

Praveen. Comparing the prescription pattern in the treatment of acute insomnia.

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ORIGINAL ARTICLE

Comparing the Prescription Pattern in the Treatment of Acute Insomnia among Urban and Rural Physicians as per the NICE Guidelines

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ABSTRACT

Background: Insomnia is one of the most disabling disorders afflicting the society, with a staggering emotional and economical impact. Most of the patients consult physicians rather than consulting the psychiatrist at the first point of contact and hence, we have planned to take up this study to know as to how many physicians treat acute insomnia as per the guidelines.

Objectives: To study and compare the prescription pattern among the urban and rural physicians in treating acute insomnia as per the National Institute for health and Clinical Excellence (NICE) guidelines.

Methods: 75 physicians in the rural and 65 physicians in the urban areas were given a questionnaire and were given enough time to fill it. Later on, all the questionnaires were collected and analyzed.

Results: Physicians in rural areas: 65 physicians prescribed the short acting benzodiazepine group, 9 physicians prescribed the z-class of drugs and 01 physician prescribed antihistaminics. Physicians in urban areas: 45 physicians prescribed the Z-class of drugs and 20 physicians prescribed the short acting benzodiazepine group for the treatment of acute insomnia.

Conclusion: The NICE guidelines state that for the treatment of acute insomnia, the drug of choice is the Z-class of drugs. In our study, most of the physicians practising in the urban areas adhered to the guidelines in treating acute insomnia more than the physicians practising in rural areas. Hence, the physicians practicing in the rural areas needed to have awareness campaigns and medical educational programs regarding the treatment of acute insomnia.

Key Messages:

Z class of drugs: Zolpidem, Zopiclone and Zaleplon

Key Words: Acute insomnia, benzodiazepine.

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Introduction

Despite essential drug programs being implemented in countries, there are some evidences in poor prescribing habits by the

physicians, including the irrational use of drugs, high numbers of drugs per prescription and high use of injectable formulations and antibiotics. Inappropriate prescribing has been identified in many health facilities in developing countries. Misuse of antibiotics, overuse of injections, and under-use of life-extending drugs for illnesses such as HIV/AIDS, heart disease and other chronic illnesses together constitute a global epidemic of the irrational use of medicines [1]. According to the figures gathered by a survey in

a study, 60% of antibiotics in Nigeria were prescribed unnecessarily [2]. The irrational use of drugs due to inappropriate prescription can also lead to adverse drug events which cause illness or death. Surveys have also shown that doctors prescribe drugs when they are not indicated. This descriptive cross-sectional study examined the prescription pattern among the urban and rural physicians in the treatment of acute insomnia as per the NICE guidelines [3].

NICE provides national guidance on the promotion of good health and the prevention and treatment of ill health in collaboration with the National Health Service (NHS) [3]. Zolpidem, Zopiclone and Zaleplon are a new group of drugs called Non-benzodiazepine hypnotics in the treatment of acute insomnia; they are also called as the Z-class of drugs. They share common features like shorter duration of action, less residual effects, limited negative influences on daytime performance and better preserved psychomotor tasks and memory capacities [4].

Materials and Methods

This is a descriptive study conducted among physicians practising in the rural and urban areas of Kolar. A set of questions were prepared and were given to the physicians. Almost 150 questionnaires were distributed. All the questions were multiple choice questions.

Results

The questionnaires were collected back from the physicians and were studied [Table/Fig 1].

(Table/Fig 1) Appendix

Doctor Initial: _____ Address: _____
Qualification: _____

Kindly fill the questionnaire and hand it over.

