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Evaluation of the medical orientation for the benzodiazepine side effects

Avaliação da orientação médica sobre os efeitos colaterais de benzodiazepínicos

Luciana Auchewski[a], Roberto Andreatini[a], José Carlos F Galduróz[b,c] and Roseli Boerngen de Lacerda[a]

[a]Department of Pharmacology, Federal University of Parana. Curitiba, PR, Brazil. [b]Department of Psychobiology, Federal University of São Paulo, Paulista Medical School. São Paulo, SP, Brazil. [c]Brazilian Information Center on Psychotropic Drugs (CEBRID). São Paulo, SP, Brazil

Abstract **Objectives:** Benzodiazepines are among the most prescribed drugs due to their effects as anxiolytics, hypnotics, myorelaxants or anticonvulsants. Their main side effects are: reduced psychomotor activity, interaction with other drugs, such as alcohol, and the development of dependence. In the present study it was evaluated the quality of the medical directions given to patients about those side effects.
Methods: One hundred and twenty patients (39 men and 81 women), with mean age of 48 years old, who sought drugstores in Curitiba to buy prescribed benzodiazepines, were interviewed by a questionnaire with open and directive questions designed to assess the medical counseling they received about benzodiazepine side effects.
Results: Directions about the three main benzodiazepine side effects were observed only in 13% of the patients, 27% had received at least two and 40% only one, while 19% reported no counselings. These findings suggest that the medical counseling was precarious and its quality was not influenced by the patients' educational level, the kind of medical attendance or the specialty of the physician. The main counseling cited was 'don't drink' (85%), followed by 'don't drive or operate machines' (46%), while few were oriented about the risk of developing dependence on benzodiazepines (31%).
Conclusion: This suggests that physicians were worried about the risk of interaction with alcohol, which can be fatal for the patients. The high number of patients continuously using benzodiazepines for more than one year (61%), the unsuccessful attempt to stop using benzodiazepines (94%), and the poor information about the duration of the treatment (22%) may all be related to the low medical concern about dependence on benzodiazepines.

Keywords Anti-anxiety agents. Benzodiazepines. Prescriptions. Adverse effects.

Resumo **Objetivos:** Os benzodiazepínicos, pelos seus empregos como ansiolítico, hipnótico, miorrelaxante e anticonvulsivante, são muito prescritos. Os efeitos colaterais que comprometem o paciente são: diminuição da atividade psicomotora, interação com outras drogas, como o álcool, e o desenvolvimento de dependência. Neste estudo, avaliou-se a qualidade da orientação médica sobre esses efeitos colaterais.
Métodos: Foram entrevistados 120 pacientes (39 homens e 81 mulheres) com idade média de 48 anos que procuraram as farmácias de Curitiba, Paraná, para comprar benzodiazepínicos. Para avaliar as orientações médicas recebidas sobre os efeitos colaterais dos medicamentos, aplicou-se um questionário com perguntas abertas e estimuladas.
Resultados: Treze por cento dos pacientes relataram ter sido orientados sobre os três tipos principais de efeitos colaterais, 27% a respeito de pelo menos dois e 40% sobre pelo menos um, enquanto que 19% não receberam nenhuma orientação. A qualidade da orientação não foi influenciada pelo grau de instrução do paciente, pela especialidade do médico prescritor e pelo tipo de atendimento (particular ou público). Houve predomínio da orientação "não beber" (85%), seguida do cuidado para operar máquinas e dirigir veículos (46%), e por último, a orientação sobre o desenvolvimento de dependência (31%).
Conclusão: Os resultados sugerem que os médicos poderiam estar mais preocupados com o risco de interação

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com o álcool, que pode ser fatal. O elevado número de pacientes que usavam a medicação de modo contínuo por mais de um ano (61%), o insucesso na interrupção da medicação (94%) e a pouca orientação sobre o tempo de uso do medicamento (22%) podem indicar a falta de preocupação do médico com a possível dependência induzida pelos benzodiazepínicos.

Descritores Agentes antiansiedade. Benzodiazepínicos. Prescrições. Efeitos adversos.

