ebsite www.ejaypee.com, for detailed information on cardiology books, visit our website www.ejaypee.com, for detailed information on cardiology books, visit our website www.ejaypee.com

Women In Cardiology And Related Sciences
Inspire, enlighten, excel

Hypertension in Women





Editors
Sarita Rao
Jyotsna Maddury

Foreword
Dipti Itchhaporia

Preface
Ramesh Daggubati

JAYPEE

Contents

1. **Sex-Specific Guidelines: Are Current Hypertension Guidelines Enough for Women? 1**
   Sri Kiran Jakkula, Abhinay Reddy N, Jyotsna Maddury
2. **Gender Bias in Hypertension Research and Clinical Trials: Still Ignored 11**
   Sonya Burgess
3. **Hypertension in Women: Epidemiology 18**
   Marta Kaluzna-Oleksy
4. **Sex-specific Patterns in Blood Pressure Variability 25**
   Antonia Anna Lukito
5. **Hypertension Across Women's Life Course: From Menarche to Menopause 34**
   Chhabi Satpathy, Trinath Kumar Mishra, Sashmi Prabha Sethi, B Milan Kumar
6. **Hypertension in the Young: When to Suspect Secondary Causes 43**
   J Cecily Mary Majella, Gottipati Divya Chowdary
7. **Pregnancy and Hypertension: Gestational Hypertension, Preeclampsia, Eclampsia, and HELLP Syndrome 48**
   Abhishek Garg, Shibba Takkar Chhabra
8. **Menstrual Abnormalities and Polycystic Ovary Syndrome and Hypertension: A Double Burden 55**
   Hema S
9. **Hypertension and INOCA/MINOCA in Women 63**
   Selvarani
10. **Contraceptives and Blood Pressure: What Every Woman Should Know? 78**
    Ritu Bhatia, Vansh Dhawan, Ansh Bhatia, Ruchi Gupta, Mamtesh Gupta
11. **Sex Differences in Renal Physiology and Salt Sensitivity of Blood Pressure 84**
    Prerna Goyal, Manjeet Kumar Goyal
12. **Secondary Hypertension due to Endocrine Causes 90**
    Jayashree Kharge, Narendran Dhanasekaran
13. **Management of Hypertension in the Elderly Women 101**
    Zakia Khan
14. **Resistant Hypertension and RDN in Women 108**
    Sarita Rao, K Roshan Rao, Mirvat Alasnag, Abhishek Rathore, Praveen Jaiswal, Achukatla Kumar
15. **Autoimmune Disorders, Inflammation, and Their Role in Hypertension 120**
    Hetan C Shah
16. **Sleep Disorders in Hypertension in Women 126**
    Saeko Takahashi
17. **Chronic Kidney Disease and Hypertension: The Bidirectional Relationship 134**
    Asha Mahilmaran
18. **Chronobiology and Hypertension: Circadian Rhythms in Hypertension 144**
    Shambhavi KR, Veena Nanjappa

19. Hypertension and the Microbiome: A Woman's Gut Connection 150
Preeti Gupta

20. Hypertension and Cancer in Women: A Shared Risk Platform 155
Sujatha Vipperla, Naga Narasimha Reddy M, Anjani Golive

21. Lifestyle Modification Strategies for Women 162
Bala Pushparaji, Poornima Vinod, Neelima Katukuri

22. Hypertension Awareness, Adherence, and Control Rates in Women 172
Priya Palimkar

23. Artificial Intelligence in Blood Pressure Measurement and Risk Prediction 179
Sujata Anipindi, Venkata Lakshmi Gowthami Rayaprolu, Lalita Nemani

Index 189

CHAPTER 3

Hypertension in Women: Epidemiology

Marta Kaluzna-Oleksy

ABSTRACT

Hypertension is one of the leading modifiable risk factors for cardiovascular disease (CVD) and premature mortality in women worldwide. Recent global estimates suggest that approximately one in three adult women has hypertension, with substantial heterogeneity across regions, countries, and age groups.[1-3] Hypertension accounts for a large and growing proportion of CVD events in women, contributing significantly to years of life lost and disability, particularly in low- and middle-income countries (LMICs).[4]

