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The prescribing dilemma of benzodiazepines

BACKGROUND

Benzodiazepines are the most commonly prescribed psychoactive drug in western societies. While associated with risk and harm, they have a legitimate place in therapeutics. Prescribing practice does not reflect guidelines and guidelines rarely provide the practical strategies required to manage the complex clinical management of conditions such as anxiety, insomnia and drug dependence.

OBJECTIVE

This article proposes a model for rational prescribing of benzodiazepines that may be transferable to other therapeutic situations requiring the consideration of complex health, social and system factors.

DISCUSSION

Benzodiazepines, like all psychoactive drugs, have their 'good', 'bad' and 'ugly' side. Prescribing decisions are complex along the spectrum of use. Many subtle factors influence how each of us prescribe such as our knowledge of our patients, their medical histories, their personal situations and the individual doctor-patient relationship.

Case study

Mrs B, an elderly patient whose husband recently died after a prolonged illness, asks for a repeat prescription of temazepam. During her husband's last months you observed how exhausted she was in providing care; she refused to accept help. You first prescribed temazepam to help her sleep after his death and to cope with the funeral arrangements. Her neighbour had an old bottle of temazepam which she gave her when she ran out of her own supply. She admits to increasing her dose to two tablets in the evening as the 'nights are now hard to cope with alone'.

This prescribing dilemma in a long term patient whose pain you understand typifies the uneasy situation for general practitioners in the grey zone between clinical guidelines and the real people we see every day.

The medical profession is often criticised for its reliance on pharmacotherapy and benzodiazepine prescribing is used as an example of the tendency to choose the 'quick fix solution'. Historically benzodiazepines were welcomed both by the public and the medical profession as an effective and safer alternative to barbiturates.¹ Negative effects were slow to be recognised and widely acknowledged only 2 decades after the description of the withdrawal syndrome, after which prescription rates began to fall.²

Extent of prescribing

Benzodiazepines are the most widely prescribed psychotropic medication in Australia, with diazepam, temazepam and oxazepam together making up nearly 4% of all prescriptions written by general practitioners.³

Use increases with age⁴ and there is a high prevalence of chronic benzodiazepine use in the elderly.⁵ A Swedish study of data from a population prescription registry found that among new benzodiazepine users 10% had continued their use 10 years later.⁶

Problems associated with benzodiazepines

Benzodiazepines are associated with fatal and nonfatal opioid overdose among heroin users.⁷ Benzodiazepines in the elderly may cause confusion and falls, resulting in considerable socioeconomic costs.⁸ Withdrawal of benzodiazepines is recommended for long term users because of the risk of adverse effects and doubtful continued efficacy. Physiological dependence can occur after prolonged use of even low dose benzodiazepines. Nonpharmacological interventions for late life insomnia⁹

and interventions to reduce the use of benzodiazepines in aged care facilities can provide effective alternatives.¹⁰

General practice encounters

General practitioners encounter patients using benzodiazepines in many varied situations as outlined in *Table 1*.

The place of benzodiazepines

Despite concerns, benzodiazepines have a legitimate place in therapeutics. There is now greater awareness of their harmful effects and more caution applied both in commencing and continuing their use. Legitimate uses include:

- anaesthesia and intensive care (eg. sedation and induction agent)
- psychiatric emergencies (eg. first line drug in the management of acute arousal)
- acute alcohol withdrawal
- acute insomnia (eg. following a major traumatic event)
- anxiety disorders (eg. short term in specific psychiatric disorders, usually as an adjunct to psychological interventions and other pharmacotherapy)¹¹
- epilepsy (eg. in refractory absence or myoclonic seizures).

Clinical guidelines

The risk of creating dependence is present even in legitimate situations. Guidelines have been developed for the appropriate prescribing of various medications but clinical practices may not always reflect such advice. Grol and Grimshaw¹² stress the importance of understanding the individual, team and system barriers which prevent the uptake of clinical guidelines into routine practice. Despite awareness of the risks, most GPs have at times prescribed benzodiazepines, albeit reluctantly, for clinical situations that fall outside the legitimate situations identified in clinical guidelines.