Introduction

Benzodiazepines are among the most prescribed drugs in the world, being used mainly as anxiolytics and hypnotics, having also myorrelaxant and anticonvulsant actions.[1] It is estimated that benzodiazepine consume doubles every five years. For example, in Belo Horizonte the use of anxiolytic-hypnotic agents among elderly people reached rates of 95% of the interviewed, and in a small town of the state of São Paulo, 50% of the interviewed used benzodiazepines.[2,3] In the years 1988 and 1989, the Brazilian consume of benzodiazepines was approximately 20 DDDs (defined daily doses), similar to that of the US.[4] According to Paprocki, the increasing consume of benzodiazepines can stem from a particularly disturbed period which characterizes the last decades of mankind, the progressive decrease in the humankind's resistance to tolerate high levels of stress or the profuse introduction of new drugs and the increasing pressure from the advertisement of the Pharmaceutical Industry, or else due to the physicians' inadequate prescribing habits.[5]

Although being relatively safe drugs, restrictions for their prescription have been increasingly high, due to the incidence of side effects,[1] which, in the case of benzodiazepines, are related to central nervous system depression.[6,7] We may mention as the main effects the decrease in psychomotor activity, memory impairment, paradoxical lack of inhibition, tolerance and dependence and the augmentation of their depressive effect by means of the interaction with other depressive drugs, mainly alcohol.[8] Besides, depression and dysthymia can occur after the use of alprazolam and clonazepam.[9]

The medical counseling related to the use of benzodiazepines is a very important factor to minimize the incidence of side effects.[10] Patients who use benzodiazepines should be oriented by their physicians about the occurrence of a decrease in the attention which, consequently, may increase the risk of accidents with cars and other psychomotor activities.[6,11]

Gorenstein reports that the protracted administration of benzodiazepines, even in low doses, induces persistent impairment in the cognitive and psychomotor functions.[12] The medical counseling about the interaction with alcohol, given its intense use, is also very important as severe and fatal respiratory depression can occur due to the synergism of the depressive effect.[13] Other relevant characteristic of this kind of medication is the appearance of tolerance and dependence.[8] Physicians should widely prevent dependence by prescribing minimal doses and making treatment the shortest possible and by carefully selecting the patient, avoiding to prescribe this kind of medications for patients with history or proneness to drug addiction.[9,14]

Periodical return to consultation is an important factor to monitor the dose, to evaluate the side effects and the therapeutical response.[15] The rational prescription of benzodiazepines should be encouraged and should be performed in appropriate conditions with a careful monitoring, always aiming to establish a good link with the patient. With this kind of approach it is possible to minimize the side effects and prevent the development of dependence.[16]

The irrational use of benzodiazepines has been a very common practice among physicians who, many times, do not have a sufficient psychopharmacological knowledge, turning prescription an uncritical and unbalanced act. The adoption of urgent measures to stimulate the rational use of these medications should be necesary.[17]

The absence of studies analyzing the medical counseling about the use of benzodiazepines aroused the interest in verifying the quality of the counseling about their most relevant side effects such as psychomotor impairment, interaction with other depressors and potentiality of causing dependence.

Method

Subjects

One hundred and twenty male and female voluntary patients were contacted when they were acquiring benzodiazepines at a drugstore.

Research instrument

A questionnaire was developed to evaluate the counselings given by physicians to their patients about the side effects of benzodiazepines (Frame). This questionnaire consisted of questions about the patients' sociodemographic data (questions 1 to 5), the type of received medical attention (questions 6 to 8), particularities about the prescribed benzodiazepine (questions 9 to 20), an open question about counselings received from the physician (question 21) and counselings received from the physician assessed by directive questions, presenting the three main side effects of these medications (questions 22 to 24).

Experimental procedure

We verified the total number of drugstores in the region of Curitiba (647) in December 2000, aided by eight sanitary districts which compose the municipal sanitary vigilance. The

Frame 1 – Evaluation of counselings received about side-effects of benzodiazepines.

