Dr. Balwant Tuana commented the other day, “It's an event fit for a King!”

Indeed our plans for Dr. Dhalla's 70th Birthday have truly blossomed into a once-in-a-lifetime celebration of his career. More importantly, we will undertake an outstanding pursuit of Dr. Dhalla's passion for sharing knowledge of developments in cardiovascular sciences and trying to expedite the flow of life-saving discoveries from the bench to the bedside.

Our original vision of the “FUTURE OF HEART HEALTH SYMPOSIUM” has attracted an amazing faculty to be led off by Dr. Valentin Fuster, President of the World Heart Federation, and closed with the Keynote Address by Sir Magdi Yacoub, President-Elect of the International Academy of Cardiovascular Sciences.

On October 13, we will Celebrate the 10th Anniversary of the Institute of Cardiovascular Sciences, St. Boniface Hospital and Faculty of Medicine University of Manitoba. Dr. Peter Liu will deliver the Keynote Address followed by eighteen world-acclaimed scientists, including Dr. Eugene Chazov from Moscow, an internationally renowned cardiologist, who was co-recipient in 1985 with Dr. Bernard Lown of the Nobel Peace Prize on behalf of the International Physicians for the Prevention of Nuclear War, an organization they co-founded in 1980.

At the celebration Luncheon, Dr. Hugh Smith, Mayo Clinic, Rochester MN will be our Special Guest speaking on “Do We Know What We Know”. Presidents of the Luncheon sponsors will bring Greetings - Dr. Emoke Szathmary from the University and Dr. Michel Tetreault from St. Boniface Hospital. Following will be Institute of Cardiovascular Sciences “8th Annual Awards Lectures” featuring Award-winning Speakers: Dr. Richard Walsh, Cleveland OH; Dr. Navin Nanda, Birmingham AL; Dr. Gary Lopaschuk, Edmonton AB; and Dr. Dennis McNamara, New Orleans LA.

The program for Oct. 15, “IACS WORKSHOPS” is being developed to include Dr. Dhalla's friends from around the world and will conclude with the Presidential address by Sir Magdi Yacoub, President-Elect of the International Academy of Cardiovascular Sciences.

We have full confidence to guarantee every reader of this issue of CV Network that they will have the time of their life when they join us in Winnipeg, Manitoba Canada for October 12 – 15, 2006!

For more details, please see pages 18/19 or visit our web site www.heartconference.com

Or Contact Ivan Berkowitz, Conference Director,
E-mail: ivan@mts.net; Telephone: (204) 228 3193
October 12, Thursday
7:00 PM – 9:30 PM  Reception to Celebrate the 10th Anniversary of I A C S at the Manitoba Legislative Building (under the Golden Boy)

October 13, Friday
8:00 AM – 8:30 AM  Continental Breakfast
8:30 AM – 12:00 Noon  University of Manitoba Faculty of Medicine Symposium “Developments in Cardiovascular Science and Medicine” *(details on page 20)*
12:00 Noon – 1:30 PM  Lunch to Celebrate the 10th Anniversary of Institute of Cardiovascular Sciences, St. Boniface Hospital & Faculty of Medicine University of Manitoba
   Chair – Dr. Arnold Naimar, Winnipeg
   Greetings from the University – Dr. Emoke Szathmary, President
   Greetings from St. Boniface Hospital - Dr. Michel Tetreault, President
   Special Guest – Dr. Hugh Smith, Mayo Clinic, Rochester MN “Do We Know What We Know”
1:30 PM – 5:30 PM  St. Boniface Hospital Research Centre Institute of Cardiovascular Sciences “8th Annual Awards Lectures and Presentations”
   Chairs: Dr. Pawan K. Singal, Winnipeg and Dr. Jan Siezak, Slovak Rep.

