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''Scheduling delay'' in oral cancer diagnosis: a new protagonist

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Summary Diagnostic delays in oral cancer have been classified as ''patient delay'' and ''delay by the clinicians''. However, the influence of the accessibility (scheduling delay) to the health care system in oral cancer diagnosis has not been studied before.

To assess scheduling delay, a descriptive, cross-sectional study was designed. This study was based upon role-play telephone conversations with two standardised patients (lingual ulceration-SP1 and patient seeking fixed prosthodontics-SP2). that followed a structured script. The variables considered in the study were days to go until the arranged appointment, professional degree of the contacted person and referral to other provider of care.

The scheduling delay for SP1 reached a median value of 1 day, and for SP2 was 6 days. When the professional degree (receptionist vs GDP) of the person arranging the appointment for the patient with lingual ulceration was considered, the scheduling delay was significantly shorter when the appointment was fixed by the GDP ($\widetilde{X}_i - \widetilde{X}_j = 4.5$; 95%CI $= -7.48, -1.51$). GDPs gave priority to the patients with lingual ulcerations over those demanding fixed bridgework ($\widetilde{X}_i - \widetilde{X}_j = 6.48$; 95%CI $= -9.46, -3.50$).

The GDPs showed a high level of awareness of the oral cancer, however, educational interventions seem to be necessary for dental surgery receptionists.

Introduction

The incidence of cancer in Europe shows considerable geographic diversity: France reports the highest level (12.4 per 100.000 inhabitants per annum in Bas-Rhin), whereas the Nordic countries show relatively low figures (1.1–1.7 per 100.000

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per annum).[1,2] In Spain oral cancer incidence ranges between 1.0 and 5.2 within the population (adjusted to the world population, per 100.000).[2,3] Moreover, epidemiological studies have shown an annual increase in oral cancer mortality from 1975 to 1994, of 25% for males and 9% among females.[4] These facts make oral cancer a major public health problem in Spain.

Variables like age, sex, nutritional or immunological status, location and size of the tumour, stage of the disease, lymph node status, several histopathological parameters, oncogene expression, proliferation markers, ploidy pattern or response to treatment have been investigated as prognostic markers for oral cancer.[5] Oral cancer diagnostic delay has also been associated to advanced stages and poor prognosis.[6] However, opportunistic screening by general dentist–the most logical group to screen for oral cancer–is a significant step forward in the efforts to decrease morbidity and mortality resulting from oral cancers.[7,8]

Diagnostic delays in oral cancer have been classified as ''patient delay'' or ''delay by patients'' (the period between the patient first consultation with a health professional concerning a symptom,[9–15] and ''provider/professional delay'' or ''delay by the clinicians'' (the period from the patient's first consultation with a health care professional and the definitive pathological diagnosis).[9–13] However, the simplicity of this classification allows the recognition as ''delay by patient'' the time elapsed until consultation due to an inaccessibility to the provider of services[9,16] and therefore the ''delay by patient'' is not always due to the patients. To avoid this inconvenience, the concept of ''scheduling delay'' (period between the patient making an appointment and actually seeing a health care professional) was introduced.[17]

The influence of the accessibility (scheduling delay) to the health care system in oral cancer diagnosis has not been studied before.

The aims of this study were to evaluate the scheduling delay in oral cancer diagnosis in dental surgeries in Galicia (Northwest of Spain) and to assess the influence of the professional role of those who allocate the appointment (receptionist vs general dental practitioner-GDP) on this delay as a baseline to determine the educational needs in this field.

Material and methods

To assess scheduling delay, a descriptive, cross-sectional study was designed. This study was based upon role-play telephone conversations with two standardised patients that followed a structured script that included as initial statement summarizing the reason for attendance, age, sex, pathochronia and clinical aspect of the lesion.

The standardised patient no. 1 (SP1) was a 63 year-old male, smoker (40 cig./day) who describes an ulcerated lesion on the tongue with features of malignancy. His introductory statement was ''I have a painful ulceration on the tongue for 20 days now. When could you see me?''

The standardised patient no. 2 (SP2) was a 60 year-old male seeking prosthetic treatment. His introductory statement was ''I would like to have some crown and bridgework done. When could you see me?''

In June 2002, each of these standardised patients asked for an appointment at 156 randomly selected dental surgeries out of 700 registered with the Galician Dental Council. The variables considered in the study were days to go until the arranged appointment, professional degree of the contacted person and referral to other provider of care.

The data obtained from the interviews were entered in a database (dBase IV) and analysed by means of a statistical package (SPSS/PC+). A descriptive analysis was performed and the means compared using a two factor ANOVA. The 95% confidence intervals were also determined.

Results

The standardised patient with lingual ulceration (SP1) telephoned to 156 dental surgeries demanding attention for this problem. Five of them (3.2%) suggested he should better be seen at a hospital. The other 151 arranged an appointment within a time of 1 day. A 25% of the contacted offices told the patient to go to the surgery the same day. and the other 75% fixed an appointment within a period of $\leqslant$5 days.

When the standardised patient seeking fixed prosthodontics (SP2) phoned to the allocated 156 surgeries, the median delay for an appointment was 6 days, and a 75% of the surgeries arranged an appointment within a period of $\leqslant$13 days.

The mean time elapsed since the surgery was contacted until the patient would be actually seen by a dental practitioner was significantly shorter when the reason for attendance was an ulceration suspicious of malignancy than when bridgework was demanded: 5.2 days vs 9.4 days ($\widetilde{X}_i - \widetilde{X}_j =$ 4.24; 95%CI = -6.22, -2.27).

When the professional degree (receptionist vs GDP) of the person arranging the appointment for