



Gazelle Book Services Limited,
Unit 1/4, White Cross Mills,
Hightown, Lancaster LA1 4XS

t: (01524) 528500

e: sales@gazellebookservices.co.uk

www.gazellebookservices.co.uk

MEDICINE

BIOMEDICAL DEVICES AND THEIR APPLICATIONS

Mechanical Ventilators for Non-Invasive Ventilation

Principles of Technology and Science



Antonio M. Esquinas MD, PhD
Editor

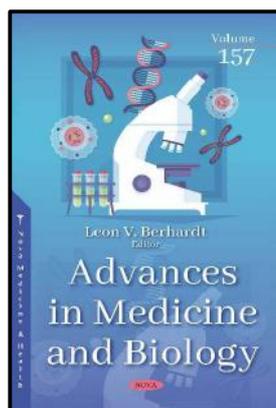
NOVA

TITLES PUBLISHED BY NOVA SCIENCE

- Advances In Medicine & Biology
- Audiology & Hearing Research Advances
- Biomedical Devices & Their Applications
- Dentistry & Oral Sciences
- Genetics - Research & Issues
- Health & Human Development
- Immunology & Immune System Disorders
- Mental Illnesses & Treatments
- Neuroscience Research Progress
- New Developments in Medical Research
- Nutrition & Diet Research Progress
- Paediatrics, Child & Adolescent Health
- Pharmacology - Research, Safety Testing & Regulation
- Public Health in the 21st Century
- Virology Research Progress

Contents

Advances in Medicine & Biology	2
Audiology & Hearing Research Advances	3
Biomedical Devices & their Applications	3
Dentistry & Oral Sciences	4
Genetics - Research & Issues	5
Health & Human Development	5
Immunology & Immune System Disorders	6
Mental Illnesses & Treatments	7
Neuroscience Research Progress	8
New Developments in Medical Research	8
Nutrition & Diet Research Progress	10
Paediatrics, Child & Adolescent Health	10
Pharmacology - Research, Safety Testing & Regulation	11
Public Health in the 21st Century	12
Virology Research Progress	14



Advances in Medicine and Biology

Edited by Leon V. Berhardt

Advances in Medicine and Biology. Volume 157 opens with a study wherein the authors use guinea pig airway smooth muscle to demonstrate that testosterone blocks L type voltage dependent Ca^{2+} channels. Furthermore, in vivo experiments with sensitized guinea pigs show that bronchospasm induced by antigenic challenge was abolished by testosterone and its 5α and 5β -dihydrotestosterone metabolites.

Following this, the authors evaluate the structural features of skeletal muscles in children and adults with various pathologies of the musculoskeletal system based on ultrasonography, considering periods of natural growth and involutive changes.

An overview of the current state of research on fluoxetine for the treatment of anxiety alone or combined with depression is provided, along with its possible side effects.

Also provided is scientific information regarding the neurobiological bases of depression and therapeutic effects of fluoxetine during the different periods of menopause. This information could be useful in pharmacological strategies for the treatment of depression occurring in the menopausal women.

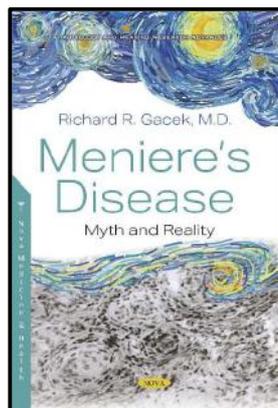
One chapter focuses on how improved direct access to the liver protected inside the rib cage can be obtained in laparoscopic liver resection using its specific “Caudal approach”, decreasing the risk of refractory ascites and liver failure, especially in hepatocellular carcinoma patients with chronic liver diseases.

The nucleolus is packed with proteins involved in ribosome function and biogenesis, as well as other proteins involved in cell-cycle regulation, senescence and stress response. However, little is known about the molecular mechanism of protein turnover in the nucleolus. As such, the authors discuss the nucleolus-localized protein degradation pathway, which is essential to ribosome production and cell-cycle progression.

The concluding chapter focuses on the dye Congo red, which is used as a stain in microscopy to detect an abnormal material called amyloid. Amyloid consists of misfolded proteins that form fibrils which bind molecules of Congo red and orientate the molecules parallel to the long axis of the fibrils.

Volume 157 HB 9781536171624 £229.99 March 2020 Nova Science Publishers 258 pages
Volume 159 HB 9781536171846 £229.99 March 2020 Nova Science Publishers 266 pages

Audiology & Hearing Research Advances



Meniere's Disease Myth and Reality

Richard R. Gacek

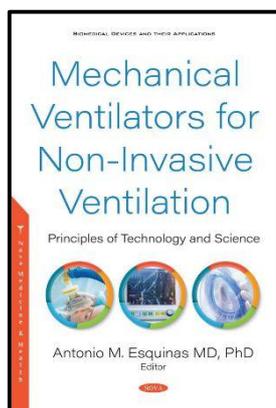
Of the most common recurrent vestibulopathies (Meniere's Disease, Vestibular Neuronitis, Benign Paroxysmal Positional Vertigo), Meniere's Disease has received the most attention because of the sensorineural hearing loss and tinnitus that is also present. Furthermore, the description of endolymphatic hydrops (EH) in the temporal of MD has provided some insight to its cause.

