

## **The necessity to prevent irrational use of benzodiazepines**

Benzodiazepines are the most frequently prescribed psychotropic medications used by 5%–10% of the community in high-income countries (1, 2). Most of the data suggesting misuse of these drugs comes from high-income countries. In contrast, low-income and middle-income countries have witnessed a rise in mental disorders diagnoses and psychotropic medication use. In 1998, a study using data from the Brazilian health system showed that 19% of chronic diseases were neuropsychiatric disorders (3, 4). Benzodiazepines (BZDs) are commonly prescribed as a treatment for anxiety and insomnia. BZDs are also inappropriately used for pain, somatic illnesses and less specific stress responses. Although there is still debate about the potential for abuse with BZDs, dependence, withdrawal symptoms and side effects, prevalence rates of BZD use are high and vary between 7.5% and 21.3% across countries (5, 6, 7, 8). When Benzodiazepines are used as indicated, i.e. at standard therapeutic doses, during a short period, and only one type of benzodiazepines at a time, treatment is usually without substantial side effects (9). Inappropriate benzodiazepine use is accompanied by adverse side effects, including cognitive impairment, risk of falling, and dependence (10). Further, there is little evidence for the effectiveness of benzodiazepines during chronic use. For that reason, several international guidelines were formed that, although showing some differences, all recommended a conservative prescription practice, including short-term use (11, 12). Benzodiazepines can cause physical dependence and be recognised by the medical profession because a withdrawal syndrome

occurred on cessation of regular use. Doctors were advised to reserve them for short-term use in minimal dosage. Nevertheless, definitions of drug dependence changed in the 1990s (13, 14). In the past, dependence had been defined in terms the development of drug tolerance and a withdrawal syndrome on cessation, but in recent classification systems, these two features alone are no longer considered sufficient for the diagnosis. Present criteria for substance dependence include tolerance, escalation of dosage, continued use despite efforts to stop and knowledge of adverse effects, other behavioral features, and a withdrawal syndrome (15, 16). Benzodiazepines meet all these criteria. The risk of dependence among elderly persons increases with age and is more common among patients with medical conditions that require polypharmacy and among patients who have depression and alcohol dependence.

Prevention of benzodiazepine dependence can be achieved by adherence to bureaucrat recommendations to limit prescriptions to short-term use (2–4 weeks), or as intermittent brief courses. Some benzodiazepine prescribing is straightforward, for example, as a brief intervention for acute distress or as-needed use for a phobic anxiety (e.g., airplanes) or transient insomnia. Some prescribing situations are, however, to be avoided if possible, like prescribing to manage persisting distress resulting from a personality disorder or for patients with known current or past substance use disorders. But prescribing is never care-free. An important guideline is to avoid chronic administration for acute problems and to set a goal for those on maintenance therapy

of gradually working to find the lowest effective dose, which over time might become less or none, especially in older patients, in whom increasing sensitivity to the medication, the likely presence of more drugs interacting, memory concerns, and fall risk are important clinical issues to be assessed.

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