



PRESCRIBING PATTERN OF DRUGS IN GENERALIZED ANXIETY DISORDER: A PROSPECTIVE STUDY

Swathi V. S*., Srinivasa Rao Y and Saritha M

Vignan Institute of Pharmaceutical Technology, Visakhapatnam

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ABSTRACT

Background: Now a days major causes of morbidity are psychiatric disorders. In India there is very limited data available related to prescribing pattern of drugs in psychiatric disorders. Prescription monitoring studies provide information related to rational prescribing and evidence based medicine. In our study we focus on prescribing patterns in GAD which is one of the most common reason for patients who visited psychiatric outpatient department of tertiary care hospital to get treatment.

Objective: To check whether prescribing pattern of drugs in GAD is in accordance with WHO drug use prescribing indicators.

Methods: It is prospective observational study conducted over a period of three months in psychiatric outpatient department. Data was collected using patient data collection form, analysed using SAS.9.2 and graphs were drawn using Ms Excel.

Results: Among 60 patients, 25 were diagnosed with GAD. Among 25, 14 members are females and 11 members are males. Most of the patients (n=12) are from age group of 41-65 years. Selective serotonin reuptake inhibitors and Benzodiazepines are used to treat this problem. Out of five WHO drug use prescribing indicators only two showed deviation from standard values.

Conclusion: Prescribing pattern in GAD is in mostly in accordance with WHO guidelines. Drugs should be prescribed by generic name and from national essential medicine list to improve rational use.

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INTRODUCTION

Nowadays major causes of morbidity are psychiatric disorders. Prescribing pattern monitoring is a good field which compares practical prescribing pattern of drugs in particular disease with standard treatment guidelines¹. In India there is very limited data available related to prescribing pattern in these disorders². Prescription monitoring studies provide information related to rational prescribing and evidence based medicine³. Among all psychiatric disorders anxiety is a common chronic condition which causes reduced work productivity^{4,5}. It is a mental illness characterised by worried or feel nervous about simple things even there is little or no reason to worry about them. Signs and symptoms of GAD include worrying about daily activities, difficulty in overcoming worries, restlessness, muscle ache, unexplained pains, irritability, sweating and increased urgency of urination. Main stay of treatment includes psychotherapy and pharmacotherapy with use of selective serotonin reuptake inhibitors, selective serotonin norepinephrine reuptake inhibitors and benzodiazepines⁶. In our study we focus on

prescribing patterns in GAD which is one of the most common reason for patients who visited psychiatric outpatient department of tertiary care hospital to get treatment.

MATERIAL AND METHODS

Study type: Prospective observational study

Study duration: Three months

Study site: Outpatient psychiatric department of tertiary care hospital

Study population: 60

Inclusion criteria: Out patients who visits psychiatry department

Exclusion criteria: In patients and paediatrics

Source for data collection: Outpatient medical records

Patient data include: Patient OP number, age, symptoms, Impression, co morbid conditions, drugs prescribed along with dose and frequency

Data analysis: Data analysed by using SAS 9.2 software
Institutional ethical committee approval was taken before commencement of study

RESULTS AND DISCUSSION

In a study conducted by Murali Madhavdas S where he stated that anxiety disorders are more prevalent in India⁷. In our study we found that 50% of patients among 60 patients have

*Corresponding author: Swathi V. S

Vignan Institute of Pharmaceutical Technology,
Visakhapatnam

GAD. Another study conducted by Patrick Martin, where he mentioned that GAD is common in females than males and mostly affected persons are in age group 25-44 years⁸.

Table 1 WHO drug use prescribing indicators standard values

S. No	Indicator	Standard values
1	Average number of drugs per prescription	1.6-1.8
2	Percentage of medicines prescribed by Generic name	100%
3	Percentage of encounters with antibiotics prescribed	20.8-26.8%
4	Percentage of encounters with injectables prescribed	13.4-24.1%
5	Percentage of medicines prescribed from NEML-2015	100%

Here also mostly females are affected than males and persons of age group 41-60 years are mostly suffering from this problem. We found, 76% of patients were prescribed with selective serotonin reuptake inhibitors (Escitalopram) and 68% of patients were prescribed with benzodiazepines (Etizolam) to treat this condition which is in accordance with American psychiatric association guidelines where they mentioned, SSRI are first line stay of treating GAD⁹ and Greenblatt *et al* mentioned that benzodiazepines showed rapid onset¹⁰.