Although men generally have higher age-standardized prevalence of hypertension in early and mid-adulthood, blood pressure in women rises steeply from the third decade of life, and the sex gap narrows or reverses at older ages.[1,4,5] Women often demonstrate higher awareness, treatment, and control rates than men, yet large absolute numbers of uncontrolled hypertension persist, especially in disadvantaged populations.[6]

This chapter summarizes the current global and regional epidemiology of hypertension in women, drawing on recent data from the Global Burden of Disease (GBD), the NCD Risk Factor Collaboration, the World Health Organization (WHO), and major regional studies. It presents the global burden and temporal trends, examines regional patterns across North America and Europe, Asia–Pacific, the Middle East and Africa, and Latin America, and analyses hypertension throughout the female life course—from reproductive years and hypertensive disorders of pregnancy to the menopausal transition and older age. Understanding these epidemiological patterns is essential for designing effective, sex- and context-sensitive prevention, detection, and treatment strategies, and for informing health policy aimed at reducing the global burden of CVD in women.

Keywords: Hypertension; women; epidemiology; global health; cardiovascular disease; sex differences.

INTRODUCTION

Hypertension remains one of the most important modifiable risk factors for CVD, stroke, heart failure, and chronic kidney disease worldwide.[1,4] In women, hypertension is now recognized as a leading contributor to CVD mortality and disability, with recent analyses of GBD data confirming that elevated blood pressure is among the top risk factors for death and disability-adjusted life years (DALYs) in women globally.[2,3]

Hypertension, being the leading fatal risk factor in women worldwide and second only to smoking in men, has a differential impact on myocardial infarction incidence, with a hazard ratio (HR) for elevated blood pressure of 1.83 in women compared with men (95% CI, 1.33–2.52).[7] These findings suggest that the optimal blood pressure thresholds for women may need to be lower than those currently applied for men.[8]

Globally, the prevalence of hypertension has remained high despite decades of prevention and treatment efforts. Contemporary estimates indicate that, among adults aged 30–79 years, the age-standardized prevalence of hypertension is approximately 32% in women and 34% in men, corresponding to hundreds of millions of affected women worldwide.[1,4] The NCD Risk Factor Collaboration reported that in 2019 there were around 626 million women with hypertension, with large variation between and within regions.[4]

Sex differences in the epidemiology of hypertension are complex. Men generally exhibit higher blood pressure levels and a greater prevalence of hypertension during early and mid-adulthood. However, beginning in the third to fourth decade of life, women experience a steeper age-related increase in blood pressure, leading to convergence and eventually reversal of this pattern. Consequently, hypertension predominates in men before the age of 50 years, whereas in populations older than 65 years it becomes equally common or even more prevalent among women.[4-6,9] In addition, women often