   Opening Remarks
   Robert Beamish Award Lecture
   What Makes the Heart Fail? – New Insights for Future Therapeutics
   Dr. Richard A. Walsh - Cleveland, Ohio
   John Foerster Award Lecture: Real Time 3D Echocardiography: Will it Replace 2D Echocardiography
   Dr. Navin C. Nanda – Birmingham, Alabama
   Ken Bowman Award Lecture: Optimizing energy metabolism as a novel approach to treat ischemic heart disease and heart failure
   Dr. Gary. D. Lopaschuk – Edmonton, Alberta
   Vincenzo Panagia Award Lecture: Pharmacologic Modulation of the Vascular Wall-Response to Catheter-induced Injury
   Dr. Dennis B. McNamara - New Orleans, Louisiana

   Arnold Naimark Award: Dr. Judit Barta (Hungary)
   Sr. Jacqueline St. Yves Award: Dr. Yan Jun Xu (Winnipeg)
   Jack Litvak Award: Ms. Val Coward (Winnipeg)
   Heart and Stroke Foundation Award: Dr. Santosh Math (Louisville)
   Henry Friesen Award: Ms. Melissa Dent (Winnipeg)
   T. Edward Cuddy Award: Mr. Vinit Elimban (Winnipeg)
   James S. McGoey Award: Mr. Irwin Eydelnant (Winnipeg)

7:00 PM – 10:30 PM  “Manitoba Feast” to reflect on the 19 years during which Dr. Naranjan Dhalla created the Institute of Cardiovascular Sciences – McPillips Street Station

October 14, Saturday
7:30 AM – 8:15 AM  Continental Breakfast
8:15 AM – 5:30 PM  FUTURE of HEART HEALTH SYMPOSIUM
7:00 PM – 11:00 PM  Indo-Canadian Community Reception and Dinner

October 15, Sunday
8:00 AM – 8:30 AM  Continental Breakfast
8:30 AM – 4:30 PM  International Academy of Cardiovascular Sciences 'Workshops' *(details on page 20)*
NOON - 1:00 PM  Lunch
4:30 PM – 5:00 PM  Presidential Address
   Speaker: Dr. Stephen Vatner, Newark
   Chair: Dr. Makoto Nagano, Japan
7:00 PM – 10:00 PM  Reception and Dinner
Symposium on THE FUTURE OF HEART HEALTH

Program Co-Chairs: Grant Pierce and Alan Menkis

7:30 - 8:15  Registration and Continental Breakfast
8:15 - 8:40  "Global Issues - From the Fatty Cell to Community Policies and Children’s Education"  
Valentin Fuster - President, World Heart Federation, New York NY. Chair: Larry Hryshko, Director, ICVS Winnipeg MB

FOCUS OF RESEARCH – Chair: Grant Pierce, Executive Director of Research, St. Boniface General Hospital, Winnipeg MB
8:45 - 9:10  "Can We Live For 150 Years?"  - Robert Roberts, Ottawa Heart Institute, Ottawa ON
9:10 - 9:35  "Can Stem Cell Research Change The Face of Cardiovascular Disease?"  – Piero Anversa, New York Medical College, Valhalla NY
9:35 - 10:00  "Potential Stem Cell-Based Therapies: A Veritable Revolution"  – Roberto Bolli, University of Louisville, Louisville KY
10:00 - 10:30  Panel Discussion – Bolli, Anversa, Roberts, Pierce, Fuster, Hryshko
10:30 - 10:45  Refreshment Break

WHERE WILL SURGERY GO ?  - Chair – Alan Menkis, Medical Director, Cardiac Sciences Program, Winnipeg

10:45 - 11:10  "Will Cardiac Surgery Exist in 20 Years?"  – Randy Wolf, University of Cincinnati, Cincinnati OH
11:10 - 11.35  "The Future of Mechanical Heart Assist Devices. Can They Be Permanent? Are They Ever Practical?"  
Walter Dembitsky, Sharpe Memorial Hospital, San Diego CA
11:35 - 12:00  Panel Discussion- Menkis, Dembitsky, Wolf
12:00 - 1:00  Naranjan Dhalla’s favourite Lunch

