SHORT REPORT

Unmet treatment needs of older prisoners: a primary care survey

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Abstract

Background: little is known about the treatment needs of older prisoners and to what extent they are being met.

Subjects: representative sample of 203 sentenced prisoners aged 60 and over in 15 prisons in England and Wales.

Design: case notes were surveyed using a standardised proforma and information on current medication was collected.

Results: three-quarters of older prisoners were prescribed medication. Those with cardiovascular, respiratory and endocrine health problems were prescribed medication that was mostly appropriately targeted. In contrast, only 18% of inmates with recorded psychiatric morbidity were prescribed psychotropic medication.

Conclusions: reviewing the medical records of older prisoners and considering the appropriateness of their current medication regime would be a primary care intervention that could significantly improve the health of this marginalized group.

Keywords: prisoners, medication, policy, public health, elderly

Introduction

Prisoners suffer high rates of physical and psychiatric morbidity [1]. Little is known about their treatment needs and to what extent they are being met [2]. With the transfer of responsibility of prison medical provision to the National Health Service having commenced in April 2003, primary care trusts in England and Wales will soon be commissioning health care for 74,000 prisoners. This development can be seen as part of a wider trend acknowledging the public health challenges posed by prison populations, and the opportunity that prison provides to reach an elusive and marginalized group, whose risk factors and infection rates significantly exceed those of the general population [3]. This is particularly the case for older prisoners, a group that are ‘doubly disadvantaged’, and who have been found to have high rates of morbidity across all body systems [4]. On 30 June 2002 there were 1,376 sentenced older prisoners in England and Wales, numbers that have more than trebled over the last decade. As a proportion of the total number of sentenced prisoners, inmates aged 60 years and over comprised 2.5% of the total prison population in 2002, a proportion that has doubled in a decade [5].

We surveyed the treatment needs in a sample of older inmates in England and Wales. In order to identify one aspect of their unmet needs, we compared their documented medical illnesses with the medication they were being prescribed.

Methods

Prisons and prisoners

Men 60 years and older are scattered widely across over 90 penal institutions in England and Wales. We selected those that were within 100 miles of Oxford and held at least 10 elderly prisoners. All sentenced inmates aged 60 and over in the 15 prisons that met these criteria were approached, and informed that the survey was confidential and voluntary. Age 60 and over was chosen as a cut-off because it is widely used in prison research, reflecting the view that the functional and health problems of older prisoners are similar to those of persons in the community who are 5–10 years more elderly [6]. Written consent was obtained before interview. Interviews were conducted in private within the prison between April 1999 and March 2000 by a specialist
registrar (SF). The project was approved by the Prison Health Service Research Ethics Committee.

**Data collection**

Demographic information was collected from each individual using a semi-structured interview. Data regarding health problems were collected using the scheme described in Burvill *et al.*, which records medical problems in various body systems [7]. All written entries, the prison reception health screen, and letters in the records were read to gather this information. Psychiatric morbidity was additionally assessed by a semi-structured standardised interview, the Geriatric Mental State (GMS). Information on current medication was taken from the current prescription charts held at the prison health centres. Treatment needs were assessed by comparing the recorded medical problem with medication prescribed. If an inmate had a recorded health problem in a particular body system, then any medication targeted at that body system was considered ‘appropriately targeted’. Information on the prevalence of physical morbidity was reported in a previous paper in this journal [8].

**Results**

We approached 233 men, of whom 203 were interviewed, representing 19% of the English and Welsh sentenced population of men aged 60 and over. The characteristics of the sampled population were not significantly different from those of the total population of sentenced men aged 60 and over in terms of time served, type of offence, type of prison and ethnic origin [9]. The mean age of the subjects interviewed was 66 years (range 60–88, SD 4.8). Of these prisoners, 77% were being prescribed medication. Information on the type and the targeting of prescribed medication is reported in Table 1. The first column is the proportion of older prisoners that was prescribed medication for a particular bodily system. The most commonly prescribed types of medication were for the cardiovascular (35%), musculoskeletal (28%) and gastrointestinal (21%) systems. Nine percent were prescribed psychiatric medication. The second column examines the targeting of the prescription by comparing the type of medication with illnesses documented in the medical records. Eighty-five percent of elderly prisoners with cardiovascular disease recorded in their notes were prescribed medication targeted at cardiovascular problems. Similarly, 78% with endocrine and 65% with recorded musculoskeletal problems were prescribed medication for those systems. In contrast, only 18% with any recorded psychiatric illness were receiving any psychotropic medication. Looking into this group in more detail with a diagnostic semi-structured interview, of those who achieved caseness for depression using the GMS (n = 60), only 14% were being treated with anti-depressants at the time of interview. For the purposes of this investigation, psychiatric illness excluded substance abuse. Current substance abuse/dependence was seldom reported in medical notes, and only found in 10 prisoners using the GMS (5% of the sample) [9]. Older prisoners are distinctive in their low level of drug misuse. In contrast, a recent study of male sentenced prisoners aged 16–64 in England and Wales found a rate of drug dependence of 43% [10]. The third column reports on those prisoners without an illness recorded in their notes who received medication for that system.