JAYEE BROTHERS

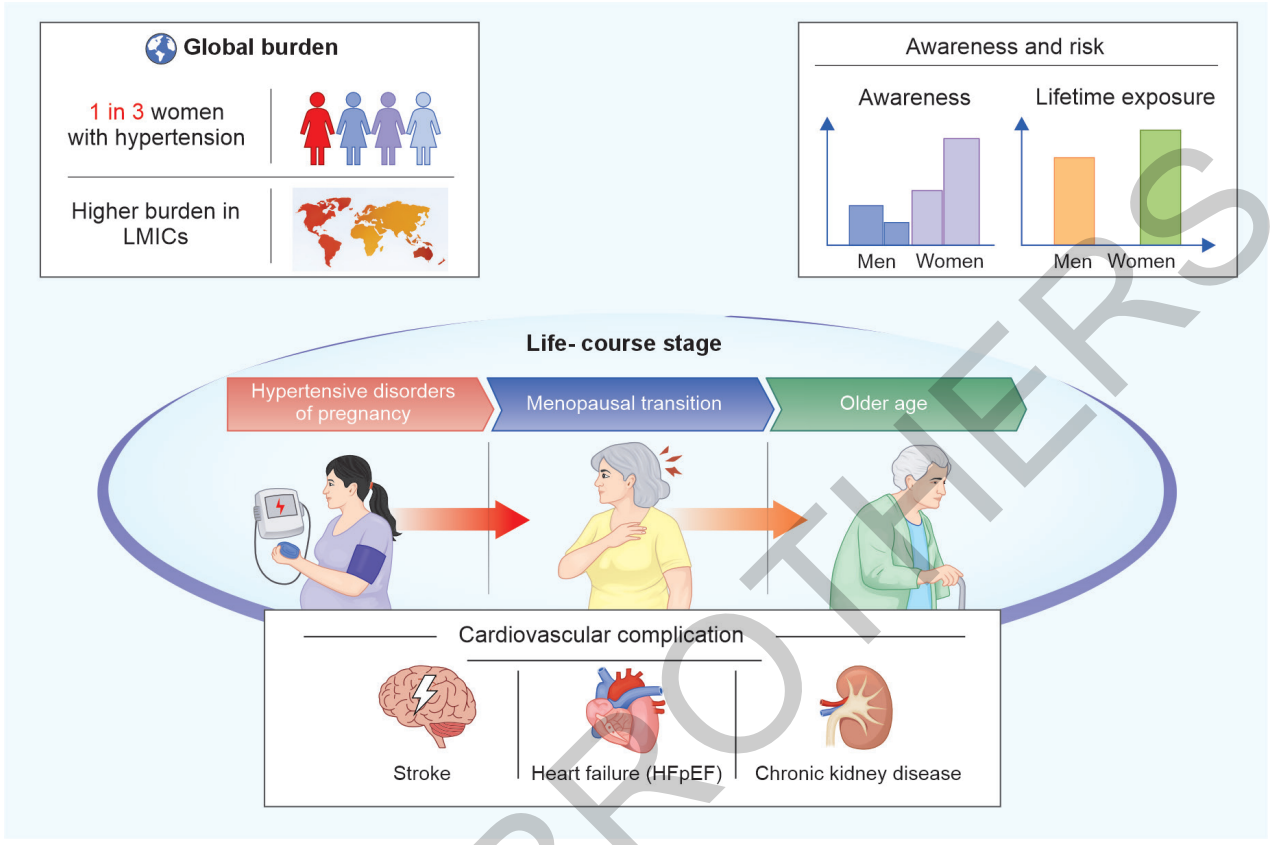


Fig. 1: Hypertension across the female life course.

have higher awareness, treatment, and control rates than men, yet substantial proportions of hypertensive women remain undiagnosed or inadequately treated, particularly in LMICs and marginalized groups.[4,10,11]

Region-specific demographic transitions, urbanization, lifestyle changes, and health-system performance strongly shape the burden of hypertension in women. High-income settings have seen improvements in detection and control, whereas many LMICs face rising prevalence, ageing populations, and persistent gaps in access to effective care.[1,11-13] These patterns intersect with gender norms, social determinants of health, and differential access to education and healthcare, further influencing risk and outcomes for women.

This chapter examines the epidemiology of hypertension in women, beginning with the global burden and temporal trends, followed by regional patterns, and concluding with changes in hypertension risk across the female life course, including the reproductive years, menopause, and older age **(Fig. 1)**.

GLOBAL BURDEN OF HYPERTENSION IN WOMEN

Prevalence and Time Trends

Hypertension prevalence in women varies substantially by age, region, and income level. Global analyses suggest that, overall, roughly one in three adult women is hypertensive.[1,4] Between 1990 and 2019, age-standardized prevalence changed little at the global level, but the geographic distribution shifted markedly: declines or plateauing in many high-income countries contrasted with large increases in several LMICs in sub-Saharan Africa, South Asia, and parts of Oceania.[1,4,11] In 2010, hypertension affected 31.1% of the global adult population (1.39 billion individuals). The prevalence was greater in low- and middle-income countries (31.5%, 1.04 billion people) compared with high-income countries (28.5%, 349 million people).[1] The number of people aged 30–79 years with hypertension doubled from 1990 to 2019, from 331 (95% credible interval 306–359) million women and 317 (292–344) million men in 1990 to 626 (584–668) million women and