1. Gender: ( ) female ( ) male
2. Age: _____ years
3. Religion:
4. Socioeconomic condition in minimum wages:
( ) 1 to 3 ( ) 4 to 7 ( ) 8 to 10 ( ) + than 11
5. Schooling:
( ) never attended school ( ) elementary school
( ) high school ( ) college
6. Medical attention:
( ) private ( ) public health system -SUS
( ) other/which one?
7. Specialty of the prescribing physician:
8. What is the frequency of consultations:
9. What is the amount of medication prescribed at each consultation:
10. What is the indicated benzodiazepine at each consultation:
11. Dose:
12. Number of daily doses: time table of doses:
13. How much time have you been you using this medication?
14. Is the use continuous or intermittent?
15. If you had used this medication before, have you ever tried to stop?
16. Has this attempt been with or without medical orientation?
17. If there has been an orientation to stop, how was it?:
( ) gradual reduction
( ) replacement by other medication. Which one?
( ) association with other medication. Which one?
18. Has the attempt to stop been successful? Describe how it was, please:
19. For how long has the physician indicated the use of this medication?
20. Why has been this medication indicated?
21. Which were the orientations received from the physician who prescribed this medication?
22. Has the physician counseled you not to drive, not operate machines, etc? If yes, has this orientation happened at the beginning or during all the treatment?
23. Has the physician oriented you not to use this medication for a long period?
24. Has the physician oriented you not to consume alcoholic beverages during the treatment?

sample was randomly chosen and had a stratified representation of the drugstores from the different regions of Curitiba, corresponding to 10% of the drugstores (n=64). In order to achieve this number we had to visit 89 randomly chosen drugstores, as 28% of the consulted pharmacists refused to participate. Each pharmacist at each selected drugstore was informed about the study's purpose, and he/she performed the first contact with patients who came into the drugstore to acquire the benzodiazepine medication. After being explained the purpose of the study, patients gave their informed consent and then the pharmacist requested their phone number for being further contacted by the researcher. The choice of patients to be invited was based on their order of arrival in the drugstore and on the attention flow, i.e., when the flow was very intense, the pharmacist was not able to approach the patient. Therefore, in drugstores placed in more densely inhabited regions, the contact with the two needed patients was delayed. Two patients at each selected drugstore were contacted, totaling 120 patients, of which eight refused to participate after having contact with the researcher. Patients received an identification code to assure anonymity.

Statistical analysis

Chi-square test (χ^2) was used, utilizing Yates correction for values below 10 and Fisher test when the expected frequency was lower than 5, and p values <.05 were considered as significant. We compared frequencies of patients, according to the following parameters: type of received counseling, quality of received counseling, medical specialty, and type of question – open or directive. Contingency coefficient was used to verify the relationship between the quality of counseling and medical attention, quality of counseling and schooling level, medical specialty and type of received counseling. Significance level was also 5.0%. The analyses were performed with the software *Statistica – Statsoft (version 5.5).*

Ethics

This project was approved by the Ethical Committee on Human Beings of the Clinical Hospital of the UFPR. After the project's objectives were explained and patients were asked to participate, volunteers signed the informed consent.

Results

Sample

Of the 120 contacted patients, aged 18 to 76 years (48±13.8, mean ± standard deviation), 67% were females, 73% Catholics, 39% reported family income ranging from 4 to 7 minimum wages, and 45% had completed elementary school. Sixty-three per cent of patients were seen at HMOs and 24% at the public health system (Sistema Único de Saúde - SUS).

Counseling received from the physician about the side effects of benzodiazepines

Among the several side effects of benzodiazepines, the analysis of received counselings was focused on the effects which could potentially threaten the patient's life and whose medical counseling should be essential. These effects were classified as: decrease of attention, interaction with alcohol and potential risk of dependence.

In Table 1 we listed all counselings which patients reported having received from the physician. These counselings were obtained by means of the open question and directive questions. In the open question (question 21), patients reported the counselings that they spontaneously remembered, whereas in directive questions (questions 22 to 24) the questions were aimed to obtain the counselings that were classified as essential. Answers related to the counselings about alcohol interaction were called 'not drinking'; those related to the influence of the medication on motor and concentration capabilities were called 'attention' and the counseling about not using the medication for a prolonged period was called 'dependence'.

