

THREE YEARS OUTCOME OF LONG-TERM BENZODIAZEPINE USERS IN A PSYCHIATRIC CLINIC

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Summary

Long-term regular benzodiazepine (BZD) use is common in patients attending psychiatric clinics. Few studies have assessed the natural outcome of this group of long-term BZD users. During a 2 weeks initial study period, we assessed a group of subjects who were taking BZD regularly for more than 6 months. Three years later, we performed a follow-up assessment on their use of BZD. Twenty-four % of patients attending the clinic took a high dose of BZD regularly (mean=20.3 mg equivalent of diazepam/day) for a long duration (mean=77.1 months). Thirty-two % of the long-term BZD users stopped BZD or used it irregularly after 3 years, especially those who had used BZD for shorter duration. We stressed the need to review the use of BZD regularly in this group of long-term BZD users.

Key words: benzodiazepine, long-term use, longitudinal study

INTRODUCTION

Patients taking BZD regularly on a long-term basis are usually advised to withdraw or decrease their use. The reasons for this advice include doubts of long-term efficacy, risks of adverse effects, increasing evidence of neuropsychological impairment and socio-economic costs (Ashton, 1994). Some doctors adopt a "Why bother" attitude and consider the use beneficial to some long-term BZD users (King, 1994). Despite this controversy, limited research was done on the natural outcome of this group of long-term BZD users. MedLine search from 1966 to 1995 found no study on this topic in psychiatric population and only 1 research being carried out in general practice. Packham (1992) found that 23% of the long-term BZD users had discontinued BZD in 2 years. Patients who had stopped BZD were younger and more likely to have use anxiolytic than hypnotic type of BZD. In view of the limited data on this topic, we performed a cross-sectional study and a 3 years longitudinal follow-up study on the long-term regular BZD users in a general psychiatric out-patient clinic.

METHOD

During a 2 weeks initial study period in December, 1991, patients attending the general psychiatric out-patient clinic of the Department of Psychiatry, Queen Mary

Hospital were recruited according to the following criteria : (1) Chinese aged 14 and above; (2) taking BZD daily for more than 6 months; (3) not suffering from epilepsy. We obtained their updated demographic information, the types, dosages and duration of BZD used, concurrent medications, current regular alcohol and substance use and the DSM-III-R psychiatric diagnosis from the history recorded in the case notes. The following equivalencies were used in calculating the dosage of BZD used : 5 mg of diazepam equivalent to 0.5 mg of alprazolam, 1 mg of lorazepam, 3 mg of bromazepam, 25 mg of chlordiazepoxide, 0.5 mg flunitrazepam, 7.5 mg of flurazepam, 0.5 mg of lormetazepam, 2.5 mg of nitrazepam, 7.5 mg of midazolam, 0.125 mg of triazolam, 0.5 mg of clonazepam and equipotent to temazepam (British Medical Association, 1994). Three years later, we traced the long-term BZD users records to assess whether they continued to use the BZD regularly. Those who were not seen in this clinic, we contacted them by telephone and obtained their current drug regimen from their doctors. We analyzed the data by SPSS/PC+ (Norusis, 1992). We used paired t-test (t) to compare means between groups of parametric data of interval type. Chi-square test (χ^2) was used for categorical data. Analysis of correlation between means was done by Pearson correlation.

RESULTS

Three hundred and forty patients excluding those who were aged under 14, non-Chinese and suffering from epilepsy, attended the clinic during the initial study period, of which 83 long-term BZD users (24.4%) were identified. Seventy-eight long-term BZD users consented to participate in the study.

CHARACTERISTICS OF THE LONG-TERM REGULAR BZD USERS

The mean age of the 78 subjects were 47.4 ± 12.3 (range: 19-73). The sex ratio was 43.6/56.4 (M/F). Most of them were married (61.5%) and educated for more than 6 years (55.2%). The common psychiatric diagnoses of the subjects were generalized anxiety disorder (44.9%), schizophrenia (12.8%), major depression (12.8%), panic disorder (6.4%) and dysthymia (5.1%). Only 2 subjects were currently dependent on alcohol and none of them took any illicit drugs regularly. The subjects used BZD regularly for 77.1 ± 58.0 months (median: 64, range: 7-242) and the mean dosage was 20.3 ± 15.6 mg equivalent of diazepam (median: 15, range: 1-75). The duration and dosage of BZD use were not related to gender, age or each other. The commonly used BZD were diazepam (28.2%), lorazepam (24.4%) and alprazolam (23.1%). Long-term BZD users with schizophrenia, schizoaffective disorder or delusional disorder when compared to those with depressive or anxiety disorder used BZD for significantly shorter duration (54.1 ± 58.4 months vs. 89.4 ± 58.1 , $t=2.07$, $p=0.04$). They also used a lower mean dosage of BZD (14.7 ± 11.9 mg equivalent of diazepam vs. 21.8 ± 17.1 , $t=1.52$, $p=0.13$) but the difference was statistically insignificant. A majority of the long-term BZD users were taking concurrent psychotropic (63.6%) or non-psychotropic medications (59.7%). The subjects took an average of 1.07 ± 1.43 (range: 0-9) additional non-psychotropic medications. Vitamins (23.4%), antacids (22.1%) and laxatives (13.0%) were the commonly used non-psychotropic drugs.