JAYEE BROTHERS

652 (604–698) million men in 2019.[4] An analysis pooling data from 844 studies across 154 countries, including 8.69 million participants, estimated that in 2015 the global mean age-standardized systolic blood pressure was 127.0 mm Hg in men and 122.3 mm Hg in women, while the corresponding diastolic values were 78.7 mm Hg and 76.7 mm Hg, respectively.[14]

Despite lower average levels, hypertension prevalence in women increases steeply with age, and in many populations more than half of women aged ≥60 years are affected.[1,4,5]

Population-based data also demonstrate important contextual variation. In the Prospective Urban Rural Epidemiology (PURE) study including over 140,000 adults from 17 countries, overall hypertension prevalence was 40.8% (37.7% in women vs 41.4% in men), with higher prevalence in rural than urban populations in high- and middle-income countries, but the reverse pattern in low-income countries.[15]

In 2019, age-standardized hypertension prevalence was lowest in Canada and Peru for both men and women; in Taiwan, South Korea, Japan, and some countries in western Europe including Switzerland, Spain, and the UK for women.[4]

Awareness, Treatment and Control

Globally, women have consistently higher awareness, treatment, and control rates compared with men.[4,6,10]

In the 2019 NCD Risk Factor Collaboration analysis, which pooled 1,201 population-representative studies including 104 million participants, 59% of women with hypertension were aware of their diagnosis and 47% had controlled blood pressure, compared with 49% and 38% among men, respectively.[4] However, these averages mask wide disparities: in some high-income countries, more than 60–70% of hypertensive women are controlled, while in many LMICs, control rates remain below 25%.[4,11]

Higher awareness and treatment in women may reflect greater contact with healthcare (e.g. through reproductive health services), differential health-seeking behavior, and greater adherence to medication in many contexts. Nonetheless, large numbers of women remain undiagnosed, particularly those who are younger, poorer, or living in rural areas.[5,11,13]

Mortality and Disability Burden

Hypertension is a major driver of cardiovascular morbidity, mortality, and disability in women. Using GBD 2019 data, a recent sex-focused analysis reported that annual incident CVD cases in women increased from 15.90 million in 1990 to 27.64 million in 2019 (+73.86%), while CVD deaths rose from 6.06 million to 8.94 million (+47.45%), largely reflecting population growth and ageing.[3] In the comparative risk assessment framework of GBD 2019, high systolic blood pressure was the leading Level 2 risk factor for attributable deaths globally, accounting for 10.8 million deaths in 2019, and it was also a dominant contributor to disability, responsible for an estimated 235 million DALYs.[16,17] Consistent with this, high systolic blood pressure explains a substantial share of major cardiovascular outcomes; for example, GBD 2019–based estimates suggest that ~52.6% of stroke deaths and ~55.5% of stroke DALYs were attributable to high systolic blood pressure in 2019.[18]

Geographically, the disability burden attributable to hypertension in women is particularly high in Eastern and Central Europe and Central Asia, and remains substantial in North Africa and the Middle East as well as South Asia, reflecting both high exposure to elevated blood pressure and persistent gaps in detection and control.[1,3,11,16] In many of these regions, hypertension in women remains under-recognized as a major risk factor, contributing to delayed presentation with stroke, heart failure, and other cardiovascular complications.

REGIONAL PERSPECTIVES

North America and Europe

In many high-income countries in North America and Western Europe, age-standardized prevalence of hypertension in women has declined modestly or remained stable over recent decades, while awareness and control have improved.[1,4,11] Countries such as Canada, the United Kingdom, Spain, and several Nordic nations report relatively low age-standardized prevalence in women and comparatively high control rates.[4]

However, important disparities persist. In the United States, non-Hispanic Black individuals have among the highest rates of hypertension globally, with earlier onset and more severe elevations than White individuals; notably, non-Hispanic Black women are particularly affected, contributing to disproportionate cardiovascular outcomes.[1,2] Consistently, analysis of NHANES 2015–2016 data from 4,821 adults aged ≥20 years showed a significantly higher age-standardized prevalence of hypertension in non-Hispanic Black individuals (57.3%)

