Review Article

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Review on Drug Utilization Pattern in Outpatient General Department

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ABSTRACT

Drug utilization reviews DUR also referred to be as drug utilization evaluation DUE. It is defined as authorized, structured. Ongoing review of healthcare provider prescribing pharmacist dispensing and patient use of medication. Drug utilization reviews involve a detailed review of patient's prescription and medication data before, during dispensing and after dispensing to ensure appropriate medication decisions making and positive patient outcomes. World health organization (WHO) defines drug utilization review as authorized research for the marketing, distribution, prescription and use of drug in a society, with a special emphasis on the resulting medical, social, and economic sequences. Inherent in the definition, such studies provide logical background for determining the rationality of drug use as well as providing the evidence based guidance for making the policies and making decisions at various levels of health care. This review studies are Aimed to discuss in detail on drug utilization pattern in outpatient general department.

Key words:
Drug utilization evaluation, Outpatient, General department, defined daily dose, Prospective DUR, Retrospective DUR, Concurrent DUR, Prescribed daily dose.

INTRODUCTION

Drug utilization review is defined as authorized, structured, ongoing review of healthcare provider prescribing, pharmacist dispensing and patient medication. Rational drug use is an important factor to be checked for the optimal benefit of drug therapy in patients' health care system. In India, many factors like illiteracy poverty, use of multiple health care systems, drug advertising and promotion, sale of prescriptions, prescribing pattern, competition in medical and pharmaceutical market place and limited availability this provides the drug information are the main chief reasons for not achieving the optimal health care. Inappropriate use of drugs also further leads to random increase in the cost of the medical care, antimicrobial resistance, adverse effects and utilization evaluation DUE studies becomes one of the potential tools in evaluation of health system. Drug utilization studies focuses on factors related to prescribing, dispensing, administering and taking of medication and associated events.

Drug therapy accounts for a major portion of health expenditures. A useful strategy for achieving cost efficient health care is drug utilization research as it forms the basis for making amendments in drug dispensing policies at local and national levels. The ultimate goal of such research is to facilitate rational drug use. Also, since it helps in developing strategies to utilize health resources in the most efficient manner, it is particularly needed in developing economies of India, where 72% of all health care burdens are borne by the patients.

Drug utilization research holds a crucial place in the clinical practices as it forms that the basis for making amendments in the drug dispensing policies at local and national levels. The reference standard for drug utilization is WHO ATC/DDD (Anatomical Therapeutic Chemical/Defined daily dose) methodology. For each drug and route of administration, defined daily dose (DDD) is defined by the WHO Collaborating Centre for Drug Statistics and Methodology as the assumed average maintenance adult dose per day for its main indication.

Drug utilization research holds a crucial place in the clinical practices as it forms that the basis for making amendments in the drug dispensing policies at local and national levels. The ultimate goal of such research is to facilitate rational drug use. Also, since it helps in developing strategies to utilize health resources in the most efficient manner, it is particularly needed in developing economies of India, where 72% of all health care burdens are borne by the patients. The DDD therefore is an international unit serving for international or regional comparisons. However, DDD does not necessarily reflect the recommended or prescribed daily dose (PDD). In fact, several studies have reported discrepancies between DDD and PDD for different groups of drugs. A number of studies have reported drug usage patterns in different health care sectors in India. The aim of the present study was to generate the data on drug utilization in outpatients of general department.

CLASSIFICATION OF DRUG UTILIZATION EVALUATION:

DUR is typically classified into three different categories.

1. PROSPECTIVE DUR

Prospective review evaluation a patient's planned drug therapy before a medication described. This drug utilization review helps the pharmacist to Access the prescription medications and resolve drug related problems.
RETROSPECTIVE DUR
It is a review of drug therapy so that the patient has received the medication. A retrospective review aims to detect the pattern in prescribing, dispensing or advertising drugs and it helps to prevent recurrence of inappropriate medication use. The advantage of this drug utilization review is to ease of data collection, as records are assessed at the data collectors’ convenience. A disadvantage is that some information may be unclear or missing and N phase.

INDICATORS USED
The indicators of prescribing practices measure the performance of the health care providers in several key Dimensions related to the appropriate use of drugs WHO prescribing indicators used in our study:

a. Average number of drug prescribed per patients.
\[
\text{Total number of drug prescribed} \times 100
\]
b. Total number of encounter sample Percentage of encounters with an antibiotic prescribed
\[
\frac{\text{Number of patient encounter with an antibiotic}}{\text{Total no of encounter sample}} \times 100
\]
c. Percentage of encounters with an injection prescribed
\[
\frac{\text{Number of patient encounters with an injection prescribed}}{\text{Total number of encounter sample}} \times 100
\]
d. Percentage of drugs prescribed from essential drug list
\[
\frac{\text{Number of drugs prescribed from essential drug list}}{\text{Total no of prescribed drugs}} \times 100
\]

CONCLUSION
This study provides the information about the drug utilization patterns in the general outpatient department. It has helped to identify irrational prescribing patterns in the general department. Hence, the clinical pharmacist must be considered to be an integral part. They should be involved in collection and presentation of prescribing data as a part of clinical audit and also counselling of patients care takers. Pharmaceutical care is needed in the correct management of drugs which is even more important in case of patients above 80 years when compared to other groups. The world health organization WHO core indicators helped to improve the prescribing pattern, identify significant problems involved in the knowledge gap of patients or caretakers understanding of instructions provided by consultants and even to minimize the cost burden on patient.

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