1. How do the patients with insomnia presents with
 - A. Difficulty falling asleep
 - B. Waking up often during the night and having trouble going back to sleep
 - C. Waking up too early in the morning
 - D. All the above
2. Acute insomnia is defined as
 - A. Sleepless nights spent for less than 3 weeks
 - B. Sleepless nights spent for 3 weeks -3 months
 - C. Sleepless nights spent for more than 3 months
3. What is most common cause that the patients complains of
 - A. Stress
 - B. Any disease ailments
 - C. Personal cause
 - D. Any others _____
4. How many patients diagnosed to be insomnia in a week
 - A. Less than 2 cases
 - B. 2-5 cases
 - C. 5-8 cases
 - D. More than 8 cases
5. Which gender is more suffering from insomnia
 - A. Male
 - B. Female
6. What is the initial plan of treatment
 - A. Therapeutic life style modification
 - B. Drug as a initial plan
 - C. Therapeutic life style changes along with drug
7. Which is the most commonly used drug in your practice to treat acute insomnia
 - A. Benzodiazepine group
 - B. Non-Banzodiazepine group-Z class drugs
 - C. Barbiturates
 - D. Antihistaminis
 - E. Any others
8. Which is the most preferred drug s in the treatment of acute insomnia
 - A Benzodiazepine group
 - B.Non-Banzodiazepine group-Z class drugs
 - C.Barbiturates
 - D.Antihistaminis
 - E.Any others
9. What do you mean by NICE
 - A. National institute of clinical excellence
 - B. National institute of health and clinical excellence
 - C. National institute of critical expert group.
- 10.How well are to connected in attending the CME'S/ Campaings
 - A. Very well
 - B. Well
 - C. Poor
- 11.If you were given a chance of attending the CME's/ Campings to attend
 - A. Attend
 - B. Think about attending
 - C. Will not attend

Physicians in rural areas: totally 75 questionnaires were collected back out of which only 9 physicians prescribed the z-class of drugs, while 65 of them prescribed the short acting benzodiazepine. The disheartening fact was that 1 physician used antihistamines for treating acute insomnia.

Physician in Urban Areas:

We could get back only 65 questionnaires from the physicians, out of which almost 45 of them prescribes Z-class drugs and 21 of them used a short acting benzodiazepine group for the treatment of acute insomnia.

Discussion

Sleep disorders are one of the major health problems in the developed and also in the developing countries [5]. Increase in the severity of insomnia is associated with increased chronic medical and psychiatric illnesses due to increase in the corporate culture and also due to people's inability to achieve their desired goals/targets. [6].

The first visit that most of the patients make, are to the physicians rather than to the psychiatrist. Hence, physicians should be aware of the current drugs available and also the recent information/ guidelines for treating such conditions.

NICE guidelines prefer the Z-class of drugs like zolpidem, zopiclone and zaleplon for the treatment of acute insomnia. The advantages of Z-class of drugs over insomnia are

- No tolerance
- No dependence
- No rebound insomnia
- No next day sedation

Conclusion

From the present study, it can be concluded that most of the physicians practising in rural areas are irrational prescribers as compared to physicians in urban areas. Hence, Continuing Medical Education programs, workshops/campaigns and small conferences should be arranged to update the disease modalities and treatment so that proper

utilization of the resources is made for better outcome.

Findings from this study will also sensitize the increased awareness and also many educational programs on rational drug use and guidelines.

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References

- [1] Sarkar PK. A rational drug policy. *Indian J Med Ethics* 2004;1:11-2.
- [2] Chukwuani CM, Onifade M and Sumonu K. Survey of drug use practices and antibiotic prescribing pattern at a general hospital in Nigeria. *J Pharmacy world and science* 2002;24: 188-95.
- [3] Guidance on the use of zaleplon, zolpidem and zopiclone for the short-term management of insomnia. *Technology Appraisal 77.National Institute for Clinical Excellence;2007:1-27.*
- [4] Terzano M G, Rossi M; Palomba V; Smerieri A; Parrino L. New Drugs for Insomnia: Comparative Tolerability of Zopiclone, Zolpidem and Zaleplon. *J Drug Safety.* 2003;26;Issue 4, 261-82.
- [5] Udwardia ZF, Doshi AV, Lonkar SG and Singh CL. Prevalence of Sleep-disordered Breathing and Sleep Apnea in Middle-aged Urban Indian Men. *American Journal of Respiratory and Critical Care Medicine.*2004;169:168-73.
- [6] Sarsour K, Morin CM, Foley K, Kalsekar A, Walsh JK. Association of insomnia severity and comorbid medical and psychiatric disorders in a health plan-based sample: Insomnia severity and comorbidities. *J Sleep medicine.* 2010: 11(1);69-74.