

Methadone maintenance treatment can be provided in a primary care setting without increasing methadone-related mortality: the Sheffield experience 1997–2000

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SUMMARY

Methadone maintenance treatment has been shown in many studies to reduce mortality and morbidity among heroin users. However, there has been concern that widespread methadone prescribing will lead conversely to an increase in methadone-related deaths. This study in Sheffield shows no increase in methadone-related mortality over a two-year period, during which 400 untreated patients were recruited into primary care methadone treatment in the city.

Keywords: methadone; mortality; heroin users.

Introduction

HEROIN users have a death rate many times that of their non-heroin using peers.¹ Methadone maintenance treatment has been repeatedly shown to reduce heroin deaths and to improve many other outcomes for heroin users,^{2,3} and government policy documents have emphasised the role of primary care in providing services for drug users.⁴ However, it has been suggested that there is a 'trade-off' between the reductions in heroin-related deaths which can be achieved by bringing heroin users into methadone maintenance treatment, and increased numbers of deaths involving methadone.⁵ This paper examines the effect on methadone-related deaths when approximately 400 heroin users were brought into methadone treatment over a two-year period in Sheffield.

Method

In April 1999, a new primary care clinic for drug dependence run by former and current GP principals was opened in Sheffield. In the first two years, approximately 400 currently untreated patients were recruited to the clinic for methadone maintenance treatment. Many of these patients had waited for periods approaching two years for treatment. At the same time, with the support of clinic staff and primary care liaison nurses working from the primary and secondary care services, the numbers of other GPs outside the primary care clinic prescribing methadone maintenance treatment in the city also increased. The primary care clinic based its protocols closely on the National Guidelines for the Treatment of Drug Dependence published by the Department of Health in 1999.⁶ All new prescriptions were to be taken under supervision of a pharmacist and over the time period studied; approximately 50% of doses prescribed within the clinic were taken under daily supervision. This represented a major change in dispensing practices in the city. All products prescribed in the clinic, including benzodiazepines were prescribed only within their licence and no tablets, injectables or dihydrocodeine were normally prescribed. A primary care approach and a harm minimisation, rather than an abstinence-oriented, philosophy was adopted (Box 1). The policy was to optimise outcomes by ensuring adequate dosages and to aim to retain patients in treatment.³

The records of the Sheffield Coroner 1997–2000 were searched manually to determine numbers of deaths where methadone was judged to be the main cause of death, and numbers of deaths where methadone was found at toxicological analysis at postmortem. Prescription Pricing

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Submitted: 13 September 2001; Editor's response: 27 November 2001; final acceptance: 21 January 2002.

©British Journal of General Practice, 2002, 52, 387–389.

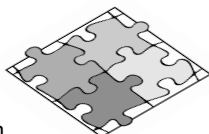
HOW THIS FITS IN

What do we know?

Methadone maintenance treatment is known to reduce mortality among heroin users. However, there has been concern that widespread methadone prescribing may lead to an increase in methadone-related deaths.

What does this paper add?

In this study in Sheffield, there was no increase in methadone mortality over the two years in which 400 people were recruited to primary care methadone treatment.



Authority records were used to calculate milligrammes of methadone dispensed in the city for the months in which

- All patients started on daily supervised consumption of methadone;
- Harm minimisation rather than abstinence-based philosophy;
- Emphasis on maintenance not reduction;
- Adequate doses of methadone prescribed;
- No tablets, injectables or dihydrocodeine prescribed;
- Benzodiazepines not prescribed on a maintenance basis;
- Local GPs encouraged to follow national guidelines.

Box 1. The Sheffield Protocol: summary of key points.

data were available (April 1999 to March 2001).

Results

While precise figures are hard to obtain, using Prescription Pricing Authority data and pharmacy scheme figures the number of patients receiving methadone maintenance treat-

ment in Sheffield approximately doubled in the two years between April 1999 to March 2001.⁷ The most accurate indicator currently available (milligrammes of methadone dispensed per month in the city), shows an increase from 333 833 in April 1999 to 840 357 two years later in March 2001.

Figure 1 shows the number of deaths considered by the Sheffield Coroner to be caused by methadone, and milligrammes of methadone dispensed in the city, with estimated maximum figures before 1999. Between 1999 and 2000, the number of methadone deaths fell from six to two, in spite of the fact that the quantity of methadone dispensed in the city had more than doubled during this time.

