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or proved. It is hoped that more detailed inquiries into future cases will help to identify the reservoir. A close relation between cattle and badgers is indicated by studies on bovine tuberculosis,20 and farmers' tales link cows and hedgehogs-frequent visitors to rural gardens. Preliminary surveys of the available wild animal material have, however, so far failed to provide useful information.

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# Casualty departments and the monitoring of drug dependence

A HAMID GHODSE

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# Summary

In a month-long prospective survey of patients attending London casualty departments with drug-related problems, 395 drug-dependent patients were identified. A check against the official Home Office index of notified addicts showed that 226 (57%) were not known to the Home Office. Of 92 patients who used narcotics only 53% were known with certainty to the Home Office, and when the source of notification was checked it became clear that in at least 77% of incidents involving narcotic addicts in casualty departments the addict was not reported. Repeated research in casualty departments could play a valuable role in monitoring drug dependence and might provide information supplementary to that obtained from the specialised drug treatment clinics and other sources of notification.

#### Introduction

Under the Misuse of Drugs (Notification of and Supply to Addicts) Regulation 1973 a doctor is required by law to notify in writing the name, sex, date of birth, address, etc of any patient whom he considers or reasonably suspects of being

Addiction Research Unit, Institute of Psychiatry, London SE5 A HAMID GHODSE, MD, PHD, lecturer in psychiatry

addicted to controlled drugs. A hospital doctor need not notify an addict only if he, or another doctor at the same hospital, has reported the patient within the previous 12 months. In practice, most notifications are made by the staff of the specialised drug treatment clinics and the remainder are made mainly by prison staff and general practitioners.

As notification is compulsory it might be assumed that the addiction statistics are accurate insofar as they report the number of addicts known to doctors1; indeed, Lewis2 found that only four of the 98 narcotic addicts who died in 1969 and 1970 were unknown to the Home Office. The notification system has never been systematically investigated,3 however, and there are indications that many narcotic addicts may be unknown to the authorities.<sup>4-6</sup> This question of the completeness of notification is unlikely to be finally settled by any practical study that can be devised, but any inquiry that looks at the overlap between a given special sample and the Home Office register may throw a little light on the question.

#### Method

A one-month prospective survey of patients with drug-related problems was carried out in 62 casualty departments in Greater London in July 1975.7 The dependence status of all the patients in the survey was assessed by the casualty officers in terms of defined criteria laid out in written guidelines,8 and the drugs of abuse were recorded. A list of patients was obtained whom the casualty officers considered to be dependent on drugs, and, with strict regard to confidentiality, their names were checked against the official Home Office index of notified addicts.

It was not always easy to be sure that the casualty records and the Home Office information referred to one and the same person. Three criteria were used to identify addicts: name, date of birth or age, and address. If two or three out of these three variables corresponded match was accepted. If only the name corresponded, the patient was considered "possibly known." Conversely, if three identifying criteria were recorded in the casualty department but the name was not on the Home Office index the patient was considered to be "definitely not known." These criteria formed the central core of the identification procedure, but in some cases additional information was taken into consideration-for example, the use by an addict known to the Home Office and to the casualty department of known aliases. If the addict was known to the Home Office the files were searched to identify the notifying agencies during the 12 months before and two months after the end of the survey. Thus the names of addicts who attended casualty departments during the last days of the survey and were subsequently notified would have had time to reach the index.

### Results

#### PATIENTS KNOWN TO THE HOME OFFICE

During the course of the London casualty survey 395 drugdependent patients were identified; they were responsible for 477 separate casualty appearances, with problems due to a wide range of drugs. Only 134 (34%) of these patients were known to the Home Office, 107 as proved addicts and 27 as suspected addicts. A further 35 patients were "possibly known" to the Home Office, being identified by name alone. The remaining 226 patients (57%) were definitely not on the index of addicts, which is, of course, concerned only with addiction to 14 narcotic drugs.

Among the 477 drug-related casualty attendances were 103 incidents in which the use of narcotics was implicated. These incidents were caused by 92 patients, who because of the type of drug used on this occasion were potential candidates for Home Office notification. Of these 92 patients 49 (53%) were known to the Home Office; 43 as proved addicts and six as suspected addicts; a further 16 patients were "possibly known." It was impossible to identify 12 patients who had used narcotics but in 15 cases (16%) the patients were definitely not known to the Home Office. This estimate of 16% of patients who had used narcotics and had never been notified is, however, a minimum estimate. When the 12 patients who were unidentifiable and the 16 patients who were identified on the tenuous evidence of name alone were also included there were 43 patientsor 47% of the narcotic-using population in the London casualty survey-who were not known to the Home Office. The true proportion of unnotified patients probably lies between these extremes of 16% and 47%.

#### NOTIFICATIONS

Only 12 of the 92 narcotic-dependent patients had been notified within the previous 12 months by the hospital whose casualty department they attended; in six cases the patient actually attended the drug treatment clinic of the same hospital, and these clinics were probably their source of notification. The 15 patients (involved in 15 incidents) who were unknown to the Home Office had clearly never been notified. Another 53 addicts, who were responsible for 64 incidents during the month of the survey, had not been reported by the casualty departments which they were known to have attended, although they had been notified by other agencies. It seems, therefore, that in at least 77 % of incidents involving narcotic addicts the casualty departments did not fulfil their legal requirement to notify addicts to the Home Office.

# Discussion

During this survey several narcotic addicts were identified who were not known to the Home Office; they represented 16-47% of the total number of narcotic addicts seen in casualty departments. Clearly many of these people attend casualty departments for reasons related to their dependence. Although an opportunity for notification is therefore available, it seems that it is not being taken, as few of the addicts were in fact notified by the hospitals that they attended. In many cases this did not affect the accuracy of the Home Office figures as the addicts had already been reported. With a substantial number, however, there had been no previous notification and this information would therefore have been of value. The reasons for omission of notification were not sought, but these clearly need investigation. Many doctors in casualty departments may not be aware of their legal obligation, or the notification form may be too complicated and time-consuming for a busy casualty officer to complete. It is not clear whether addicts themselves realise that all doctors are legally required to notify the Home Office and if they did know whether this would deter them from attending casualty departments despite genuine medical need.

The Home Office statistics probably represent a fairly accurate index of those regularly using predominantly narcotics. But since the Dangerous Drug Act 1967 the pattern of drug use has changed and poly-drug abuse is now very common.\* This study showed that as many as 169 of the 395 drug-dependent patients seen during the month may have been known to the Home Office but that only 92 patients were treated because of narcotic use. Therefore many notified narcotic addicts attended casualty departments not for narcotic use but for problems related to other drugs. It was also evident during the survey that many of the patients who attended more than once did so sometimes for problems related to narcotics and sometimes for problems related to other drugs, often barbiturates.8

Statistics based on dependence on one group of substances alone-narcotics-and relying mainly on information from drug treatment clinics are likely therefore to present an incomplete and biased picture of drug dependence in Great Britain. They tend to ignore both narcotic users who do not attend special clinics<sup>6</sup> and patients who are dependent but not on narcotics. A more accurate picture of addiction might be obtained if there was less emphasis in the statistics on substance dependence, which now seems a somewhat out-of-date concept. Casualty departments could play an important role in providing information about the true spectrum of drug problems, but it might be unfair to place an increased burden of notification on already overworked casualty staff. What is needed is regular research monitoring, which does not put too much strain on the staff but which can examine this problem in all its subtleties and provide continuing front-line intelligence.

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