Departing from the three counselings considered as essential, we performed a classification to assess the quality of the counseling given by the physician. Crosses represented this classification of quality. Higher quality counseling (+++) was determined when the patient received simultaneously the three types of counselings (not drinking, attention and dependence); medium quality counseling (++) was determined when the patient received simultaneously two types of counseling (not drinking and attention or not drinking and dependence or at-

Table 1 – Frequency of patients who reported having received orientations about side-effects of benzodiazepines.

Response obtained by the open question	Number of patients	% of patients
Attention	14	12
Not drinking	20	17
Dependence	10	8
Attention and not drinking	7	6
Attention and dependence	4	3
Not drinking and dependence	1	1
Not drinking, taking care with association of medications	1	1
Dependence and loss of memory	1	1
Communicating adverse effects	2	1
General collapse	1	1
Does not cause dependence	1	1
Finality of the medication	1	1
Does not remember if there was any orientation	28	23
Without orientation	29	24
Total	120	100
Response obtained by the directive question	Number of patients	% of patients
Attention	5	4
Not drinking	37	31
Dependence	6	5
Attention and not drinking	24	20
Attention and dependence	1	1
Not drinking and dependence	8	7
Attention, not drinking and dependence	16	13
Without orientation	23	19
Total	120	100

tention and dependence) and the lower quality counseling (+) was determined when the patient received at least one type of counseling (not drinking or attention or dependence).

This classification of the quality of counselings and frequencies observed in the open and in the directive questions are shown in Table 2. The counseling classified as +++ was not reported by means of the open question and 13% of patients reported having received the three counselings when the question was directive (χ^2: 15.07; $p<0.001$). Also for the counseling ++, the stimulation facilitated recall of the received counseling, and the frequency in the directive question (27%) was statistically higher that that obtained in the open question (10%) (χ^2: 12.06; $p<0.001$).

For the counseling +, 38% of the patients spontaneously remembered having received at least one type of counseling and when they were stimulated, this percentage remained practically the same, reaching 40% of the answers. (χ^2: 0.07; $p>0.05$).

In order to quantify the occurrence of each type of counseling we added the subjects who mentioned that type of counseling and were present in the different classes of quality. To verify which was the most cited counseling we compared the total of counselings of 'not drinking' with 'attention', of 'not drinking' with 'dependence', of 'attention' with 'dependence', obtained both with the open and with the directive questions. For the open one, we observed a significant difference (χ^2: 4.62; $p<0.05$) when comparing 'not drinking' (24%) with 'depen-

Table 2 – Number of patients who received medical orientation about the three main side-effects of benzodiazepines.

		Number of patients	% of patients
Open question			
+ + +	Attention + not drinking + dependence	0	0
+ +	Attention + not drinking	7	
	Attention + dependence	4	
	Not drinking + dependence	1	
	Total	12	10
+	Attention	14	
	Not drinking	21	
	Dependence	11	
	Total	46	38
	Without orientation	34	28
	Other orientation	28	24
Directive question			
+ + +	Attention + not drinking + dependence	16	13
+ +	Attention + not drinking	24	
	Attention + dependence	1	
	Not drinking + dependence	8	
	Total	33	27
+	Attention	5	
	Not drinking	37	
	Dependence	6	
	Total	48	40
Without orientation		23	19

+ + + ideal orientation (excellent), + + medium orientation, + insufficient orientation

dence' (13%). The remaining comparisons were not statistically significant. For this kind of question, the counselings 'not drinking' and 'attention' were predominant, i.e., spontaneously, patients equally remembered the counselings of 'not drinking' (24%) and 'attention' (21%) (χ^2: .38; p>0.05).

In the case of the directive question, all comparisons between the types of counseling were statistically significant: 'not drinking' vs. 'attention': χ^2: 25.56 p<0.001; 'not drinking' vs. 'dependence': χ^2: 48.65 p<0.001; 'attention' vs. 'dependence': χ^2: 4.30 p<0.05. For this mode of questioning there was a predominance of the counseling 'not drinking' (71%), followed by the counseling 'attention' (38%) and that of 'dependence' (26%).