HOW CAN WE IMPROVE QUALITY OF HEART PATIENTS’ LIVES?  – 
Chair: James Tam, Chief of Cardiology, Cardiac Sciences Program, Winnipeg MB

1:00 - 1:25  "Prevention Will Reduce Heart Disease More Than Any Other Factor"  – Salim Yusuf, McMaster University, Hamilton ON
1:25 - 1:50  "Heart Disease in Women - Where it’s Going and The Challenges Ahead"  – Noel Bairey Merz, Cedars-Sinai Heart Center, Los Angeles CA
1:50 - 2:15  "The Medical and Public Health Impact of Cardiovascular Disease in Children: Globally Under-appreciated and Under-financed"  
Edward Kaplan, University of Minnesota, Minneapolis, MN

2:15 - 2:45  "Multimodality Cardiovascular Imaging: Embarking on a Fantastic Voyage"  – A. Jamil Tajik, Mayo Clinic, Scottsdale AZ
2:45 - 3:15  Panel Discussion – Bairey Merz, Tajik, Yusuf, Kaplan, Tam
3:15 - 3:30  Refreshment Break

ROUND TABLE ON IMPLEMENTING FUTURE CHANGES – Chair: Albert Friesen, President, Medicure Inc, Winnipeg MB

3:50 - 4:10  "How Can We Afford Health Care in the Future?"  - Roger Evans, Rochester MN
4:10 - 4:30  "The Role of Industry in Research & Development & Health Care. How Will It Look 20 Years from Now?"  - Calvin Stiller, London, ON
4:30 - 5:00  Panel Discussion – Stiller, Evans, H. Friesen, A. Friesen
5:00 - 5:30  "Keynote” Address - Sir Magdi Yacoub, President-Elect of International Academy of Cardiovascular Sciences, London, England  Chair: Alan Menkis
5:00 - 5:30  Indo-Canadian Community Reception and Dinner to honour Dr. Dhalla

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HON. PETER LIBA, HON. PEARL McGONIGAL, MRS. TANNIS RICHARDSON, DR. BILL NORRIE, DR. ARNOLD NAIRMARK

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### October 13, 2006, Morning

**Developments in Cardiovascular Science and Medicine**

#### A. Keynote Address
- **Chairman:** Bohuslav Ostadal, Czech Rep.
- **Speaker:** Peter Liu, Toronto

#### B. Symposium #1
- **Chairmen:**
  1. Senator Wilbert Keon, Ottawa
  2. Eldon Smith, Calgary
- **Speakers:**
  1. Paul Armstrong, Edmonton
  2. Bruce McManus, Vancouver
  3. Michael Sole, Toronto

**Nutritional Break**

#### B. Symposium #2
- **Chairmen:**
  1. Laurentiu Popescu, Romania
  2. Satoshi Takeda, Japan
- **Speakers:**
  1. Arnold Schwartz, Cincinnati
  2. Vladimir Smirnov, Russia
  3. Kewal Talwar, India

**Nutritional Break**

#### C. Symposium #3
- **Chairmen:**
  1. Robert Jennings, Durham
  2. Dragan Djuric, Serbia
- **Speakers:**
  1. Garret Gross, Milwaukee
  2. Dipak Das, Farmington
  4. Jawahar Mehta, Little Rock
  5. Baljit Singh, Saskatoon
  6. David Brasil, Brazil

**Nutritional Break**

#### D. Symposium #4
- **Chairmen:**
  1. Otoni Gomes, Brazil
  2. Ivana Ostadalova, Czech Rep.
- **Speakers:**
  1. Muhammad Asraf, Cincinnati
  2. Rakesh Kukreja, Richmond
  3. Elizabeth Röth, Hungary

