

Original Article

## Eight-year trend of new patients at Clinic for Disabled Patients, University Hospital, Faculty of Dentistry, Tokyo Medical and Dental University

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The trend of new patients was investigated at the Clinic for Disabled Patients, University Hospital, Faculty of Dentistry, Tokyo Medical and Dental University for eight years from 1989 to 1996. The purpose of this study was to explore the future role of this specialized clinic. The study revealed the following information:

1. A total of 1,388 new patients, corresponding to 173.5 new patients per year on average, visited the clinic.

2. The percentage of patients aged 30 or more increased. As a result, the mean patient age rose from 40.4 in 1989 to 47.6 in 1996.

3. Referrals accounted for more than 80% of new patients. Medical doctors referred more patients to our clinic than dentists did.

4. While the percentage of disabled patients tended to decrease, the percentage of medically compromised patients increased.

5. The predominant complaint was dental caries. Patients with cardiovascular diseases also complained of gingival bleeding and ill-fitting dentures.

The growing percentage of medically compromised patients and the increasing mean age of patients over the eight-year period seems to

reflect advances in medical science and the aging society. These tendencies could be more remarkable in the future. Therefore, much closer cooperation between dentists and medical doctors will be required.

**Key words:** new patients, disabled patients, medically compromised patients, chief complaint

### 1. Introduction

The Clinic for Disabled Patients (University Hospital, Faculty of Dentistry, Tokyo Medical and Dental University) was established in 1982 with the aim of offering dental care services to the following types of special patients: disabled patients (DPs) such as those with mental retardation, cerebral palsy, and mental illness; medically compromised patients (MCPs) such as those with cardiovascular diseases and hematologic disorders; and fearful dental patients.

Initially, DPs, who require behavior management involving psychosedation or general anesthesia, were dominant in our clinic. The total number of patients treated at our clinic increased from 4,785 in 1989 to 6,084 in 1996. With this increase, the percentage of MCPs appeared to increase. The change in patient composition may suggest the changing role of our clinic at the university hospital.

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Accordingly, we retrospectively investigated the trend of the categories of new patients over the past eight years to predict the future role of our specialized clinic.

**Subjects and Method**

Patients who newly visited the Clinic for Disabled Patients, University Hospital, Faculty of Dentistry, Tokyo Medical and Dental University, in the past eight years from April 1989 to March 1996 were retrospectively investigated. Data on age, referrer, underlying conditions, and chief complaint were selected from their first consultation records and analyzed.

**Results**

A total of 1,388 new patients, corresponding to an average of 173.5 new patients per year, visited our clinic from April 1989 to March 1996. Although the numbers of new patients decreased from 219 in 1989 to 133 in 1994, the tendency subsequently reversed from 1995 (Fig 1).

Fig. 2 shows the distribution and mean age of patients at the first consultation. The percentage of patients aged 30 or more increased from 68.9% in 1989 to 79.1% in 1996. The mean age also increased from 40.4 in 1989 to 47.6 in 1996.

In each year, referrals by dentists or medical doctors accounted for about 80% of new patients in our clinic; there were more referrals by medical doctors than by dentists. About 20% of new patients visited our clinic without referral (Fig 3). Referrals from doctors specializing in internal medicine or thoracic and cardiovascu-

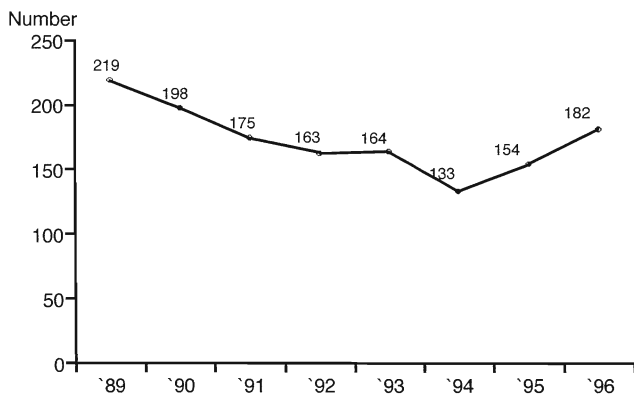


Fig 1. Time course of new patient numbers.

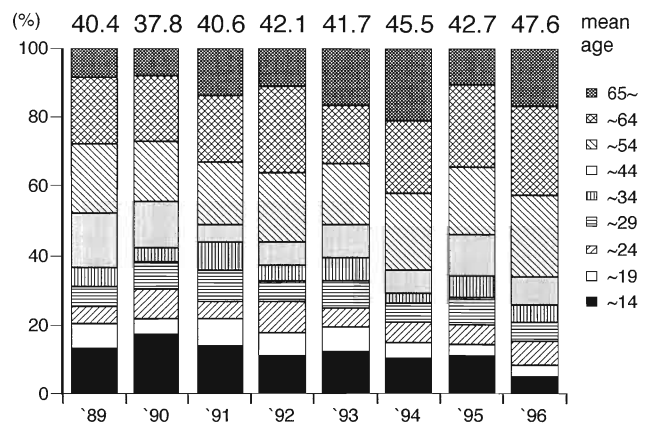


Fig 2. Distribution and mean age of new patients.

