What Your Older Patients Want From Their Dental Services

Oct 2009

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There is a transition in the practice of dentistry, which is perhaps best illustrated by the emergence of root caries, a chronic infectious disease. Ten years ago, root caries had little impact on the Canadian dental office but now it has become a common problem in many Canadian dental offices. Interestingly, one might consider root caries to be at the crux of change for several reasons. It results from the aging Canadian population: it can be an inevitable outcome of routine periodontal maintenance care (due to a shift away from periodontopathic to cariogenic bacteria in the oral flora) which has become a major focus of Canadian dental offices. And, it is a disease of remarkable interest to the older health care consumer.

What is the nature of the emerging shift in the delivery of dental care? As of 2009, the patient population is shifting away from a predominantly younger generation of patients, to a population dominated by Canadians over age 50. A transition from an economy, which fostered comprehensive employer-sponsored dental plans, to one favouring healthcare spending accounts for those working, and more user-pay for the growing numbers of retired or those in the entrepreneurial sector where dental insurance is largely unavailable. A transition from a period when the dental patient had little access and reason to pursue information on their oral health, to the 'Internet era' of the informed health care consumer who wants to know more about his/her treatment and choices given the growing linkage between oral health and overall health.

The consequences of an aging population -- A changing perception of dental care As they age, and certainly once they reach age 70, Canadians visit the dental office far less frequently, as reported by a national survey conducted by Ipsos Reid in mid 2008 (Fig. 1). This is important to Canadian dentists, since patients over age 70 will be the fastest growing group in Canada within the next 10 years, a percentage predicted to rise from 7.6% of the national population in 2009 to 9.9% in 2020. Secondly, this older population will require more dental care, particularly for the management of root caries as it becomes the predominant infectious dental disease (Fig. 2).

If older Canadians need more dental care, but are not seeking it, what might the reasons be? The obvious, generally-held explanation is that dental care is too costly, particularly if older Canadians do not have insurance or other third party coverage. Indeed, enrollment in dental insurance plans has always declined steadily and dramatically after mid life, such that in 2003, only one in four Canadian seniors reported having dental insurance. The Ipsos Reid survey described below, found a similar trend: almost six out of 10 seniors paid for their dental care out of pocket.

But there must be other, less obvious, non-economic reasons that would explain why older Canadians have relatively poor dental attendance. If it were economics alone, this would be inconsistent with the fact that today, older age groups actually have the highest net worth in the country, and should arguably be the least affected
by the current economic crisis. Moreover, this trend preceded the current economic crisis in any event. Furthermore, this population is well informed as to their need for dental care. In this regard, our investigation has suggested the presence of a factor that might be even more impactful than economics in relation to why older Canadians seem to under-appreciate their consumption of professional dental care. Our research suggests that older Canadians want a ‘different’ type of dental service -- something geared to more prevention of disease as opposed to treatment of already established disease.

What do older Canadians want from their dental service providers: -- Three patient surveys.

Survey methods

Ipsos Reid surveyed 1,044 Canadians, age 40 and older, about their attitudes, preferences and expectations for professional dental services. This survey was representative of the population as portrayed by the 2006 Census. The findings as reported were shown to be statistically significant.

Secondly, surveys were undertaken by dental hygiene teams in nine family dental offices in Southern Ontario. These surveys involved 482 adult patients, aged 40+, attending these dental offices for regular dental care, and included a root caries risk assessment of each patient, a questionnaire focused on their dental knowledge, and test of the patient’s ‘willingness to pay’ for additional preventive care as recommended by the dental professional (in most cases, the dental hygienist).

Thirdly, 55 patients attending a Toronto periodontal practice for regular maintenance care were asked about their dental knowledge, and then for their willingness to pay for additional preventive care for root caries, a common sequelae of maintenance care for periodontitis.

THE FIRST SURVEY:

A national survey of older Canadians by Ipsos Reid The survey revealed that older Canadians have a good dental IQ, and are paying directly for more of their dental care, and are also expecting to learn more about their oral health from their dental professional. This population expressed a strong preference for prevention over other dental services (Fig. 3).

From an economic perspective, the survey showed that in mid-2008, the most common method of paying for dentistry by older Canadians was cash. Thirtyseven percent of patients pay their entire dental bill out-of-pocket and by contrast, only 11% have a dental plan from their employer, which pays the entire cost of dental care. About 25% of older Canadians, and 30% of seniors, pay more than $400 per year, out of pocket, for their dental care.

From a health perspective, the survey found that older Canadians were substantially affected by caries. Almost 50% of older Canadians had a new cavity or crown in the prior two years, while 30% had two or more cavities or crowns in the past two years.

One of the most noteworthy aspects of this survey’s findings related to preferences, attitudes and knowledge about professional dental care. To wit, older Canadians responded as follows, which the authors believe is critical to the current transition of the dental profession:

• Older Canadians value preventive care far more than cosmetic care and restorative care (i.e. the latter referring to the repair of damage that might have been prevented in the first place) (Fig. 3).