JAYEE BROTHERS

compared with non-Hispanic White (43.8%) and Hispanic individuals (44.7%).[19]

Pronounced socioeconomic gradients are evident, with women of lower income and educational attainment showing higher hypertension prevalence and poorer blood pressure control. The largest disparities, including particularly low control rates, are observed in Central and Eastern Europe.[4] In some countries, effective blood pressure control is achieved in fewer than 10% of both women and men, with similarly low rates also reported among men in parts of North Africa and Central and South Asia.[4] The ageing of the female population in Europe and North America further amplifies the burden of hypertension, as older women constitute a growing proportion of hypertensive individuals and are more likely to have multimorbidity and polypharmacy.

Asia–Pacific Region

Asia–Pacific is characterized by large populations, rapid urbanization, and heterogeneous health-system capacity, resulting in considerable variation in hypertension epidemiology among women. In East Asia, particularly China, the absolute number of women with hypertension is very high, although age-standardized prevalence has plateaued or slightly declined in some settings due to improvements in detection and treatment.[1,4,5] For example, population-based data comparing China and Sweden reported hypertension prevalence of 35.8% among Chinese women versus 28.6% among Swedish women, but with markedly poorer management in China: only 37.6% of treated women achieved blood pressure control, compared with 58.7% in Sweden.[5]

In South Asia, hypertension prevalence has risen sharply over the past two decades. In India, large national surveys indicate that hypertension affects substantial proportions of both men and women, with women showing somewhat lower prevalence but comparable or greater exposure to major risk factors, alongside pronounced regional and urban–rural disparities.[5,20] Awareness and treatment remain inadequate, particularly among younger women and those in rural and low-income groups.

Japan and several other high-income Asia–Pacific countries have comparatively high awareness and control rates, largely reflecting long-standing screening and salt-reduction policies. According to the NCD Risk Factor Collaboration pooled analysis (1990–2019), more than 60–70% of individuals with hypertension in high-income Asia–Pacific settings are aware of their condition and approximately 40–50% achieve blood pressure control, compared with often <10–20% in many lower-income countries in the region.[4] Despite these favorable management indicators, rapid population ageing means that large numbers of older women remain at risk of stroke and heart failure attributable to hypertension.

In India, nationally representative NFHS-5 data (2019–2021) including over 1.7 million adults showed an overall hypertension prevalence of 22.6%, slightly lower in women than men (21.2% vs 24.1%).[21] Prevalence increased markedly with age, reaching 51.3% in women aged ≥60 years, exceeding that observed in men of the same age.[21] Urban women had higher prevalence than rural women (23.4% vs 20.2%), and obesity, elevated waist circumference, and high glucose levels were strongly associated with hypertension.[21]

Middle East and Africa

The Middle East and sub-Saharan Africa are experiencing a rapid epidemiological transition, with rising prevalence of hypertension in women alongside persistent infectious disease burdens. Data remain limited in many countries, but available studies indicate high and often increasing prevalence of hypertension among adult women, particularly in urban settings.[1,11,13] In women, the prevalence of hypertension was lowest in HICs (25.3%) and highest in Sub-Saharan Africa (36.3%).[1]

In Africa, studies conducted in high-risk groups such as individuals with diabetes consistently report very high hypertension prevalence, with important implications for women, who constituted 56% of participants in a large regional meta-analysis.[22] The pooled prevalence of hypertension among people with diabetes was 58.1% (95% CI 52.0–63.2%), varying from 51.5% in West Africa and 53.0% in East Africa to 69.1% in Southern Africa and 77.6% in Central Africa.[22] Among individuals with type 2 diabetes, prevalence reached 60.8%, and individual cohorts reported levels up to 92%.[22]

Although these data do not represent the general population, they underscore the interaction between hypertension, metabolic disease, and CVD risk in African women.

