

A Pilot Survey of Dental Health in a Group of Drug and Alcohol Abusers

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Abstract - This study was designed to provide a broad estimate of the level of dental disease in a group of patients attending a Regional Addiction Unit, and outline some of the perceptions of this group with regard to the importance of dental health and gaining access to dental services. In a survey of consecutive patients admitted to a day Hospital Service at a Regional Addictions Psychiatry Unit, 50 patients were with either opiate or alcohol dependence were surveyed and asked a range of questions in relation to their dental health. A basic dental examination was carried out. The majority of patients had either moderate or severe dental disease. Disease levels were higher among opiate abusers compared to alcohol abusers. A large majority of patients had experienced dental problems within the preceding year and there was found to be a problem in accessing dental care for this group of patients. Improving dental care for this group of patients presents various challenges given the high rates of dental disease and poor access to dental services

KEY WORDS: Dental health needs, alcohol, substance misuse, service provision

INTRODUCTION

It has been shown that drug and alcohol abusers have an increased incidence of dental caries¹, periodontal disease² and other oral pathology such as candidiasis³. Alcohol, along with smoking, has long been recognised as a key aetiological factor in oral leukoplakia and oral carcinoma. There is mounting evidence that other substances such as cannabis, cocaine and opiates may render the oral mucosa more susceptible to these exogenous carcinogens⁴ and in a substance abuse population poly drug use is common⁵. Therefore in managing patients with drug and alcohol dependence, an awareness of, and motivation to address, these dental issues should form part of their holistic care.

Whilst this patient group has a high rate of oral health problems, there are a number of factors that can affect their ability to access and engage with dental services. Dental phobia is common amongst such groups⁶ and pain and anxiety management techniques may be compromised by the patient's substance misuse, for example, the use of intravenous sedation techniques and a benzodiazepine abuse. Dentists may be reluctant to treat such individuals because of medical complications, concern about blood borne viruses and previous experience of the chaotic attendance of some substance abusers⁷.

The aim of this survey was to broadly assess the level of dental problems in a group of patients attending a regional drug and alcohol service with a view to identifying and understanding some of the issues leading to developing services in this area.

METHOD

Fifty successive individuals admitted to the Day Hospital Service at the Regional Addictions Unit in Newcastle upon Tyne were included. The survey collected data using a questionnaire, see Figure 1. One of the authors (DJ), a qualified dentist, carried out a basic oral examination of decayed, missing or filled teeth and included an assessment of other oral health diseases. This was done with a pen torch only in a medical consulting room, without the benefit of dental equipment. The severity of oral disease was subjectively graded using four levels. These were: no obvious dental disease; mild dental disease (1-3 carious teeth, mild periodontal disease); moderate disease (4-6 carious teeth, moderate periodontal disease); severe disease. Severe disease included greater than 6 carious teeth and/or advanced periodontal disease.

RESULTS

Fifty patients were surveyed; 43 males (86%) and 7 females (14%) with a mean age of 34 (Range 20 to 54 years). Twenty-six patients fulfilled the International Classification of Diseases (ICD-10) criteria for Alcohol Dependence and twenty-four patients fulfilled criteria for Opiate Dependence. The ICD-10 is a general medical classification system intended for worldwide, multi-speciality use. Of the opiate dependent group, co-morbid dependence with alcohol and benzodiazepines was also noted in three and six patients respectively.

With regard to access to dental care, the mean time since the last dental visit of patients in the alcohol group was 24 months and in the opiate group, 34 months. Half of the patients with alcohol dependency (13 patients) were registered with a dentist compared to only 7 (29%) of the opiate dependent group. Both groups reported problems accessing dental care with 16 (62%) and 22 (92%) patients from the alcohol and opiate dependent groups respectively

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Age _____ Sex- M ☐ F ☐

Primary substance abuse diagnosis- _____

When did you last see a dentist? _____

Have you had any dental problems in the last year e.g. pain? Yes ☐ No ☐

If so what? _____

Are you currently registered with a dentist? Yes ☐ No ☐

Have you had any problems accessing emergency dental care? Yes ☐ No ☐

Have you had any problems accessing routine dental care? Yes ☐ No ☐

What sort of problems have you had? _____

Do you think your substance misuse has had an adverse effect on your dental health?
Yes ☐ No ☐

If so how? _____

How importantly do you view your dental health as part of your over all health?