Unfortunately, the various medical and surgical methods used to reduce this EH have failed to relieve the symptoms of MD. EH has come to be regarded as a marker of the pathophysiology result of a viral labyrinthitis. Close examination of human TB specimens from patients with MD, VN and BPPV by light and electron-microscopy has revealed changes in the 7th and 8th cranial nerves produced by neurotropic viral organisms of the herpes family. Re-activation of these viruses in the vestibular ganglion with release of toxic nucleic acids into the peri lymphatic space produces a serous labyrinthitis responsible for the symptoms of MD. We have documentation of recovery of hearing loss in almost half of the patients with MD.

In this book the work of more than 20 years documents this evidence.

PB 9781536170153 £87.99 March 2020 Nova Science Publishers 187 pages

Biomedical Devices & their Applications



Mechanical Ventilators for Non-Invasive Ventilation Principles of Technology and Science

Edited by Antonio M. Esquinas

This book Mechanical Ventilators for Non-Invasive Ventilation: Principles of Technology and Science analyzes and describes the whole spectrum of technical elements related with non-invasive mechanical ventilators technologies, ventilator modes and complementary technologies for correct interpretation and clinical indications.

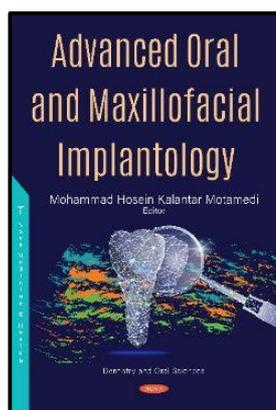
With the aim of addressing different topics, authors have presented in each chapter and section a rigorous summary of non-invasive mechanical ventilators principles and technologies, as well as clinical indications in order to understand lung function. Moreover, this book also offers a comprehensive examination of how mechanical ventilators interact, for example, in case of asynchrony (diagnosis/treatment), and other tools. The patient-mechanical ventilator interactions sections have been planned from a physiological basis, as they include physical description of the ventilator elements and the non-invasive algorithms that allow adequate patient-ventilator interaction.

We describe the correct interpretation and monitoring of positive pressure, airflow and volume waveforms, leakages impact and analysis and interface options and technology (facial mask, nasal mask and other new interface).

From a practical point of view, authors describe non-invasive mechanical ventilators device selection, indications and evaluation in different clinical conditions, acute and chronic setting from hospital (emergency/critical care/anesthesiology/pneumology) and from home non-invasive mechanical ventilation.

We consider this to be an original and exhaustive book crucial and practical for the correct understanding of mechanical ventilators principles of technology and science of non-invasive mechanical ventilation.

HB 9781536174359 £293.99 May 2020 Nova Science Publishers 623 pages



Advanced Oral and Maxillofacial Implantology

Edited by Mohammad Hosein Kalantar Motamedi

The book at hand is an international text on advanced oral and maxillofacial implantology. It is the fruition of over 40 specialists from 8 countries. The procedures presented herein are meant for expert implantologists; these procedures (including sinus floor grafting and ridge augmentation, etc.) are not for beginners or the novice; and require a great deal of skill, training and experience to perform.

Although the majority of these operations require only local anesthesia and sometimes sedation in an outpatient setting, a significant number of these procedures are major operations and need to be performed by trained OMF surgeons and may require hospitalization and treatment under general anesthesia.

Recruiting national and international world-renowned experts in implantology from 8 countries to write the chapters of this book was indeed a difficult undertaking. The authors generously present their cases and state-of-the-art techniques in an educational manner; actual cases were treated and their outcomes are presented thus allowing the surgeon to choose the technique which best addresses the dilemma at hand and yields the best result for that particular case.

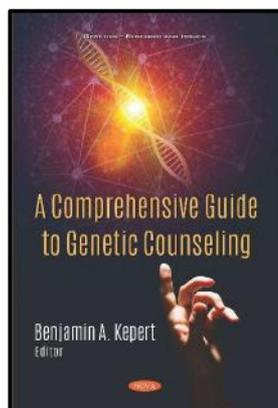
Problems commonly arise when there is insufficient bone to place implants. Operations are then needed to graft bone prior to accommodation of implants; these operations range from splitting the alveolar ridge (for horizontal ridge deficiency) to onlay grafting or sandwich techniques (to manage vertical ridge deficiency). Several solutions to solve these difficult issues are presented in this text.

