

PATTERN OF BENZODIAZEPINE USE IN NURSES

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ABSTRACT

Background: Nurses are more prone to benzodiazepines' use that can lead to dependence. There is lack of work on this subject in local literature. Our study aimed to know the pattern of benzodiazepines' use in nurses.

Methodology: This cross sectional descriptive study was carried out in three tertiary care teaching hospitals of Peshawar during the period from 1-08-2006 to 30-11-2006. Seven hundred nurses were recruited in the study via convenient sampling. Sociodemographic details were recorded with the help of anonymous proforma. A questionnaire was administered to know the pattern of use of benzodiazepines. The data was labeled and descriptive statistics calculated with the help of Statistical Package for Social Sciences version 16.

Results: Out of 700 nurses 97(14%) reported benzodiazepines' use, out of which (71)73% reported using by themselves (self medication). Among the users Lexotanil (bromazepam), valium(diazepam) and ativan (lorazepam) were used by 64(66%),29(30%) and 4(4%) respectively. These drugs were used for problem of sleep by 62.8% worry 20.6% depression 12.3% and others like pain, etc 4.1%. The drugs were used by 28(29%) for four weeks period continuously. When responses to the question "Can you stop this drug" were collected, 87(90%) were "Yes, 7(7%) "No" and 3(3%) were "No answer" responses.

Conclusion: Benzodiazepines are used by adequate number of nurses mostly without prescription. Bromazepam by trade name "Lexotanil" was the most commonly used benzodiazepine. More than half of them used these drugs for sleep problem. Although approximately one fourth used them for longer period of four months yet nine out of each ten were unable to stop, showing sign of dependence.

KEY WORDS: Benzodiazepine, Nurses, Abuse.

INTRODUCTION

Literature shows that substance abuse in nursing population is more or less the same as in general population. Although less reporting of this issue of abuse of substances in this special group of society is dangerous, yet consequences of not reporting concerns about the issue seem worse than it. The abuse of substances in nurses poses multiple risks in terms of danger to their health, harms to the patients under their care and earning bad name both for the facility of their work and nursing profession.¹

On one hand nurses work in stressful environment because of multiple factors like shortage of nurses, repeated exposure to death and dying, interpersonal and interprofessional difficulties which make them vulnerable to the abuse of illicit drugs.^{2,3} On the other hand, nurses have easier access to controlled drugs as compared to general population.⁴

Benzodiazepines are commonly used psychotropic drugs. Literature shows that 8-10% of

general population is taking benzodiazepines each year.⁵ These drugs are used for multiple purposes mainly in anxiety, depression and insomnia. However, their long use easily ends up in their abuse and dependence resulting in cognitive and occupational decline.^{6,7}

As literature shows that the use of benzodiazepines in nurses is almost equal to that in general population. but a problem more serious than it is that nurses have been found mostly not seeing benzodiazepines as a problem drug. So once a prescription is initiated, there is great possibility of using these drugs for longer periods.^{1,8}

Research in the developed countries has addressed this issue and raised the concerns about the seriousness of the issue to some extent to improve their health care. In our country, although patterns of drug abuse in general, has been studied to appreciable extent,⁹⁻¹¹ yet the use and abuse of drugs in special groups like nurses seems unaddressed.

The objective of this study was to know the patterns of use of benzodiazepines in the nurses

working in government teaching hospitals of Peshawar city, the capital of Khyber Pakhtunkhwa.

MATERIAL AND METHODS

It was a cross sectional descriptive study conducted during the three months period from 1-08-2006 to 30-11-2006 at three tertiary care teaching hospitals i.e. Lady Reading, Hayat Shaheed and Hayatabad Medical Complex, Peshawar.

The sample size consisted of 700 subjects. Selection was made via convenient way of sampling. The included nurses were those who had worked at least for one year in any of the three hospitals falling in the age range of 15-45 years.

First of all, informed consent was obtained from the nurses who met inclusion and exclusion criteria for participation in the study. The socio-demographic details were recorded with the help of anonymous proforma. After filling the proformas, we administered a questionnaire which was designed to measure the use of benzodiazepines and to know the patterns of use in the nurses population of the teaching hospitals. The questionnaire consisted of 5 questions divided into two categories. Three questions were of the nature where four options were given while two questions had to be answered in yes or no. These instruments were administered during class sessions of student nurses, whereas, staff nurses were approached individually during their shifts of duties.