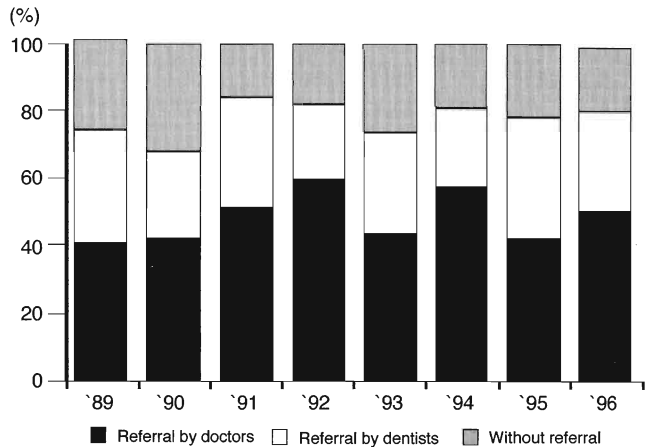


Fig 3. Classification of new patients by referring doctor.

lar surgery accounted for more than 60% of all referrals by medical doctors in each year and showed a tendency to increase. Referrals from pediatricians or neuropsychiatrists were constant in number, but the percentage of those tended to decrease (Fig 4).

Fig. 5 demonstrates the chronological change in patient composition, subdivided into disabled patients (DPs), medically compromised patients (MCPs), and fearful dental patients. Throughout the eight-year period, MCPs accounted for 60–80% and exhibited a tendency to increase, while DPs showed a decrease.

A further breakdown of MCP categories, including cardiovascular, endocrine, autoimmune, hematologic, renal, respiratory tract, digestive and other diseases, revealed that patients with cardiovascular diseases accounted for almost half of MCPs, followed by those with endocrine diseases, autoimmune diseases, hematologic disorders, renal diseases, respiratory tract diseases or digestive diseases (accounting for less than 10% of MCPs, respectively) (Fig. 6).

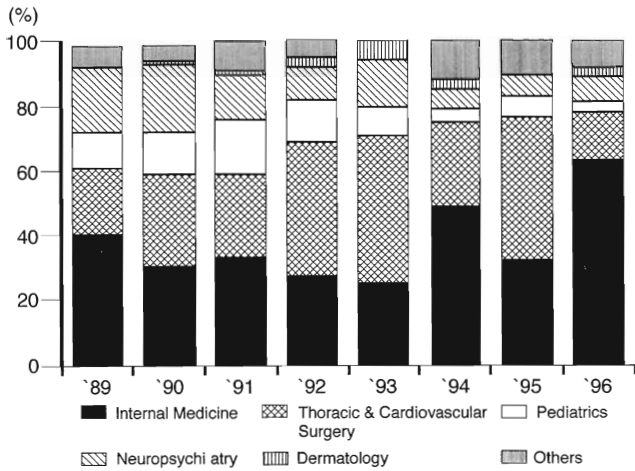


Fig 4. Subclassification of referrals by medical doctors.

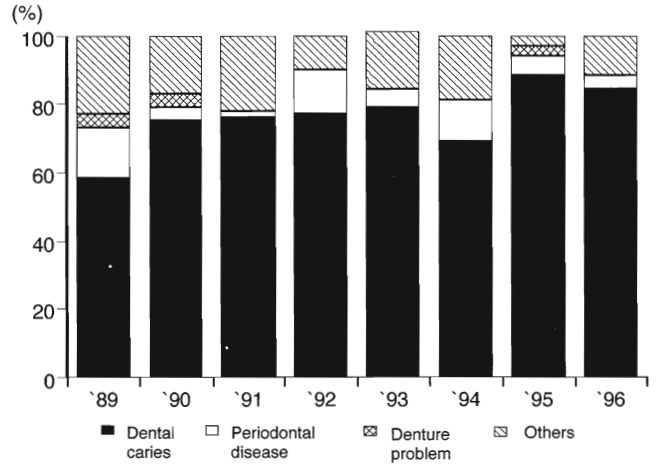


Fig 7. Complaints (Developmentally disabled patients).

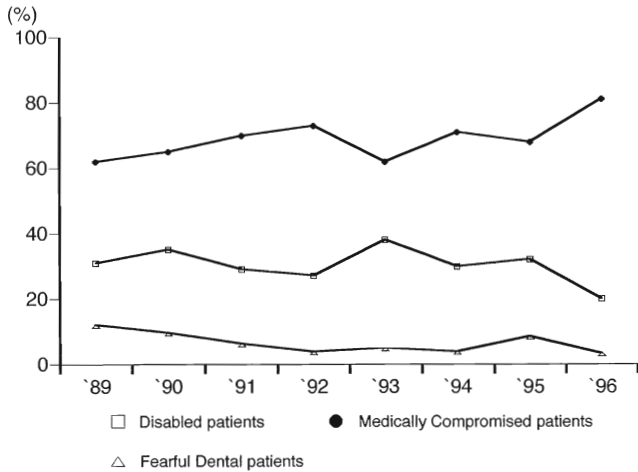


Fig 5. Proportion of DPs, MCPs, and Fearful dental patients.

