

A Prologue to the Initial Report

G.Srinivas

Department of Obstetrics and Gynaecology, Mamata Medical College, Khammam, Telangana, India

"On The Motion Of The Heart And Blood In Animals," William Harvey's magnum opus, was published in 1628. The groundwork for modern cardiology was set down in this 70-page pamphlet. Ever since, research in the field of life sciences has not only enabled the rapid advancements linked to the IT and IR revolutions, but it has also cleared the path for advancements in the detection and treatment of cardiovascular diseases (CVD). Significant advances in cardiovascular medicine were marked by the following landmarks:

1. Aspirin and other lipid-lowering medications from the statin class, including cardiotonics, diuretics, angiotensin converting enzyme inhibitors (ACEIs), beta blockers, and others, have considerably improved the prognosis, and reduced the risk of cardiovascular disease (CVD) patients.

2. The use of supplementary examination tools, such as stethoscopes, electrocardiographs, nuclide scanners, computerized tomography, magnetic resonance imaging, and positron emission tomography, has considerably improved our clinical diagnostic level for cardiovascular disease (CVD).

3. A new age of interventional cardiology has dawned with the invention of the pacemaker, implantable converter defibrillator (ICD), coronary angiography (CAG), stent, and the drug-eluting stent, as well as the advent of radio frequency catheter ablation (RFCA) and percutaneous coronary intervention (PCI) technology.

4. Advancements in cardiopulmonary bypass, coronary artery bypass grafting (CABG), heart transplant, off-pump bypass, and the next generation of artificial heart technologies have all helped to make cardiac surgery more precise.

We are entering a new age of life science technology revolution tidal waves, which will build upon the magnificent accomplishments of the IT and industrial revolutions.

Modern cardiology is making strides in understanding the genetic predisposition to cardiovascular illness, how ion channels work, which molecules mediate signal transduction pathways (both upstream and downstream), and how to control the proliferation and death of myocytes.

Recent Nobel Prize winners have made strides in understanding the nature of potassium channels and nitric oxide (NO) signal transduction pathways.

The use of stem cells in the treatment of cardiovascular disease is quickly becoming a hot subject at conferences throughout the globe. The CVD remains an insurmountable obstacle, however. An increasingly dire scenario continues to confront us.

Since 1900, the global morbidity and death rates of CVD have been gradually increasing at an alarming pace, due to factors such as lifestyle changes, an aging population, and changes in the disease spectrum. Less than 10% of all fatalities throughout the globe were due to CVD at the turn of the twentieth century. Near the end, cardiovascular disease was responsible for 25% of deaths in underdeveloped countries and over 50% in industrialized nations.¹

The incidence of CVD is a problem in today's globe, impacting both rich and poor nations.

Approximately 80.7 million individuals, or one-third of the population, are living with a cardiovascular disease. In 2006, out of 2,425,900 total fatalities, or 1 out of every 2.9 deaths, were attributed to cardiovascular disease (CVD), making it the top cause of death for both men and women across all racial and ethnic groupings.²

Cardiovascular disease mortality has climbed from 12% of all fatalities in China during the 1950s to 36% now; the country is home to 15% of the world's population.³

With an estimated 24 percent of all fatalities in India attributable to CVD, the country is home to one-sixth of the world's population.⁴

Smoking, high blood pressure, dietary fat, elevated plasma cholesterol levels, lack of physical exercise, diabetes

mellitus, and obesity are among the preventable risk factors for cardiovascular disease (CVD) that are expanding at a rate never seen before.

By 2020, cardiovascular disease (CVD) will have surpassed all other causes of mortality as the leading global killer, accounting for one out of every three fatalities.¹

According to projections, we may reach the peak of CVD by 2020.¹

Medical expenses and human suffering caused by CVD place a severe financial and emotional strain on families and communities. Concerningly, given the current economic situation, the projected direct and indirect cost of CVD in the US alone in 2008 was \$448.5 billion.²

It is the holy obligation of governments, medical professionals, and basic research experts in the area to establish a thorough, worldwide, preventative and therapeutic barrier against the global development of CVD.

As varied CVD specialists, it is our shared and paramount duty to further improve cardiovascular disease research, both at the fundamental and clinical levels.

With the backing of the non-profit, medical magazine running and the experienced publisher, E-Manuscript, a group of distinguished cardiologists and basic research scientists from various countries (e.g., China, India, the US, and Japan) have launched the Journal of Cardiovascular Disease Research (JCDR), an international professional journal that is peer-reviewed and double-blinded.

All aspects of cardiovascular disease are addressed in JCDR, from fundamental scientific research to clinical treatment. JCDR acknowledges and publishes articles pertaining to prevention, clinical observation, medication, interventional therapy, cardiac surgery, and nursing, as well as work at the molecular, subcellular, cellular, tissular, organic, and systemic levels focusing on the pathophysiological mechanisms of cardiovascular disease. Members of the cardiovascular disease research community, including academics, doctors, surgeons, pharmacists, occupational therapists, and other medical professionals, are JCDR's target audience.

The Journal of Computational and Diagnostic Research (JCDR) provides a forum for the worldwide exchange of academic knowledge among experts in the area of cardiovascular disease (CVD).

If you have accomplished something in clinical or fundamental research, JCDR is the place to showcase it and become involved.

JCDR is a venue where you can share your ideas and inspire others.

I really hope that this JCDR platform will be the recipient of your insight. If you're lucky, your idea will grow into a blazing torch that guides the rest of your team.

As the clock strikes midnight, I am delighted to announce, on behalf of the editorial board at E-Manuscript, the inauguration of the Journal of Cardiovascular Disease Research (JCDR), a brand new official, non-profit publication.

Reference

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