

**AWARENESS, ATTITUDE AND SIGNAL DETECTION ON
ANTIDEPRESSANT AND ANXIOLYTIC DRUGS****Shama Anjum^{1*}, Deepthi C.², Saathvika T.³, Zeenath K. F.⁴ and Muhammed Irfan N.⁵**

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ABSTRACT

Background: Depression and Anxiety have become trending disorder among the people irrespective of age and gender. Research aim is to create awareness among the patients about importance of medication adherence to prevent A/E, treatment and adverse event [A/E] in relation to Anti-Depression and Anxiolytic drugs. Further concentrating on improving their knowledge on adverse event monitoring and overlapping of ADR and disease symptoms to improve their quality of life and treatment outcome. **Objective:** Primary objective is to evaluate A/E related to Antidepressant and Anxiolytic drugs. Secondary to check the attitude and create awareness on the treatment and the adverse event. **Methodology:** An active surveillance was conducted with the sum 50 Depression and Anxiety patients in particular site and collected the data through response on set of questionnaires and spread the awareness about the adverse event and medication adherence among public by distributing the leaflets which

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was provided in both English and Kannada for better understanding along with oral counselling regarding the same. **Key Findings and Conclusion:** Among 50 patients, 28 were female and 22 were male. Based on age, Category B [31-50] are more prone to Depression and Anxiety and most patients were aware of the S/E. 22 patients appeared with Adverse effect. It was observed that the patients on long term medication had no Adverse effect stating the possibility of resistant to it. Dose of the drug was reduced to the patients who appeared with A/E during the period of treatment. Mirtazapine was given to reduce gastric problem.

KEYWORDS: Pharmacovigilance, Anti-depressants, Anxiolytics, Adverse drug reactions.

INTRODUCTION

Depression and **Anxiety** are the mental disorders, these disorder which always have been a centre of attention of researchers in India. In last 50-60 years lots of researches have been made published from India focusing various features of this prevalence disorder. Depression was second prime root lived with disability in 2010 in Canada, US and worldwide. It is third highest worldwide cargo of disease while considering the depression associated deaths caused by suicide and stroke. Depression appeared with 75% rise in disability altered life in 1990 and 2010 in Canada, and the second substantial prevalence after Alzheimer disease.^[1] Gender difference is self-reporting of depression symptoms shows that mild and moderate is often reported by females, but in case of males it has been seen that only severe depression and society tendencies are reported.^[7] Meanwhile the females: male ratio of worldwide disability among the depression persist uninterrupted at 1:7:1 despite of the fact of dissimilarities in the social economical factor as well as abuse, education and income, crash the high rate of depression in women. Young women at the stage of puberty are at the higher risk to prone for depression and the mental disorder widely. Prior to puberty the depression rate in boys is greater than girls. At old age above 65 years, both men and women showed decrease in the rate of depression.^[1] Depression and Social Anxiety is strongly associated with functional impairment, feelings of social isolation, and suicidal ideas compare to participants without other social anxiety, those with social anxiety are significantly more likely to report that financial barriers uncertainly over where to go for help and fear of what others might think or say prevented them from seeking treatment.^[12] Until recently for Depression, TCA's and MAOIs were used but it has significant adverse effect and toxicity. Hence newer drugs like SSRIs, SNRIs are more suitable than the older one because of wide therapeutic use, decrease ADR and toxicity. For the past many years Diazepam is currently most widely prescribed BZD but Alprazolam is currently most commonly used drug because of its lower incidence of sedation. Alprazolam often reduces panic attack at the daily dose of 1.5 to 10mg.^[13]

ADR are the known root of morbidity and increased hospitalization health care caused complications and decreased adherence inpatients with depression. Majority of the patients suffering from major depression disorder [MDD] have poor adherence to antidepressants. Poor adherence to antidepressant medication plays a crucial role in many cases including

acute relapse, non-response and also increase mortality and morbidity.^[18]

