

How to change prescribing of hypnotics

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This paper charts the progress of a continuing audit cycle of prescribing of hypnotics in a psychiatric hospital. First we reviewed some possible standards from the literature, then educated the prescribing doctors, and fed back to them their own patterns of prescribing. We present the results of this exercise repeated over 18 months; these show a change and general improvement in prescribing patterns. Finally we discuss some of the motivations and possible mechanisms behind these changes, and the implications for the audit process in general.

This short paper charts the progress of an audit in which we have been involved over the past year. We hope to highlight, and discuss, some of the issues and methods involved in bringing about changes in practice. Audit is supposed to be about change, changing and improving medical practice (Secretaries of State for Health, 1989) and it is often depicted as a circular process, setting a standard and reviewing one's progress towards it (Royal College of Psychiatrists, 1989).

There is some debate over what exactly constitutes audit (Shaw & Costain, 1989; Jacyna, 1992). Particular issues relevant to our audit are first the educational content of audit, and the fact that this may be the major ingredient for producing change. For example, Lomas *et al* (1991) showed that the educational input from 'opinion leaders' had an equal impact to that of setting standards. Feedback has also been shown to be a powerful method of changing practice (Grandia, 1990); being shown the facts about one's own practice, compared with others, is sufficient to change practice. Recently clinical guidelines have become an area of interest, with many being produced; however, as Delamothe (1993) notes, "almost no attention has been paid to doctors' reluctance to follow them."

Why audit hypnotics?

The use and misuse of benzodiazepine hypnotics is a matter of concern to both the

general public and the medical profession. Since the recognition of the dependence syndrome (Ashton, 1984; *Drug and Therapeutics Bulletin*, 1985) there have been a number of public campaigns and professional guidelines to improve the way hypnotic drugs are used. Muijen & Silverstone (1987) in a survey of psychiatric hospital prescribing showed that nearly half of all patients received a hypnotic, and it is generally held that hospital prescribing influences the wider prescribing in general practice. Therefore as it is such a common procedure, the outcome of which, iatrogenic dependence, is so important, and a procedure which is potentially amenable to change, it would appear eminently suitable for audit.

Setting a standard

Numerous guidelines exist, and the first stage of the audit process was to collect and collate this information into a presentable form. Quotes from the most authoritative sources on benzodiazepine use are given below.

The lowest dose which can control the symptoms should be used. It should not be continued beyond four weeks. (Committee on Safety of Medicines, 1988).

If benzodiazepines are prescribed for insomnia, then this should be at a low dosage, not every night, and normally for a maximum period of one month. (Royal College of Psychiatrists, 1988).

Hypnotics should not be prescribed indiscriminately and routine prescribing is undesirable. Ideally, they should be reserved for short courses in the acutely distressed. Tolerance to their effects develops within 3 to 14 days of continuous use and long term efficacy cannot be assured. (*British National Formulary*, 1993).

The lowest dose which can control symptoms should be used and long term chronic use is not recommended. When used as hypnotics,

treatment should if possible be intermittent (ABPI Data Sheet Compendium 1992).

When starting a prescription of benzodiazepines, restrict use to about two weeks but no longer than four weeks; no new long term users should be created (Mental Health Foundation, 1993).

Because of the dependence problem, tranquillisers (benzodiazepines) are only given in regular dosages for a few days at a time. If given for longer, they are best taken only when required (Royal College of Psychiatrists, 1992).

Using these guidelines a number of measurable criteria can be derived, together with an explicit standard of practice to aim at achieving. We were able to generate three possible standards, which looked at either the process or the outcome of prescribing.

- (a) Hospital produced dependency, i.e. the number of patients discharged on a benzodiazepine, who were not on one when they were admitted. The standard for this would be that no patient should be discharged with a new dependency.
- (b) Length of treatment, i.e. the number of days of continuous use. The standard for this would be that no patient should receive a benzodiazepine hypnotic continuously, for longer than X weeks (X being between two and four weeks, depending on which guideline is adopted).
- (c) Supervision of treatment, i.e. regular medical review of prescriptions. The standard proposed for this would be that all PRN prescriptions are reviewed after three nights of treatment, and that

all regular prescriptions are reviewed weekly by the consultant.