In the final chapter, extraoral implants are also addressed; they provide anchorage for facial prostheses and are indeed artistic as well as scientific.

I would like to take the opportunity to thank all my national and international colleagues who helped me compile the chapters necessary for this text, especially the invaluable help and kind guidance of Prof. Peter Hunt, a genuine icon in the field of dental implantology by my standards, for his generosity in submitting four informative educational chapters to this text. Last but not least, I would like to thank my family for putting up with me all the long hours of the night while I was working and they were sleeping. I sincerely hope this book will be of use to all clinicians who practice this fascinating discipline for the benefit of those who need it.

HB 9781536169317 £211.99 March 2020 Nova Science Publishers 378 pages

Genetics - Research & Issues



A Comprehensive Guide to Genetic Counseling

Edited by Benjamin A. Kepert

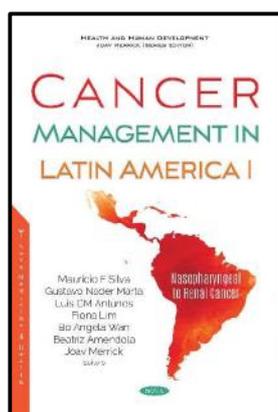
In this compilation, the authors describe the psychological consequences and effects of predictive cancer genetic testing in both breast and ovarian cancer. Predictive genetic tests are being offered to an increasing number of women as the availability and public awareness of genetic testing increases.

Next, *A Comprehensive Guide to Genetic Counseling* assesses the parental psychosocial implications, such as emotions and coping, regarding the earlier diagnosis of Usher syndrome via genetic testing compared to parents of children who were diagnosed later via ophthalmologic findings.

The closing chapter reports on a comprehensive analysis of the studies performed on genetic counseling, particularly those pertaining to the Israeli Arab society. Furthermore, an overview of the various socio-demographic, economic, cultural and religious aspects is provided.

PB 9781536169751 £87.99 March 2020 Nova Science Publishers 172 pages

Health & Human Development



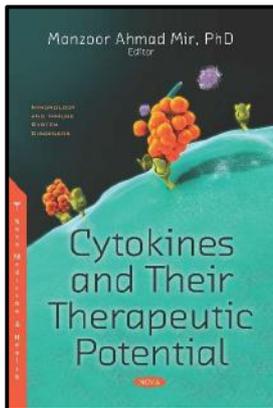
Cancer Management in Latin America I Nasopharyngeal to Renal Cancer

Joav Merrick

Latin America represents about 10% of the global population distributed in 33 countries. There is huge social and economic heterogeneity even within and beyond the same country, particularly Brazil being the largest country, where Portuguese is the official language rather than Spanish. Furthermore, several ranking systems have considered Brazil a unique country within the 10 world highest economies. In view of the diversity in Latin America with different possibilities and realities, we have found it essential to develop a textbook with focus on the Management of Cancer in Latin America, describing our daily reality, problems to overcome and our huge possibilities. In this volume, we discuss various cancers from nasopharyngeal to renal cancer. We hope that this book will serve as a valuable resource of information for health care professionals, practitioners and policy makers.

Book I - HB 9781536167337 £211.99 March 2020 Nova Science Publishers 437 pages

Book II - HB 9781536167351 £211.99 March 2020 Nova Science Publishers 327 pages



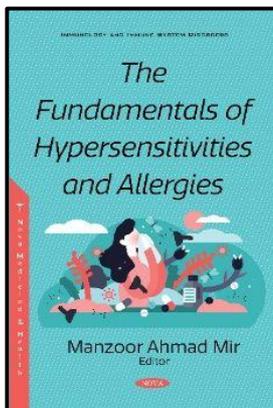
Cytokines and their Therapeutic Potential

Edited by Manzoor Ahmad Mir

The book “Cytokines and Their Therapeutic Potential” comprises of five chapters and describes the origin, production and scope of cytokines, which are the most important molecules of immune system around which the field of functional immunology revolves. This book describes how the immune system responds to injuries and insults by foreign antigens (bacteria, viruses etc.) and produces cytokines, which then, through various immune response mechanisms, protect the body against pathogenic invasions, how these glycoproteins are involved in the differentiation and maturation of immune cells, how lymph nodes are involved in concentrating the different forms of cytokines, how immunogenicity of a cytokine is affected and how a cytokine is related to the immune response. Various types of cytokines and the organization and expression of cytokine receptors are described separately. The properties, mechanistic function and therapeutic cytokines are also discussed in separate chapters.

The characteristics, production and important roles played by different cytokines in research, diagnostics and therapeutics is described separately. Lastly the role of cytokines and chemokine’s in infectious diseases and their importance in the detection of various kinds of diseases like cancer, HIV-AIDS, tuberculosis, malaria etc. are discussed in detail separately. The book contains a reasonable number of diagrams, flowcharts and tables. Besides this, various interesting and self-explanatory illustrations are incorporated to make the book useful to the students for whom it is written. The question bank, which includes long answer type, short answer type and multiple choice questions with their answers at the very end of each chapter, is developed to get a full grasp of the topic.