### October 15, 2006, Morning

**Developments in Cardiovascular Science and Medicine**

#### 1. Progress in Investigative Cardiology
- **Chairmen:**
  1. Raja Babu Panwar, India
  2. Delfin Rodrigués Leyva, Cuba
- **Speakers:**
  1. Suda Suri, India
  2. Giuseppe Ambrosio, Italy
  3. Keld Kjeldsen, Denmark
  4. Jawahar Mehta, Little Rock
  5. Baljit Singh, Saskatoon
  6. David Brasil, Brazil

- **Chairman:** Wafia Etieba, Egypt
  1. Sergio Dalla-Volta, Italy
  2. Karl Werdan, Germany
  3. Horacio Cingolani, Argentina

#### 2. Progress in Cardiovascular Physiology
- **Chairmen:**
  1. Borivoj Korecky, Ottawa
  2. Shyam Agrawal, India
- **Speakers:**
  1. Manjit Singh, India
  2. Ashwani Malhotra, Newark
  3. Ren Ke Li, Toronto
  5. Nilanjana Maulik, Farmington

- **Chairmen:** Alexandre Fabiato, Richmond
  1. Iveta Waczulikova, Slovak Rep.
  2. Pedro D’Orleans-Juste, Sherbrooke
  3. William Weglicki, Washington
  5. Ghassan Bkaily, Sherbrooke
  6. Madhu Anand-Srivastava, Montreal

#### 3. Poster Session

### October 15, 2006, Afternoon

**Developments in Cardiovascular Science and Medicine**

#### 4. Progress in Molecular Cardiology
- **Chairmen:**
  2. Khalid Rahman, England
- **Speakers:**
  1. Balwant Tuana, Ottawa
  2. Jos Lammers, The Netherlands
  3. Stephen Schaffer, Mobile
  4. Mohammed Siddiqui, New York
  5. Mahesh Gupta, Chicago
  6. Roland Vetter, Germany

- **Chairmen:** Vaclav Pelouch, Czech Rep.
  1. Narinder Mehra, India
  2. C.C. Kartha, India
  3. Krishna Agrawal, New Orleans
  4. Ursula Muller-Werdan, Germany
  5. Ashok Grover, Hamilton
  6. Munir Hussain, England

#### 5. Progress in Cardiovascular Pathophysiology
- **Chairmen:**
  1. Harpal Buttar, Ottawa
  2. Adela Joanta, Romania
- **Speakers:**
  1. John McNeill, Vancouver
  2. David Severens, Calgary
  3. Belma Turan, Turkey
  4. Ramesh Goyal, India
  5. Jaipal Singh, England
  6. Brian Rodrigues, Vancouver

- **Chairmen:** Rama Rao, India
  1. Vladimir Jakovljevic, Serbia
  2. Michai Hinescu, Romania
  3. Yao Sun, Memphis
  4. Naoki Makino, Japan
  5. Suresh Tyagi, Louisville

#### 6. Poster Session
During the Young Investigators Forum in Winnipeg, Dr. Donald S. Beanlands was presented the 2006 Lifetime Achievement Award in Cardiovascular Sciences from the International Academy of Cardiovascular Sciences.

Dr. Beanlands left Toronto in 1975, moving to Ottawa to develop cardiology at UOHI. He served as Chief of the Division of Cardiology for 19 years, Professor of Medicine at the University of Ottawa and is widely recognized as one of Canada’s top cardiologists.

Currently, Dr. Beanlands is Professor Emeritus at the University of Ottawa and Deputy Director General of the Heart Institute. He is the past Director of what is regarded as one of the best postgraduate training programs in the country for young cardiologists. Physicians from across Canada and many from around the world are trained in all aspects of cardiology at the Heart Institute.

His many awards in teaching include the Excellence in Clinical Teaching Award for postgraduate training at the Faculty of Medicine on two occasions and distinguished Teacher Award of Canadian Cardiovascular Society 1998.

