Referral patterns and access to dental services of people affected by homelessness in Dublin, Ireland

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Abstract

Aims: To assess the accessibility of a dental service in a dental clinic and a homeless drop-in centre in Dublin for people affected by homelessness, evaluate current referral patterns and investigate the level of methadone use in the population and corresponding use of drug services. Material and methods: A review was conducted of a comprehensive database of all 237 patient dental records using simple inclusion criteria. Comparisons were made with data from a general survey of homeless people in Dublin. Results: Showed 163 men and 74 women had attended, with a modal age range of 25–34 years. Only 16% of patients were over 40 years of age, of which only 6% were females. The main source of referral was from the homeless drop-in centre, in which the clinic is situated (39%); hostels referred 19% and day centres 12%. Previous input from the dental team into the centres through education, health promotion or screening improved the number of referrals. 61% of the patients were attending for treatment in methadone clinics. Conclusions: As the homeless population is not homogenous the targeting of services to certain sub-sets of this population is necessary, such as people over 40 years of age and women with families in bed and breakfast accommodation. Health education and screening can promote access to dental services. Finally, an interdisciplinary approach is essential so that an oral health assessment can be included in the initial assessments made by community welfare officers, hostel staff and drug centre workers.

Key words: Access, dental, services, homeless, methadone

Introduction

Homelessness is a persistent and growing problem in Dublin. ‘Counted In’ is a cross-sectional survey of the homeless population of Dublin conducted by the Homeless Agency (Williams and Gorby, 2002). It documents the number and demographic details of people using all homeless services or rough-sleeping over a period of one week and, from this, a general profile of the homeless population may be extrapolated.

In 2002 the survey estimated that there were 2,920 homeless adults and 1,140 dependent children in the Dublin area. The transient nature of homelessness means that many more people will be considered homeless over a one-year period. The pathways to homelessness are complex and multifactorial. O’Sullivan (1996) identified two main routes to homelessness, which are:

- Biological factors, such as alcohol and drug abuse, social exclusion, poor family relations, domestic violence and mental illness.

The health needs of homeless people are composite and are well documented (Zolopa et al., 1994; Feeney et al., 2000; Wright 2002). In Ireland, Condon et al., (2001) reported a high prevalence of hypertension, Hepatitis B and C, respiratory illness and depression when compared to the general population. Due to the transient and chaotic nature of homelessness, epidemiological data on the oral health status of homeless people are limited. International studies have shown a high level of dental caries and a low treatment experience (Allukian et al., 1982; Burgess, 1986; Blackmore et al., 1995). Utilisation of dental services is reported as being low, despite high levels of dental need. In Los Angeles only 26.7% of the sample had used a dentist (Gelberg et al., 1988). Many barriers to treatment utilisation have been cited, such as lack of money, service provider attitudes, transient lifestyles and inability to keep appointments (Lee et al., 1994; Pizer et al., 1994).

O’Neill (2000) carried out an oral and dental survey of
226 hostel dwelling men in Dublin and found that treatment need was high at 98%, whilst only 41% of subjects examined had attended a dentist. The prevalence of dental caries, periodontal disease, trauma and lesions of the oral mucosa was significantly higher than that found in the general population.

Barriers to dental care were reported as: no perceived need for treatment, not in possession of a medical card, cost, fear of treatment and lack of information.

Blackmore et al. (1995) found similar results in Leeds and suggested that a better liaison between dental and homeless service providers would increase the acceptability of a dental service to homeless people. O'Neill (2000) made recommendations for a targeted dental service, which would provide on-site treatment, health promotion, improved access to information about services and medical cards as well as the development of outreach screening services in hostels.

In 2003 a dental service for those affected by homelessness was set up in Dublin. The service commenced originally in Cornmarket Dental Clinic, one day a week, and then in December 2003 a surgery in Merchant's Quay Homeless Centre (MQP) was opened and four clinical sessions were scheduled. MQP is a dynamic city centre project, running drop-in centres for people affected by homelessness and for those involved in substance misuse. A primary health care centre is present, taking an interdisciplinary approach to care of their clients, including nursing, counseling, medical and dental services.

