

## Prevention of Vascular Disease and Development of Affordable Health Care for All: Thinking out of Box

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Three decades ago, India and other participating countries signed a declaration to achieve “Global Health Care For All” by the year 2000(1). Two decades later, under the aegis of the European Union, another conference was held in Belgium on the same theme- “the health care for all” (2). In view of the information technology revolution, now the theme is; can we achieve health information for all by 2015? (3). Except Spain and Costa Rica, no other country has achieved the goal of providing health care for all of their citizens. It is time to focus our attention, on how to achieve this goal in India, in the near future. Since India has made considerable progress in the information technology (IT) area, by bringing the giants of the IT and health care stakeholders on a common platform, we probably can bring health care to all in India. Indians have the highest incidence of hypertension, obesity, type-2 diabetes, coronary artery disease, and stroke (4-6). To create awareness and develop preventive programs, we started a society “South Asian Society on Atherosclerosis and Thrombosis” (SASAT, [www.sasat.org](http://www.sasat.org)) in 1993. There is no way we could provide modern medicine to all in a country like India. Furthermore, a quick survey reveals, that Indians by and large, want to select their own choice of therapies. Therefore, we will have come up with “novel” ideas to provide accessible, acceptable, affordable healthcare for all. In the 2010 conference of SASAT in Bangalore, we organized a round table conference (RTC) to discuss such novel approaches. Since majority of individuals pay from their own pocket for healthcare in India, they decide the type of healthcare they want. In view of this observation, the experts who met at RTC suggested forming an alliance of all traditional health systems [Global Alliance of

Traditional Health Systems (GATHS, [www.GATHS.org](http://www.GATHS.org))].

GATHS would like to join hands with AYUSH ([www.indianmedicine.org](http://www.indianmedicine.org)) and other professional organizations of traditional healers to develop a comprehensive integrated healthcare program for all individuals in India. In this collective effort, we feel strongly that using the strength and expertise of each one of the arms of AYUSH (Ayurveda, Yoga, Unani, Siddha, Homeopathy, and Naturopathy) will offer the most benefit. To develop full potential of these “heritage” therapeutic modalities, we need to work on capacity building, develop standard surveillance methodologies for risk assessment, create awareness programs, risk management programs, promote life style changes, introduce evidence-based knowledge about therapies and therapeutic products, and initiate affordable therapeutic modalities. We also have to develop effective management of 3 Is—infection, inflammation, and immune systems. Since patient safety is of great importance, adequate regulatory issues should be considered. These issues cannot be answered in isolation and needs to be considered in light of a meaningful assessment of the potential benefit, the risks of avoiding other “proven” therapeutic approaches, the potential toxicity of other therapeutic interventions as well as of the AYUSH products that are currently in use.

This kind of approach to bring traditional methods of therapies as an alternative or complementary medicine is called “integrative medicine” in the Western countries. In India and other developing countries, these traditional therapies are the mainstream therapeutic modalities available. Integrative medicine is, by and large, an approach to healthcare that can be easily incorporated by all medical specialties and professional disciplines and by all healthcare systems. If the integrated platform could be developed well, its use will not only improve healthcare for patients, but also will enhance the cost-

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effectiveness of healthcare delivery for providers as well as payers. Since in a country like India less than 10% of the individuals are covered by health insurance, we will have to find a way to empower people to take charge of their own healthcare. Integrative approach to healthcare should include engaging the patient as an informed and empowered partner and personalizing the care to best address the individual's unique conditions, needs, and circumstances. To develop such a system, we need to bring in multiple stakeholders and develop the needed infrastructure at the level of the community health centers. In view of this need, we have initiated a move to form an alliance of traditional healers so that we can develop a well-harmonized, accessible, acceptable, and affordable healthcare to all. By bringing traditional therapeutic specialties like Yoga, Ayurveda, Unani, Siddha, Naturopathy and Homeopathy, and the science of spiritual healing modalities, we can address the full range of physical, emotional, mental, social, and spiritual aspects that affect a person's health. By treating the whole person (holistic approach), both the patient's immediate needs as well as the effects of the long-term and complex interplay between a range of biological, behavioral, psychosocial influences can be addressed. This process enhances the ability of individuals to not only get well but, most importantly, to stay well. The integrative approach emphasizes prevention, health maintenance, and early intervention, and utilizes all appropriate, evidenced-based, and personalized therapeutic approaches to achieve optimal health and wellbeing across one's lifespan. This fits very well with the mission and vision of our professional society, SASAT, as well as that of the new alliance (GATHS) that we have initiated.

In December 2010, we had a RTC along with the SASAT 2010 conference in Bangalore, India, to brainstorm these ideas. We also invited other stakeholders, such as academicians and information technology (IT) giants of Bangalore, to this platform to discuss this very important issue. We were fortunate to have the representatives of AYUSH as well as the team of experts (Prof. Gopal Naik, Indian Institute of Management, Bangalore, and his team) that put together a "Grameen Project," which will eventually take the Government to the level of village. The pilot project called "Pragathi" was inaugurated at Nallur, a village 120 km from Bangalore. Now the villagers can do all the government business at this "kiosk" without leaving their village. They also have

access to teleweather, tele-education, and tele-medicine facilities. Indeed, they demonstrated these capabilities at the inauguration ceremony. We have been asked to work with this project and develop a health booth. Majority of the telemedicine platform now in development or in operation use modern medicine.