PB 9781536170177 £75.99 March 2020 Nova Science Publishers 168 pages



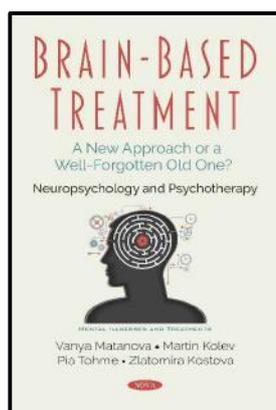
The Fundamentals of Hypersensitivities and Allergies

Edited by Manzoor Mir

The book “The Fundamentals of Hypersensitivity and Allergy” comprises of seven chapters and describes the historical perspective, causes and classification of hypersensitivities, which are important in understanding the current issues regarding conditions in which the immune system which normally serves a protective role has a harmful effect. This book describes the original concept of hypersensitivity and allergy and how sensitive individuals respond to different allergens, drugs and other agents, where the body reacts with an exaggerated immune response that ultimately results in tissue damage. The classification of hypersensitive reactions given by Gell and Coombs with the modifications made to the previous classification are described in detail. Different types of hypersensitivities, their process, the contribution of various cells and molecules to normal immune responses and to hypersensitive reactions are discussed separately.

The examples for different types of immune responses are described thoroughly to get a proper understanding of the topic. The clinical manifestations of different types of hypersensitivities and their means of prevention, evaluation and management are also depicted in separate chapters with clear insight. Lastly, the airborne allergens responsible for the allergy, different types of aeroallergens, their effects and allergies caused by them are described. The effect of climate change on aeroallergen production, various diagnostic tests for detection of aero-allergy with their prevention and control are discussed in detail separately. The book contains a reasonable number of diagrams, flowcharts and tables. Besides this, various interesting and self-explanatory illustrations are incorporated to make the book useful to the students for whom it is written. The question bank, which includes long answer type, short answer type and multiple choice questions with their answers at the very end of each chapter, is developed to get a full grasp of the topic.

HB 9781536170122 £146.99 March 2020 Nova Science Publishers 248 pages



Brain-Based Treatment A New Approach or a Well-Forgotten Old One? Neuropsychology and Psychotherapy

Vanya Matanova

What is the influence of psychotherapy over the brain functioning? Is it possible for us to determine in which type of psychotherapy the most significant changes in the brain functioning are observed? If the influence of psychotherapy over the brain is a fact, does this fundamentally change the training in psychology, psychiatry and psychotherapy and the inclusion of knowledge from the basic sciences?

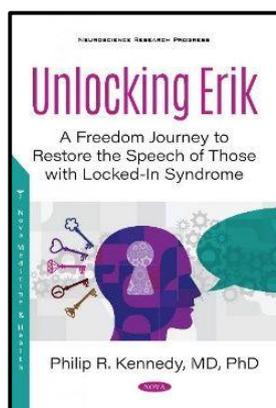
Psychotherapy can be considered as a type of training that stimulates the patient to learn how to change their behaviour, thinking and regulation of emotions. Psychotherapy is much more than an opportunity to talk to someone with good listening skills. Understanding the relationship between psychotherapy and brain functions is stimulating news and changes the traditional thinking about the place of psychotherapy and pharmacotherapy, the relations between them in the process of overcoming mental problems and diseases. Psychotherapy is assumed to be a form of learning which suggests that the uptake of information in the process of psychotherapy leads to a change in the expression of genes, thus changing the strength of synaptic connections. The gene sequence does not change under the influence of the environment, but the ability of genes to direct the synthesis of individual proteins depends on environmental factors and is regulated by their influence (Candel, 1998). This explains the phenotypic differences between monozygotic twins and discordance of diseases, such as schizophrenia.

Any mental condition is a brain state and any mental disorder is a disorder in the work of the brain. The effect of treatment of mental disorders is associated with an effect on structural and functional changes in the brain (Candel, 1998).

Neuroimaging gives an objective diagnostics of mental disorders, revealing the reasons for their occurrence and therefore allows for the development of more effective methods of treatment and psychotherapy.

