BioSpectrum the business of Bio & Health Sciences ASIA EDITION

Cardiovascular disease (CVD) impact on Asia-Pacific markets

June 23, 2020 | Analysis

A detailed analysis report on Hong Kong, Singapore, China, Australia, Korea, Taiwan



HONG KONG

Prevalence

- CVD, including heart attack and stroke, is the third leading cause of death in Hong Kong (after cancer and pneumonia) accounting for almost 9,000 deaths in 2019.
- Hong Kong has the second highest incidence of stroke in the Asia-Pacific region with 314 cases per 100,000, after China (403/100,000).
- Rates of ischemic heart disease, including heart attacks, are on the rise in Hong Kong due to an ageing population, reduced exercise and physical activity, poor diet and obesity.
- More than 1 in 10 people aged 30-74 in Hong Kong are at risk of experiencing a CVD event in the next 10 years.

Economic cost

- In Hong Kong, the total direct and indirect cost of CVDs is more than USD 4.6 billion (HKD 35.7 billion), with modifiable risk factors including hypertension, high cholesterol, smoking and obesity, accounting for 65 percent of these costs.

CVD in younger populations

- Almost 30 percent of people aged 45-54 in Hong Kong are considered to be at medium- or high-risk of developing CVD in the next 10 years.
- Furthermore, the incidence of ischaemic heart disease, including heart attacks, in younger males in Hong Kong is increasing, particularly among those aged 15-24 (10.7 percent increase).

SINGAPORE

Prevalence

- Every day, 17 Singaporeans die from CVD.

- Accounting for more than 6,200 deaths each year, heart disease and stroke are the cause of almost one-in-three deaths (29.2 percent) in Singapore.
- CVD is on the rise in Singapore, with the number of strokes increasing by nearly 40 percent to 7,741 between 2008 and 2017, and heart attacks increasing by 63 percent to 11,877 in the same period.

Economic cost • CVD is the largest contributor to Singapore's combined burden of early death and disability (measured in disability-adjusted life years or 'DALYs'), accounting for 14.2 percent total DALYs.

- In Singapore, CVDs incur USD 8.1 billion (SD 11.5 billion) in direct and indirect costs on individuals, their households and the public finances.

CVD in younger populations

- The incidence of heart attacks in those aged under 50 years has increased from 2007 to 2013.
- The age-specific incidence rate of heart attacks per 100,000 population has increased in all age groups, including those aged under 50 years.

CHINA

Prevalence

- There are approximately 290 million people in China living with CVD.
- CVD, namely stroke and ischaemic heart disease (including heart attacks), is China's leading cause of death, accounting for up to two-in-five deaths.
- Ischaemic heart disease is the fastest growing cause of premature death in China.
- In 2016, CVD accounted for 45.50 percent and 43.16 percent of all deaths in rural and urban areas, respectively.
- China has the highest incidence of stroke in the Asia-Pacific region, with 403 cases per 100,000, followed by Hong Kong (314/100,000) and Japan (218/100,000).

- In China, the morbidity of ischemic heart disease, including heart attacks, has sharply increased and become a major cause of emergency medical care, hospitalization and death over the past few decades.
- Increasing urbanization, economic prosperity and western influences have also increased consumption of animal fats, cigarette smoking, and obesity, all leading to the marked increase in cardiovascular diseases, especially in the younger and rural populations.

Economic cost

- In China, CVDs incur USD 21.7 billion (RMB 153.9 billion) in direct and indirect costs on individuals, their households and the public finances.
- Stroke is the leading cause of family poverty in rural China.
- In 2016, the hospitalization cost was USD 2.6 billion (RMB 19.1 billion) for heart attack and more than USD 12.1 billion (RMB 85.5 billion) for stroke.

AUSTRALIA

Prevalence

- A substantial 4.2 million Australians are living with CVD, which is a major cause of avoidable hospital admissions.
- CVD remains the number one cause of death in the country, with one Australian dying from CVD every 13 minutes.

- CVD is the cause of almost 30 percent of all Australian deaths.

- More than 1,000 Australians experience a stroke every week, 40 percent of whom will die within 12 months, while 50 percent of those who survive will become dependent on carers.

- The prevalence of coronary heart disease increases rapidly with age, affecting around 1 in 6 adults aged 75 years and over

Economic cost

- CVD, namely heart disease and stroke, is Australia's most costly disease, accounting for 10.4 percent of direct healthcare expenditure.

- CVD is forecast to remain the most expensive disease group, projected to rise from USD 7.75 billion (AUD 12 billion) in 2012-13, to more than USD 14.22 billion (AUD 22 billion) in 2032-33.

CVD in younger populations

- There is an increase in the incidence of heart attacks in those under 50 years of age.
- Although older age groups have experienced stable or decreasing rates of heart attack, an increasing rate of heart attacks has been observed in younger age groups.

KOREA

Prevalence

- CVD is the second leading cause of death in Korea after cancer, accounting for up to onein-five deaths.
- However, Korea has the lowest rate of ischemic heart disease in the Asia-Pacific region, with 184 cases per 100,000.
- An estimated 101 per 1,000 Koreans were living with atherosclerotic cardiovascular disease (ASCVD)* in 2015, a slight increase from the previous year.

**ASCVD includes myocardial infarction, angina, coronary revascularization, peripheral artery disease, ischemic stroke, and transient ischemic attack).*

Economic cost

- In Korea, CVDs pose a burden of more than USD 7.2 billion (KRW 8.8 trillion) (direct and indirect costs) on individuals, their households and the public finances.

TAIWAN

Prevalence

- CVD, including heart, cerebrovascular and hypertensive diseases, are the second leading cause of death in Taiwan, responsible for more than one-in-five deaths.
- CVD claimed the lives of more than 39,000 people in Taiwan in 2018 – a substantial one person every 14 minutes.

Economic cost

- CVDs levy USD 4.7 billion in direct and indirect costs on individuals, their households and the public finances.
- In Taiwan, the average medical costs associated with a heart attack in the first year is more than USD 9,824 (NTD 293,995), while the cost of stroke is USD 4,714 (NTD 141,086).

CVD in younger populations

- The rate of heart attacks in Taiwan increased by 30.3 percent in males aged under 50 years and 29.4 percent in females aged under 50 years between 2009 to 2015, whereas in other age groups, the incidence decreased, or remained unchanged.
- The prevalence of dyslipidemia (abnormal blood lipid levels) increased significantly during the above-mentioned period, noting it was the most common risk factor for heart attacks in young patients.
- In fact, in the young population (those aged under 55 years), dyslipidemia was the most common risk factor, compared with other older age groups.