METHODOLOGY

Study was conducted in Mysore institute of mental health [M.I.M.H.], Mysore for the period of 2 months. The materials used were Medication chart, suitably design data collection form which is designed for offline and documentation is done. It consists of details such as patient demographics [Age, Gender, current medication, past medication if any] and questionnaires [related to adverse event, medication and compliance]. All the patients who are receiving Anti-depressants and Anxiolytic drugs at the institute. Antipsychotic drugs other than Antidepressants and Anxiolytic drugs and Paediatrics patients are excluded from the study. This is a cross-sectional descriptive study, where the questionnaires are asked related to ADR/side effects, medication awareness, attitude and compliance to the patients. Treatment charts are reviewed. The record of all the necessary data along with patient demographic details are recorded in a suitable designed data collection form and spread knowledge of A/E by distributing leaflet. Computerization of data collection form: For easy storage, accessibility and analysis of collected data, Microsoft excel was created.

RESULTS

1. Demographic details of study

1. BASED ON GENDER

A total of 50 Depression and Anxiety patients responded to the questionnaires at M.I.M.H. Clinic, Mysore in October 2022. Among them 22 patients were male and 28 patients were female. Therefore, women are more prone to Depression and Anxiety.

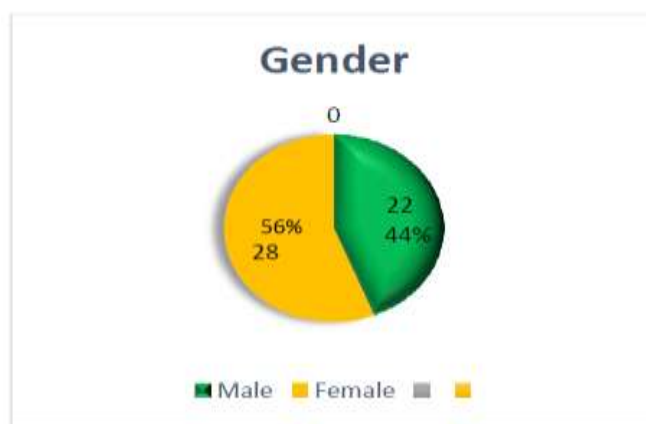


Figure 1.

Table 1.

Gender	Total number	Percentage
Male	22	44%
Female	28	56%

2. BASED ON AGE: Majority of patients belonged to Category 2.^[31-50]

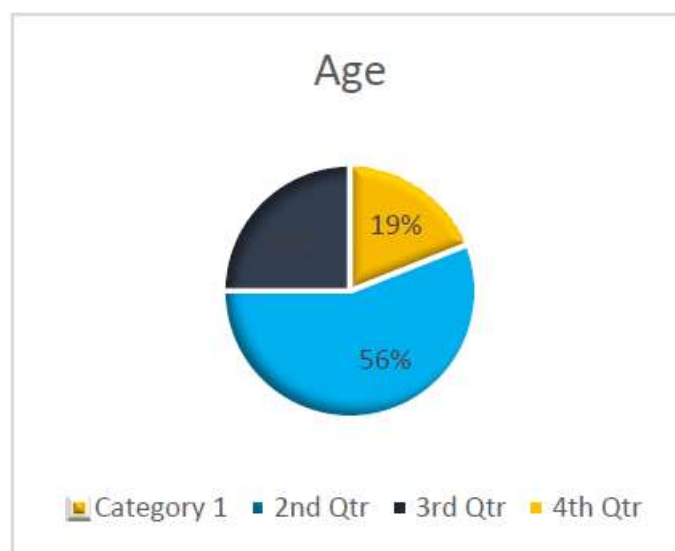


Figure: 2.

Table 2.

Category 1	Category 2	Category 3
12 - 30	31 - 50	51 - 85

2. **Adverse event:** Among 50 patients, 21 patients were suffering from adverse effect.