We want to develop a fusion of the existing health systems and make use of the best from each system. Our idea is to bring all the traditional healers to this platform. We envisage creating an IT-supported, web-enabled health booth. This health booth will be at the kiosk at each village. The health booth will have a mobile diagnostic platform (MDP), which will provide basic diagnostic tests based on modern medical technology. It will also have web-enabled, face-to-face consulting capability. We will have a knowledge-portal, which would provide access to the existing knowledge in each of these therapeutic modalities (e-clinician). Currently this knowledge base has information on 4000 diseases and the therapeutic modalities practiced by allopathic physicians ([www.coresysit.com](http://www.coresysit.com)). Based on the diagnostic work-up, the doctors or the traditional healers can provide electronic prescription and facilitate the dispensing of needed drugs or therapies. This type of system with extensive network of traditional healers and web-supported knowledge base can reduce the cost, standardize the treatment modalities, and provide access as well as affordable healthcare delivery to a large section of the society.

We have made a beginning by launching the first platform, GATHS, in Mysore on the 23 February 2011. To start with, we have commissioned an expert to develop an IT module to interface with the tele-education set up of the Karnataka e-Government sponsored Pragathi program. The GATHS IT-module will have information on all the vaidyas practicing different traditional medicine in specific geographic location (e.g., Tumkur District), list of common ailments, and the approved remedies in common use by the various systems. With the help of AYUSH, we will develop a "shop" at these Pragathi kiosks for dispensing AYUSH or Government-approved medicinal products. We are planning to launch this GATHS module at the Pragathi kiosks this year. We also are contacting experts in this field as well as Vice Chancellors of Universities of Health Sciences in various States, to try and experiment this novel model.

We have started working on type 2 diabetes related issues at the community level in Mysore, which

involves detection of early onset diabetes and providing appropriate interventions to prevent the development of full-blown diabetes. We also have initiated a collaborative project with the same “theme” partially funded by Indian Council of Medical Research and University of Minnesota. We are also working with Isha Foundation ([www.ishafoundation.org](http://www.ishafoundation.org)) of Coimbatore, Swami Vivekananda Yoga Anusandhana Samsthana, Bangalore ([www.svyasa.org](http://www.svyasa.org)), on studies related to evaluation of Yoga and diet on the cardiovascular disease risk factors. We are also developing working relationships with the Karnataka Institute of Diabetes ([www.kidbangalore.in](http://www.kidbangalore.in)) on holistic management of type 2 diabetes. We are working with the staff of Pravara Institute of Medical Sciences (PIMS), Loni, to develop herbal medicines for the management of atherosclerosis. In view of the fact that more than 30% of the children born in India are of low birth weight, we are developing a project on maternal and neonatal nutrition at PIMS. In addition, we are working on public health projects with Isha Foundation. One of these projects is funded by AYUSH and involves a first-of-a-kind testing of AYUSH therapies on the tribals of Kohli hills. Preliminary studies have shown benefit of Siddha therapies in alleviating anemia in young women and adolescents. We are developing a national level anemia prevention project to evaluate the efficacy of various AYUSH products as well as effect of micronutrients.

With the help of AYUSH, Karnataka, and GATHS, we are planning a two-day workshop of traditional healers in Mysore in October this year. We will document various methods they employ and publish our first monograph on the subject. We also are working with the Pharmacy College of JSS Academy in Ooty, for collecting, documenting and validating traditional therapies used by the tribal people, in Ooty and its neighborhood. We have also launched our second platform, Mind Body Spirit Society of India, recently (June 2011). We are in the process of organizing a preconference symposium along with the international conference of “Integrative Medicine and Health” at Portland, Oregon, in May 2012. The Consortium of Centers of Academic Health for Integrative Medicine ([www.TheImConsortium.com](http://www.TheImConsortium.com)) is organizing this conference. We will initiate a massive educational campaign using multimedia and all the available communication modalities to create awareness about the holistic use of traditional therapies for the effective management and prevention of chronic

diseases. If we can keep up with the momentum that has been initiated and select leaders in each field and delegate the responsibilities, we will see remarkable progress in the way the healthcare is delivered in India, in the near future. We can develop a working model of “e-health” fully operational with the help of various experts. We can also develop robust corporate wellness program as well as life style management centers, in the form of “kiosks” in various locations of major cities.

As we mentioned in the beginning of this article, South Asians (Indians, Pakistanis, Bangladeshis, and Sri Lankans) have the highest incidence of coronary artery disease compared to any other ethnic group in the world. In addition, Indians also have a high incidence of hypertension and type 2 diabetes. SASAT has been organizing international conferences since 1994 in India and has published several books on the subject (4–8).

In spite of these observations, India has no national platform to address these issues or action plans in place to diagnose early risk, manage these risks, or prevent these chronic metabolic diseases. Although we claim, that India has been practicing traditional therapies for thousands of years, we do not have a National Institute for Integrative Medicine, to focus on the issues related to this ancient art of therapy. For the first time, there is a concerted effort by us and like-minded individuals, to bring attention of the world bodies to the epidemic of these diseases. The subject of noncommunicable diseases (NCDs) will be discussed at the United Nations. We, the members of SASAT, are delighted to learn that there was an unprecedented number of attendees, with over 250 civil society representatives and 90 UN country representatives in the civil society meetings held in New York on June 16, 2011. As WHO Director General Margaret Chan stated at the First Global Ministerial Conference on NCDs and Healthy Lifestyles in Moscow, “Without global goals or targets, this is not going to fly—what gets measured gets done.”

In view of our strong belief that creating awareness, early risk assessment for the development of NCDs, and effective risk management of these risks are the essentials for reducing the healthcare burden of these NCDs, we welcome the inauguration of the new publication devoted to this topic—the Journal of Clinical & Preventive Cardiology.

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