Patients attend through the drop-in centre in Merchant's Quay, in which there are open access sessions in the afternoons, making the service very flexible, catering for the more chaotic clients who are normally excluded from treatment. Alternatively, there are appointments in the mornings. Appointments are made through direct referral from homeless agencies.

Cornmarket Dental Surgery is in an optimum location as many of the homeless services are located in the area, both hostels and day services. The dental service has five functions:

- Direct dental treatment
- Health promotion
- Improving access to regular dental services
- Research and training
- Multidisciplinary co-operation.

The aim of the dental service is to provide equitable and accessible dental care to any person registered as homeless. The overall aim is to improve the individual’s, and the population’s oral health by establishing access to services. The aims of this review were to:

- Assess the accessibility of the dental service
- Establish if the patients treated were representative of the homeless population
- Investigate the equity of referral patterns from various homelessness

- Determine the number of dental patients attending methadone programmes in order to be able to inform service planning and development.

**Materials and method**

The review was carried out in June 2004 using a comprehensive database of 237 records of patients who had attended the dental service for the homeless in both Cornmarket and Merchant’s Quay clinics. The process measurement involved a simple well-defined set of criteria, which were applied to each patient record in the database. All patients must have attended the dental service since June 2003 and undergone a complete dental examination and medical history screening. All information reported was recorded in the standard chart including:

- Gender and age of the patient
- Type of accommodation used
- Referral source
- Attendance on a methadone programme
- Attendance at a drug treatment centre.

The assessment of the accessibility of the dental service was carried out over two weeks, with the assistance of the senior dental nurse in the clinic. An Excel database was used to record and analyse the information collected. Results were compared with figures from the 'Counted In' survey (Williams and Gorby, 2002).

**Results**

Data were available from 237 charts, all of whom met the inclusion criteria.

**Patient age and gender**

Of the 237 subjects there were 163 men (69%) and 74 women (31%) (Table 1). ‘Counted In’, the most recent statistics for homeless persons in Dublin, recorded the gender breakdown of the homeless population to be 81% male and 19% female (Table 2). Comparing these data with Merchant’s Quay Project’s figures for the first six months of 2004 of 84% males and 16% females (MQP Personal Communication), showed the dental service had treated a higher percentage of females than in the estimated population of homeless people.

Figure 1 records the modal age group for male and female patients as 25–34 years old (42%), with lower proportions in the age group 16–24yrs old (31%) for females and 35–44yrs old (22%) for males. Sixteen percent of the dental patients were over 40 years of age. The ‘Counted In’ study revealed that an estimated 45% of the homeless population is over 40 years of age, with 33% of females over 40 years (Williams and Gorby, 2002).

**Accommodation**

Hostels are the main type of accommodation (53%) used by clients attending services. More females are housed in Bed and Breakfast (B+B) accommodation and corpora-
Table 1. Patients attending for dental treatment by age and gender

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age in years</th>
<th>n</th>
<th>%</th>
<th>n</th>
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<th>n</th>
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<tbody>
<tr>
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<td>16</td>
<td>66</td>
<td>40</td>
<td>35</td>
<td>22</td>
<td>21</td>
<td>13</td>
<td>12</td>
<td>7</td>
<td>3</td>
<td>2</td>
<td>163</td>
</tr>
<tr>
<td>Female</td>
<td>23</td>
<td>31</td>
<td>34</td>
<td>46</td>
<td>14</td>
<td>19</td>
<td>2</td>
<td>3</td>
<td>1</td>
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</tr>
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<td>49</td>
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<td>23</td>
<td>10</td>
<td>13</td>
<td>5</td>
<td>3</td>
<td>1</td>
<td>237</td>
</tr>
</tbody>
</table>

Table 2. Age of male and female populations by percentage reported by ‘Counted In’ study (Williams and Gorby, 2002)

<table>
<thead>
<tr>
<th>Gender</th>
<th>Age in years</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
<th>n</th>
<th>%</th>
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</tr>
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<td>19</td>
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<td>30</td>
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<td>100</td>
</tr>
<tr>
<td>Total</td>
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<td>9</td>
<td>13</td>
<td>13</td>
<td>33</td>
<td>33</td>
<td>40</td>
<td>40</td>
<td>5</td>
<td>5</td>
<td>100</td>
<td>5</td>
<td>100</td>
</tr>
</tbody>
</table>

