Victorian Dental Therapists Association (VDTA):** the professional body for practising dental therapists in the state of Victoria, Australia

**APPENDIX II**  
**CONTACTS FOR DENTAL THERAPY IN CANADA**

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Jim McLeod  
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Tel: (204) 983-2871

Cindy Reed, Registrar  
Saskatchewan Dental Therapists Association  
Tel: (306) 297-2496

Leslie Topola, President  
Saskatchewan Dental Therapists Association  
Tel: (306) 655-4161

**APPENDIX III**  
**MINISTRY OF HEALTH MAORI HEALTH SCHOLARSHIPS, NEW ZEALAND**

**High School Students:**

60 scholarships of \$300NZ to assist with the purchase of books and/or tuition fees

**Undergraduate students:**

80 scholarships of \$1,500 for Maori studying community health or towards a certificate or diploma or degree that aligns with one of the Maori Health Gain Priority Areas

**Nursing:**

125 scholarships of \$1,500

**Midwifery:**

20 scholarships of \$1,500

**Medicine:**

70 scholarships of \$2,500

**Physiotherapy:**

20 scholarships of \$1,500

**Dental professions:**

15 scholarships of \$2,500 for Maori studying towards a diploma in dental therapy or dental hygiene or the Bachelor of Dental Technology

**Pharmacy:**

10 scholarships of \$1,000

**Health Management:**

10 scholarships of \$2,000

**Postgraduate students:**

30 scholarships of \$2,500 to pursue the graduate certificate of clinical training Kaupapa Maori or the graduate diploma of Maori Health. Eligible are Maori medical graduates, nursing graduates, graduates from Allied Health Professional Grouping, or Maori studying physiotherapy, occupational therapy or psychology.

**Contact:**

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[www.healthsite.co.nz/hauora\\_maori/resources/opportunities/MoH\\_scholarships.html](http://www.healthsite.co.nz/hauora_maori/resources/opportunities/MoH_scholarships.html)

**APPENDIX IV**  
**PERSONAL PROFILE OF A MAORI DENTAL THERAPIST:**  
**FATI TAPU OF NEW ZEALAND**

Fati worked as a meat packer for a while and was in fact going to train as a butcher. “But I got a bit fed up with handling meat,” he says, “so I went up to the local polytechnic, looking on the notice board and saw dental therapy. I thought I like the sound of that. I was 19 years old and applied but I didn’t get in at first because I needed School Certificate.” Fati waited for a while and applied again and was accepted for training as a mature student.

What attracted him was being able to work in the community and with children. “I like everything about this job and I don’t really find anything in it too difficult,” he says. “I love the kids, but I also love doing the fillings. I really enjoy that part.”

Fati has to be very sensitive and patient with the children he treats. “Usually if a child is afraid, I try and talk to them to help them relax, and explain to them what is going to happen and what it is for. They usually come around and decide to give it a go. They all have different pain thresholds so you have to be careful.”

“You need very good communication skills too. I had a child here recently who could not speak much English, so I had to make sure the mother was there to translate everything I needed to tell the child about what I was doing at each stage of the treatment.” Fati says that while training, each dental therapist experiences learning about providing treatment for children from a diverse range of backgrounds. “We have to become skilled with all the different treatment options that are required for all children that attend our clinics.”

*Source: Faculty of Dentistry, University of Otago, New Zealand.*

## ENDNOTES

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<sup>1</sup> NWT *Dental Auxiliaries Act 1990* (s.1 (1)a-e).

<sup>2</sup> *British Columbia Occupational Outlooks 2000*.

<sup>3</sup> Bjerregaard and Young, 1998.

<sup>4</sup> CBC News, June 7, 2002.

<sup>5</sup> *Ibid.*

<sup>6</sup> Bjerregaard and Young, 1998: 97.

<sup>7</sup> Bedford and Davey, 1993.

<sup>8</sup> Association of Dental Surgeons of British Columbia, 2002.

<sup>9</sup> CBC News, June 7, 2002.

<sup>10</sup> Rea et al., 1993: 124.

<sup>11</sup> Manitoba government news release, April 26, 2002.