In Table 3, we can see the frequencies of answers obtained by directive questions among patients with different schooling levels. The calculation of the contingency coefficient revealed that there was no relation between the quality of the physician's counseling as reported by patients and their schooling level (χ^2: 11.85; p>0.05).

In the same Table 3, we can observe the frequencies of answers obtained by different types of attention classified as private, HMO and public health system - SUS. The obtained contingency coefficient (χ^2: 7.53; p>0.05) revealed that the quality of the supplied medical counseling did not depend on the type of attention patients were submitted to.

Another approach is related to the influence of the medical specialty on the quality of the counseling about the side effects of benzodiazepines (Table 3). For all the comparisons between the medical specialties we have not found significant statistical differences for the class of quality of counseling. Other concern was to verify if the medical specialty and the received counseling had any relationship. We found significant statistical differences for the counseling 'not drinking' between clinicians and neurologists (χ^2: 5.01; p<0.05) and for the counseling 'dependence' between clinicians and psychiatrists (χ^2: 5.42; p<0.05). The data showed that the counseling 'not drinking' was more valued by clinicians (81%) than by neurologists (54%), and the counseling 'dependence' was more valued by clinicians (39%) than by psychiatrists (12%).

Concern with dependence

Some items of the questionnaire (Frame) were included to evaluate if there was a concern of the physician regarding benzodiazepine dependence such as: frequency of consultations (item 8); quantity of medication prescribed per consultation (item 9); type of use (item 14); time of use (item 13); attempt to interrupt the medication (items 15, 16, 17 and 18); medical information about the time using the medication (item 19). Collected data on these items are shown in Table 4.

Regarding the frequency of consultations, it was noted that most of the patients (83%) returned to the physician between 1 and 3 months afterwards for a new consultation. However, it was observed that 61% of the patients had used the medication for more than one year and, predominantly, continuously (71%). Besides, patients acquired nearly 60 tablets per consultation and most of them (78%) reported that the physician had not oriented them about the time of use of the medication.

It was observed that 42% of the patients had had previous attempts to interrupt the medication and that only 6% of them succeeded. Only 21% of the interviewed patients were suggested by their physician to reduce the dose of the medication. Of the 43 patients who had attempted to interrupt it and were not successful, 41 had been using the medication for more than one year.

Discussion

The medical counseling about the side effects of benzodiazepines in the region of Curitiba is far from ideal, even when the patient was stimulated to recall the received counseling. The great difference observed in the frequency of answers obtained by open or directive questions suggests that patients did not remember the counseling or did not value the physician's counseling or else, the emphasis given by the physician to be careful using benzodiazepines was insufficient. It is very important to highlight that the methodology employed in our study is based on the patients' memory, what means that even if the physician had stressed the importance of the side effects of benzodiazepines, patients could have forgotten it. Anyway, the main objective of the study was to

Table 3 – Frequency of orientations received according to the schooling of patients, the type of medical attention and the medical specialty of the physician who prescribed the benzodiazepine.

	Orientation +++ 1+2+3	Orientation ++ 1+2	Orientation ++ 1+3	Orientation ++ 2+3	Orientation + 1	Orientation + 2	Orientation + 3	Without Orientation
Schooling								
None (n=3)	0	1	0	0	1	0	0	1
Elementary school (n=54)	8	10	1	0	19	3	4	9
High school (n=41)	3	9	6	1	13	2	1	6
College (n=22)	5	4	1	0	4	0	1	7
Type of attention								
Private (n=16)	4	2	1	0	4	1	2	2
HMO (n=75)	9	13	5	0	24	2	4	18
SUS (n=29)	3	9	2	1	9	2	0	3
Medical specialty								
General clinic (n=38)	8	6	3	1	14	0	3	3
Psychiatry (n=33)	2	9	1	0	10	2	1	8
Neurology (n=22)	2	3	3	0	4	1	1	8
Other (n=27)	4	6	1	0	9	2	1	5

1= orientation for not drinking; 2= orientation for taking care in the attention; 3= orientation about dependence.

verify if patients were dully aware of the risks of using benzodiazepines.