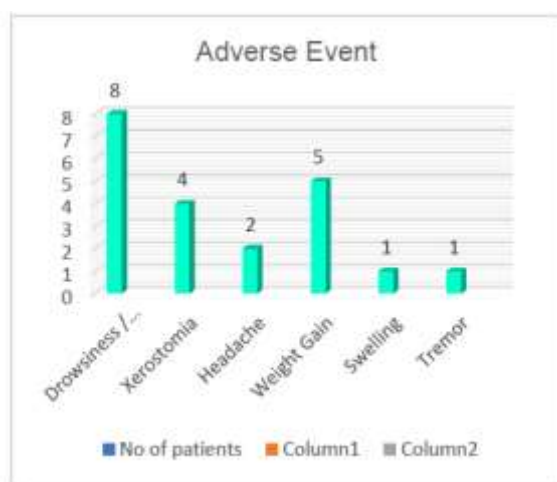


Figure: 3.

Table 3.

ADVERSE EVENT	NO
Drowsiness/ Depression	8
Xerostomia [Dry mouth]	4
Headache	2
Weight gain	5
Swelling	1
Tremor	1
Lethargy	1

Drowsiness/Dizziness: 4-7% [E], 6-14% [P] Xerostomia: 4-9% [E], 9-18% [P], 9-22% [F]

Weight gain: 1% [E]

Headache: 17% [P]

Tremor: 3-13% [F].^[19]

MEASURES TAKEN: Medication was not changed instead dose of the drug was reduced as the adverse events are tolerable and Mirtazapine was given to reduce weight gain.

B. Side effect: Among 50 patients taking Anti-depressant and Anxiolytic drugs, Gastric problem is high compared to other side effects.

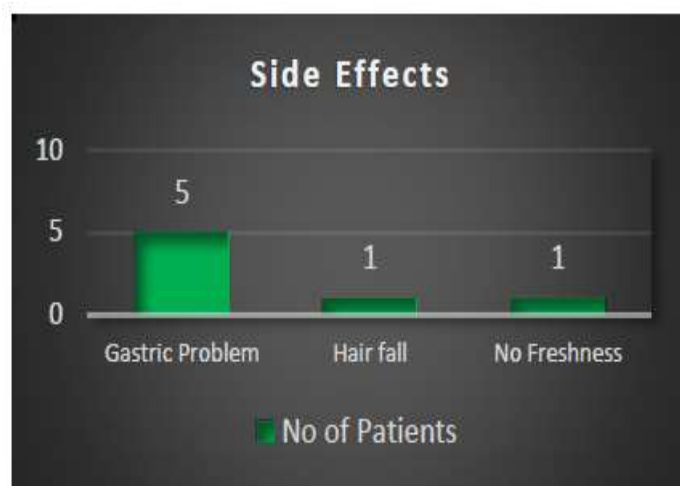


Figure: 4.

MEASURE TAKEN: Domperidone and Rabeprazole was given to reduce gastric problem.

C. Patient awareness on Adverse effect

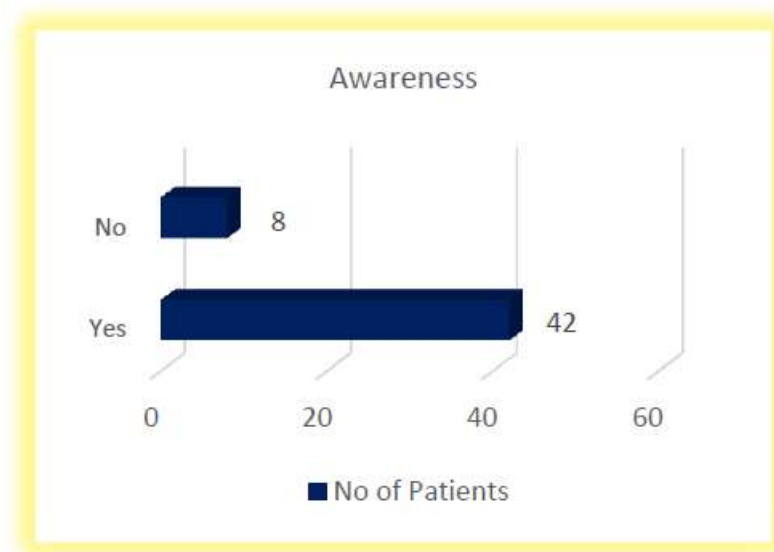


Figure: 5.