Not at all Not very Fairly Important Very important

Figure 1. Questionnaire

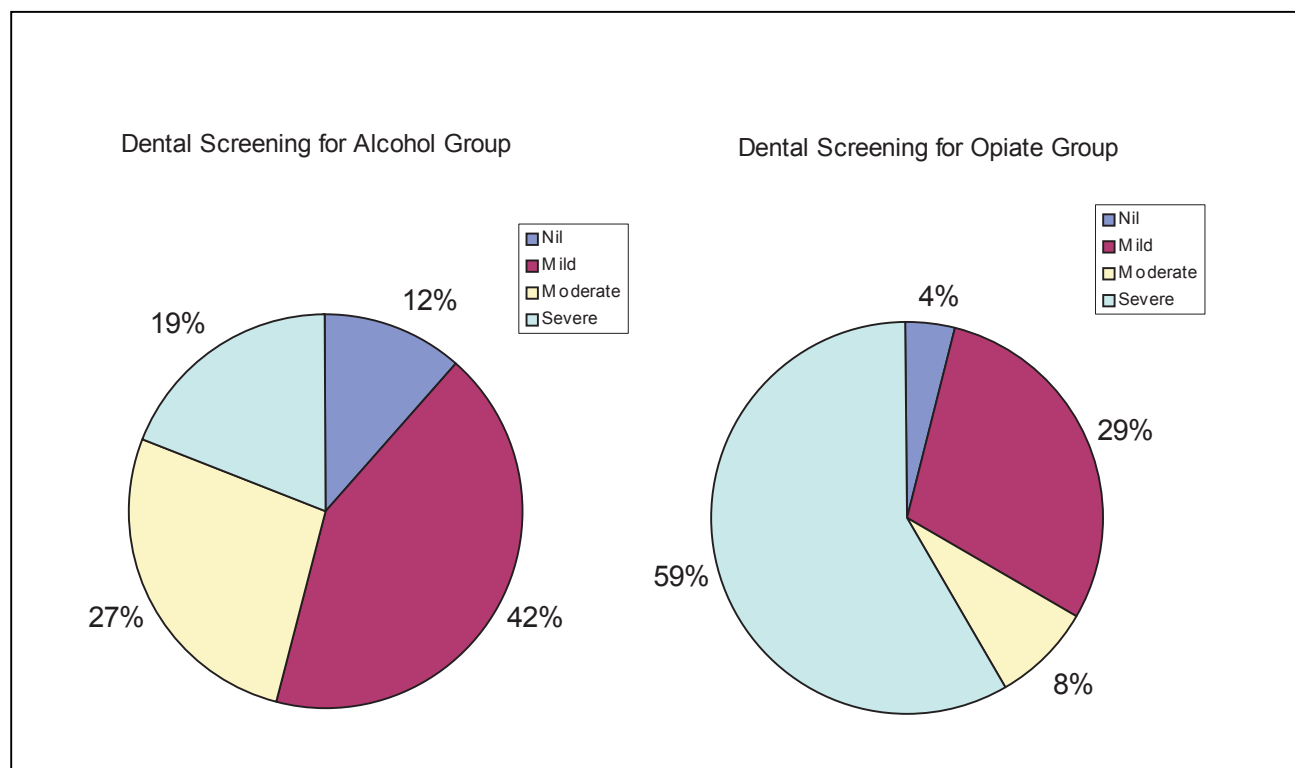


Figure 2. Disease levels for alcohol and opiate dependent patients

reporting difficulties. These difficulties included the 'local dentist' no longer accepting new patients and financial constraints. Some reported dissatisfaction at having to use the local dental hospital in an emergency. Also 3 (23%) of the opiate abusers reported being denied access to dental services due to their substance abuse problems. No individuals in the alcohol group had such difficulties.

