Unreliability of reports of hypoglycaemia by diabetic patients

Hundreds of case reports suggest a problem with human insulin

EDITOR,—Simon Heller and colleagues' study of the unreliability of diabetic patients' reports of hypoglycaemia¹ was conducted after my suggestion to John Ward, one of the authors, that both patients' and their partners' views about loss of awareness with human insulin were important. I am therefore surprised that I was not given an acknowledgement. The study confirms my belief that patients' and their carers' views are important.

The authors' suggestion that the validity of previous studies looking into loss of awareness of hypoglycaemia with human insulin is questionable is an understatement. Most scientific studies into loss of hypoglycaemic awareness with human insulin have not included partners as a core factor in the research.^{2,4}

Now that the validity of previous studies looking at problems experienced with human insulin have been questioned we must rely on the hundreds of case reports about human insulin from patients and their carers. These suggest that many patients have problems when using human insulin. The patients and their carers confirm an improvement when the patients change to animal insulin.

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Hypoglycaemia was validated

EDITOR,—Simon Heller and colleagues report significant discrepancies between estimates of the frequency of severe hypoglycaemia and impaired awareness of hypoglycaemia as reported by diabetic patients and their relatives.¹ They conclude that patients' self reporting on questionnaires is unreliable. The hypoglycaemic episodes reported by the patients and relatives were not, however, validated, and no evidence was provided to support the assumption that relatives are more accurate or reliable than patients in identifying hypoglycaemia.

In a study of 100 diabetic patients treated with insulin who were interviewed about hypoglycaemia with a structured questionnaire 24 reported having had no severe episodes and 23 recalled five or more severe episodes.² These 47 patients' histories were validated by scrutiny of their general practice and hospital records. In addition, their close relatives were questioned about the incidence and severity of any nocturnal hypoglycaemia. This confirmed that patients who reported several episodes had documented evidence of multiple treatments for severe hypoglycaemia. Only one of the 24 patients who claimed to have had no severe episodes had documented evidence to the contrary: two episodes of moderate severity had been associated with consumption of alcohol and one had been caused by an intentional overdose of insulin. These episodes were all treated with oral carbohydrate. In addition to performing this validation

exercise we reinterviewed 85 of the 100 patients after 18 months. The test-retest reliability for patients' reported frequencies of severe hypoglycaemia was 0.766 ($P < 0.001$).³

Although the frequency of mild hypoglycaemia can be recalled accurately over a period of only one week, severe hypoglycaemia (any episode requiring external help for recovery) has been shown to be a more robust measure.⁴ While individual patients may have amnesia of a particular hypoglycaemic event, the disruption associated with severe hypoglycaemia usually has sufficient impact on the life of affected patients and their families to be related later. Although prospective recording with witnessed confirmation is superior for epidemiological purposes⁵ and may help to limit underestimation of hypoglycaemia, it is misleading to cast doubt on previous self reported estimates on the basis of a single and limited survey.

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Private prescribing of controlled drugs needs closer scrutiny

EDITOR,—The prescribing of controlled drugs to drug misusers by private practitioners raises some ethical questions.¹ Whether drug users should be prescribed central nervous system stimulants for a fee is particularly controversial. The only accepted medical indications for dexamphetamine are narcolepsy and childhood hyperkinetic syndrome,² and treating stimulant dependence by prescribing stimulants is by no means universally accepted. However, it is common to find drug misusers getting a combination of methadone, dexamphetamine, and benzodiazepines from private sources. The second Brain committee report recommended special licensing for doctors prescribing heroin and cocaine to drug misusers,³ but no such licensing procedure covers the prescribing of amphetamines. In the late 1960s the spread of amphetamine misuse was controlled by doctors voluntarily agreeing not to prescribe it. This case highlights the need for more careful control of current prescribing practice.

A young woman was admitted compulsorily to a psychiatric unit with a three week history of paranoid delusions, auditory hallucinations in the second and third person, and bizarre behaviour including posturing. She was convinced that people were scanning her with a machine, causing her physical pain, and that she was telepathic.

For some years she had been getting a private prescription for 200 mg of injectable methadone, 40 mg of diazepam, and 75 mg of dexamphetamine per day. She was crushing the dexamphetamine tablets and injecting the drug intravenously along with the methadone. After admission she was treated with oral haloperidol, recovered, and was

discharged 16 days later. The following day she returned to the same private practitioner, who prescribed a combination of injectable and oral methadone and 50 mg of dexamphetamine per day. Seventeen days later she was readmitted in a florid psychotic state. There was evidence of self neglect and she had auditory and visual hallucinations and delusions of persecution similar in content to those at her first admission. She required further treatment with antipsychotic drugs.

In view of the known association between amphetamine use and psychoses,⁴ the further prescribing of dexamphetamine to a patient with a documented recent psychotic illness is questionable. Whether this patient's schizophreniform psychosis was drug induced or not, the first episode should have been a contraindication to any further prescribing of dexamphetamine. In this case, prescribing continued. This suggested that private prescribing of controlled drugs needs closer scrutiny than exists at present.

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Drug users' views on general practitioners

EDITOR,—As a result of their survey of drug users' views on general practitioners Charles Hindler and colleagues suggest that general practitioners should adopt a central role in the management of drug misuse.¹ As vocationally trained general practitioners currently working in a substance misuse service, we disagree with this interpretation and suggest that wider issues concerning training and the provision of services need to be considered.

Rather than recommend a central role for general practitioners, the Advisory Council on the Misuse of Drugs suggested that they should share care with specialist services.² To target resources effectively and avoid duplication of services, specialist strategic planning is therefore required. Up to half of vocational trainees in general practice do not undertake psychiatric training posts,³ let alone gain experience in specialist drug units. Day release teaching is no substitute for supervised clinical experience.

Assessing and managing drug users' problems is expensive in medical time. In our district service (population 250 000) we annually assess 70 injecting drug users and provide a detoxification programme for 20; we currently prescribe oral methadone to 64. A recent study of methadone maintenance in general practice acknowledged that "injecting drug users do require a good deal of medical time" in clinics run separately from normal surgeries.⁴ Most general practitioners would find it difficult to take on such extra workload without compromising other commitments.

Users state a preference for counselling by general practitioners. Although most general practitioners have core skills, few have formal training in drug counselling, unlike specialist and voluntary services, which can provide comprehensive programmes to prevent relapse.