1. Unenlightened on awareness is due to:

Language barrier
Literacy rate
Age factor

2. More yes is because of:

Doctor educated the patients about the Adverse effect, Side effect and patients effect and patients understood

D. The Knowledge given through leaflet was helpful

Yes, the knowledge given through leaflet was useful as the leaflet was provided in both English and Kannada language for better understanding along with oral counselling regarding same.

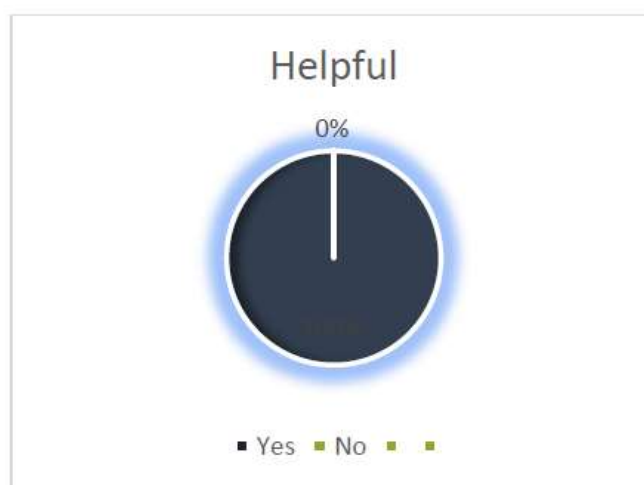
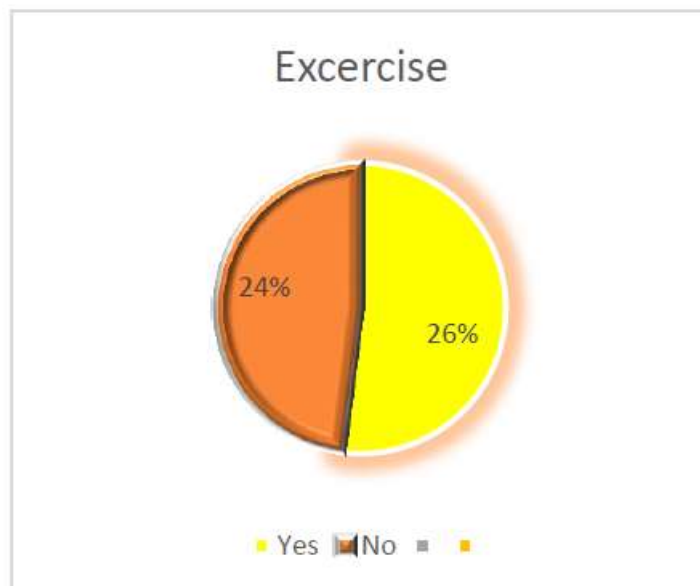


Figure. 6.

