



ASSESSMENT OF KNOWLEDGE, ATTITUDE AND PRACTICE OF RATIONAL USE OF DRUGS AMONG POSTGRADUATE STUDENTS AT A TERTIARY CARE TEACHING HOSPITAL IN HYDERABAD – A CROSS SECTIONAL STUDY.

Pharma

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ABSTRACT

Irrational use of medication is a major global health challenge with significant implications on patient's health status and whole health care community. Rational use of drugs requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community. **Methods:** cross sectional pre-validated questionnaire based study was carried out at Osmania medical college and hospital, Hyderabad over 3 months among 350 postgraduate students. **Results:** 67.2% students know about the possible consequences of irrational prescribing of drugs, only 30% students know about steps to improve rational drug prescribing, 60.6% students noticed emergence of antimicrobial resistance during their professional practice, 65.63% students felt that lack of diagnostic facilities was the main reason for irrational prescribing. **Conclusion:** awareness and concern regarding problem is high but due to the lack of diagnostic facilities and patient demand it is not transforming into rational one. Participants have a positive attitude and are willing to prescribe drugs in rational manner.

KEYWORDS

rational use ,antimicrobial resistance, Irrational use of medication.

INTRODUCTION

Rational use of drugs requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements, for an adequate period of time, and at the lowest cost to them and their community[1]. Irrational use of medication is a major global health challenge with significant implications on patient's health status and whole health care community[8].

Lack of information about new drugs, faulty & inadequate training & education of medical graduates, poor communication between health professional & patient, lack of diagnostic facilities, patient demand were the reasons for irrational prescribing of drugs[2]. Irrational prescribing refers to prescribing that fails to comply to good standards of treatment[3]. Irrational prescribing of drugs lead to poor quality of medical care, emergence of antimicrobial resistance, excess expenditure, psychosocial impact on patients[4]. Inappropriate prescribing occurs when a medicine is given for a wrong diagnosis or adjustments not made to incorporate the patient's co-existing medical, genetic or environmental conditions[5].

In order to prevent serious health risks and socioeconomic burden to patient WHO has given guidelines to good prescribing[6]. overprescribing refers to instances where a medicine that is not indicated is prescribed or if indicated, the duration of treatment is too long[7].

METHODOLOGY

Study Tool : Prevalidated questionnaire on knowledge, attitude and practice of rational use of drugs.

Study Design: cross-sectional study using a prevalidated questionnaire to assess knowledge, attitude and practice of rational use of drugs among postgraduate students.

Study Site : Osmania medical college & hospital, Hyderabad.

Study Duration : 3 months (February 2023 to April 2023)

Sample Size: sampling size of 350 postgraduate students (both male and female).

Selection Method: study population was drawn from postgraduate students of Osmania medical college and were given a questionnaire having 15 questions related to rational use of drugs. They were asked to give their responses and questionnaires were collected after they

have successfully answered the questions.

Inclusion And Exclusion Criteria :

Postgraduate students who gave consent to participate in the study were included and postgraduate students who were not willing to participate in the study were excluded.

Statistical Analysis :

data from the returned questionnaires is tabulated and percentages are calculated.

RESULTS :

Out of 350 postgraduate students, 320 students satisfactorily completed the questionnaire and were included for evaluation. From table 1, in the questions about knowledge, 67.2% responded that they know about the possible consequences of irrational prescribing of drugs, But only 30% students know about the steps to improve rational drug prescribing. In the questions regarding attitude, majority shown that they have positive attitude towards rational use of drugs. 79.4% students agreed that irrational prescribing of drugs has psychosocial impact on patients. In the questions about practice, 60.6% students responded that they noticed emergence of antimicrobial resistance during their professional practice.

From pie chart 65.63% participants responded that lack of diagnostic facilities was the main reason for irrational prescribing of drugs. 18.75% participants responded that patient demand was the reason for irrational prescribing. 9.38% participants responded that faulty & inadequate training and education of medical graduates was the reason for irrational prescribing. 6.25% participants responded that lack of updated information about new drugs was the reason for irrational prescribing.

