Trends in the use of accident and emergency services by the homeless on the Wirral

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Abstract
Objective—To examine the use of accident and emergency (A&E) services by the homeless, with particular reference to the use of psychiatric services generated by this attendance.

Methods—A retrospective study of attendance registers at a large A&E department over an eight year period, during which there were 566 separate attendances by homeless patients out of a total of 421 237 adult attendances (1.3 per 1000).

Results—There was no significant change in rates of attendances over the eight year period (P = 0.41), in the broad demographic details of the groups, or in the use of psychiatric services.

Conclusions—There has been no significant increase in the use of A&E services by homeless people in the population studied over the eight year period. Several possible explanations for this are given.

(Key terms: homeless; services; primary care)

The number of homeless people in this country is not known with any degree of certainty. It has been calculated that there are 500 000 homeless people in England, up to two thirds of these outside the capital, although pressure groups argue that official figures underestimate the scale of the problem. What is clear, however, is that official figures doubled between 1979 and 1989 and the problem is more visible. Reports have suggested that the homeless make greater use of accident and emergency (A&E) services compared with the resident population.

Concern has also been expressed at the levels of psychiatric morbidity found in the homeless across a range of settings. A study in Liverpool, which lies across the Mersey from the Wirral, is in keeping with the studies of other cities in the United Kingdom, but these studies have tended to focus on large cities and have not always been clear about their definitions of homelessness. Consequently, their results cannot be generalised. Local studies need to be undertaken so services can be tailored appropriately.

Our paper reports the results of an eight year retrospective study undertaken at Arrow Park Hospital, Wirral, Merseyside, between 1983 and 1991. It examines the trends in demands placed upon an A&E department at a district general hospital on the Wirral, by the “homeless”. The Wirral peninsula (figure) lies between the two cities of Chester and Liverpool and is bordered by the rivers Dee and Mersey and by the Irish Sea. It has a population of approximately 360 000, and contrasts areas of marked deprivation and relative affluence. Arrow Park Hospital is one of two hospitals on the Wirral and has the only A&E department. It opened in March 1982 and the average yearly attendance figures for the A&E department are 50 000 adults (>16 years of age) and 20 000 children (<16).

Methods
The null hypothesis was that there had been no change in demand for services by the homeless attending Arrow Park A&E department between 1983 and 1991. We examined attendance registers manually to identify those adult patients who were homeless at the time of attendance at the A&E department. For the purposes of this study, anyone attending whose address was recorded as “NFA” (no fixed abode) was classified as homeless. Subsequently the casualty record cards were examined and from these, demographic, diagnostic, and outcome data were obtained. By using only patients who were unable to give any address, those who were in temporary accommodation or hostels for the homeless were excluded. Although we were primarily interested in the number of attendances, we also recorded the number of times a given patient attended.

The study was divided into two periods, 1983-1986 and 1987-1991. These results were analysed using χ² tests.

Results
Over the eight year period there were 566 separate attendances by homeless patients, all of whom were adults. This was out of a total of 421 237 adult attendances, giving a rate of 1.3 per 1000 adult attendances.

The rates of homeless attendances for 1983-1986 and 1987-1991 were compared and showed no statistically significant difference (P = 0.41; see the table).

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<table>
<thead>
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<tbody>
<tr>
<td>Total A&amp;E attendances</td>
<td>211 541</td>
<td>209 696</td>
</tr>
<tr>
<td>Total homeless attendances</td>
<td>274</td>
<td>292</td>
</tr>
<tr>
<td>Homeless male attendances</td>
<td>241</td>
<td>252</td>
</tr>
<tr>
<td>Homeless female attendances</td>
<td>33</td>
<td>40</td>
</tr>
<tr>
<td>Psychiatric diagnosis</td>
<td>74</td>
<td>72</td>
</tr>
<tr>
<td>Other diagnosis</td>
<td>200</td>
<td>220</td>
</tr>
<tr>
<td>Psychiatric admission</td>
<td>14</td>
<td>21</td>
</tr>
<tr>
<td>Other psychiatric outcome</td>
<td>60</td>
<td>51</td>
</tr>
</tbody>
</table>