Cultural norms, gender-related barriers to healthcare access, and limited availability of screening and consistent treatment contribute to low awareness and poor control among women in many Middle Eastern and African settings. Rural women may have particularly limited access to care, while urban women face increasing

JAYPEE BROTHERS

exposure to obesity, physical inactivity, and high-salt diets.[12,13]

Latin America

Latin America displays considerable heterogeneity in hypertension epidemiology among women. Regional studies from urban and rural communities have reported high prevalence (often 30–40% or higher in middle-aged and older women), with substantial differences between countries and within countries by socioeconomic status.[11,23]

Data from several Latin American cohorts show that women often have higher awareness and treatment rates than men but still face low control rates, especially in disadvantaged populations.[23] Some countries have implemented national CVD prevention and primary-care strengthening initiatives, which have begun to improve detection and management, but coverage remains incomplete. The coexistence of high obesity prevalence, diabetes, and hypertension in women amplifies CVD risk, particularly for stroke and heart failure.

HYPERTENSION ACROSS THE FEMALE LIFE COURSE

Reproductive Years and Hypertensive Disorders of Pregnancy

During the reproductive years, women generally have a relatively low absolute risk of overt cardiovascular disease; however, hypertension in this period carries important short- and long-term consequences. Hypertensive disorders of pregnancy (HDP), including gestational hypertension and preeclampsia, affect a substantial proportion of pregnancies worldwide and remain major contributors to maternal and perinatal morbidity and mortality.[24] Women with a history of HDP have a markedly increased risk of subsequent chronic hypertension and later cardiovascular disease, often emerging within 5–10 years postpartum. These observations support recognition of HDP as both an acute complication and an early-life cardiovascular risk marker requiring structured long-term blood pressure surveillance.

Menopausal Transition

The menopausal transition represents a key turning point in the epidemiology of hypertension in women. Longitudinal cohort data show that blood pressure rises progressively with age, and sex differences narrow and eventually reverse during later midlife.[25] In the ARIC cohort, hypertension prevalence increased from 38.8% in women aged 43–46 years to 94.7% at ages 91–94 years, surpassing that of men at older ages.[25] The shift begins around the sixth decade of life, consistent with hormonal changes and vascular ageing.

From an epidemiological perspective, this period corresponds to a large population transition from normotension or high-normal blood pressure to established hypertension in the 40s and 50s, highlighting the need for systematic screening beyond reproductive healthcare settings.

Older Age

At older ages, hypertension becomes nearly universal among women. In longitudinal population data, prevalence approached >90% in women aged >90 years.[25] Importantly, patterns of control also change: uncontrolled hypertension was less common in middle-aged women than men (23% vs 33% at ages 43–46 years) but became more frequent in older women (56% vs 40% at ages 91–94 years).[25] Isolated systolic hypertension resulting from increased arterial stiffness is particularly common in older women and is strongly associated with stroke, heart failure with preserved ejection fraction, and cognitive decline.[1,2,13] Older women therefore experience prolonged lifetime exposure to elevated blood pressure together with multimorbidity, contributing to increased risks of chronic kidney disease progression (HR 1.5), heart failure (HR 1.6), stroke (HR 2.1), and mortality (HR 1.5) associated with uncontrolled hypertension.[25]

From a public health perspective, improving detection and control of hypertension in older women remains one of the most effective strategies for reducing stroke and heart failure burden at the population level.

CONCLUSION

Hypertension in women represents a major and evolving global health challenge. Approximately one in three adult women worldwide is hypertensive, with large regional and within-country differences in prevalence, awareness, treatment, and control. Although men tend to have higher prevalence earlier in life, women experience a steep rise in blood pressure beginning in mid-adulthood, leading to high prevalence in older age and substantial lifetime exposure to elevated blood pressure.

JAYEE BROTHERS

High-income regions in North America and Western Europe have achieved important gains in detection and control among women, yet marked disparities persist by race/ethnicity, socioeconomic status, and geography. In many LMICs in Asia, the Middle East, Africa, and Latin America, the prevalence of hypertension in women is high and rising, while awareness and control remain unacceptably low. These patterns contribute significantly to the global burden of CVD in women, including ischemic heart disease, stroke, heart failure, and complications of pregnancy.

