Published in final edited form as:

Ann Intern Med. 2012 February 21; 156(4): JC2–J08. doi:10.1059/0003-4819-156-4-201202210-02008.

Review: Minimal interventions (e.g., a letter) reduce long-term benzodiazepine use in primary care

Brian A. Primack, MD, PhD

University of Pittsburgh, Pittsburgh, Pennsylvania, USA

Question

Can minimal interventions reduce or stop long-term use of benzodiazepines (BZDs) in adults in primary care?

Review scope

Included studies assessed minimal interventions (i.e., a letter, self-help information, or short consultation with a general practitioner that addressed concerns about long-term use of hypnotics, particularly potential side effects, and included practical advice on how to gradually and safely reduce or stop BZDs) in patients > 18 years of age who had been taking BZDs for > 3 months. Primary outcomes were reduction and cessation of BZD use.

Review methods

MEDLINE, EMBASE/Excerpta Medica, and Cochrane Central Register of Controlled Trials (all to Aug 2010), and reference lists of identified studies and reviews were searched for randomized controlled trials (RCTs). 3 RCTs ($n = 615$, mean age > 60 y, > 60% women) involving 5 comparisons with control (continued usual dose) met inclusion criteria. Minimal interventions assessed were a letter (2 comparisons), letter plus follow-up (1 comparison), and letter plus consultation (2 comparisons). 2 trials had adequate randomization methods, and all had objective outcome measures (prescription records).

Main results

Meta-analysis showed that patients allocated to minimal interventions reduced and stopped BZD use more often than those allocated to control (Table).

Conclusion

Such minimal interventions as a letter, with or without a single consultation with a general practitioner, reduces or stops long-term use of benzodiazepines in primary care patients.

Commentary

In an age of whole genome sequencing and total-body computed tomography, it is heartening that there are still some low-technology solutions to common problems. The

findings of Mugunthan and colleagues showing that simple letters sent home can reduce unnecessary long-term use of BZDs are compelling.

The authors point out the substantial risks of long-term BZD use, particularly falls and cognitive impairment in the elderly. Risks to adolescents and young adults also seem to be increasing. A 2011 report suggested that US hospital admissions linked to nonmedical BZD use tripled over the past decade, whereas overall admissions for substance abuse increased by only 11% (1). Anecdotally, many of these cases involve youth who find and experiment with unused alprazolam or lorazepam in home medicine cabinets (2).

Mugunthan and colleagues found that only 13 letters needed to be posted to have 1 additional patient stop using BZDs. Current availability of e-mail and mobile phone text messaging present other possible inexpensive approaches for counseling patients. However, the cost-effectiveness of the intervention is uncertain because studies reported only surrogate outcomes.

As is often the case, the results may not be broadly generalizable. Only 3 RCTs ($n = 615$) met inclusion criteria, and these were done in UK settings 8 to 18 years ago. Moreover, included studies provided minimal information on potentially important factors, such as duration of BZD use, BZD dosage, or severity of psychiatric disease. Given the morbidity associated with long-term BZD use and the apparent simplicity of the intervention, use now could be considered. Given limitations in the evidence to date and new information technology options, further research in this area is also warranted.

Acknowledgments

Source of funding: No external funding.

References

1. Substance Abuse and Mental Health Services Administration. The TEDS Report: Substance Abuse Treatment Admissions for Abuse of Benzodiazepines. Rockville, MD: Center for Behavioral Health Statistics and Quality; 2011. <http://oas.samhsa.gov/2k11/028/TEDS028BenzoAdmissions.htm>
2. National Drug Intelligence Center. Information Brief: Prescription Drug Abuse and Youth. McLean, VA: US Department of Justice; 2002. www.justice.gov/ndic/pubs1/1765/

Table 1

Table Minimal intervention vs control for reduction and cessation of benzodiazepine (BZD) use in adults in primary care *

Outcomes	Weighted event rates		At 6 mo	
	Minimal intervention	Control	RBI (95% CI)	NNT (CI)
Reduced BZD use	34%	16%	104% (48 to 183)	6 (4 to 13)
Stopped BZD use	14%	6.1%	131% (29 to 317)	13 (6 to 57)

* Abbreviations defined in [Glossary](#). RBI, NNT, and CI calculated from event rates and risk ratios in article using a random-effects model. Analyses based on 5 comparisons ($n = 588$).