• Older Canadians expect to be advised of more preventive care: 30% said they think the primary role of the dental team is “to recommend appropriate new preventives services – it is a primary reason I go to the dentist”. And further, 62% said that “the dentist and dental hygienist should always speak to their patients about new preventive procedures if they apply to the patient”.
Older Canadians want to be advised of more preventive care: 29% said they would be very interested in the dentist or hygienist taking the time to speak with the patient about a new preventive coating that might reduce the risk for root decay. A further 40% said they would be interested if the dental professional provided information on this new coating so that the patient could think about it. (Similar findings were reported in the survey by nine family dental clinics).

In terms of ‘willingness to pay’ for more prevention of root caries when it is recommended by the dental team, a majority of older Canadians gave a conditional yes, or wanted to consider it (Fig. 4).

As summarized by Ipsos Reid, older Canadians want to know more about their oral health, partly because they already know a lot. Almost half of older Canadians said they were very interested in their dentist or hygienist speaking to them about the following:

- Tooth decay at the gum line can be reduced with an antibacterial tooth coating.
- Tooth decay at the gum line is a bacterial infection, which spreads from tooth to tooth.
- Tooth decay at the gum line may be a risk factor for heart disease.

By contrast, only one in five older Canadians were very interested in a new tooth-whitening product.

**THE SECOND SURVEY:**

**Risk assessment and willingness to pay for more prevention in nine family dental offices**

In the latter half of 2008, nine family dental offices in Southern Ontario participated in a survey over two weeks. The dental hygiene teams used a simple questionnaire to canvas all patients age 40+ visiting the dental office, to evaluate the patients’ dental knowledge. Next, dental hygiene teams conducted a risk assessment for root caries using a simple form, which lists disease indicators and risk factors derived from current dental literature (Table 1). If the patient was evaluated to be at risk of root caries, the hygienist recommended more prevention in the form of the Prevora® antibacterial tooth coating.

The average age of the 482 patients participating in this study was 59 years. The vast majority of patients were on a semi-annual or annual treatment cycle. As also shown in the Ipsos Reid national survey, there were significant levels of dental disease (Fig. 5). Approximately 60% of those surveyed had experienced cavities/ caries in the last two years and about 40% had experienced root caries. Most had significant gingival recession and were under periodontal maintenance care (i.e. scaling and root planing), which has been shown to shift oral microbial flora to one that is more cariogenic. Most of the patients had multiple risk factors and disease indicators for root caries.

When the patient was at risk for caries, the nine dental hygiene teams recommended more preventive therapy using the Prevora antibacterial tooth coating, and explained this new treatment regimen, its safety and efficacy, as well as its cost to the patient. The patient then indicated his/ her willingness to proceed with Prevora, choosing one of three options: (i) agree to proceed with treatment, or (ii) consider proceeding with more information, or (iii) decline more prevention.

Interestingly, the responses received from the older patient population varied significantly from clinic to clinic, even though there was relatively little variation in clinical need across those clinics (Fig. 6).
THE THIRD SURVEY:

Willingness to pay for more prevention by older patients on periodontal maintenance care

The third research survey involved 55 regular patients on maintenance care at a downtown Toronto periodontal clinic. The mean age of the patients was 56 and the mean period of maintenance care was seven years. The participants were asked to complete a questionnaire which tested 1) their dental knowledge and 2) their willingness to pay for prevention of root caries costing $100 per treatment. Participants responded via visual analog scales (VAS). This approach allows for the generation of parametric or continuous data meaning that a score of, say, six, is truly twice as high as a score of three. When using other survey methods that rely on yes/no, or other indices, score values cannot necessarily be considered as multiples of one another. Hence, one obtains a more quantitative assessment that can be subjected to more rigorous statistical analyses than other assays. As well, by employing an extremely different form of analysis (i.e. the VAS), more interesting mathematical relationships between various parameters can be generated.

The patients were surveyed anonymously and there was no way that a patient completing the survey could be identified. In addition,

a test VAS, based on work done by Dao et al, 5 was done to determine whether the patient truly understood the concept of a VAS. If it appeared that the patient in fact did not understand how to complete a VAS, that patient’s survey was rejected (two were rejected).

This VAS-based survey showed that patients in a specialty periodontal practice were substantially more willing to pay for root caries prevention than in the family clinics (Fig. 7). Taking a conservative approach to analyzing this response almost seven out of 10 indicated a strong desire to proceed with more treatment.

DISCUSSION

Based on the findings reported here, it would seem that older Canadians are indeed interested in receiving more preventive treatment for root caries. Moreover, the authors suggest that when using three wholly different methods of assessment that, in the end, describe the same outcomes, the face validity of the outcomes are strengthened or are more reliable as compared to using only a single method of analysis. That all methods in this study support the above conclusion strengthens the notion that there is an ever-growing interest and need for preventive dental treatment. Yet, these three surveys reveal the need is not necessarily being met, at least for root caries and that Canadian patients are definitely interested in receiving more preventive care, even if they have to pay for this treatment themselves. This need and importantly

the desire for preventive care are essentially under-served by the existing model of professional dental care -- understandably, since the current treatment model evolved to serve a younger, healthier population which was largely enrolled in employer-sponsored dental insurance schemes from the mid 1970s.

