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مركز الشبكات وتكنولوجيا المعلومات قسم التوثيق الإلكتروني







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PHARMACOECONOMIC STUDY OF DRUG UTILIZATION AND COST OF TREATMENT IN PATIENTS HOSPITALIZED WITH CHEST DISEASES (UPPER AND LOWER RESPIRATORY TRACT INFECTION)

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List of Abbreviations

ANOVA	Analysis of Variance
CMA	Cost-Minimization Analysis
CEA	Cost-Effectiveness Analysis
СВА	Cost-Benefit Analysis
CUA	Cost-Utility Analysis
COI	Cost of Illness
CER	Cost Effectiveness Ratio
COPD	Chronic Obstructive Pulmonary Disease
CFC	Chlorofluorocarbon
FEV1	Forced Expiratory Volume in one second
FVC	Forced Vital Capacity
HRQOL	Health-Related Quality of Life
LSD	Least Significant Difference
ug	Micro Gram
MDI	Meter Dose Inhalers
MIR	Medical International Research
PEFR	Peak Expiratory Flow Rate
QALY	Quality Adjusted Life Year
SBN2	Single Breath Nitrogen Washout
SD	Standard Deviation

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ABSTRACT

The rapid growth of healthcare expenditures has led to an increased interest in the economic evaluation of health care interventions and programs especially pharmaceuticals.

Pharmacoeconomics, as well as outcomes research, have become part of the background and expertise of many health care professionals, including pharmacists.

The recent definition is assessing the implications of projected outcomes and costs of Pharmaceutical products for the decision whether to continue or stop development of a drug and for global pricing strategy.

Pharmacoeconomic is a tool of management which should be applied to strategic and operational decisions about pharmaceutical development, production or consumption.

The costs are broadly classified as direct, indirect and intangible costs.

Direct costs are further classified into medical and non-medical costs.

The Economic Evaluation is classified into four types

1. Cost-minimization Analysis (CMA)

It is used to define the most economical treatment among different alternatives with equal efficacy/effectiveness.

The ideal situation for a CMA is the comparison of a brand and equivalent generic drug.

2. Cost-effectiveness Analysis (CEA)

It compares treatment alternatives with different effectiveness and safety profiles.

While costs are calculated in monetary value, outcomes are valued in clinical terms (e.g., drop in blood pressure, number of cases cured).

3. Cost-benefit Analysis (CBA)

Both costs and benefits of a treatment are measured in monetary values. CBA are not that common in Pharmacoeconomics. Although considered the best economic analysis, its application in general is limited, duo to the difficulties in assigning a monetary value to health outcomes and a patient's life.

4. Cost-utility Analysis (CUA)

In CUA, benefits are calculated using parameters that take into account the quality of life of the patient.

Cost is measured in monetary value and outcomes in clinical terms incorporating patient preferences (e.g., quality of life measures).

Pharmacoeconomics and respiratory disease:

Chronic obstructive pulmonary disease (COPD) and asthma are the two major airway diseases most amenable to pharmacoeconomic evaluation.

Where asthma prevalence and mortality has continued to increase in the 1990s despite dramatic advance in the diagnosis and treatment of the disease.

Health providers and managers view respiratory disease as a *ripe area for* pharmacoeconomic evaluation for several reasons as the high cost of the disease, for so many years, ambulatory pharmaceutical therapy has been viewed as a cost-effective alternative to hospitalization and finally, improper administration of therapeutic agents, missed doses, and poor timing of doses, result in worse health- related and economic outcomes.