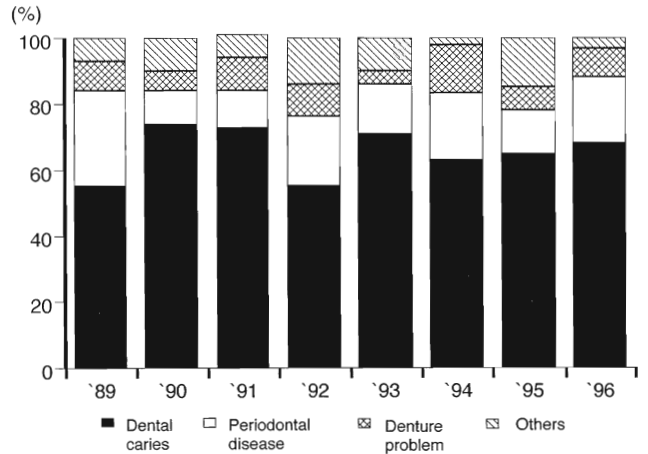


Fig 8. Complaints (Patients with cardiovascular diseases).

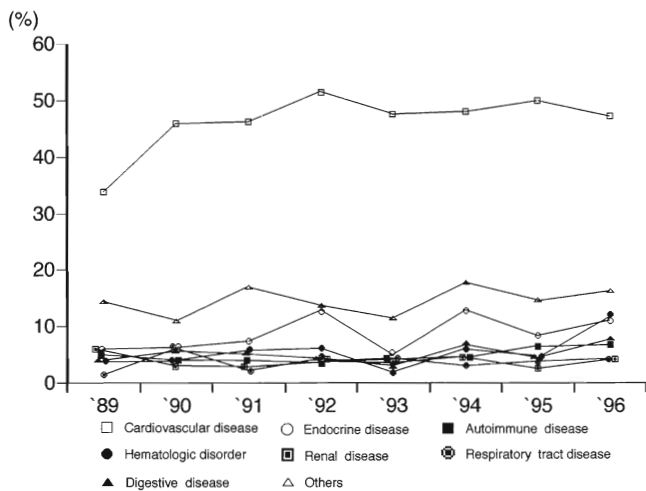


Fig 6. Subclassification of MCPs.

The chief complaint at the first consultation was investigated for the developmentally disabled patients and patients with cardiovascular diseases. If the patient had more than one complaint, the most troublesome condition was selected for trend analysis. In each year, dental caries was the predominant complaint in patients in both subgroups (more than 50%), and this was particularly so for developmentally disabled patients (Fig. 7). In patients with cardiovascular diseases, the commonest complaints, in addition to dental caries, were gingival bleeding, loose teeth, and ill-fitting dentures (Fig. 8).

**Discussion**

Over the eight-year period, a total of 1,388 patients newly visited our clinic. Their average age rose from 40.4 in 1989 to 47.6 in 1996. This may reflect the

increase of the elderly population.

MCPs accounted for 60 to 80% of the new patients, showing a tendency to increase. Most suffered from age-related diseases including cardiovascular diseases. These findings may be associated with the rise of mean patient age. Advances in medical science may also partially contribute to the increase in MCPs<sup>1</sup>.

MCPs referred by doctors of internal medicine were mainly those with hypertension or ischemic heart diseases requiring monitoring and hematologic disorders requiring special care to prevent infection. Most of referrals from doctors of thoracic and cardiovascular surgery were referred to us for investigation of oral infections or special dental care to avoid contracting infective endocarditis<sup>2,3</sup>. In the thoracic and cardiovascular surgical field, the prognosis appears to be worsened by the presence of oral infection; therefore, the need for preoperative oral check will be more important in the future<sup>4</sup>.

The relative decrease in new DPs in our clinic may be explained by increasing numbers of dental clinics accessible to these patients in neighboring districts. Because of historically poor access to dental care services, this is a desirable environmental change for DPs<sup>5,6</sup>. DPs account for 20% of our new patients, however, offering them dental care services still remains the most important role for our clinic.

As previously reported<sup>7</sup>, the chief complaint of developmentally disabled patients was dental caries. For patients with cardiovascular diseases, the commonest complaints were gingival bleeding, loose teeth, and ill-fitting dentures, as well as dental caries. The prevalence of such complaints may be associated with these patients' relatively higher mean age and

hence a higher incidence of periodontal disease and the use of dentures<sup>8</sup>.

The present study revealed an increasing number of MCPs in middle age or over who were suffering from complicated medical conditions with dental implications. To provide proper oral health care to such patients, a close relationship with their referring medical doctors must be needed.

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