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Editorial

World Heart Day: May the force be with your HEART

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Cardiovascular diseases (CVDs) remain the single leading cause of deaths worldwide, and India is no exception. It was projected that 17.5 million people died from CVDs in 2012, which is one-third of all global deaths, and of these deaths, 7.4 million were due to coronary heart disease alone.¹ Over 3 million of these deaths were premature, i.e., before the age of 60 and, ironically, could have largely been prevented. Further, over 75% of CVD deaths take place in developing countries. Out of the 16 million deaths due to noncommunicable diseases (NCDs) in people less than the age of 70 years, 82% occur in developing countries and 37% are caused by CVDs.²

In India, the Registrar General's Report states that CVDs are the foremost cause of mortality, with almost every fourth death in the country being attributable to CVD.³ In fact, the Global Burden of Disease (GBD) Study found that the age-standardized CVD death rate in India of 272 per 100,000 population is significantly higher than the global average of 235 per 100,000 population.⁴ A particularly alarming feature of the Indian scenario is the relatively early age of onset and the high case fatality rate. It is estimated that by the year 2020, nearly 3 million Indians will die due to coronary heart disease, and a high number of these deaths are expected to occur in the age group of 30–69 years.⁵ Currently, CVD deaths in Indians are seen at least a decade earlier than those in developed countries. The GBD Study also observed that over 50% of deaths due to CVDs in India are seen below the age of 70 years, as compared to 23% in developed countries, directly affecting the most productive age groups, with profound adverse impact on the country's economy.⁵

diabetes, overweight or obesity, physical inactivity, and tobacco use. Major health gains can be made in this hitherto fore ignored area through basic public health strategies focusing on lifestyles, diet, and the environment. Despite adequate knowledge on the risk factors for CVDs, which have been demonstrated in case-control INTER-HEART and INTER-STROKE studies, there have been hardly any prospective studies that have analyzed the association of risk factors with CVD incidence in India.⁶

Public health services in developing countries are already overstretched due to the double burden of communicable and NCDs. Already scarce and overburdened state resources need to be often diverted to cope with the increasing demands of heart disease, diabetes, and other NCDs. At the same time, healthcare systems in these countries are hampered by a model based on high-technology hospitals that provide expensive tertiary care to a limited population who can afford it, while consuming large amounts of resources. It is estimated that some countries may spend more than 50% of their health budgets on tertiary care services, thus rendering a significant proportion of people with high cardiovascular risk undiagnosed, or with inadequate access to treatment at the primary healthcare level. Strong evidence exists to show that most premature deaths resulting from NCDs including CVDs can be prevented purely by primary prevention and the remaining by improving existing healthcare systems to respond more effectively and equitably to the needs of people with NCDs.⁷

Risk factors alleviation or tertiary care

The leading cause for the increasing burden of CVDs is the rising prevalence of risk factors for CVD, such as hypertension,

Focus of the Armed Forces

It would be rather naïve to assume that the Armed Forces would be immune to this burden of heart disease. Indeed, complex lifestyle changes, rapid urbanization, higher stress levels, and erosion in fitness levels have all conspired to

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challenge our dependant clientele. While cardiac sciences in the Armed Forces Medical Services have made great and rapid strides in the fields of diagnostics and management of CVDs, it is rather unfortunate that very little headway has been achieved in preventive cardiology, be it in early detection or amelioration of risk factors.

This edition of MJAFI has its heart in the right place! 29th September was observed internationally as the World Heart Day with the theme of “Power your Life.” This year, the theme is directed specifically to raise awareness on what people can do to power their lives using a few simple steps such as eating more healthily, reducing alcohol intake, and stopping smoking. This edition of MJAFI brings to attention the complexities in the field through several articles. These articles sum up different interesting aspects of the disease, both in terms of diagnosis and management. The diligent reader shall be made aware of the prevalence of CVDs in the community setting through a study on the risk factor distribution by Nangia et al.⁸ Narayan et al. bring out structural cardiac lesions in transient tachypnea of the new born.⁹ Research by Dashottar et al.¹⁰ and Maurya et al.¹¹ bring out the invaluable role played by radiological imaging procedures in the early diagnosis and management of CVDs. A well-researched review article on drug-eluting stents rounds up the selection for this issue of the Journal.¹²

Way forward

The magnitude of the epidemic of CVDs requires definitive and sustained action to be taken in three key areas: surveillance and monitoring, prevention and reduction of risk factors, and improved healthcare settings using early detection and timely treatment.⁷ Actions must include setting goals and measuring results, capacity building of health systems, and strengthening of primary healthcare. Without focusing on prevention strategies, increasing numbers of people will succumb to CVDs due to continued exposure to risk factors. Specifically in the context of the Armed Forces, this must translate into actively mapping and monitoring the epidemic of CVDs, along with early identification of risk factors through the system of AMEs and PMEs. This should go hand in hand with intensive preventive strategies aimed at reducing the exposure to risk factors. Research needs to be specifically directed toward estimating incidence and prevalence of CVDs and the

association of risk factors for CVDs. A targeted large-scale, prospective study could be tried, taking a cohort of new inductees and following them up over their service careers, and providing data on incidence of risk factors for CVDs specific to our settings.

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