

Available online at www.sciencedirect.com

ScienceDirect

journal homepage: www.elsevier.com/locate/ihj

CSI Forum

History of Cardiology in India



Mrinal Kanti Das*, Soumitra Kumar, Pradip Kumar Deb, Sundeep Mishra

Cardiological Society of India, India

ARTICLE INFO

Article history:

Received 7 April 2015

Accepted 7 April 2015

Available online 21 May 2015

Keywords:

Vedic concept of health

Cardiological Society of India

Yoga

Intervention in cardiology

Innovations

ABSTRACT

History as a science revolves around memories, travellers' tales, fables and chroniclers' stories, gossip and trans-telephonic conversations. Medicine itself as per the puritan's definition is a non-exact science because of the probability-predictability-sensitivity-specificity factors. Howsoever, the chronicles of Cardiology in India is quite interesting and intriguing. Heart and circulation was known to humankind from pre-Vedic era. Various therapeutics measures including the role of Yoga and transcendental meditation in curing cardiovascular diseases were known in India. Only recently there has been resurgence of the same globally. There have been very few innovations in Cardiology in India. The cause of this paucity possibly lie in the limited resources. This has a vicious effect on the research mentality of the population who are busy in meeting their daily requirements. This socio-scientific aspect needs a thorough study and is beyond the scope of the present documentation. Present is the future of past and so one must not forget the history which is essentially past that give the present generation the necessary fulcrum to stand in good stead. The present article essentially aims to pay tribute to all the workers and pioneers in the field of Cardiology in India, who in spite of limited resources ventured in an uncharted arena.

Copyright © 2015, Cardiological Society of India. All rights reserved.

'What is all knowledge except recorded experience, and a product of history?'

- Thomas Carlyle

1. Explanatory notes on science vs. history

Science as per Cartesian criterion constitutes rational method of analysing any problem, transforming rules logically, defining them in reproducible terms, inferring the rules and

then rigorous deduction of conclusion. How does history which as per Aristotle is an account of what individual human beings have done and suffered, fit into Science? Beneath the great continuities of thought, beneath the solid, homogenous manifestations of a collective mind which led to a linear development of science there persists a particular genre, form, discipline, or theoretical activity; non-linear interruptions whose status and nature vary considerably. It is these *epistemological acts and thresholds* which suspend the continuous accumulation of knowledge, interrupt its slow development, and force it to enter a new time, cut it off from its empirical origin and its original motivations, cleanse it of its imaginary complicities; The documentation of these

* Corresponding author.

E-mail address: Dr.mkdas2001@yahoo.co.in (M.K. Das).<http://dx.doi.org/10.1016/j.ihj.2015.04.004>

0019-4832/Copyright © 2015, Cardiological Society of India. All rights reserved.

interruptions connected linearly in a matrix of web in several planes and consciousness is called HISTORY.¹ Thus it is not surprising that science itself revolves around amalgamation of memories, travellers' tales, fables and chroniclers' stories, gossip, moral policing by the powerful and last but not the least the untiring human zeal. The old or modern history, both seeks the solid foundation of evidence provided by chains of researchers to establish the same as a scientific truth. Thus, history is indeed a science, but a science in some different sense, with its own methods and canons, no less exacting, perhaps than those of the sciences of nature, but resting on foundations different from them. Or maybe it is *sui generis*, neither science nor arts, but a sole independent faculty with altogether different mindset.²

The history in itself can be of three types; the contemporaneous writings limited to deeds, events and concepts which are witnessed by the very eyes or are in collective consciousness is called Original history; a history that reflects on events in past, written at some temporal distance from the events considered is Reflective history; and a history which does not concern merely with the events but searches the root cause for them is the Philosophical history. In this text we primarily deal with the Original history (but also a bit of Reflective and Philosophical history).³ History is a record of these defining moments.

2. Indian heritage of health and cardiovascular science

India has a heritage of knowledge dating back to 8000 BC.⁴ Extremely knowledgeable sages and saints perceived various aspects of nature and universe, experimented with their observations, concluded and transmitted their findings through the Vedas also known as 'Sruti' meaning hearing. They were never found in print form at that period. Out of the four Vedas Rik, Sham, Yadu and Atharva, the Rik and Atharva Vedas extensively covered health of human being. Only subsequently, in post Vedic era they got printed in the forms of various epics including treatise like Bhagvat Geeta.