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Between 1983 and 1991 the average annual number of adult first attendances was 52,454 out of a total adult population of approximately 286,000 (18.4%). The annual average attendance rate for the homeless was 71. The number homeless on the Wirral is not known, although it is estimated that between 1500 and 2000 people are classified as homeless. These figures obviously represent all categories of homeless people. Assuming that there were 1500 homeless people on the Wirral, this would suggest that 4.7% of those homeless attended the A&E department annually. The true rate would perhaps be greater than this. Three hundred and five male adults accounted for 493 of the attendances, while 54 adult females accounted for the remaining 73, giving a total male:female ratio of 5.6:1. This did not alter between either of the two four-year periods studied (P = 0.64; table). Details of the male:female ratio in the general population of homeless people on the Wirral are not known, although experience suggests that a rather high proportion of males are seen in this group. Certain individuals were frequent and repeated attenders. Forty four males recorded as homeless accounted for 232 attendances and 11 females for 30 attendances.

Broad diagnostic categories are given in the table. These are based on the diagnoses of the casualty officers or the doctors from the specialties seeing the patients. From a psychiatric perspective the two largest groups are “NAD” and “Psychiatry”. The NAD category (“nothing abnormal detected”) represented 9.2% of attendances and was a rather unsatisfactory group which includes a large proportion attending under the influence of alcohol (if a more specific diagnosis was offered, for example, alcohol dependence syndrome, then this was counted as a psychiatric diagnosis). Drug overdoses were counted as medical patients unless they were referred directly to the psychiatrist by the casualty officer. The NAD group also included other categories such as somatic complaints for which no cause could be found or comments such as “social problem”, “it’s raining outside”, or “DNW” (did not wait [to be seen]). As a group there is no record that they received any specific treatment or referral to social services. The group of regular attenders predominantly fell into the NAD group.

The variety of terms used in this NAD group reflects the large turnover of staff over the eight year period of the study. However, it is likely that the characteristics of this broad diagnostic group will have remained unchanged for that period.

The psychiatric group constituted 25.7% of the attendances. All 156 people recorded as homeless who received a psychiatric diagnosis were seen by the duty psychiatrist. Thirty five (24%) of these were admitted to a psychiatric ward. Of the remainder, 10 (7%) were seen in the psychiatric emergency clinic, five (3.4%) were given an outpatient appointment, and 91 (62.3%) were discharged with no follow up. Five patients (3.4%) left the department before they could be seen by the duty psychiatrist. There was no statistically significant difference in rates of psychiatric admission between the two groups (P = 0.37). None of the patients who were recorded as homeless was registered with a local general practitioner.

**Discussion**

Our study shows that there has been no statistically significant increase in the rate of attendance among the homeless attending the Wirral A&E department over a period of eight years. There has also been no significant rise in psychiatric morbidity rates in this group. Perhaps, more importantly, it shows that as a group the homeless on the Wirral make fewer demands on the A&E department than the resident population.

Three possible factors may explain why demand for A&E services by the homeless has not increased during our study period. Firstly, alternative local services may be providing for the needs of this group. Secondly, the numbers of those homeless on the Wirral may be static or even decreasing. Thirdly, the numbers of homeless may be increasing but there may be no associated increase in uptake of accident and emergency services.

We are aware of no expansion or change in service provision in either the public or private sector during the study period, and there appears to be no greater uptake of those services currently available. There was no increase in social services spending on the homeless group during the 1987-1990 period which might hide an actual increase in numbers seeking assistance from other providers.

Accurate figures for the homelessness on the Wirral are not known. It is clear, however, that drifting to major cities such as Liverpool, Manchester, and London occurs, possibly in the hope of finding a better way of life. It may
be that this is sufficient to account for a numerically static or even decreasing homeless population on the Wirral.

It may be that the numbers of homeless people on the Wirral is increasing but that there is no associated increase in the use of A&E services. Victor et al. have suggested that the homeless may have difficulties in accessing primary care and are unlikely to be registered with a general practitioner. Our study broadly supports these findings. The same researchers further argued that homeless people are dissuaded from using primary care facilities and instead turn to the A&E department. However, it appears in this study that in fact they may be dissuaded from using both the local primary services and the A&E department. This causes concern, as this group is often particularly disadvantaged and may comprise those people most in need of statutory support.*

CONCLUSION
This study did not show any increase in the rate of attendance of the homeless at an A&E department or a rise in psychiatric morbidity among that group, in contrast to previous studies. Clearly, services are tailored to local needs and it must not be assumed that research from large centres of population can be generalised to other parts of the country.

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