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Review Article

Drug utilization research: a review

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ABSTRACT

Data from drug utilization research is an invaluable resource for all stake holders involved in drug and health policies. Drug utilization is "marketing, distribution, prescription and use of drugs in a society, with special emphasis on the resulting medical, social and economic consequences". Research on drug utilization includes factors related to prescribing, dispensing, administering and intake of medication and its associated events. The ultimate purpose of drug utilization research is to estimate the optimal quality of drug therapy by identifying. documenting, analysing problems in drug utilization and monitoring the consequences. It encourages the prescribers to prescribe correct drug at appropriate dose and affordable price. It contributes to the knowledge of rational use of drugs in the society; whether the drug is being prescribed appropriately, whether the drug is taken in correct dosage, whether the drug is available at affordable price or misused. It provides valuable feedback about the rationality of the prescription to the doctors. It also assesses whether an intervention affects the drug use in the population by examining the outcomes of different types of intervention given to improve rationality in drug use. Drug utilization research can be qualitative or quantitative and can be done by various methods. This review highlights the understanding of various aspects, different designs and WHO guidelines for conducting drug utilization research.

Keywords: ATC classification, Aspects of drug utilization research, Drug utilization research, Defined daily dose, Drug use indicators, Drug and therapeutic committee

INTRODUCTION

Drug utilization research as defined by WHO (World Health Organization) is "marketing, distribution, prescription and use of drugs in a society, with special emphasis on the resulting medical, social and economic consequences". Rational use of drug requires that patient receive medication appropriate to their clinical needs, in dose that meet their own individual requirements for the adequate period and the lowest cost to them and their community. Poor management and irrational use of drugs leads to increased morbidity and mortality, wastage of resources, prolonged suffering, death and loss of confidence in the health care system. There are many factors underlying irrational use of drugs. Major factors

can be patients, prescribers, workplace and supply system. Therefore, it is important to recognize negative consequences of inappropriate drug use to promote rational use of drug. The development of drug utilization as research area made it possible to study drug use in a scientific manner. Studies on drug utilization have become a potential tool to be used in the evaluation of healthcare system. The main objectives of drug utilization research are to identify drug use related problems and analyze their consequences. Drug utilization research encourages rational prescribing of drug, contributes to the knowledge of current use of drugs in the society and explore whether a particular intervention affects the drug use in the population by observing the drug use pattern.

Social And Economic Aspects Of Drug Utilization Research

Siddappa N.Byrareddy

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Social and Economic Aspects of Drug Utilization Research: an Overview of the State of Knowledge, an Analysis of Outcome of Fe Bernard Edward Conley,1976 Drug Utilization Research Monique Elseviers, Björn Wettermark, Anna Birna Almarsdóttir, Morten Andersen, Ria Benko, Marion Bennie, Irene Eriksson, Brian Godman, Janet Krska, Elisabetta Poluzzi, Katja Taxis, Vera Vlahovic-Palcevski, Robert Vander Stichele, 2016-04-01 Drug Utilization Research DUR is an eclectic scientific discipline integrating descriptive and analytical methods for the quantification understanding and evaluation of the processes of prescribing dispensing and consumption of medicines and for the testing of interventions to enhance the quality of these processes The discipline is closely related and linked mainly to the broader field of pharmacoepidemiology but also to health outcomes research pharmacovigilance and health economics Drug Utilization Research is a unique practical guide to the assessment and evaluation of prescribing practices and to interventions to improve the use of medicines in populations Edited by an international expert team from the International Society for Pharmacoepidemiology ISPE DUR is the only title to cover both the methodology and applications of drug utilization research and covers areas such as health policy specific populations therapeutics and adherence Encyclopedia of Pharmacy Practice and Clinical Pharmacy, 2019-06-28 Encyclopedia of Pharmacy Practice and Clinical Pharmacy Three Volume Set covers definitions concepts methods theories and applications of clinical pharmacy and pharmacy practice It highlights why and how this field has a significant impact on healthcare The work brings baseline knowledge along with the latest most cutting edge research In addition new treatments algorithms standard treatment guidelines and pharmacotherapies regarding diseases and disorders are also covered The book s main focus lies on the pharmacy practice side covering pharmacy practice research pharmacovigilance pharmacoeconomics social and administrative pharmacy public health pharmacy pharmaceutical systems research the future of pharmacy and new interventional models of pharmaceutical care By providing concise expositions on a broad range of topics this book is an excellent resource for those seeking information beyond their specific areas of expertise This outstanding reference is essential for anyone involved in the study of pharmacy practice Provides a one stop resource for access to information written by world leading scholars in the field Meticulously organized with articles split into three clear sections it is the ideal resource for students researchers and professionals to find relevant information Contains concise and accessible chapters that are ideal as an authoritative introduction for non specialists and readers from the undergraduate level upwards Includes multimedia options such as hyperlinked references and further readings cross references and videos