The 2000 Royal Australian College of General Practitioners guidelines provide an example of a set of clinically relevant guidelines that recognise the ambiguity of clinical situations.¹³ Yet even practical guidelines such as these, which attempt to address this dilemma, can appear to deliver two opposing messages. The first point of the guidelines states: 'Wherever

Table 1. GP encounters with benzodiazepine users

Incidental	Patients being treated for other reasons who are incidentally noted to be on benzodiazepines
Benzodiazepine seeking or with symptoms suggesting possible use of benzodiazepines	Patients seeking assistance for insomnia, anxiety Pressure from families or aged care facility nursing staff requesting that patients be prescribed benzodiazepines for 'insomnia' Patients dependent on benzodiazepines ('doctor shoppers')
Consequences of the negative effects of benzodiazepines	Intoxication and trauma presentations, including falls Acute psychiatric presentations (eg. overdose)
Help seeking	Patients wanting to cease benzodiazepines

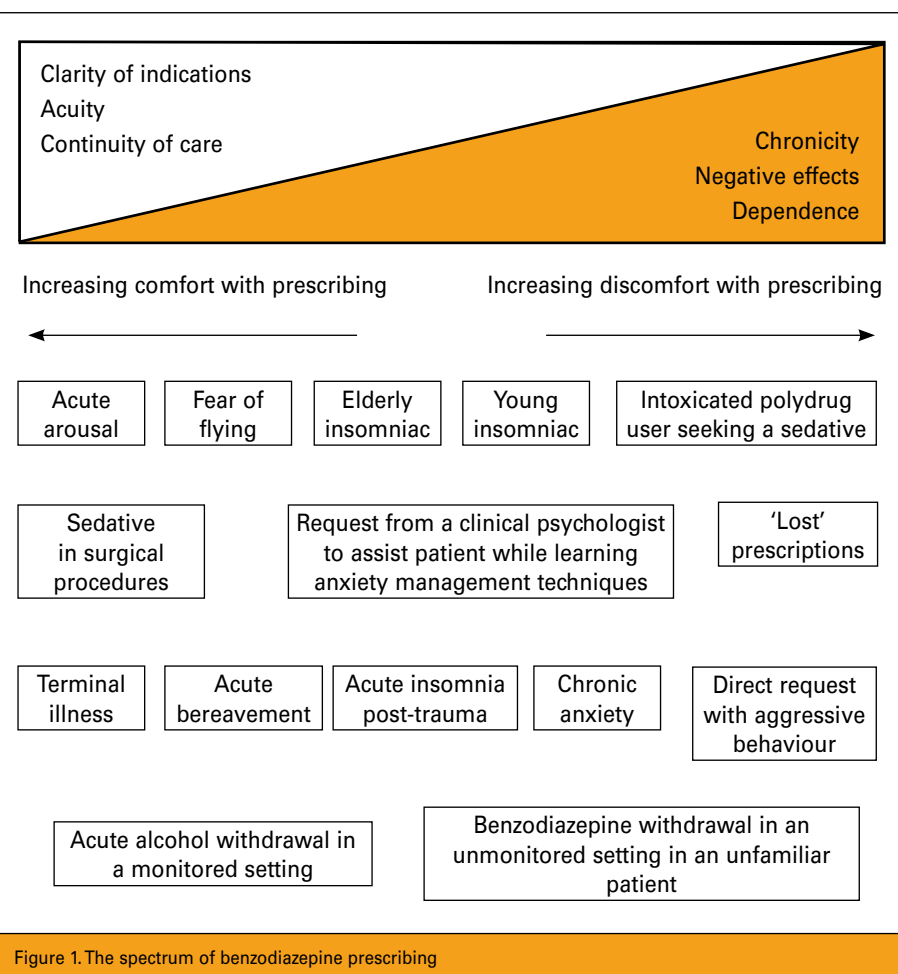


Figure 1. The spectrum of benzodiazepine prescribing

possible avoid prescribing benzodiazepines especially to known polydrug users, including those with dependence'. This may seem at odds with point 7 which states: 'Detoxification from benzodiazepines may be facilitated by changing patients to long half life medications (eg.

diazepam) and then slowly reducing the dose'.