A majority of the patients surveyed reported having dental problems within the preceding year; 17 (65%) of the alcohol dependent group and 21 (87%) of the opiate users. The number who thought that their substance abuse had had an adverse effect on their dental health in the opiate group was 21 (87%) while 17 (65%) of the alcohol dependent group felt the same. Of the alcohol and opiate dependent groups, 7 (37%) and 15 (71%) patients respectively felt that the drug itself caused the harm while 9 (43%) of the opiate abusers felt that substitution therapy was to blame. Interestingly 10 (53%) of the patients with alcohol dependence and 4 (19%) of the opiate abusers felt that their problems were due to poor oral hygiene which was contributed to by their habit.

When asked to rate how important their dental health was as part of their overall health the majority of both groups rated it as important or very important, however in the opiate group 40% more patients rated it as very important compared to the alcohol group.

On examination of the patients, few were considered to be free of dental disease. The percentages of those deemed to have mild, moderate and severe disease levels is shown in Figure 2.

DISCUSSION

As would be expected, the mean age of the opiate users was lower than those with alcohol dependency and there were proportionally more females in the latter group. When considering these findings one should be aware that older populations and females attend the dentist more regularly and are more concerned about oral health⁸.

In the alcohol dependent group recent dental attendance rates of approximately 50% were similar to the general population⁸. However in the opiate group 87% had not seen a dentist in the last year. This could suggest difficulties in this group accessing dental care due to their addiction as reported by three of the patients. A survey by Dawkes (1995) revealed that only 9% of general dental practitioners would be willing to accept referrals from a drug treatment service⁷.

Little work has been done on the health beliefs and attitudes towards dental health of substance abusers. In a group of young opiate abusers Scheutz et al (1985) found very limited knowledge of the causes and prevention of dental disease, dental attendance only in response to pain and a common belief that dental caries was caused by substances that are mixed with drugs prior to them being taken⁹. These findings are mirrored in this survey where opiate users were more likely to blame their substance misuse for their dental problems than patients with alcohol dependence. This may suggest that targeting oral health education at opiate users may be more appropriate.

The level of dental disease appeared to be more severe amongst opiate users and this mirrors other studies that have tended to centre on opiate abusers, whilst little work has been done on the dental health of alcohol abusers. In a community sample of chronic alcohol abusers, Harris et al (1994) found similar levels of dental disease to the general population but highlighted a cause for concern regarding mucosal problems e.g. leukoplakia¹⁰. A better awareness of the increased risk of oral carcinoma amongst alcohol abusers by mental health professionals could lead to better early detection of potentially life threatening lesions.

In this survey, dental screening highlighted a high incidence of dental disease. This is likely to be an underestimate of the actual disease level as the examination was carried out under less than ideal circumstances, in the absence of dental instruments or equipment, and no radiographic examination of the patients was carried out which may have allowed the detection of less obvious carious lesions and periapical and periodontal pathology. In a study of head and neck cancer patients, Lockhart and Clark (1994), found that 50% the patients they deemed disease free at a screening examination were found to have caries as a result of a more thorough oral evaluation. Furthermore 42% were found to have radiographic evidence of pathology at the apex of one or more teeth that were asymptomatic and without clinical evidence of disease¹¹.

All of the clinical findings were of a subjective nature based on the assessment and experience of the clinician involved. The terms used to describe the level of disease are vague in the absence of any set criteria, however, the purpose of the study was to merely establish a broad estimate of the level of disease within the chosen population. All of these areas may be looked at in a more objective manner in the future in a more structured piece of clinical research with much a larger sample size.

Improving dental care in this group of patients presents various challenges given the high rates of dental disease and poor access to dental services. Access to healthcare has been a high on the political agenda for several years and while the current changes in primary care dental services may provide an opportunity to commission new services it remains to be seen if it will also improve access for this group of patients.

The Regional Drug Addiction Service in Newcastle, in liaison with the local Community Dental Service, have provided a dental hygienist to attend clinics on a weekly basis to carry out oral health awareness and education and to facilitate contact with local services for those seeking treatment. It is hoped that this may go some way towards improving the dental health of this patient group and contribute to their overall care.

In conclusion, this survey highlights the high levels of dental need in substance abusers and the difficulties they encounter in accessing dental services. It is hoped that this piece of work will raise awareness of these issues and be springboard to further work.

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