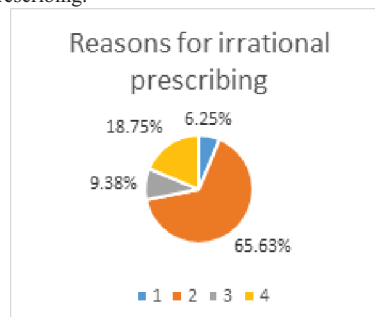


Table – 1 Questionnaire :

S.NO	KNOWLEDGE QUESTIONS	YES%	NO%
1.	Do you know about irrational prescribing of drugs?	96.8	3.2
2.	Do you know the reasons for irrational prescribing of drugs?	87.5	12.5
3.	Do you know about types of irrational prescribing?	76.5	23.5
4.	Do u know about the possible consequences of irrational prescribing of drugs?	67.2	32.8
5.	Do u know about factors promoting rational use of drugs?	63.7	36.3
6.	Do u know the criteria for rational prescribing of drugs?	54.6	45.4
7.	Do u know the steps to improve rational drug prescribing?	30	70
	ATTITUDE QUESTIONS	agree %	Disagree %
8.	Irrational prescribing of drugs can cause increased incidence of ADR's?	95.6	4.4
9.	Do u think inclusion of problembased pharmacotherapy training in undergraduate curriculum promotes rational use of drugs?	92.18	7.82
10.	Irrational prescribing can cause emergence of antimicrobial resistance and increase cost burden?	95	5
11.	Do you think irrational prescribing of drugs has psychosocial impact on patients?	79.4	20.6
	PRACTICE QUESTIONS	YES%	NO%
12.	Have u ever found irrational prescribing of drugs during your professional practice?	54.6	45.4
13.	Have u documented any ADR due to irrational prescribing of drugs?	51.2	48.8
14.	Have u attended any CME's/workshops/seminars on rational use of drugs?	52.8	47.2
15.	Have u noticed emergence of anti microbial resistance during your professional practice?	60.6	39.4

DISCUSSION:

This present study shows that most of the participants have good knowledge about rational use of drugs. 87.5% participants know the reasons for irrational prescribing. 67.2% participants know the possible consequences of irrational prescribing. 95.6% participants agreed that irrational prescribing of drugs can cause Adverse drug reactions. 79.4% participants believes that irrational prescribing of drugs has psychosocial impact on patients. 52.8% participants attended CMEs/workshops/seminars on rational use of drugs. 60.6% participants noticed emergence of antimicrobial resistance during their professional practice. 65.63% participants responded that lack of diagnostic facilities was the main reason for irrational prescribing. Faulty & inadequate training and education of medical graduates and patient demand were the other reasons for irrational prescribing of drugs. majority of the participants have positive attitude towards rational use of drugs.

Only 30% participants know about the steps to improve rational prescribing of drugs. 51.2% participants responded that they documented Adverse drug reactions due to irrational prescribing. This study provides information to policy makers for further planning and identifying intervention strategies.

CONCLUSION:

Irrational use of medication is a major global health challenge with significant implications on patient's health status and whole healthcare community. Our study concludes that concern regarding the problem is high but due to lack of diagnostic facilities it is not transforming into rational one. Participants have a positive attitude towards the problem and are willing to practice in rational manner. our study provides information to policy makers for further planning and identifying

intervention strategies.

Author Contributions

Dr. Chintakindi Srikanth has planned, designed the concept of the manuscript, drafted the manuscript and collected the reference articles, Dr. N. Karuna sree & Dr.T.Chakradhar reviewed the manuscript and supported in drafting the manuscript, Dr. Ande Sriman has supported in designing the concept of manuscript and helped in collecting the reference articles.

Conflict Of Interest

None declared

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