Guidelines can provide agreed principles that we can strive for. But the implementation of guidelines in such clinically complex situations as the management of anxiety, insomnia and direct requests from real patients for drugs of

Table 2. Checklist for benzodiazepine prescription

Indication	Are benzodiazepines indicated or is there a clear rationale for their use in this particular situation?
Benefit/risk	Does the potential for benefit clearly outweigh the potential risk?
Safety	Can safety be improved? <ul style="list-style-type: none"> • is the smallest amount prescribed for the shortest time? • if there is concern about excessive use is monitoring or dispensing of small amounts possible?
Other methods	Have accessible nonpharmacological techniques and supports been maximised? <ul style="list-style-type: none"> • are there pamphlets, local supports, counsellors available and relevant to this situation? • have underlying issues such as anxiety and insomnia been managed within the limits of local resources?
Discussion	Have risk reduction and future plans been discussed with the patient? Are doses regularly reviewed? <ul style="list-style-type: none"> • sometimes patients who have been on benzodiazepines for a long time are unaware of the potential benefits of reduction. A discussion can result in a planned reduction • if benzodiazepines are being withdrawn do patients understand what symptoms to expect?
Review system	Are you comfortable with the decision? <ul style="list-style-type: none"> • do you know enough about available resources for both you (eg. information about suspected doctor shoppers) and the patient (eg. pamphlets on benzodiazepines)? • are there agreed practice policies on prescribing? (We have an example of a practice policy on opioid prescribing in a previous publication¹⁴) • is there an agreed practice policy on the management of aggressive or demanding behaviour? • would you do anything different in the future with this or other similar patients?

dependence may challenge our adherence. Guidelines often fail to provide the pragmatic tools to manage clinical situations. For example, many GPs have experienced negative reactions from patients who request benzodiazepines when they have provided warnings about risks and suggested nonpharmacological interventions. As individual GPs, our clinical judgment may be at odds with guidelines that do not meet our needs in the management of unique clinical situations. Have we failed the guidelines or have they failed us?

The spectrum of benzodiazepine prescribing

Benzodiazepines, like all psychoactive drugs, have their 'good' (highly effective short term), 'bad' (ease of transition into chronic use) and 'ugly' (dependence and related behaviours) side. Difficult prescribing decisions usually lie in the

grey area between the two ends of the spectrum. *Figure 1* illustrates the spectrum of benzodiazepine use. Prescribing for acute arousal and anaesthetic purposes is unambiguously indicated and our comfort with prescribing is 'high'. On the other end of the spectrum continued prescribing for chronic situations where there is clear harm is contraindicated. Our fear of causing harm increases as the chronicity and potential harm increases. Each situation outlined has been placed at an arbitrary point along the spectrum. For each situation in the diagram each of us has a comfort zone of prescribing and many subtle factors influence our prescribing behaviour. Many decisions are based upon what we know of our patients, their medical history, their personal situation and the individual doctor-patient relationship.

Managing benzodiazepine use in the grey world of clinical practice

Not everyone who is using a benzodiazepine is dependent and some who are dependent are not willing to stop. A critical question is why the person is using benzodiazepines, ie. what benefits, perceived or real, are there? How will the person who ceases them manage the loss of those benefits? As benzodiazepines are powerful sedatives and anxiolytics, symptoms such as insomnia and anxiety, which can be experienced during the withdrawal process, can be very distressing. This can be compounded if these symptoms were the very reason that benzodiazepines were commenced. From a practical perspective what alternatives and what supports are available?

General practitioners are required to weigh up the potential benefits and risks for the individual patient when prescribing medication. Instead of a list of 'do' and 'do not' statements, we propose the use of a checklist (*Table 2*) as a tool for GPs to apply against their personal knowledge of the individual situation. It is based upon the concepts of harm reduction and continuous improvement and can be applied over a series of consultations in general practice. This checklist together with practical strategies aimed at improving GP confidence and skills in managing complex consultations and intimidating behaviours provides GPs with tools to implement the guidelines.

Conclusion

Benzodiazepines are useful drugs for certain clinical indications, but in some instances a more specific and suitable therapy may be a better alternative. The decision to prescribe benzodiazepines is not black or white, but needs to take into consideration the many shades of grey that make up the therapeutic relationship between a doctor and a patient.

Summary of important points

- Benzodiazepines are important therapeutic drugs that also have the potential to cause harm.
- Benzodiazepine prescribing guidelines often do not reflect what happens in the clinical setting.
- In making decisions on benzodiazepine

prescribing, GPs need to consider their knowledge of the patient and their situation as well as effects of the drug.

Conflict of interest: none declared.

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