Ayurveda is a combination of two components: 'Ayu' meaning life or age or longevity and 'Veda' meaning knowledge. This came into existence possibly in 5000 BC deriving concepts and rules laid down in the Rig Veda and Atharva Veda. Thus Ayurveda is the knowledge by which a healthy human life in all aspects-physical, mental, intellectual and spiritual lives and mainly concerned with the prolongation of a healthy life and prevention of diseases and senility and occasionally with the curing of diseases. World Health Organisation (WHO) has only recently adopted the same ethos for the definition of health.

Later around 600 BC, Susruta scientifically depicted the various aspects of human biology, anatomy, surgery with instrumentations in a book called 'Sushruta Sanhita', a great classic on the science of surgery which earned him the title of 'father of surgery' internationally. Similarly another stalwart physician Charaka possibly in the same era scripted the pharmacotherapy of various diseases in 'Charaka Sanhita' having 120 chapters with definite effort to move treatments to a reason-based approach.⁵

Yoga and transcendental meditation, a life style approach combined with dietary modification and 'Asanas' or specific corporal postures mostly adopted from 'Hathayoga', a gift from ancient India have contributed a lot in prevention of cardiovascular diseases. The renewed interest in the last & present century with evidence-based approach has been a boon to the people of the globe by circumventing the various pharmacological agents.⁶ Indian documentation of description of heart dates back to 600 BC in Charaka Sanhita and Sushruta Sanhita. Here, heart was described as the seat of consciousness and as a prime mover of 'prana' or imperious energy. Heart being the centre of the system, transmits energy through different 'nadis' or channels, which were later on described as 'siras' or veins, 'dhamanis' or arteries and 'srotas' or flow. Interestingly, Charak or Susruta did not have the clue that lungs had any role in the circulatory system. Instead, they described liver as the transmitter of purified blood coming to it through portal 'dhamani' or artery from intestine and through hepatic 'sira' or veins to the heart which then transmitted the same blood to all parts of body. It is presumed that they extensively studied fetal circulation possibly because greater availability of fetuses or new borns, where lungs are bypassed (for purified blood came to the fetus from mother through placenta and umbilical vein and this led to the overlooking of lungs altogether in the adult circulation). Sir B N Seal (1864–1938 AD), a philosopher and Mathematician par excellence from Bengal have extensively studied those aspects and put them in his treatise "The positive sciences of the ancient Hindus."^{7,8} Ancient Indians believed that life force 'prana' ('chi' for Chinese and 'ki' for Japanese) was located as the centre of consciousness in the heart. Further, the 'prana', is believed to be drawn into the body by the 'chakras' or wheels of life with whirling vortexes of energy. It was rather like whirlpool sucking in the energy and from that point it was distributed through the body, and, much like blood distribution it 'flows' through special 'channels'. The fourth (out of 7 Chakras) was the *Heart Chakra*, located near the centre of the chest, controlling the operation of the heart and the circulation of blood. Fig. 1.

3. Modern cardiology and cardiological society of India

Modern Cardiology became a reality as a superspeciality after the World War II. The advanced outlook and vision of a group of topmost Indian physicians under the leadership of Bharatratna Dr. Bidhan Chandra Roy led to official formation of the Cardiological Society of India (CSI) on 4th April, 1948, even before the formation of the American College of Cardiology in 1949 and many others.⁹ Formation of CSI was very interesting indeed. A group of eminent physicians including B C Roy, J C Banerjee and others were traveling in a train from Kolkata to Asansol, a sub-urban town to attend a conference in 1946 and on board; the idea of forming Bengal Cardiological Society was mooted and formed. Later on in 1948 the elite physicians of India met at Kolkata (The then Calcutta) and CSI came into being on 4th April, 1948. The All India Heart Foundation (AIHF), one of the first in Asia was formed in

Download English Version:

<https://daneshyari.com/en/article/2927867>

Download Persian Version:

<https://daneshyari.com/article/2927867>

[Daneshyari.com](https://daneshyari.com)