OUTCOME AFTER 3 YEARS

Seventy-one subjects (91%) were traced. Fifty-two of them were still seen in the clinic, 2 in other psychiatric units, 7 by private psychiatrists, 8 had no regular follow-up, 1 died from medical illness and 1 died from suicide. Among the subjects who were traced and alive, 11.6% increased the dosage of BZD, 34.8% decreased the dosage, 21.7% had no change in dosage, 21.7% used BZD irregularly and 10.1% had stopped BZD. Subjects who had stopped BZD or used it irregularly did not differ statistically from subjects who continued BZD in age, sex, education, marital status, psychiatric diagnosis, dosage of BZD, whether they used anxiolytic or hypnotic type of BZD and day or night time use of BZD. They only differed significantly in the duration of BZD use (55.9 ± 54.8 months vs. 88.3 ± 55.3 , $t=2.27$, $t=0.03$) and that subjects who stopped BZD or used it irregularly had shorter duration of use.

DISCUSSION

The present study looks at characteristics of the long-term BZD users in a general psychiatric out-patient clinic and one dimension of their outcome, that is, whether they still use BZD regularly after a period of 3 years.

We find that long-term BZD users are common. Many of them have taken BZD for a long time (mean=77.1 months) and used a higher than recommended dosage (mean=20.3 mg equivalent of diazepam/day) (British Medical Association, 1994). We do not know whether the results can be generalized to other psychiatric clinics. A comparison study between centres will be needed. This group of patients who used BZD continuously for a long duration has been similarly reported in general practice (Salinsky and Dore, 1987, Rodrigo et al, 1988, Morgan et al, 1988, Geiselman and Linden, 1991). Long-term BZD users with psychotic disorder has taken BZD for a significantly shorter duration than those with anxiety or depressive disorder. It is possible that anxiety symptoms of subjects with psychotic disorder are more transient and they can stop their BZD use once their symptoms subside. The duration of BZD use is not related to age, sex or current dosage. A large proportion of subjects take additional medications for their physical symptoms.

Ten % of the long-term BZD users can stop BZD and 22% take BZD irregularly after 3 years. The proportion of long-term BZD users who has stopped BZD is less than figures reported by Salinsky and Dore (1987) and Packham (1992) in general practice and the factors that predict discontinuation are different. This may suggest that long-term BZD users in psychiatric clinic can have personality factor (Tyner et al, 1983, Schweizer et al, 1990) or more severe psychiatric symptoms (Rickels, 1993) that reduce the proportion who is able to stop the use of BZD. A comparison between long-term BZD users in different populations will be useful. Without an active intervention, one-third of the long-term BZD users can stop BZD or use it irregularly over a 3 years' period, this may imply that the figure will be higher if more assistance is given. However, we have not interviewed the subjects and do not know exactly whether the subjects who have stopped BZD or take it irregularly fare better than the subjects who still use BZD regularly. Some research (Golombok et al, 1987, Rickels et al, 1991, Packham, 1992) which followed up the long-term BZD users after they stopped BZD found that they did not differ from or were sometimes better than subjects who continued BZD in the level of psychopathology. These positive results may be confounded by a self selection of patients who felt that they are adequately improved to stop BZD. On the other hand, some studies reported that a significant proportion (about one-third) of subjects who were able to stop their long-term regular use of BZD re-used BZD or other types of psychotropic medication regularly after a short period (Holton et al, 1992, Isacson et al, 1992, Klein et al, 1994). This represents that some patients may benefit from the withdrawal and some have chronic problems that require long-term pharmacotherapy or psychotherapy.

Neverthe-less, it is of great help to the patients if they could successfully stop the use of BZD or learn to use the drug irregularly. Assistance to build up a sense of self-control over psychiatric symptoms is beneficial in the long-term management of patients. Further studies will be carried out to find out whether patients who are assisted to withdraw from the use of BZD actually benefit in terms of the severity of symptoms and quality of life. Recently, Bruce et al (1995) reported that the degree of change in anxiety sensitivity could predict the ability to successfully withdraw from the long-term use of BZD. We will further explore this area and determine underlying factors that help a patient to control their psychiatric symptoms without resorting to BZD. Finally, we find that long-term BZD users of shorter duration are more likely to stop BZD or use it irregularly after a 3 years period.

In conclusion, we find that long-term BZD use in general psychiatric out-patient clinic is quite common, most of them took BZD for a long period and at high dosage. One-third of them are able to stop or use BZD irregularly after a 3 years period, especially those taking BZD for shorter duration. We emphasize the need to regularly review the chronic use of BZD, especially those who have started the drug for a short period of time and assist them to deal with their anxiety symptoms without resorting to medications.

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