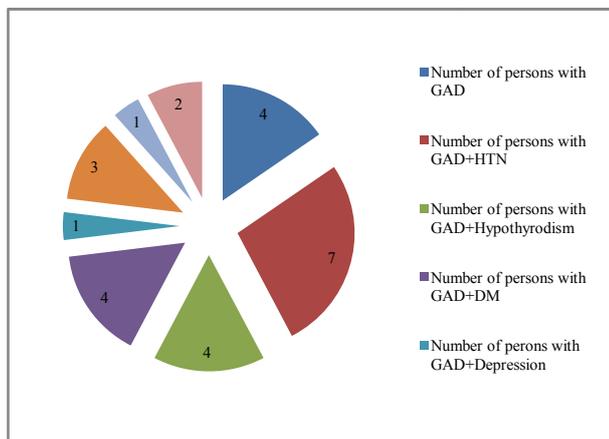


Figure 1 Number of patients with GAD and other co morbidities

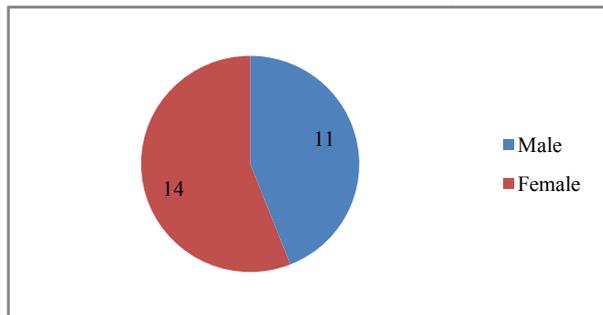


Figure 2 Sex wise distribution of patients

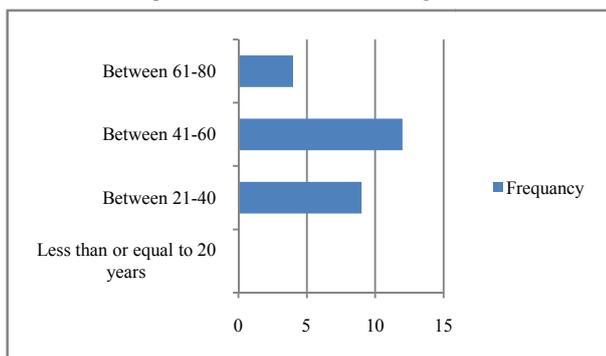


Figure 3 Age wise distribution of patients

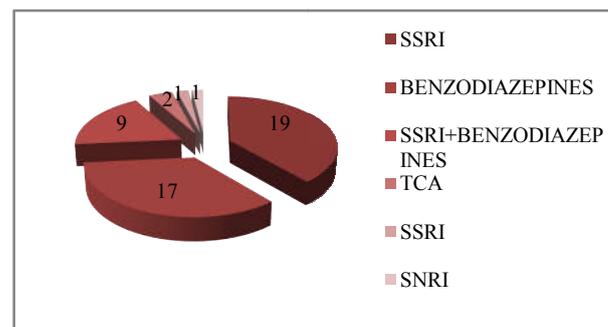


Figure 4 Type of drugs prescribed to patients

Table 2 Results of our study using WHO drug use prescribing indicators

S. No	Indicator	Value
1	Average number of drugs per prescription	1.52
2	Percentage of medicines prescribed by Generic name	0%
3	Percentage of encounters with antibiotics prescribed	0%
4	Percentage of encounters with injectables prescribed	0%
5	Percentage of medicines prescribed from NEML-2015	55.55%

According to WHO drug use prescribing indicators, average number of drugs per encounter should be in the range of 1.6-1.8, percentage of encounters with an antibiotics prescribed should be in the range of 20.8 to 24%, percentage of encounters with an injection prescribed should be in the range of 13.4 to 24.1, percentage of drugs prescribed by generic name should be 100% and percentage of drugs prescribed from the essential drug list or formulary should be 100%¹¹. In our study, average number of drugs per encounter is 1.52 which is nearer to standard value. As it is psychiatric outpatient department, percentage of encounters with an antibiotics prescribed is 0% and percentage of encounters with an injection prescribed is 0%. Percentage of drugs prescribed by generic name is 0% which shows deviation from standard values. Percentage of drugs prescribed from the essential drug list or formulary is 55.55% which shows deviation from standard values.

CONCLUSION

By this study we can conclude that prescribing pattern of drugs in treating GAD is mostly in accordance with standard treatment guidelines except in two situations.

Recommendations

Drugs should be prescribed by generic name and drugs should be selected from national essential medicine lists or hospital formulary to improve rational drug use

Limitations of study

Study period and study population should be increased

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