PB 9781536169515 £146.99 March 2020 Nova Science Publishers 197 pages

Neuroscience Research Progress



Unlocking Erik

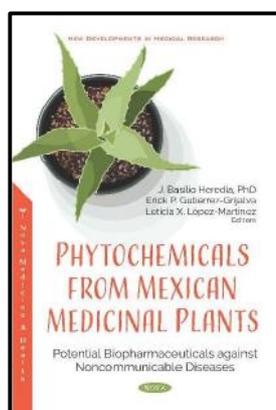
A Freedom Journey to Restore the Speech of Those with Locked-In Syndrome

Philip R. Kennedy

This book depicts the trials and tribulations when trying to restore speech to Erik who was locked-in (paralyzed and mute) at age 16. We implanted electrodes into his brain, initiating a decade of breakthrough research in speech recovery. It led to the author's own brain implant and the consequent successful offline development of the speech prosthetic whereby mute, locked-in people can speak. Part 1 is Erik's story of how he became locked-in following a brainstem stroke, and our efforts to break him out of his locked-in state by helping him speak. It describes my decision making, the tremendous contribution of his family, their anguish and the very relevant comparison with famous locked-in people, namely, Stephen Hawking and Jean-Dominique Bauby (The Diving Bell and the Butterfly). It also documents conversations between the author and Erik's Dad, Eddie. Eddie describes how he was trained in a rehabilitation hospital to take care of his son. His 16-year devotion to his son is unparalleled and heroic. Part 2 is a condensed and easy to follow version of the scientific aspects of this research. Part 2 also contains important contributions from other researchers in the field, in a question and answer format. Figures and videos on the website (www.neuralsignals.com) augment the text. Finally, there is a description of the documentary associated with this book written by the producer called 'Father of the Cyborgs'.

PB 9781536174557 £77.99 May 2020 Nova Science Publishers 243 pages

New Developments in Medical Research



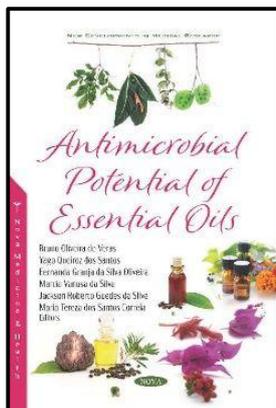
Phytochemicals from Mexican Medicinal Plants

Potential Biopharmaceuticals against Noncommunicable Diseases

Erick P. Gutiérrez-Grijalva

Noncommunicable diseases are the leading cause of death around the world, accounting for nearly 70% of all deaths. Several factors such as unhealthy lifestyles, physical inactivity, exposure to UV-light, harmful use of alcohol, among others, might cause diseases such as cancer, diabetes, obesity, and cardiovascular diseases. The current conventional pharmacological approach of treatment for these diseases is often costly, which represents an economic burden for most people, mainly from the low- and middle-income countries, who cannot always afford to buy medication. Besides, with or without medical approval and surveillance, people often turn to incorporate preparations from local medicinal plants when they are already under prescribed medication for their particular ailments. On the other hand, medicinal plants contain a rich source of phytochemicals such as alkaloids, terpenes, and polyphenols, which are potential biopharmaceutical agents against several noncommunicable diseases. Several studies have been conducted to isolate, identify and evaluate such compounds with promising results. In this book, we comprehensively review the information that shows the potential of phytochemicals from selected Mexican medicinal plants against noncommunicable diseases such as obesity, diabetes, cancer, cardiovascular diseases, and the metabolic syndrome. This work also summarizes the toxicological studies and risks of the use of medicinal plants as well as perspectives in the future use of phytochemicals as biopharmaceutical agents.

HB 9781536173970 £211.99 March 2020 Nova Science Publishers 380 pages

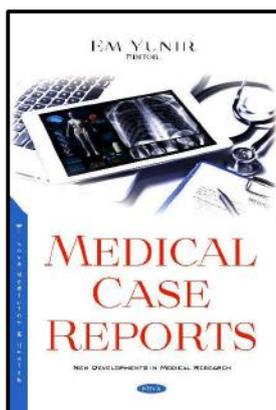


Antimicrobial Potential of Essential Oils

Edited by Bruno Oliveira de Veras

Instead of relying on prescription medications with numerous dangerous side effects, what if you could opt for a safer, natural alternative to address your health concerns? Medicinal plants for therapeutic purposes have been used for many years. The antimicrobial activity of essential oils and their major constituents has been widely documented by several works, however, in a fragmented way. Based on this premise, this book is designed to provide an overview of current knowledge about the antimicrobial properties of essential oils and their mechanisms of action, either alone or in combination, as a possible tool for obtaining new antibiotics.

PB 9781536169454 £87.99 March 2020 Nova Science Publishers 196 pages



Medical Case Reports

Edited by Em Yunir

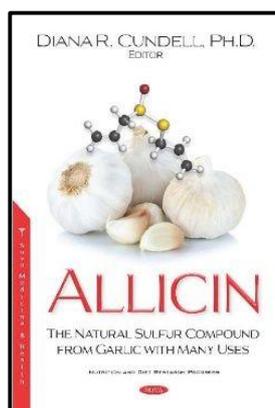
This book describes cases in medical and pediatrics field in which physicians may encounter in daily practice. Case reports in our book were conducted in a broad range of medical field (medical acupuncture, internal medicine, pediatrics, sports medicine, physical, and rehabilitation, infectious disease, dermatology, and venereology, pulmonology, psychiatry, emergency, and critical care).