**Discussion**

This survey of 203 older male prisoners found that cardiovascular, endocrine and respiratory medication needs were mostly met while psychiatric ones were not. We are not aware of other studies that have investigated medication needs of prisoners. This research was not able to assess the full extent of unmet treatment needs as it estimated morbidity from medical records, which is likely to have underestimated illness [11]. In addition, the current study examined treatment from the perspective of medication alone, whereas psychological and physical treatments will also be part of the management of older prisoners. Nevertheless, this report provides information on a potentially important aspect of the treatment of older prisoners, an intervention that can be easily implemented. The National Service Framework for Older People in the UK highlights the need to ensure that older persons ‘do not suffer unnecessarily from illness caused by excessive, inappropriate, or inadequate consumption of medicines’, and provides four key interventions to address this problem [12]. All prison health care centres need to review their older populations in the light of the

![Table 1. Medication prescribed for older prisoners (n = 203)](https://example.com/table1.png)

<table>
<thead>
<tr>
<th>System</th>
<th>Medication prescribed</th>
<th>Accurately targeted medication</th>
<th>Unaccounted for medication</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cardiovascular</td>
<td>72 (35%)</td>
<td>62/73 (85%)</td>
<td>10/130 (8%)</td>
</tr>
<tr>
<td>Musculoskeletal</td>
<td>56 (28%)</td>
<td>31/48 (65%)</td>
<td>25/155 (16%)</td>
</tr>
<tr>
<td>Gastrointestinal</td>
<td>42 (21%)</td>
<td>15/26 (58%)</td>
<td>27/177 (15%)</td>
</tr>
<tr>
<td>Respiratory</td>
<td>26 (13%)</td>
<td>17/28 (61%)</td>
<td>9/175 (5%)</td>
</tr>
<tr>
<td>Endocrine</td>
<td>19 (9%)</td>
<td>14/18 (78%)</td>
<td>5/185 (3%)</td>
</tr>
<tr>
<td>Other</td>
<td>18 (9%)</td>
<td>11/24 (46%)</td>
<td>7/179 (4%)</td>
</tr>
<tr>
<td>Psychiatric</td>
<td>18 (9%)</td>
<td>11/61 (18%)</td>
<td>7/142 (5%)</td>
</tr>
<tr>
<td>Dermatological</td>
<td>10 (5%)</td>
<td>6/12 (50%)</td>
<td>4/191 (2%)</td>
</tr>
<tr>
<td>Neurological</td>
<td>7 (3%)</td>
<td>6/14 (43%)</td>
<td>1/189 (1%)</td>
</tr>
</tbody>
</table>

Note: In ‘accurately targeted medication’, the first number refers to the number of prisoners on medication for that body system, and the second number refers to the total number of prisoners with a recorded health problem in that body system.

In ‘unaccounted for medication’, the first number refers to the number of prisoners on medication, and the second number refers to the number of prisoners without a recorded health problem in that body system.
National Service Framework to determine how these and other standards (including Standard 7 on mental health) can be met in the prison setting. Underlying these standards is the principal objective of providing equivalence of medical care for prisoners compared with persons in the community. Sharing best practice from the National Health Service will be an important component of meeting this objective. The health needs of older female prisoners remain uncertain. However their numbers are small: there were only 18 serving sentences in English and Welsh prisons on 30 June 2002 [5].

In the context of problems identified by HM Inspectorate of Prisons regarding inpatient and specialist hospital care [2], the poor training of prison medical staff [13], the increasing overcrowding of prisons, and the lack of secure psychiatric beds [14], these findings support the current ‘root and branch reform’ of the prison medical service [15]. Even simple reforms such as reviewing the medical records of prisoners – paying particular attention to psychiatric medication – and considering the appropriateness of their current medication regime could enhance the quality of life of a group of prisoners with distinct, but little-known, needs. Future research could investigate the effectiveness of possible interventions to address this problem, including educational interventions at a regional level, audit of local prison health centres, and improved health screening of older prisoners.

Key points

- The number of prisoners aged 60 or over is growing but little is known about their medical needs and whether they are being met.
- The majority (77%) of older male prisoners were being prescribed medication. This did not always match their documented treatment needs.
- The discrepancy was most marked for psychiatric illness where only 18% of those with a recorded problem were receiving psychotropic drugs.
- Regular review of prisoners’ medical records, with a view to aligning medication regimes with identified illnesses, would constitute a simple but effective reform.

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References