Unfortunately we were unable to get agreement on a clear standard, for a variety of reasons. The standards were considered too restrictive, particularly for very difficult patients, it was too difficult to objectively define exceptions, and there was concern over legal responsibility if cases of iatrogenic dependency were identified. It was therefore agreed that we should circulate the guidelines around the hospital, to remind people of good practice in the prescription of benzodiazepine hypnotics. Junior doctors were also encouraged to prescribe short courses of PRN hypnotics with a review after three or four days, and for the review of all hypnotics to be carried out at ward rounds. It was proposed that regular surveys of prescribing should be started and presented at future audit meetings.

Audit and re-audit

The most straightforward method of measuring prescriptions is to examine the drug treatment cards of patients in repeated cross-sectional surveys (Table 1). In this and many hospitals, the computerised pharmacy data are designed for stock control and therefore can only give an indication of overall usage. Detecting hospital-produced dependency was attempted by comparing discharge medication slips with records of medication on admission; unfortunately this information was the most difficult to obtain.

Table 1. Pattern of hypnotic prescribing in the North Wales Hospital: four cross-sectional surveys over 18 months

Date	24.06.92	19.10.92	3.06.93	1.12.93
Total number of acute in-patients	155	142	132	125
	no. (%)	no. (%)	no. (%)	no. (%)
Patients on hypnotics	70 (45)	46 (32)	45 (34)	38 (30)
Patients on hypnotics, on admission	50 (32)	20 (14)	25 (19)	16 (13)
Patients started on hypnotics in hospital	20 (13)	26 (18)	20 (15)	22 (17)
Patients on regular hypnotics	38 (54)	39 (85)	8 (18)	—
Patients on p.r.n. hypnotics	32 (46)	7 (15)	37 (82)	—
Prescription for under 1 week	13 (19)	8 (17)	15 (33)	—
Prescription for over 1 week	57 (81)	38 (83)	30 (66)	—
Patients discharged on hypnotics	—	15 (10)	12 (9)	5 (4)

(Percentages are expressed as either part of the total number of acute in-patients, or as part of the total number of patients on hypnotics).

The following results were obtained and fed back to the doctors at two further medical audit meetings, along with discussion and a review and update of guidelines. The results were presented in more detail so that differences across wards and consultants could be shown, and the variations in lengths of prescribing highlighted, but at no point could individual doctors be identified.

The first result was obtained prior to the initial audit meeting discussion about prescribing of hypnotics. Following the meeting there was a clear trend, developing over the next 12 months, towards the use of less hypnotics. Fewer patients appeared to be taking hypnotics prior to their admission, suggesting a decrease in their prescription by our local GPs. When in hospital, patients continued to be started on hypnotics, reflecting the clinical difficulty of sleep disturbance associated with severe psychiatric illness. When they were used, they were given for shorter periods of time and often as p.r.n. medications; however p.r.n. prescriptions were frequently continued for over a week, although this proportion appears to decline. Finally, the shorter more controlled use appears to have resulted in a decrease in the number of people on continuing prescriptions, who were still taking hypnotics when discharged.

Comment

Why have we changed our practice? The results may, of course, be chance findings. There is a statistically significant decrease in the total number of patients receiving hypnotics ($\chi^2 P < 0.01$); however this is mainly due to the decrease in patients taking them on admission. There is a trend towards a decrease ($\chi^2 P < 0.2$) in the number of patients taking them on discharge. If we really have changed our prescribing practice the motivation behind that change is clearly obscure and complex. We had been unable to set an outcome standard, despite there being clear guidelines and measurable standards. It would appear from our experience that the educational experience of discussing guidelines, together with ongoing feedback about prescribing within the hospital, has helped to improve practice, without the need for setting potentially confrontational standards.

In conclusion, benzodiazepine hypnotics are undoubtedly a useful treatment for insomnia associated with acute psychiatric illnesses; audit is helping us to look at the checks and balances which we apply when using them, and helping us raise the possibility of using non-pharmacological treatments. The audit has also shown us the types of simple clinical information which we need to have routinely available for feedback, and has provided us with a learning experience as to how change can really come about through the medical audit process.

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