Figure 1. Age and gender of patients attending dental service

Figure 2. Percentage of patients using homeless accommodation. (NFA = No Fixed Abode; B + B = Bed and Breakfast)

Data from ‘Counted In’ reveal that the majority (56%) of the homeless population assessed, stayed in hostels with 16% of people sleeping rough and 14% using B+B accommodation (Williams and Gorby, 2002). When looking at gender breakdown, 31% of single females and 89% of families stayed in B+B accommodation.

Referral source

The main source of referral (Table 3) was from clients attending Merchant’s Quay Project (39%) who were being seen in the open access dental clinics in the afternoons. This was a mix of clients attending specifically for dental care or attending other services and being opportunistically referred by Merchant’s Quay Project staff members. Hostels referred 19% of dental patients. A breakdown by hostel shows that some centres were very active in referring and many had yet to refer clients. The day centre referrals (12%) were mainly from centres located close to Cornmarket Dental Clinic and the referrals were made following a number of screening sessions by the dental team in this centre.

Self-referrals were patients who attended Cornmarket Clinic wanting to make a dental appointment. The numbers of clients referred by the Homeless Persons Unit (6%) and Multidisciplinary Team (3%) were low. Methadone clinics


Table 3. Source of client referrals.

<table>
<thead>
<tr>
<th>Referral source</th>
<th>Number of clients</th>
<th>Percentage of referrals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cornmarket Dental Clinic</td>
<td>4</td>
<td>2%</td>
</tr>
<tr>
<td>Day Centres</td>
<td>28</td>
<td>12%</td>
</tr>
<tr>
<td>Hostels</td>
<td>45</td>
<td>19%</td>
</tr>
<tr>
<td>Homeless Persons Unit</td>
<td>15</td>
<td>6%</td>
</tr>
<tr>
<td>Methadone clinics</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td>Merchant’s Quay Drop-in</td>
<td>91</td>
<td>39%</td>
</tr>
<tr>
<td>Multidisciplinary team</td>
<td>8</td>
<td>3%</td>
</tr>
<tr>
<td>Self</td>
<td>38</td>
<td>16%</td>
</tr>
<tr>
<td>Total</td>
<td>237</td>
<td>100%</td>
</tr>
</tbody>
</table>

Figure 3. Percentage of patients attending Trinity Court and methadone clinics

directly referred only a small number of clients (3%); at present, only homeless IV drug misusers are eligible for the dental service.

**Homelessness and substance misuse**

In planning an extension of the dental services one such initiative would be to incorporate substance misusers into the current model of care provision. It was important to assess how many existing patients attend drug treatment centres, in particular, Trinity Court, a city centre methadone clinic where a dental service could be developed (Figure 3).

The results of the investigation of those attending drug treatment centres show that 61% of all clients treated were attending for medical care in methadone clinics with 60% of male patients and 28% of female on methadone programmes. As there are 95 methadone clinics in greater Dublin, many were represented. Eighteen percent of clients using the dental services attended Trinity Court, 10% of male and 12% of female patients. Other clients attending for dental treatment have a chemical dependency on heroin or alcohol but many of the clients are not involved in substance misuse.

**Discussion**

Although this study was conducted as a service review, the results are more significant than for local use alone. The British Dental Association policy document, Dental Care for Homeless People (Turner et al., 2003) highlighted the need for research into the oral health of, and service utilisation by, homeless people particularly groups other than rough-sleepers. An understanding of the dynamic of uptake of the homeless service provision is fundamental to providing effective dental care.

Comparing this review’s results on age and gender to data collected by the ‘Counted In’ survey, there is a large difference in the percentage of clients treated over the age of 40 (Williams and Gorby, 2002). The ‘Counted In’ study reveals that an estimated 45% of the homeless population is over 40 years of age, yet only 16% of the dental patients were over 40. The largest difference was with females, where only 6% of female patients were over 40 years of age compared to 33% in the ‘Counted In’ estimation.