Dr. Beanlands continues with an active schedule, remaining committed to teaching and training. Advances in technology and new, more effective medications have improved the ability of physicians to treat patients, he says. “There has been tremendous progress but we still have to look after individual patients. That is important for residents to learn in their training. We’ve increased the training program by a year to take account of the technology but I’m not sure that’s enough.”

“Knowledge at the bedside, taking a proper history and conducting a thorough physical examination are critical for young physicians to learn”, says Dr. Beanlands. “These are gradually disappearing arts because of a growing dependence on technology. Unless you know what you are doing, hearing and seeing, you can’t tell whether the technology is always correct. So it’s very important that young cardiologists learn these clinical skills.”
The Role of Government in Health Care: A Societal Issue

For centuries, prominent figures have recognized the primacy of the health of the people. In 300 BC, the Greek anatomist and surgeon Herophilus wrote: “To lose one’s health renders science null, art inglorious, strength unavailing, wealth useless, and eloquence powerless” [1]. And in a speech in 1877, Benjamin Disraeli observed, “The health of the people is really the foundation upon which all their happiness and all their powers as a state depend” [2].

For many years, and particularly during the past half century, concern has intensified in both the United States and Western Europe about the cost, accessibility, and quality of health care for all the people. With impressive advances in molecular biology and the understanding of disease processes, in medical technology, and in pharmaceutical therapeutics, much more effective treatment has become available for a widening array of diseases. As a consequence, however, costs have steadily risen, while a substantial proportion of society, some in poor health, has little or no ready access to these services. As a result, medical policy issues occupy increasing political attention, with sometimes bitter disputation among various societal segments, including federal and state officials, congressmen, medical practitioners, social scientists, economists, health insurers, business leaders, and others. The essence of this controversy lies in the role of state intervention, particularly the extent to which it controls the provision, funding, and regulation of medical services. Opponents of state intervention and proponents of “privatization” contend that the deeper government becomes involved in health care, the more bureaucratic, complex, inefficient, and inferior the services. Advocates of state intervention, on the other hand, argue that government participation is the best way to improve both cost-effectiveness and accessibility of health services.

Historically, federal or state officials in various countries have intervened intermittently in medical or health activities, including particularly the licensing of medical practitioners, public health policies, and even regulation and control of medical practice. More than 4,000 years ago, King Hammurabi of Babylonia established a codification of medicine that included fees paid to physicians for satisfactory services, as well as penalties, sometimes draconian, for harmful services [3]. According to Magnier [4], the ArthaSastra written for Chandragupta Maurya, who reigned in India in the third century BC, “contains many laws... regulating medical practitioners, midwives, nurses, drugs and poisons, prostitution, sanitation and public health.” As early as the 12th century, Roger II of Sicily established certification of physicians, requiring them to pass an examination [5]. In the next century, his grandson, Fredrich II, expanded the process to require all candidates for medical licensure to be publicly examined after a 9-year curriculum [5]. In addition, he also established a sanctioned schedule of fees.

Health Care and Government in the United States

In the United States, the role of federal or state intervention in health care lagged far behind Europe for a number of reasons. Historically, medical education and clinical training were not standardized in the United States, consisting largely of preceptorships and “reading for medicine,” with the development, toward the end of the nineteenth and early twentieth century, of proprietary medical schools of generally poor quality.

Another influential factor in health care is the profit motive, which is culturally related to the enterprising commercial spirit of America. Still another, and perhaps the most important, factor according to Hollingsworth [6] is “a lack of a sense of community” in the United States versus the European cultural concept of “social solidarity” and the social-Darwinist attitudes [7].

Particularly significant is the role Medicare has played in the health care system, accounting in 2002 for about 30% of all hospital services, more than 20% of expenditures for physician services (with the addition of Medicaid, the figures become 47% and 27%, respectively), and a substantial proportion of the revenue for home health care agencies, hospices, renal dialysis facilities, laboratories, and ambulance services [8].