Across the female life course, hypertension and related conditions such as HDP and isolated systolic hypertension in older age exert a profound influence on health trajectories. Epidemiological data consistently demonstrate that improving prevention, detection, and long-term control of hypertension in women would yield substantial reductions in CVD events and deaths.

Future efforts should focus on strengthening surveillance systems with sex-disaggregated data, addressing regional and socioeconomic inequities, and integrating blood pressure measurement and follow-up into reproductive, primary, and geriatric care. Such approaches are crucial for achieving equitable cardiovascular health and for reducing the global burden of hypertension-related disease in women.

REFERENCES

1. Mills KT, Stefanescu A, He J. The global epidemiology of hypertension. Nat Rev Nephrol. 2020;16(4):223-237.
2. Maas A, Cenko E, Vaccarino V, et al. Changing clinical perspectives on sex and healthcare. Lancet Reg Health Eur. 2025;2025;56: 101370
3. Li Y, Yin N, Li C, Yang SW. Global burden of cardiovascular disease in women, 1990-2019: A systematic analysis for the Global Burden of Disease Study 2019. Medicine (Baltimore). 2025 Jul 4;104(27):e43215.
4. NCD Risk Factor Collaboration (NCD-RisC). Worldwide trends in hypertension prevalence and progress in treatment and control from 1990 to 2019: a pooled analysis of 1201 population-representative studies with 104 million participants. Lancet. 2021;398(10304):957-980.
5. Santosa A, et al. Gender differences and determinants of prevalence, awareness, treatment and control of hypertension among adults in China and Sweden. BMC Public Health. 2020;20:1763.
6. Connelly PJ, et al. Sex differences in the prevalence, outcomes and management of hypertension. Curr Hypertens Rep. 2022;24(6):185-192.
7. Millett ERC, Peters SAE, Woodward M. Sex differences in risk factors for myocardial infarction: cohort study of UK Biobank participants. BMJ. 2018; 363, k4247
8. Ji H, Niiranen TJ, Rader F, et al. Sex differences in blood pressure associations with cardiovascular outcomes. Circulation. 2021;143:761-3.
9. Ji H, Kim A, Ebinger JE, et al. Sex differences in blood pressure trajectories over the life course. JAMA Cardiol. 2020;5:19-26.
10. Janczewska M, et al. Gender differences in hypertension awareness, diagnosis and treatment. J Educ Health Sport. 2023;13(3):51-7.
11. Mills KT, Bundy JD, Kelly TN, et al. Global disparities of hypertension prevalence and control: a systematic analysis of population-based studies. Circulation. 2016;134(6):441-450.
12. World Health Organization Regional Office for Europe. New data from WHO/Europe shows links between gender and noncommunicable diseases. Copenhagen: WHO; 2020. https://www.who.int/europe/news/item/09-12-2020-new-data-from-who-europe-shows-links-between-gender-and-noncommunicable-diseases?utm_source=chatgpt.com
13. Vervoort D, et al. Addressing the global burden of cardiovascular in women. J Am Coll Cardiol. 2024; 83(25):2690-2707.
14. Zhou B et al. Worldwide trends in blood pressure from 1975 to 2015: a pooled analysis of 1479 population-based measurement studies with 19·1 million participants. Lancet. 2017;389:37-55.
15. Chow CK et al. Prevalence, awareness, treatment, and control of hypertension in rural and urban communities in high-, middle-, and low-income countries. JAMA. 2013;310:959-68.
16. GBD 2019 Risk Factors Collaborators. Global burden of 87 risk factors in 204 countries and territories, 1990-2019: a systematic analysis for the Global Burden of Disease Study 2019. Lancet. 2020;396:1223-49.
17. The Lancet, 2020:296. https://www.thelancet.com/pb-assets/Lancet/gbd/summaries/risks/high-systolic-blood-pressure.pdf
18. Junxiao Li, Qionggiong Zhong, Shixiang Yuan, Feng Zhu. Global burden of stroke attributable to high systolic blood pressure in 204 countries and territories, 1990-2019. Front Cardiovasc Med. 2024;11:1339910.
19. Dorans KS, Mills KT, Liu Y & He J Trends in Prevalence and Control of Hypertension According to the 2017 American College of Cardiology/American Heart Association (ACC/AHA) Guideline. J. Am. Heart Assoc 7, 10.1161/JAHA.118.008888 (2018).
20. Priya S, Thakur R. Understanding gender variation in the risk factors of hypertension through cross sectional analysis. Sci Rep. 2025;15:3393.