These results throw into sharp focus, the need to make the dental service more accessible to women and men over the age of 40, while still encouraging other age groups to attend. The data for the dental service may be biased by younger people since the population attending Merchant's Quay are predominantly under 40 years of age. Some agencies and hostels refer more frequently than others. To plan for an improvement in equity of access, the type of accommodation and referral pathway for clients must be investigated further.

The data on accommodation revealed that the type of homeless accommodation was similar to that in the ‘Counted In’ statistics (Williams and Gorby, 2002). Many people with No Fixed Abode attend Merchant Quay Project for contact work and food. This is a good opportunity to provide treatment to this vulnerable population. Women and children account for a large proportion of the homeless population (1,140 dependent children.) Further research should be conducted into the dental need and service utilisation of this population of often hidden homeless.

Referrals from homeless agencies reveal the importance of interdisciplinary care pathways. The main source of referrals was through the Merchant’s Quay Project (38%) with some of the clients who attended seeking dental treat-
ment while others attended opportunistically when they used other services. Nineteen percent of patients were referred from hostels, and a breakdown shows that some centres were very active in referring and many had yet to refer clients. Hostels with good communication links to the dental team referred more often. Health promotion training for both staff and clients in hostels helped to increase the number of referrals from that centre. Hostels with registered nurses, who performed clinical duties, referred the number of referrals from that centre. Hostels withing for both staff and clients in hostels helped to increase dental team referred more often. Health promotion encouraged to attend mainstream dental services. Some treatment or with difficulty accessing treatment from general practitioners.

The number of clients referred by the Homeless Persons Unit (HPU) (6%) and Multidisciplinary Team (MTD) (3%) were low, though good support was given for the individual clients by the MDT. There is a need to investigate initial assessment tools used by Community Welfare Officers and the MDT to encourage inclusion of an oral health assessment and an improvement in referral pathways. The HPU has a good link for women and children and B+B referrals that should be utilised. Methadone clinics directly referred a small number of clients (3%); at present only homeless IV drug misusers are referred. Methadone clinics referred a small number of clients (3%); at present only homeless IV drug misusers are referred. Again, oral health should be part of an initial assessment.

Better communication, information and a targeted approach will help improve access to dental services to subsections of the homeless population currently not utilising services. The homeless population is not homogenous being very diverse in age, socio-economic status, education and substance misuse. The pathways to homelessness are multifactorial. Not all homeless people misuse drugs, but as The Merchant Quay Project is a centre involved in harm reduction, including a needle exchange and methadone clinic, there is a greater crossover of homelessness and drug use than in other homeless services.

The oral health of substance misusers is recorded as being poor with a high prevalence of dental decay, tooth wear, trauma and denture need. (Angelillo et al., 1991; Molendijk et al., 2001; Gray 2002.) They are a population that has had little dental intervention to date, which is in much need of an accessible specialist service, similar to the homeless service. A complementary service in Trinity Court would enable more clients with chemical dependencies to have dental treatment. This would enable the targeting of other homeless persons (e.g. families and the homeless population over 40 years of age) to attend for treatment in Cornmarket and Merchant's Quay Clinics.

**Conclusion**

This service review revealed much about access to dental care for homeless people and has helped focus the direction of the service. As the homeless population is not homogenous, targeting of certain populations is necessary. It is apparent that people in the older age groups, over 40 years of age, with a particular focus on women over 40 years of age and women and children housed in B+Bs, should be prioritised. Targeting of hostels and day centres not currently referring clients will facilitate equity of access. This can be done by education and health promotion to both staff and clients as well as an increase in the number of screening sessions in these hostels, which we have demonstrated to be an effective first contact with the dental service.

Encouragement should be given to community welfare officers and hostel staff to include an oral health assessment as part of their initial assessment and the dental team should collaborate in producing a simple assessment tool. The service should continue to provide treatment for marginalised homeless drug users, improving their access to service by working with methadone clinics to include oral health on initial assessment. An audit of the uptake and outcome of services is timely. Dentistry has an important role to play in the healthcare of homeless people. The services potentially available at present are often inaccessible to this marginalised population and only through evidenced-based planning of dental services will an acceptable and effective service evolve.

**Acknowledgement**

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