For a lecture entitled “Clinical Freedom,” Sir Raymond Hoffenberg [9], then President of the Royal College of Physicians, analyzed the “winds of change” in medicine in Great Britain and the United States during 4 decades of state medical service: “…on balance, despite our recruitment to a State-run service, we have retained a substantial degree of clinical autonomy, perhaps—one might venture—some-what more than our colleagues in America who are less overtly subject to government control.”

Rather astounding has been the number of self-appointed “pundits” who have facile solutions to the “health care crisis” without ever having studied medicine, seen a patient, battled the physician paper overload, or felt torn by the critical needs of a patient that have to remain unmet because of managed care dictates and financial restraints. An arrant example of the contumely of such comments is this statement in an address to medical students, “If you oppose government interference in your work, you should get out of health care and get into Hula Hoops...If you don’t want government interference, get out of medicine” [10]. In other words, do not try to correct social or political ills; simply avoid them by leaving them for others to cope with. Moreover, what activity in life is there with no government oversight? Even the facetious example of hula hooping has restrictions and is prohibited, for example, in the middle of a busy thoroughfare.

The British National Health Service (NHS), begun in 1948, now costs more than $139 billion a year. According to Nairne [11], “queueing for a cure...and the rationing of care continue to be routine...” Because of overflowing emergency rooms, crowded corridors, and waiting lists of about 1 million patients, the overburdened NHS health care workers are now encouraging patients to seek patient-paid physicians. Here again, retrenchment of government funds in the face of an aging population and more costly technology has deteriorated Britain’s socialized medical system. In an effort to address the waiting list, the British government is contracting out more NHS work to independent private firms [12].

In regard to the vaunted Canadian Health Care system, the Canadian Supreme Court ruling on June 9, 2005, in response to a case of a patient requiring a hip replacement placed on a waiting list, struck down the law banning private medical practice. The Chief Justice wrote that “Access to a waiting list is not access to health care.” The ruling stated “The prohibition on obtaining private health insurance ... is not constitutional where the public system fails to deliver reasonable services” [13]. In a crisp response to his own question “What reform would do the most harm?” Milton Friedman [14] replied, “Extending government control to all of medical care, i.e., socializing medicine on the Canadian model.”
Is Health Care a Societal Responsibility?

Do we have an obligation to care for every citizen who is ill? Yes, I believe we do, both as physicians and as members of a compassionate society. Moreover, I believe this responsibility is strongly implied in the American polity established by our founding fathers based on the concept of natural law and natural rights emanating from the Enlightenment and establishing our “right” to life, liberty, happiness, and property. Health is necessarily encompassed in this concept, for without health “life,” in its popular sense, and the attainment of all these “rights” is extremely difficult, if not impossible. It follows, therefore, that the sustainability of health is an integral function of the American policy. From a practical standpoint, the good health of all citizens is an economic advantage, since it allows greater productivity and less dependence on compensation from tax funds.

Caveats

Do I have a panacea for achieving such a goal? No, but I have some caveats to recommend and a proposal toward achieving this goal. First, be very cautious about proponents of radical “restructuring” or “reform” of health care. In the present climate, I believe that some form of national coverage is inevitable, but I would express grave concern about any form of a total government-operated system such as an “expanded version of traditional Medicare” [15].

Responsibility of the Medical Community

The medical community also has a clear responsibility in this regard. Because of the turmoil in the health care system, many physicians find that they no longer control their professional activities. Physicians must reclaim their stewardship of their own profession, especially in medical decision making and ethics, both of which must place the welfare of the patient above all else. Medicine must recapture its professionalism and reject the imposition of crass commercialism by profit-driven entrepreneurs. Physicians must become vocal and help educate the public and Congress in the realities of patient care [16]. As I have pointed out previously, “It is our responsibility to inform the public fairly and fully of the insiders’ views of the issues and of the adverse effects of overregulation, irrational restraints, and politically alluring but perilous recommendations” [17]. Only in that way can the public make informed decisions about the kind of health care system they want. It is unrealistic, indeed folly, for society to demand the most advanced and sophisticated health care available, yet balk at its higher cost [99]. As in most other spheres of life, there are no free lunches in medicine. The cost for those who cannot pay must be shifted to others. For physicians to remain passive about these matters while smoldering over the injustice of unreasonable, and sometimes inhumane, rules and regulations is bootless.