This existing model is being challenged increasingly by several long-term, irreversible demographic and economic factors described above, as well as by ever-advancing dental science which is starting to portray periodontitis and associated root caries as medical/dental syndromes. Indeed, as regards the treatment of periodontitis, now that we know that successful management of periodontitis also leads to a shift in oral microbial flora to that which is cariogenic, there should be a new paradigm developed in periodontal practice where root-caries prevention is a major consideration.

The transition from the existing model for the delivery of dental care in Canada may well be illustrated in the varying response to the question of ‘willingness to pay’ for Prevora in the nine family clinics participating in the second research survey. There were strikingly different responses to the recommendations for more prevention by patients attending dental clinics serving the same community.

Does this research reveal some of the parameters needed to develop a new model for the delivery of dental
care in Canada? Perhaps over the next 10 years it will be found that a successful practice (general or Periodontics) will focus on its older patients and will be more attentive and sensitive to their attitudes and preferences for care, as well as their changing needs for care. Given the inexorable increase in the impact of the baby boomer population in Canada who are now entering the older Canadian age cohort, as well as their demands for more consumer driven and preventive health care, coupled with the probable changes (i.e., reductions) in third-party reimbursement for dental care, the new model will be different. Treatment will be centred increasingly on the provision of prevention-oriented services that focus on newly emerging (yet always-present) clinical needs. The 'new' model will actually revert back to one that is oriented more to treatment and more importantly prevention of disease and this will be driven in large part by a more sophisticated patient population; one that is more actively involved in treatment planning and in two-way communication with their care providers. Indeed, this is not a new concept in business of any kind, and is known as “getting close to your customer” (in the end, a dental practice is, after all, a business). It is highly probable, that by adopting this paradigm more enthusiastically dental care professionals will help patients remain healthier and for a longer period of time; a factor that can only lead to increased satisfaction for both health care providers and their patients.

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Oral Health welcomes this original article.

References


4. Van der Reijden WA, op. cit.


Abstract

Three studies were undertaken to evaluate the attitudes and preferences of adult older Canadians towards professional dental care. (For the purposes of this paper, older patients are considered to be in the 40+ years age cohort). The rationale for carrying out this study was to assess the attitudes of adult Canadians in relation to preventive dental care, particularly since this age cohort is the dominant consumer of dental services. Moreover, such individuals likely have a greater need for preventive care, particularly as regards caries (crown and root), and are paying for more of their dental care out-of-pocket (as opposed to using insurance coverage) in comparison to those in younger age cohorts. Given these trends, it is important to the future practice of dentistry in Canada that the dental professional will be able to appreciate more precisely, what older patients want from their dental service providers. While the three surveys took different approaches and perspectives to this key question, importantly, all reached the same conclusions concerning the desires of adult Canadians regarding preventive dental treatment. A national Ipsos Reid survey was conducted in 2008 and reported that adult Canadians have a strong preference for more preventive care and want to be more informed about their preventive care options. The second survey of 482 patients visiting nine family clinics reported that the majority of patients had multiple risk factors or disease indicators for root caries and that the majority of these patients either purchased more preventive care when it was recommended by the care provider, or wanted to consider paying for such treatment between dental appointments. The last survey involved 55 patients visiting a Toronto periodontal clinic for maintenance care. This third survey found that seven out of 10 patients agreed to have additional preventive care for root caries, whether they or their insurance paid for the proposed treatment. The overwhelming findings from three separate investigations carried out using different methodologies (which strengthens the findings considerably), shows that the adult Canadian dental patient is well informed about their oral health, wants even more information, and expects a high level of preventive care. This also suggests that there is a significant, untapped opportunity for Canadian dental care to respond to the aging population (even during difficult economic times) by providing what is not only needed but also wanted.
Patients over age 70 will be the fastest growing group in Canada within the next 10 years

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FIGURE 1 --Source: Ipsos Reid, Dental Attitudes Omnibus, 2008.


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Older Canadians want a ‘different’ type of dental service -- something geared to more prevention

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Given the inexorable increase in the impact of the baby boomer population in Canada, as well as their demands for more consumer driven and preventive health care, the new model will be different

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By adopting this paradigm more enthusiastically dental care professionals will help patients remain healthier and for a longer period of time.
FIGURE 3 -- Source: Ipsos Reid, Dental Attitudes Omnibus, 2008.

FIGURE 4 -- Source: Ipsos Reid, Dental Attitudes Omnibus, 2008.


FIGURE 7--

TABLE 1 -- Risk assessment form for root caries.