We combined common and unusual but unique cases in daily practice, which readers will find very interesting. Chapters are divided by nine specific fields including medical acupuncture, internal medicine, sports medicine, physical, and rehabilitation, infectious disease, dermatology and venereology, pulmonology, psychiatry, emergency and critical care, and pediatrics. Our cases are original and might have unexpected presentations of a new and emerging disease. This book will expand knowledge in the field of medicine that is written by our best practitioners and specialists.

This valuable bundle of 61 case reports provides access to the case (history, physical examination, and diagnostic tests including laboratory, imaging, and histopathological examination), differential diagnosis, treatment, and educational messages for suggested case solutions. Approach to the cases is explained step-by-step with clear explanations of theory and practice. Essential key learning points and references are included in every case to aid the physician to understand better about the disease and to improve the patient outcomes.

HB 9781536168846 £247.99 March 2020 Nova Science Publishers 500 pages

Nutrition & Diet Research Progress



Allicin

The Natural Sulfur Compound from Garlic with Many Uses

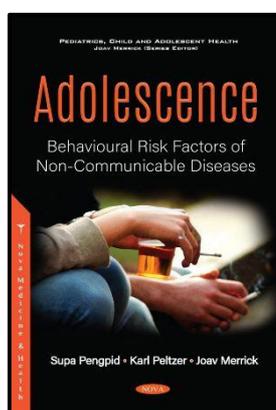
Edited by Diana R. Cundell

Allicin is the major active sulfur-containing moiety that is released when garlic cloves are crushed or damaged. Since its first recorded use in ancient times to ward off snakebites and by the physician Hippocrates to treat pneumonia and heal wounds, allicin has come a long way and its attributes now include antimicrobial and anti-insecticidal activities. Given the rapid appearance of resistant microbes and insects, allicin clearly has merit in these spheres, even more so as resistance does not appear following its usage. More recently allicin has been successfully used as a complementary treatment for chronic inflammatory diseases, which include type II diabetes, cardiovascular disease and even certain tumors.

Having a “natural” medicine, which is associated with an absence of side effects, can only be beneficial in conditions requiring long-term usage and it is clear that allicin’s potential as an individual or adjunct medicine needs to be evaluated. The gold standard for phase III human studies are double blind randomized placebo controlled trials and allicin’s success in this area is just beginning to be realized. Allicin has great potential, and maximizing its bioavailability could be enhanced using computational chemistry methodology combined with the stabilization methods already used for other phytomedicines, such as curcumin. Given the attention it deserves, it is likely that allicin will provide much needed alternative management strategies for decreasing infection and disease over the next decade.

HB 9781536173390 £211.99 March 2020 Nova Science Publishers 374 pages

Paediatrics, Child & Adolescent Health



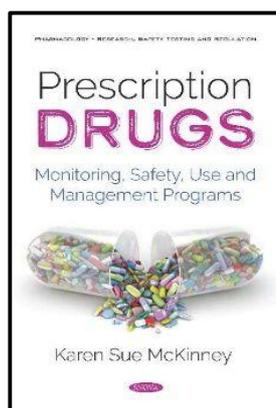
Adolescence

Behavioural Risk Factors of Non-Communicable Diseases

Joav Merrick

The “Global School-based Student Health Survey (GSHS)” is a World Health Organization (WHO) and United States Centers for Disease Control and Prevention (CDC) collaborative effort in helping countries to assess ten behavioural risk and protective factors, including “alcohol use, dietary behaviours, drug use, hygiene, mental health, physical activity, protective factors, sexual behaviours, tobacco use, violence and unintentional injury” among adolescents. In this book, we deal with multiple behavioural non-communicable disease (NCD) risk factors in 15 countries: Philippines, Mozambique, Laos, Kuwait, Oman, Guatemala, Timor-Leste, Wallis and Futuna, Cook Islands, Afghanistan, Maldives, French Polynesia, Fiji, Bahrain and Benin. The results of the various papers will inform stakeholders of the relevance of school and youth health programmes and related policies targeting behavioural NCD risk factors in the adolescent population.

HB 9781536177046 £146.99 May 2020 Nova Science Publishers 260 pages



Prescription Drugs Monitoring, Safety, Use and Management Programs Edited by Karen Sue McKinney

The Prescription Drug User Fee Act authorized the Food and Drug Administration to collect user fees from industry to support the approval of new drugs and biologics. The Prescription Drug User Fee Agreement has been a success bringing safe and effective new products to patients in a timely manner as reported in chapter 1.