JAYPEE BROTHERS

21. BMC Public Health 2024 Oct 1;24(1):2681.doi: 10.1186/s12889-024-20097-5. Hypertension in India: a gender-based study of prevalence and associated risk factors. Raza Mohammad, Dhananjay W Bansod
22. Hinneh T, et al. Regional prevalence of hypertension among people diagnosed with diabetes in Africa, a systematic review and meta-analysis. PLOS Glob Public Health.2023;3(12):e0001931
23. Irazola VE, Ortolá R, et al. Hypertension prevalence, awareness, treatment, and control in selected LMIC communities: results from the NHLBI/UHG Network of Centers of Excellence for Chronic Diseases. Glob Heart. 2016;11(1):47-59.
24. Tang Z, et al. Global, regional, and national trends and burden of hypertensive disorders in pregnancy among women childbearing age from 1990-2021. Front Glob Womens Health. 2025;6:1533843.
25. Yeo WJ, et al. Sex differences in hypertension and its management throughout life. Hypertension. 2024; 81(11): 2263-74.

JAYEE BROTHERS

for detailed information on cardiology books, visit our website www.ejaypee.com, for detailed information on cardiology books, visit our website www.ejaypee.com, for detailed information o

Hypertension in Women

Salient Features

- Comprehensive national academic resource on hypertension in women, addressing sex-specific differences in epidemiology, pathophysiology, diagnosis, and treatment
- Covers hypertension across the entire female life course—from adolescence and reproductive years to menopause and older age—including women-specific risk factors
- Dedicated focus on hypertensive disorders of pregnancy, including gestational hypertension and preeclampsia, with emphasis on long-term cardiovascular risk
- Integrates the cardio-renal-metabolic perspective, covering hypertension in chronic kidney disease, salt sensitivity, resistant hypertension, and emerging therapies such as renal denervation
- Highlights advanced diagnostic approaches, including ambulatory blood pressure monitoring, blood pressure variability, chronobiology, and early detection of secondary hypertension
- Addresses emerging scientific areas such as the gut microbiome, inflammation, sleep disorders, and cancer-related hypertension in women
- Provides evidence-based insights from major clinical trials and international guidelines, along with practical clinical guidance for screening, risk stratification, and management.

About the Editors

Sarita Rao MD DM FACC FSCAI is a Senior Interventional Cardiologist and the Director Cath Lab, Department of Cardiology, Apollo Hospitals, Indore, Madhya Pradesh, India, and the President of the WINCARS Association. With over 23 years of experience, she has performed more than 30,000 cardiac procedures, pioneering advanced interventions in India. She was the first female cardiologist in the country, and the central region to perform various complex interventions. She is a mentor, researcher, and advocate for women in cardiology. She is the Co-Chair of EAPCI International Affairs, Fellowship Director of WIN-APSIC and has received numerous prestigious awards and published numerous publications in international and national journals.

Jyotsna Maddury MD DM FACC FESC FICC is a distinguished Interventional Cardiologist, retired as Professor and Head, Department of Cardiology, Nizam's Institute of Medical Sciences, Hyderabad, Telangana, India, and the Founder of the WINCARS Association. She has a passion for women's heart health and made remarkable contributions to research in cardiovascular diseases, especially in stem cell therapy for acute myocardial infarction (AMI). She has published more than 200 original research papers and reviews in national and international journals and serves on the editorial boards of multiple medical journals. She trained many general and interventional cardiologists as a guide and teacher. Her numerous accolades include the Women Leadership Award and the International Scientist Award, etc.

Shelving Recommendation
CARDIOLOGY

ISBN 978-93-7806-015-1

Buy from ejaypee

JAYPEE BROTHERS