The data thus collected was labeled and descriptive statistics were calculated with the help of Statistical Package for Social Sciences (SPSS) version 16.

RESULTS

Out of 700 female nurses, 603 (86%) denied the use of benzodiazepines while 97 (14%) admitted that they had used these drugs.

When the 97 users were asked to tell if they had taken these drugs by themselves, 71 (73%) replied in yes.

Table 1: The frequencies of use of different types of benzodiazepines. (n=97)

S. No.	Type of benzodiazepine	Frequency	Percentage
1.	Lexotanil (Bromazepam)	64	66
2.	Valium (Diazepam)	29	30
3.	Ativan (Lorazepam)	04	04

Table 2: Different problems for which benzodiazepines were used. (n=97)

S. No.	Type of problem	Frequency	Percentage
1.	Sleep	61	62.8
2.	Worry	20	20.6
3.	Depression	12	12.3
4.	Other	4	4.1

Table 4: Response to a question "Can you stop this drug?". (n=97)

Response	Frequency	Percentage (%)
Yes	7	7
No	87	90
No answer	3	3

Table 3: Numbers of weeks for which benzodiazepines were used. (n=97)

Number of weeks	Frequency	Percentage (%)
One week	28	29
Two weeks	3	3
Three weeks	2	2
Four weeks	23	24
Off & on	39	40
No answer	3	3

The following tables show results of the patterns of use of these drugs in these users.

DISCUSSION

Benzodiazepines are notorious universally and particularly in our country for their dependence and high frequency of use for deliberate self harm. Moreover, the literature shows that young females are the frequent victims because of different social and psychological factors.^{6,7,12-14} Keeping in view this scenario, the reported evidence that nurses have easy access to these drugs and do not perceive them problematic, highlights the importance of this study.

Results of our study showed that 14% of the nurses had used benzodiazepines. Moreover, 73% of these nurses have used these drugs by them-

selves i.e. self medication. Although local as well as literature from the neighboring countries has not shown similar studies, yet the world wide literature gives the prevalence of benzodiazepines use as 8-10% in general population and almost the same in nursing population.⁵ So our figure is higher than the generally reported figure. The probable reasons for the high percentage using these benzodiazepines by themselves in our nursing community may be those generally assumed e.g. easy availability over the counter of these drugs and improper implementation of drugs regulatory act in our country.

According to the findings of the Table 1, among the benzodiazepines bromazepam (lexotanil) was used by 66%, diazepam(valium) by 33% and lorazepam (ativan) by 4% of nurses who used benzodiazepines. This chronology, although, seems meaningful yet difficult to explain perhaps because of the fact that we did not find relevant local evidence focusing on this issue. However, these findings point towards specific directions for investigations in future.

Findings of Table 3 showed that more than half of the nurses used benzodiazepines for induction of sleep and approximately one third for relief of worry. While round about one fourth of them used these drugs for depression and few used it for nonspecific problems like pain. As it is an established fact that sleep problem is the most common symptom of anxiety and depression and both anxiety and depression are very common in serious psychiatric morbidity.

Table 3 indicates that out of 97 nurses 24% had used benzodiazepines continuously for the period of 4 months or more and Table 4 gives a very high figure i.e. 97 % of the total 97 users who replied in "NO" to the question "Can you stop this drug?" means that although less number of nurses had reached to the optimum period of use yet maximum nurses had started showing signs of dependence on these drugs. This phenomenon is likely alarming because of the fact that nurses are involved in the care of seriously ill patients. Abuse of these drugs can put these nurses at danger to themselves as well as patients in their hands.

CONCLUSION

Nurses in our hospitals are using benzodiazepines largely by themselves as self medication. The commonly used ones are those which are widely available by the trade names of Lexotanil and Valium. Sleep disturbance is the most reported problem that motivates benzodiazepine use while worry is the next. Most of these nurses show sign of dependence.

Further research is needed to clarify the situation. Moreover, public health action is required to address this issue by educating these nurses and tightening drug regulation.

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