
Updates in Hypertension and Cardiovascular Protection

Series Editors

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The aim of this series is to provide informative updates on both the knowledge and the clinical management of a disease that, if uncontrolled, can very seriously damage the human body and is still among the leading causes of death worldwide. Although hypertension is associated mainly with cardiovascular, endocrine, and renal disorders, it is highly relevant to a wide range of medical specialties and fields – from family medicine to physiology, genetics, and pharmacology. The topics addressed by volumes in the series *Updates in Hypertension and Cardiovascular Protection* have been selected for their broad significance and will be of interest to all who are involved with this disease, whether residents, fellows, practitioners, or researchers.

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Hypertension and Cardiovascular Disease in Asia



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Foreword

Understanding and addressing cardiovascular disease (CVD) and hypertension in Asia is like completing a challenging 1000-piece jigsaw puzzle. The problem is so grand that it accounts for the 10.8 million annual deaths in Asia, comprising 58% of the 18.6 million reported CVD deaths worldwide in 2019. Close to 40% of these deaths were deemed premature, defined as deaths before the age of 70 years. Uncontrolled hypertension remains the real-world “Freddy Krueger” which kills its victims, not with razors and gloved hands, but with heart attacks, strokes, and other hypertension-related complications.

Describing hypertension as a serial killer is actually an understatement. It has killed in pandemic proportions, and the excess deaths due to it have apparently increased in the past 2 years, as the whole world grapples from the deadly strangle of another pandemic—COVID-19. A double whammy indeed!

And just like the complexity of a multi-piece puzzle, the CVD and hypertension enigma in Asia is the consequence of the complex effects of varied factors among the countries in the world’s most populated continent. These include the diverse socioeconomic, cultural and living environments, demography, and Westernized lifestyles. With different healthcare systems and strategies being employed, Asian countries also differ in their capacity to achieve CVD prevention and treatment goals.

With the multifactorial diversity and heterogeneity, it is understandable that the CVD spectrum may also differ in Asia as a region. It is well known that the cardiovascular phenotype is quite different in Asia, with stroke being associated more with hypertension than ischemic heart disease; in contrast to the Western world wherein the opposite is true. Within some of the countries comprising Asia, the diversity in clinical disease presentation may also be apparent, since some countries may be characterized by a multiethnic composition. The CVD and hypertension pandemic may also pan out differently among the different Asian countries, depending on the socioeconomic stage or development a particular Asian country is in.

It is humbling to admit that we still find some odd pieces that don’t fit in the CVD and hypertension jigsaw puzzle in Asia. And just like when we solve challenging puzzles, we need to sort out the pieces first, so we would know where they might fit. Gathering all the updated information one could gather on all aspects of hypertension and CVD in Asia—from epidemiology to disease presentation to management—is a big step in helping clinicians, researchers, and policy makers understand the complex picture which hypertension and CVD in Asia present.

This book, *Hypertension and Cardiovascular Disease in Asia*, is definitely a big accomplishment that fills in a major gap in the understanding and management of hypertension and CVD in a continent that is considered the disease epicenter in the world. Our hats off to the editors—Doctors C. Venkata S. Ram, Boon Wee Jimmy Teo, and Gurpreet S. Wander; and all the world-renowned contributing authors for this remarkable feat.

This book will definitely occupy a prominent place in my library; I hope it does in yours, too.

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Preface

We are privileged to introduce this book on *Hypertension and Cardiovascular Disease in Asia* to readers interested in preserving public health by reducing the disease burden in the community. As Asia is going through a cardiovascular disease endemic, it is timely to push back the wave through medical education and preventive strategies. The grim statistics show a high incidence of cardiovascular disease in Asia compelling policy makers and medical practitioners to action. Advances in prediction technology will enable medical practitioners to take an active stance in disease prevention, changing the paradigm from disease management to “anticipatory” medicine. While individual patient-level disease prevention is important, a greater impact is achieved if the majority of the population can be prevented from ever having hypertension and cardiovascular disease.

The current epidemiology, clinical profile, and consequences of hypertension and cardiovascular disease in Asia are discussed extensively. From population science to individual therapeutic implications, clinicians will gain additional knowledge. We should discard the status quo and embark on a firm footing to safeguard public health in Asia. We will live a longer and a healthier life. One unique feature of this compendium is that it does not have the typical textbook structure where a sequence of reading is required; instead you can start the journey from any chapter based on your preference or interest.

We would like to thank the European Society of Hypertension and its leadership (Drs. Giuseppe Mancia, Enrico Agabiti-Rosei, and Reinhold Kreutz) for giving us the special opportunity to assemble this book devoted to Asian countries. It is timely that the ESH asked us to look at the pattern of hypertension and cardiovascular disease in Asia. The term “Eurasia” indicates the contiguous landmass of Europe and Asia. There is no geographic demarcation between the two continents. It is an ethnic and cultural demarcation at best. Asia has 49 countries with 5 being transcontinental (partly in Asia and Europe) and is the largest continent of the world. It has 30% of the land area of the world and has 60% of the world population. The pattern of these diseases in Asia is important also to Europeans. With increasing international migration, public health becomes an important matter of great economic significance. Asia has very diverse climates and cultures. The United Nations statistics department divides Asia into 6 regions. The body build, genetic ancestry, disease prevalence, and phenotypes are different due to varying climates and diverse lifestyles.

The economic situation of different regions is also variable. These challenges should be kept in mind while going through this book.

We are grateful to all the authors for their valuable and expert contributions to this book. They have covered the various aspects of hypertension and cardiovascular disease with an Asian perspective. They have a vast experience in the field and have done original work in cardio-metabolic diseases in the Asian countries. We are grateful to the staff of Springer Nature publications for working with us closely in completing this book. We acknowledge the excellent managerial help provided by Ms. N.Madhavi Latha and meticulous proofing and corrections done by Ms. Nicola Ryan.

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