The fact that the most cited counseling was 'not drinking' demonstrated that physicians as a whole give more relevance to pharmacological interaction, perhaps concerned with the resulting potentially severe and fatal intoxication, even if the subject was a social drinker. This result could have been also influenced by the cultural attitude of patients and physicians regarding the popular concept of the lack of compatibility of alcohol with medications in general.

As the received counselings were assessed through the interview applied to patients, a pertinent questioning is related to their understanding when oriented by the physicians. In order to assess the level of understanding about the reported counselings we compared the frequencies of obtained answers considering the different educational levels of the patients. We found no significant statistical differences between patients with different educational levels, what suggests that the understanding of the counselings reported by the patients have not depended on their schooling. Another consideration would be to investigate if the emphasis of the approach performed by the physicians was adequate to the level of schooling of the patients. However, we could not accomplish this analysis in this study.

Further evidence found is related to the influence of the type of medical attention performed, be it private, HMO or SUS. We could expect that the type of attention would reflect the quality of the counseling as, theoretically, physicians would have more time to dedicate to the patient in the private or HMO consultations. However, we have not detected any relationship between the type of attention and the quality in the counseling about the side effects of benzodiazepines.

Other questioning is linked to which medical specialty would be performing a better counseling about the side effects. We could expect that psychiatrists and neurologists, due to their specificities in treating disorders in which benzodiazepines are prescribed, such as certain types of anxiety and sleeping disorders, could have a better management in their use and in the counselings of patients. In all the comparisons between medical specialties we have found no statistically significant differences for the quality of counseling classes, what suggests that a good counseling does not depend on the medical specialty. Contrarily to what was expected, psychiatrists and neurologists were not those who performed a better counseling about each type of considered side effect. General practitioners warned patients more about the risk of interaction of benzodiazepines with alcohol and were the most concerned with the risk of dependence.

The risk of benzodiazepines causing dependence has been reported as low, considering the great quantity of prescriptions.[3] Epidemiological studies have demonstrated that subjects who use these substances without medical prescriptions seeking for pleasure perform benzodiazepine abuse and the relief of symptoms originated in the use of other drugs such as alcohol and cocaine. In fact, despite the great number of prescriptions of benzodiazepines made by physicians in general, the epidemiological data obtained in the First Home Survey about the use of psychotropics in Brazil performed by CEBRID (Brazilian Information Center on Psychotropic Drugs) in 2001 showed that only 1.1% of the 8,589 inter-

Table 4 – Frequency of patients who reported having received orientations which demonstrated the physician's concern with dependence with benzodiazepines.

Characteristic		Number of patients	% of patients
Frequency of consultation	Every month	43	36
	Every 2 or 3 months	56	47
	Every 6 months or more	12	10
	Other	9	7
Prescribed amount per consultation	20 to 40 pills	39	32
	60 pills	73	61
	Other	8	7
Type of use	Continuous	85	71
	Intermittent	35	28
Time of use of BDZ*	1 month to 6 months	24	23
	7 months to 1 year	16	16
	More than 1 year	63	61
Attempt to interrupt the use	Yes	51	42
	No	69	58
Interruption of the medication	With counseling	34	28
	Without counseling	17	14
	Without interruption	69	58
Medical orientation for the interruption	Gradual reduction	26	21
	Replacement	7	6
	Association	1	1
Successful interruption	Yes	8	6
	No	43	36
Médical orientation regarding the time of use of BDZ*	Not determined	80	78
	1 to 6 months	10	10
	7 months to 1 year	3	3
	More than 1 year	5	5
	Does not remember	2	2
	Other	3	3

BDZ= benzodiazepine;
** Exclusion of patients who used BDZ as an anticonvulsant.*

viewed in 107 Brazilian cities with more than 200 thousand inhabitants met criteria for benzodiazepine dependence.[18] These epidemiological data could have been reflected in the low frequency observed for the counseling about 'dependence' both in the open and in the directive questions.