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Regulierungsbeh rden Datenguellen Anwendungen und Methodiken werden verst ndlich erl utert Social and Economic Aspects of Drug Utilization Research ,1976 Social and Economic Aspects of Drug Utilization Research Bernard Edward Conley, 1976 Research reports and references to published literature under 10 major categories e.g. Drug education research Pharmacy practice research and Pharmaceutical manpower research Each category contains overview descriptions of specific projects and listing with annotations of selected references Author and project director index Pharmacoepidemiology Brian L. Strom, Stephen E. Kimmel, Sean Hennessy, 2021-09-22 Pharmacoepidemiology originally arose from the union of the fields of clinical pharmacology and epidemiology Pharmacoepidemiology studies the use of and the effects of medical products in large numbers of people and applies the methods of epidemiology to the content area of clinical pharmacology This field represents the science underlying studies of the effects of medical products such as drugs biologicals and devices in real world use Strom's Textbook of Pharmacoepidemiology meets the increasing need for people to be trained in the field Designed to meet the need of students this textbook offers an approach that focuses on the core of the discipline providing a focused educational resource for students The book is designed for students at all levels upper level undergraduates graduate students post doctoral fellows and others who are learning the field Case examples feature in most chapters and all chapters include key points and a list of further reading Fully revised and updated throughout Textbook of Pharmacoepidemiology 3rd edition is a useful introduction and resource for students of pharmacoepidemiology both those enrolled in formal classes and those learning in the real world who will respond to the challenges that they encounter

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Clinical Pharmacy Education, Practice and Research Dixon Thomas,2018-11-23 Clinical Pharmacy Education Practice and Research offers readers a solid foundation in clinical pharmacy and related sciences through contributions by 83 leading experts in the field from 25 countries This book stresses educational approaches that empower pharmacists with patient care and research competencies The learning objectives and writing style of the book focus on clarifying the concepts comprehensively for a pharmacist from regular patient counseling to pharmacogenomics practice It covers all interesting topics a pharmacist should know This book serves as a basis to standardize and coordinate learning to practice explaining basics and using self learning strategies through online resources or other advanced texts With an educational approach it guides pharmacy students and pharmacists to learn quickly and apply Clinical Pharmacy Education Practice and Research provides an essential foundation for pharmacy students and pharmacists globally Covers the core information needed for pharmacy practice courses Includes multiple case studies and practical situations with 70% focused on practical clinical pharmacology knowledge Designed for educational settings but also useful as a refresher for advanced students and researchers

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Kurowski,2013-11-21 Non steroidal anti inflammatory drugs NSAIDs are among the mostfrequently prescribed drugs in the