Methadone was detected at postmortem toxicology in six cases in 1997, nine each in 1998 and 1999, and three in 2000. Of these 27 cases, 10 were thought by the coroner to have involved diverted methadone, as the deceased person had not been in receipt of a prescription for the drug. Methadone injectables, which had been prescribed for the deceased person, played a part in 11 out of the 27 cases. However, by 2000 there was no involvement of injectable methadone and this may have been owing to changes in prescribing practices. The involvement of concomitant benzodiazepines — which had been a major factor in 1998 and 1999⁸ — also decreased in 2000 and this may be another reflection of more evidence-based prescribing for drug users in the city.

Discussion

The Sheffield primary care clinic is still a relatively new service and overall numbers of methadone deaths are small over the short time period studied. These results should therefore be treated with caution. On the other hand, it is undoubtedly the case that the prescription of methadone to 400 new patients over two years did not in fact increase

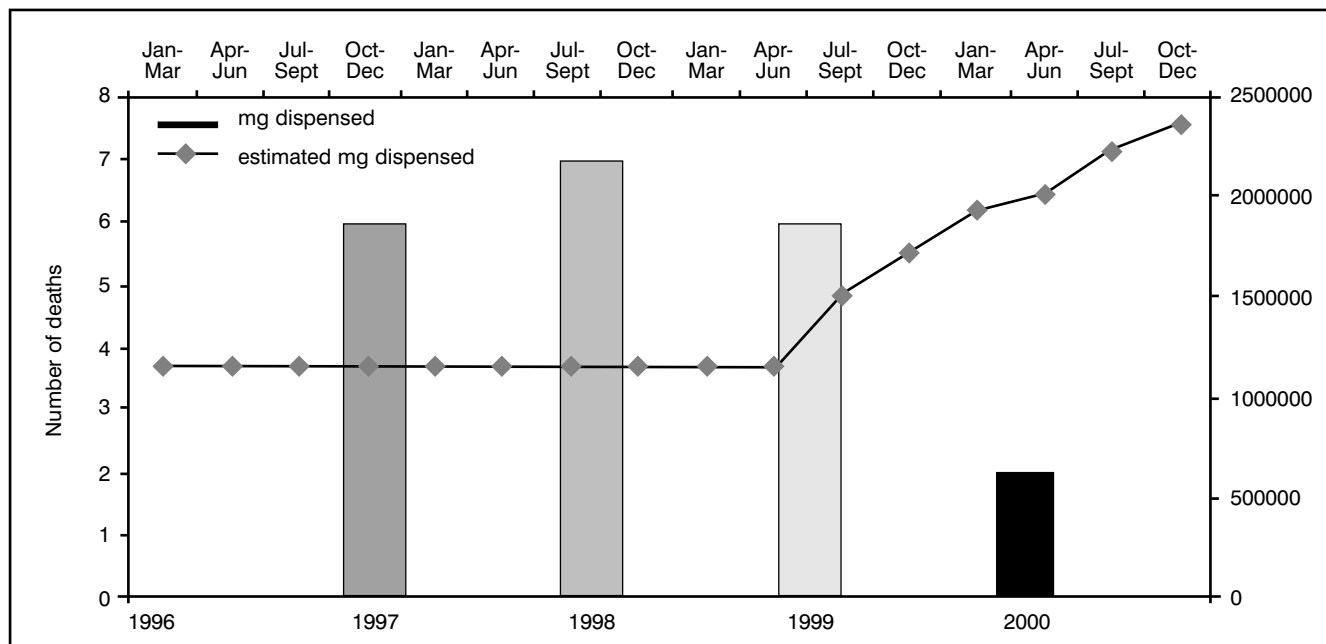


Figure 1. Numbers of methadone deaths in Sheffield 1997–2000 in which methadone was considered to be the primary cause, and milligrammes of methadone dispensed quarterly in the city.

methadone deaths in Sheffield and that methadone deaths fell.

The Sheffield experience suggests that methadone may be prescribed and dispensed safely for large numbers of patients in a primary care setting without increasing numbers of methadone deaths. This raises the question as to why a demonstrably effective treatment which appears to be able to be prescribed and dispensed safely is still so difficult for patients in many areas of the United Kingdom to gain access to.

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