Several items of the questionnaire allowed us to indirectly evaluate the concern of the physician with the risk of benzodiazepines causing dependence. Regarding the frequency of consultations, we noted that most patients returned to the physician between 1 to 3 months afterwards for a new consultation, showing that the contact of the patient with the physician was frequent. This can be interpreted as a concern of the physician to monitor the patient's response to benzodiazepines besides promoting a good physician-patient relationship. However, we must highlight that many patients come to the consultation office only to obtain a new prescription. Medical prescriptions are a primary source of medication supply for people who abuse of this type of substances.[8] Anyway, routine follow-up of the patient is fundamental for treatment efficacy and management of side effects.

The daily dose and the time of continuous use of benzodiazepines are important factors for the installation of dependence. The use for up to 3 months has almost a null risk, whereas from 3 to 12 months the risk increases to 10% to 15% and the use for more than 12 months has a risk of 25% to 40%.[19] In our sample, we observed that most patients had used continuously the medication for more than one year, patients had acquired nearly 60 tablets per consultation and most of them reported that the physician had not oriented them about the time of use of the medication. These data reinforce the risk of benzodiazepine dependence in the researched patients, although the previous picture that had originated the prescription must be analyzed.

The difficulty to distinguish abstinence symptoms from the reappearance of anxiety symptoms can be responsible for the lack of success in the attempt of interrupting the medication.[6] In our study we observed that most of the patients was not successful in withdrawing the use of benzodiazepines. Besides, few of them had medical counseling to reduce the medication dose up to the complete stop. In face of these observations, we could infer that these patients were dependent on the medication, and that the interruption of the treatment could trigger the installation of undesirable abstinence syndrome symptoms or the reinstallation of the disease. Of the 43 patients who were not successful, 24 were using the medication for anxiety and therefore could have been afraid of attempting to stop it, fearing the return of the symptoms. Added to them, 7 patients who used the medication for depression and panic could have failed to stop for the same reason.

According to Tufik, the protracted use of benzodiazepines or their abuse cause severe consequences such as tolerance, which provokes the increase of the dose along time, and dependence which perpetuates its use.[20] Benzodiazepine dependence is connected not only to the presence of the drug, but also to the patient's individual characteristics, and the prescription of the drug should be avoided to those who have a history of drug addiction.[5]

Benzodiazepines are substances which are indicated for patients with certain anxiety disorders or with transient insomnia (related to acute stress). They are not recommended in chronic anxiety with symptoms that do not interfere much with the patient's routine. Besides, the pharmacological therapy is, and will always be, only part of the management of the patients and must not be used merely to replace other therapeutic conducts or as a treatment for other non-medical problems.[21] In the study performed in Curitiba, the indication of benzodiazepines was compatible with that described in the literature.[7,18,22] The indications for anxiety and insomnia were predominant.

We should mention the limitation of our study regarding the kind of sample we used – an accidental, not a probabilistic, sampling -, what could have introduced a selection bias of patients. Besides, despite the counseling given to pharmacists on how to select the sample, some different approaches could have occurred, such as contacting a client known as a benzodiazepine user. These aspects could hamper the generalization of the results discussed in this study.

Although we have highlighted in this study the role of the physician in the counseling about benzodiazepine use, we cannot forget that there are other professionals who could also help in the counseling of the patient. The active pharmacist should also inform, counsel and educate the patient, in order to help in the rational use of psychotropic medications.

Conclusions

Observing the data obtained in the studied sample in Curitiba, we noticed that the medical counseling about benzodiazepines was not the ideal, although regarding the interaction with alcohol there has been a good citing rate. Rarely, all three types of counseling considered as important for the patient's safety were simultaneously mentioned. The concern only with the interaction of benzodiazepines with alcohol was highly mentioned, being reported by 85% of the patients, while only 46% of them reported having received counseling about precautions in the attention. The low rate of medical counseling about dependence, in one hand, and the high rate of benzodiazepine use for more than one year, on the other hand, may indicate a lack of concern of physicians regarding this undesirable effect.

Our data also induce to think that the medical education about the patient's counseling should be reviewed in order to improve the quality of the counselings provided for the patients highlighting what really puts them at risk.

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Correspondence:
Roseli Boerngen de Lacerda
Rua Euzébio da Motta 515 ap. 36
80530-260 Curitiba, PR, Brazil
E-mail: boerngen@bio.ufpr.br