

## Periodontal treatment: a new thrust for pedodontics

The Department of Preventive and Community Dentistry at the University of Iowa, in collaboration with the Iowa Dental Association, has recently completed an Iowa Household Survey with a sample of 3,343 subjects ranging in age from 1 to 75 years and above. The voluminous data will take years to analyze and detailed publications will be forthcoming.

In Iowa children, the operative and periodontal treatment needs per 1,000 persons up to 17 years of age according to surfaces are shown on Tables 1 and 2. Of the reasons given for the last visit to the dentist for the entire sample, 52.8% went for regular routine checkups, 13.5% went for fillings,

**Table 1.** Iowa Survey of Dental Health, 1980: operative treatment needs per 1000 persons by age.

Age	Restoration Needed/1000 Persons			
	1 Surface	2 Surface	3 Surface	4+ Surface
1-5	238	28	0	67
6-11	507	239	22	201
12-17	863	163	6	261

**Table 2.** Iowa Survey of Dental Health, 1980: periodontal treatment needs per 1000 persons by age.

Age	Oral Hygiene Instruction And Scaling/1000	Routine Perio/1000	Complex Perio/1000	All Perio
1-5	38	0	0	38
6-11	194	29	0	224
12-17	281	72	0	353

4.4% for cleanings, and 7.2% went for extractions, whereas only 1.0% went for gum treatment. The periodontal treatment needs of the dentulous population show that 7.2% needed only oral hygiene instruction, 34.6% needed scalings and oral hygiene instruction, 19.5% needed routine periodontal treatment, and 1.2% needed complex periodontal treatment.

The most prevalent reasons given for not seeing a dentist more frequently is that there is no need to go; this comprised 63% of the answers of 2019 subjects who responded to this question. Twelve percent indicated that dental costs were

too high, and 7% indicated that fear was a reason. Only 1.5% gave the reason that work prevented them from making an appointment, or that they were too busy (2%). To the question, "If you went to the dentist now, what needs would you have?" 62% indicated that there would be nothing they would need, 13% indicated that they would need cavities filled, 15% indicated they would need to have their teeth cleaned and 2% would need extractions. None of the patients indicated that there would be a need for periodontal treatment.

It is obvious that there is a big discrepancy between patients' perception of their oral health — particularly in the area of periodontal health — and their actual needs.

Based on the North Carolina Survey conducted in 1963 and 1977, Dr. James W. Bawden, Alumni Distinguished Professor at the University of North Carolina, School of Dentistry, emphasized the changing disease patterns in the U.S. population. The main findings of the studies included a dramatic drop in the caries prevalence in all age groups 30 years and younger due to fluoridated water supplies, and improved preventive dentistry practices for children. By contrast, periodontal disease has increased significantly since 1963, particularly in children, young adults, and blacks. It is remarkable that general practitioners in North Carolina spend less than 2% of their time treating periodontal disease.

Recently, I was privileged to be a consultant for World Health Organization, one of three people who gave a three-week intensive teacher training course in Beijing, China. As part of the course, Dr. David Barmes, Chief Dental Health Officer of the World Health Organization conducted a pathfinder survey on 12- and 15-year-old children in Beijing. He found that the caries status in the Chinese was extremely low, the average DMF score being 1.61 with only 61% of the subjects affected by caries at age 12. By contrast, the periodontal conditions were appalling; 93% of children aged 12 exhibited bleeding, 89% had calculus, and 15% already had shallow pockets. It is obvious that very few of

the dental educators, practitioners, or the general population in China perceive the need for, or demand treatment for periodontal disease.

In a recent guest editorial by Dr. James W. Bawden (J Dent Ed 45:557, 1981) he suggests a changing emphasis in dental practice, dental education, community awareness, and intensified efforts in dental research, aimed at the increasing prevalence of periodontal disease. Because so few of the practitioners seem to treat periodontal disease, they either; fail to recognize it, their patients and/or the practitioners elect not to treat it, or they refer the patient to a periodontist for treatment. Obviously, pedodontists are the first dentists to see the initial signs of gingivitis and calculus formation, bleeding, and shallow pockets; therefore we should be leaders in the prevention of periodontal disease, arresting the disease progress through effective plaque control programs. It is our responsibility to motivate patients to encourage their children to adopt sound oral hygiene practices from early childhood so that severe periodontal disease, bleeding, calculus, and pocket formation does not reach the astronomical proportion that it has in China.

There has recently been a great deal of discussion about whether there are now too many dentists — that most dentists are not as busy as they want to be. The North Carolina Survey, the Iowa Survey, and the survey in China all indicate that these diverse populations from different economic backgrounds could all adopt a more comprehensive preventive dentistry program aimed not only at the prevention of caries but also at the prevention of periodontal disease — as a major new emphasis.

I hope the articles on periodontal indices in our December and March issues will stimulate enough interest in pedodontic educators that they will emphasize this aspect of the pedodontic curriculum as they teach dental students and specialists in pedodontics.

It is also clear that practicing pedodontists can — and should — make periodontal treatment a greater part of their practice.



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