E. Attitude and Life style

- 1) Too busy working
- 2) Age factor (old people)

**Figure: 7.****Table 4:**

	Knowledge given through leaflet		Attitude and Life style	
	Helpful		Exercise	
	Yes	No	Yes	No
Total number	50	0	26	24
Percentage %	100 %	0%	52%	48%

DISCUSSION

The data suggests that the female is more prone to Depression and Anxiety than male and majority of patients are from age group of.^[31-50] In early stage of the treatment the patients appear with adverse events like drowsiness, dry mouth, weight gain. The dose of the suspected drug is reduced as the action to prevent adverse event but the medication was not changed as the adverse effect was tolerable. Side effect like GI had been seen, to treat gastric problem a combination of Domperidone and Rabeprazole was given and for weight gain Mirtazapine was given. It was observed that the patients were not completely adherent to medication, this discontinuation was found to be due to low income, Adverse effect or Side effect of the drugs and misbelief on long term medication would create more health

problems. If the medication has reissued after discontinuation, the adverse effect reappeared for initial days. Patients on long term administration showed no adverse effect due to resistance. The reason for introducing back the same drug which has shown the Adverse effect or Side effect was majorly due to its past effectiveness to improve the condition even with minor unintended effects, but still further observation and long term follow up on such patients is necessary, which could not be achieved due to time constraint. According to the survey most of patients were aware of adverse events of Anti-depressant and Anxiolytic drugs and almost all who were aware of the Adverse effect have consulted the doctor. The small portion of patients who were not aware was because of the language barrier or forgetfulness or lack of understanding about the disease. These 84 % of patients who lacked awareness were the main target of the study and was achieved with the help of the leaflets and oral counselling in the language they are comfortable in and further questionnaire confirmed its helpfulness. 26% had positive attitude on Adverse effect and Side effect as most of them were aware about it and the follow up with the concerned physician was made when necessary. This percentage indicates that majority of the patients still need further care and assistance on improving their attitude towards medication adherence, Adverse effect, Side effect and what action should be taken in such situations.

CONCLUSION

This is to conclude the study by summarising the research in proportion to the research objectives and the questionnaires. The objective of the study was to investigate who is at high risk to go under depression and anxiety and whether the patients are aware of adverse event and if yes, how many patients were aware of it in the sum of 50 and to check their attitude and response for Adverse effect. The study also involves to spread awareness on Adverse effect appearing from Anti-Depressant and Anxiolytic drugs and teaching Adverse effect and Symptoms of disease overlapping. Advising the patients to take medicines on time and regular exercise for good quality of life. Through this study we found that the patients receiving Anti-depressant and Anxiolytic drugs appeared with adverse effect for initial days. The patients with long term administration showed no Adverse effect as their body got resist to it and most of the patients were aware of the Adverse effect cause by these drugs on long term. 26% patients responded with positive attitude on Adverse effect and Side effect.

The major concern and need for the study were to differentiate between signs and symptoms of the disease and the Adverse effect and Side effect, which still needs further research and

deeper knowledge on the topic and long-term patient follow ups, thus creating scope and importance for continues study with other classes of psychiatric drugs. The further scope in the study is to carry out for longer duration, including both inpatients and outpatients to know which adverse event occurs the most among the patients, preventive measures, how much time the body takes to get resistant to these drugs and also work on increasing the knowledge among the patients on Adverse drug reaction and medication adherence for betterment of public health.

LIMITATION

- Due to time constraint could not include more patients in the study.
- The study was limited to outpatients only, and did not include inpatients.
- Few didn't give concerned to collect the data.

FUTURE DIRECTION

- The researcher can carry out the study for long time including both inpatients and outpatients.
- To know which adverse event occurs the most among the patients.
- To research on how much time the body takes to get resistant to these drugs.
- And can also work on increasing the knowledge among the patients on ADR and medication adherence for betterment of public health.
- Can include more areas and hospitals.
- Improve general public knowledge on the disease for early diagnosis and prevent diseases.
- Methods to improve medication adherence in elderly and paediatric population Study on other psychiatric drugs A/E and S/E.

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AUTHOR CONTRIBUTION

All authors contributed for accomplishment of the study; Shama Anjum, Deepthi undertook data collection and analysis of data. Zeenath and Irfan joined them. Dr. Saathvika read and approved it.

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CONFLICTS OF INTEREST

There is no conflict of interest in the study.

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