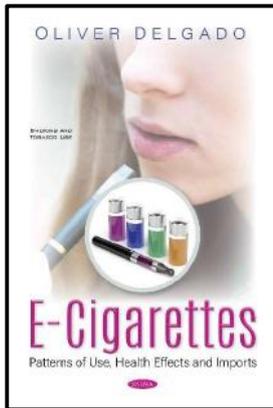
Chapter 2 provides an overview of prescription drug monitoring programs (PDMPs), including their operation, enforcement mechanisms, costs, and financing. It also examines the effectiveness of PDMPs and outlines federal grants supporting PDMPs.

Finally, it discusses relevant considerations for policymakers including interstate data sharing, interoperability, protection of health information, and the possible link between the crackdown on prescription drug abuse and rise in heroin abuse. Chapter 3 examines federally recommended and other available methods patients may use to dispose of unused prescription opioids, and what is known about patients' use of these methods.

Monitoring prescription drug use patterns at the population level can inform research and clinical practice. These patterns may shift over time in response to changing health needs, updated clinical guidelines, policy changes, and other factors. Chapters 4 and 5 examine statistics pertaining to drug use monitoring.

Chapter 6 examines bill (H.R. 5675) to amend title XVIII of the Social Security Act to require prescription drug plan sponsors under the Medicare program to establish drug management programs for at-risk beneficiaries.

HB 9781536172881 £211.99 March 2020 Nova Science Publishers 322 pages



E-cigarettes Patterns of Use, Health Effects and Imports

Edited by Oliver Delgado

Chapter 1 provides background information on e-cigarettes.

Tobacco use among youth and young adults in any form, including e-cigarettes, is not safe. In recent years, e-cigarette use by youth and young adults has increased at an alarming rate. E-cigarettes are now the most commonly used tobacco product among youth in the United States. Chapter 2 highlights the rapidly changing patterns of e-cigarette use among youth and young adults, assesses what we know about the health effects of using these products, and describes strategies that tobacco companies use to recruit our nation's youth and young adults to try and continue using e-cigarettes. It also outlines interventions that can be adopted to minimize the harm these products cause to our nation's youth.

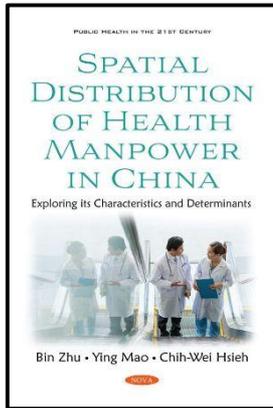
Over the last decade, use of electronic cigarettes, known as e-cigarettes, in the United States has grown rapidly as use of traditional cigarettes declined among both adolescents and adults. Most e-cigarettes sold in the United States were thought to be imported, but e-cigarette import volume and tariff revenue were unknown because the Harmonized Tariff Schedule of the United States (HTS) did not contain separate statistical reporting numbers. New statistical reporting numbers went into effect on January 1, 2016. Chapter 3 reports on e-cigarettes imported into the United States in 2016. While chapter 4 reports on e-cigarettes imported into the United States from 2016 through 2018.

E-cigarettes are battery-powered devices which simulate tobacco smoking by producing a heated vapor that resembles smoke. A number of explosions and fires have been attributed to e-cigarettes, causing some concern within the fire service community as discussed in chapter 5.

Electronic cigarettes, known as "personal vaporizers" (PV) have experienced a significant increase in popularity for those seeking an alternative to smoking traditional tobacco products. The use of the e-cigarettes as an illicit drug delivery device is touted on websites, forums, blogs, and videos describing how best to use them for specific illicit drugs such as tetrahydrocannabinol, methamphetamine, fentanyl, and heroin as reported in chapter 6.

Chapters 7 and 8 report on the 2019 outbreak of lung injury associated with e-cigarette use.

HB 9781536172201 £284.99 March 2020 Nova Science Publishers 495 pages



Spatial Distribution of Health Manpower in China Exploring its Characteristics and Determinants

Bin Zhu

The misdistribution of health manpower is one of the major challenges faced by the Chinese health sector hindering people's access to healthcare. However, this subject remains underexplored, as spatial distribution characteristics have not been fully mapped out, nor have its causes been determined at the macro regional level. To fill this research void, this study aims to conduct sophisticated spatial analyses to examine the characteristics of health manpower distribution and test various determinants of health manpower densities. By introducing spatial techniques, this study sheds light on the distribution of health manpower in China, thus offering invaluable evidence for making national and regional policies to facilitate a more effective distribution of health manpower in China.

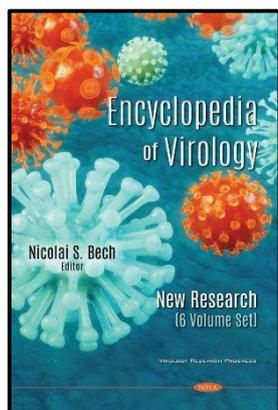
On the one hand, this study used spatial statistics (space-time scan statistics and Moran's I statistics) to reveal, visualize, and compare the temporal trends, spatio-temporal dynamics, and spatial clustering patterns of different subtypes of health manpower (clinicians, doctors of traditional Chinese medicine, dentists, public health doctors, general practitioners, registered nurses, pharmacists, technologists, and interns) and their total. The results reveal that regional disparities and huge urban-rural imbalances exist in China's health manpower distribution, indicating that some provincial units have been left behind. In addition, spatial distribution characteristics varied across different subtypes of health manpower, which still held with respect to either the urban or rural health manpower distribution.