Western world During the past decade a large number of new compounds were marketed some of which had to be withdrawn after a short while because of adverse drug reactions These experiences led to an under standing that a complete picture of the safety of these drugs can only be obtained after their introduction into the marketplace Differentmethods ofpost marketing surveillance PMS serve as important tools for monitoring the frequency of adverse reactions and for generating and corroborating hypotheses Experience with PMS has thusfar been quite limited in Germany In 1987 a non profit organization Verein zur Langzeituntersuchung von Arzneimittel wirkungen auf dem Gebiet der Rheumatologie e V VLAR was founded by interested physicians and pharmacologists to raise funds and perform investigations on the safety of NSAIDs The first project by the VLAR SPALA Safety Profile of Antirheumatics in Long Term Administration was sponsored by F Hoffmann La Roche AG Basel Switzerland In July 1990 when the project was successfully terminated almost 30 000 patients had been completely docu mented and their medical records entered into a computer for subsequent review by a select panel of experts with experience in monitoring adverse reactions to NSAIDs The comments criticisms and ideas of these experts were brought togetherat a symposium organized by the VLAR at the Klinikum Steglitz Berlin Germany on 12 October 1990

Textbook of Clinical Epidemiology Chongjian Wang, Fen Liu, 2023-12-16 This book is a comprehensive and practical introduction of clinical epidemiology for students and practitioners It covers both the basic principles and concepts of clinical epidemiology as well as its applications in various medical disciplines It covers how to design conduct and interpret clinical studies using methods such as bias analysis confounding control causality assessment diagnosis evaluation prognosis prediction treatment comparison and meta analysis in this book It also introduces how to apply these skills to real world scenarios through case studies and examples that provide a fresh perspective on familiar topics This book is a useful textbook for graduate and undergraduate students in medical schools including MBBS Bachelor of Medicine and Bachelor of Surgery Handbook of Epidemiology Wolfgang Ahrens, Iris Pigeot, 2007-07-26 This 3 volume reference covers the entire student field of epidemiology from statistical methods and study design to specialized areas such as molecular epidemiology and applications in clinical medicine and health services research This updated edition of the Handbook of Epidemiology adds 22 new chapters on History of Epidemiological Methods and Concepts Cluster Randomized Trials Internet Based Epidemiology Misclassification Sensitivity Analysis and Bias Analysis Emergency and Disaster Health Surveillance Statistical Inference Data Management in Epidemiology Visual Display of Quantitative Information Bayesian Methods in Epidemiology Generalized Estimating Equations Directed Acyclic Graphs Life Course Epidemiology Molecular Epidemiology Physical Activity Radiation Epidemiology Epidemiology of Obesity Epidemiology of Respiratory Allergies and Asthma Epidemiology of Dental Diseases Epidemiology of Digestive Diseases Psychiatric Disorders Epidemiology of Diabetes All other chapters are extensively revised from the 1st edition This is a reference for epidemiological researchers and graduate students in public health A Longitudinal Study of Access and Drug Utilization in a Cohort with HIV Disease Scott Robert

Smith,1996 Catalog of Copyright Entries. Third Series Library of Congress. Copyright Office,1978 Journal of the American Pharmaceutical Association American Pharmaceutical Association,1975 Appendix; the technical papers of the first report of the National Commission on Marihuana and Drug Abuse United States. Commission on Marihuana and Drug Abuse,1972 Drugs Great Britain: Parliament: House of Commons: Home Affairs Committee,2012-12-10 Additional written evidence is contained in Volume 3 available on the Committee website at www parliament uk homeaffairscom Marihuana: First report United States. Commission on Marihuana and Drug Abuse,1972 Marihuana, Signal of Misunderstanding United States. Marihuana and Drug Abuse,1972 Marihuana: a Signal of Misunderstanding United States. Commission on Marihuana and Drug Abuse,1972

Social And Economic Aspects Of Drug Utilization Research Book Review: Unveiling the Magic of Language

In an electronic digital era where connections and knowledge reign supreme, the enchanting power of language has become more apparent than ever. Its capability to stir emotions, provoke thought, and instigate transformation is actually remarkable. This extraordinary book, aptly titled "Social And Economic Aspects Of Drug Utilization Research," written by a very acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound effect on our existence. Throughout this critique, we shall delve into the book is central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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