

CHALLENGES IN DIABETES & CANCER MANAGEMENT



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Challenges in Diabetes and Cancer Management

First Volume

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Preface

Diabetes and cancer are among the most pressing global health challenges of the 21st century. Each poses significant burdens on patients, families, healthcare systems, and societies at large. While they are distinct in etiology and progression, growing research underscores their complex interplay — with shared risk factors, overlapping treatment complications, and emerging evidence of biological connections. This edited volume, *Challenges in Diabetes and Cancer Management*, brings together a multidisciplinary perspective to illuminate the evolving landscape of care, prevention, and policy for these two formidable diseases.

The objective of this book is to provide an in-depth exploration of the clinical, psychosocial, and systemic challenges involved in managing diabetes and cancer, both separately and in comorbid contexts. The contributors — leading researchers, clinicians, and policy experts — examine key themes such as diagnostic complexities, treatment side effects, medication adherence, disparities in access to care, and the impact of lifestyle, environment, and socioeconomic status on disease progression and outcomes.

The intersection of diabetes and cancer also presents unique management dilemmas. For instance, certain cancer treatments may worsen glycemic control, while diabetes may alter cancer prognosis and response to therapy. As medical advances extend life expectancy, the co-management of chronic conditions becomes increasingly relevant, requiring more integrated and patient-centered approaches.

This book aims to serve as a valuable resource for healthcare professionals, academic researchers, public health practitioners, and policymakers who seek to better understand and address the multifaceted challenges in diabetes and cancer care. By fostering dialogue across disciplines and bridging gaps between research and practice, we hope this volume contributes meaningfully to improving health outcomes and quality of life for patients worldwide.

We extend our deepest gratitude to all contributors for their dedication and insight, and to the readers who continue to strive for excellence and equity in healthcare.

The Editors

Dr. Soma Rani Kolay
Dr. Ajai Kumar Pandey
Dr. Sanjeev Kumar
Dr. Pragati Saxena
Dr. Arun Kumar
Dr. Rajesh Kumar Kar
Dr. Sanjeev Kumar Vidyarthi

Foreword

The global burden of chronic diseases continues to rise at an alarming pace, with diabetes and cancer emerging as two of the most pressing health challenges of the 21st century. Despite significant advances in diagnostics, therapeutics, and healthcare delivery, the effective management of these complex diseases remains a daunting task. The intricate interplay of genetic, environmental, behavioral, and socioeconomic factors further complicates prevention and treatment strategies.

Challenges in Diabetes and Cancer Management is a timely and comprehensive volume that brings together leading researchers, clinicians, and public health experts to explore the multifaceted nature of these conditions. This book is the culmination of diverse perspectives and cutting-edge research that address not only the biological underpinnings of diabetes and cancer but also the systemic and policy-level hurdles that obstruct optimal care.

The chapters delve into key issues such as early detection, personalized medicine, access to affordable treatment, health disparities, and the integration of traditional and modern therapeutic approaches. They highlight the urgent need for interdisciplinary collaboration and innovative solutions in tackling the rising incidence and complications of these diseases.

As editors, we envision this book as a valuable resource for medical professionals, researchers, policymakers, and students who are committed to advancing the frontiers of chronic disease management. We hope it sparks meaningful dialogue, fosters new research directions, and ultimately contributes to improved outcomes for individuals and communities affected by diabetes and cancer.

We extend our deepest gratitude to the contributors for their dedication and insight, and to the readers who will carry this important conversation forward.

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Contents

Title	Page No.
Chapter 1 SEIZURE AND EPILEPSY ASSOCIATED WITH BRAIN TUMORS AND OTHER NEURODEVELOPMENTAL DISEASES: CAUSES AND CHALLENGES IN MANAGEMENT	1-20
Chapter 2 CANCER AND DIABETES: FROM COMPLICATIONS TO CURRENT THERAPEUTIC STRATEGIES	21-34
Chapter 3 INTEGRATION OF EXOSOMAL SIGNALING AND MACROPHAGE FUNCTION IN COLORECTAL CANCER	35-49
Chapter 4 CHALLENGES IN MANAGEMENT OF CANCER IN DIABETIC PATIENTS	50-59
Chapter 5 CROSSTALK BETWEEN TUMOR ASSOCIATED MACROPHAGES (TAM) AND TUMOR CELLS AS THERAPEUTIC STRATEGY IN TRIPLE NEGATIVE BREAST CANCER (TNBC)	60-90
Chapter 6 MADHUMEHA (DIABETES MELLITUS): ITS PREVENTION AND PRINCIPLES OF MANAGEMENT AS PER AYURVEDA	91-109
Chapter 7 COMPARATIVE FREE RADICAL SCAVENGING ACTIVITY OF DIFFERENT FRACTIONS OF CINNAMOMUM TAMALA LEAVES IN CHEMICAL SYSTEM	110-120

Chapter 8 AN INSIGHT OF DIATHESIS & MANAGEMENT OF DIABETIC PERIPHERAL NEUROPATHY (DPN) THROUGH AYURVEDA	121-140
Chapter 9 EXPLORING THE SYNERGY BETWEEN AYURVEDIC DIETARY PRACTICES & GUT MICROBIOME IN THE PREVENTION AND MANAGEMENT OF DIABETES MELLITUS	141-150
Chapter 10 PREVENTIVE APPROACH OF TYPE-2 DIABETES MELLITUS UNDER THE INFLUENCE OF YOGIC PRACTICES	151-165
Chapter 11 CHALLENGES AND OPPORTUNITIES IN THE MANAGEMENT WITH DIABETES AND CANCER PATIENTS	166-171
Chapter 12 MENTAL HEALTH AND DIABETES MANAGEMENT IN SENIOR CITIZENS	172-182
Chapter 13 ECONOMIC CHALLENGES IN DIABETES MANAGEMENT: A COMMERCE PERSPECTIVE IN INDIA	183-193
Chapter 14 HOME REMEDIES FOR TYPE 2 DIABETES	194-207
Chapter 15 BALANCING BLOOD SUGAR NATURALLY: HERBAL TRADITIONS IN DIABETES CARE	208-217

Chapter 16	218-225
HOW INDIAN PEOPLE SPEND MONEY ON DIABETES TREATMENT	
.....	
Chapter 17	226-231
UNPACKING THE LINK BETWEEN HEAVY WORKLOAD AND TYPE 2 DIABETES	
.....	
Chapter 18	232-245
THE BUSINESS OF HEALTH: MANAGING COSTS AND BARRIERS IN CHRONIC DISEASE CARE	
.....	
Chapter 19	246-262
BIOCHEMICAL PERSPECTIVES IN DIABETES MANAGEMENT	
.....	

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