On the other hand, this study theoretically modeled and empirically measured various determinants of health manpower distribution from both the supply and demand sides while taking the spillover effect between adjacent geographical units into consideration. Based on the results of the estimation, the health service demand was, as expected, found to forcefully drive the health manpower distribution across the nation. In light of this, the increase in health services demands in a province could significantly help one unit attract licensed doctors and registered nurses from adjacent units. Unexpectedly but intriguingly, the power of medical education capacity was relatively limited in increasing the health manpower density in local units compared to its spillover effect on neighboring units. In addition, government and social health expenditure played different roles in the health labor market, the former being more effective in increasing the stock of licensed doctors and registered nurses, the latter doing better in attracting dentists and general practitioners.

This study has the potential to make profound contributions to the theory and practice of health manpower distribution in China. First, this study advances our understanding of characteristics of health manpower distribution by introducing spatial statistics. By doing so, this study visualizes the detailed spatial distribution characteristics with maps and identifies the priority areas for health manpower allocation in China. Second, this study provides a comprehensive research framework to understand the potential drivers of health manpower distribution, and more importantly, takes spillover effects into consideration and measures them for the first time. Third, this study systematically explores and compares the distribution characteristics and determinants of different subtypes of health manpower, which differ greatly. By exploring both the characteristics and determinants, this study gives a full picture of the health manpower distribution and provides new evidence for making health manpower allocation policies in China.

HB 9781536175721 £146.99 May 2020 Nova Science Publishers 249 pages

Virology Research Progress



Encyclopedia of Virology New Research (6 Volume Set)

Edited by Nicolai S. Bech

This six volume set presents important research on virology. Some of the topics addressed include:

- the fundamentals of Zika virus
- preparation for pandemic diseases
- West Nile virus
- the management of the spread of Ebola virus disease
- human papillomaviruses
- viral hemorrhagic fevers
- the treatment of avian influenza virus
- bronchiolitis

HB 9781536179163 £1,146.99 May 2020 Nova Science Publishers 1611 pages



Gazelle Book Services Limited,
Unit 1/4, White Cross Mills,
Hightown, Lancaster LA1 4XS

t: (01524) 528500

e: sales@gazellebookservices.co.uk

www.gazellebookservices.co.uk

Gazelle Book Services Order Form - (Books listed alphabetically by title)

Title	Format	ISBN	RRP (£)	Qty	Total
A Comprehensive Guide to Genetic Counseling	PB	9781536169751	£ 87.99		
Adolescence	HB	9781536177046	£ 146.99		
Advanced Oral and Maxillofacial Implantology	HB	9781536169317	£ 211.99		
Advances in Medicine and Biology - Volume 157	HB	9781536171624	£ 229.99		
Advances in Medicine and Biology - Volume 159	HB	9781536171846	£ 229.99		
Allicin	HB	9781536173390	£ 211.99		
Antimicrobial Potential of Essential Oils	PB	9781536169454	£ 87.99		
Brain-Based Treatment	PB	9781536169515	£ 146.99		
Cancer Management in Latin America I	HB	9781536167337	£ 211.99		
Cancer Management in Latin America II	HB	9781536167351	£ 211.99		
Cytokines and their Therapeutic Potential	PB	9781536170177	£ 75.99		
E-cigarettes	HB	9781536172201	£ 284.99		
Encyclopedia of Virology	HB	9781536179163	£1,146.99		
Mechanical Ventilators for Non-Invasive Ventilation	HB	9781536174359	£ 293.99		
Medical Case Reports	HB	9781536168846	£ 247.99		
Meniere's Disease	PB	9781536170153	£ 87.99		
Phytochemicals from Mexican Medicinal Plants	HB	9781536173970	£ 211.99		
Prescription Drugs	HB	9781536172881	£ 211.99		
Spatial Distribution of Health Manpower in China	HB	9781536175721	£ 146.99		
The Fundamentals of Hypersensitivities and Allergies	HB	9781536170122	£ 146.99		
Unlocking Erik	PB	9781536174557	£ 77.99		



Gazelle Book Services Limited,
Unit 1/4, White Cross Mills,
Hightown, Lancaster LA1 4XS

t: (01524) 528500

e: sales@gazellebookservices.co.uk

www.gazellebookservices.co.uk



GazelleBookServices



GazelleBookServices



@Gazellian



GazelleBooks