Recommendations and Conclusions

Health care is too critical for the welfare of the people to be held hostage by the politically motivated or the profit minded. Herein lies the societal challenge: the need for accepting the desirability of some form of national health care, along with the willingness to pay for it, but avoiding its administration and total control by an ultimately rigid and unwieldy governmental or insurance industry bureaucracy. Our present health care system is unquestionably in disarray. The need is urgent for reform to achieve more effective and more efficient health delivery. I believe the best mechanism to accomplish this objective is the establishment of a high-level commission jointly endorsed and supported by the President of the United States and the Congress, which is tactically different from the recommendation of the Committee of the Institute of Medicine [18], that the President and Congress “... develop a strategy to achieve universal insurance coverage.” I am emboldened to propose such a commission as a consequence of my personal gratifying participation in two such commissions that proved effective: (1) The Hoover Commission [19], which was responsible, among other things, for the establishment of the National Library of Medicine, and (2) President Johnson’s Commission on Heart Disease, Cancer, and Stroke [20], which was responsible, among other things, for the National Library of Medicine’s Outreach program and the National Cancer Institute Designated Comprehensive Cancer Centers. What is essential here are bold initiatives and focused and resolute leadership. In order to secure legitimacy and the nation’s esteem, the members of this commission should be meticulously selected for their nonpartisanship, integrity, vision, and documented expertise in all aspects of the multifarious health care system, with broad representation of the various participating disciplines, including medical practice, medical education, medical research, medical administration, hospital administration, medical ethics, medical economics, insurance, and other related fields. The mission should be explicitly defined to consider, contemplate, and analyze all the dynamics, features, and components of our current health care complex and provide a “roadmap” toward achieving universal health care coverage that is culturally acceptable, affordable, and of optimal quality. The commission should be adequately funded and given a deadline for completion of its studies and issuance of its recommendations in one to two years. Although at first glance this suggestion for a comprehensive exploration and reconstruction of our entire health care system may seem drastic, I rather envision it as a Fabius-like strategy, to which the words of Virgil [21], which appear on the reverse side of the Great Seal of the United States of America, seem apropos: “Look with favor upon a bold beginning.”

References

[1] Hersphilus. Fragment. 300 BC.

To read Dr. DeBakey’s entire article, please visit the Academy web site: www.heartacademy.org

Ischemic heart disease is a complex problem and various risk factors such as diabetes, obesity, cholesterol, high blood pressure and enlargement of the heart are believed to promote the occurrence of ischemic heart disease. Furthermore, several variables including environment, lifestyle, lack of exercise, smoking, as well as stress due to social, economic and work-related activities have been suggested to account for the increased incidence of heart attacks, abnormal heart beat and heart cell death – the main characteristics of ischemic heart disease. Accordingly, it is important to gain an in depth knowledge of the ischemic heart disease and evaluate the impact of each risk factor and variable on its development if we have to control, prevent and treat this devastating disease.

It should be pointed out that ischemic heart disease is manifested by insufficient supply of blood carrying oxygen and other nutrients to the heart for the production of energy. It could happen due to different reasons such as thrombosis (blood clot due to aggregation of platelets and other blood constituents), atherosclerosis (plaque formation due to cholesterol and other lipid deposits in the coronary artery) and coronary spasm (due to stress hormones in the blood). Endothelial dysfunction (imbalance in the release of contracting and relaxing factors by a layer of cells lining the coronary artery) has now been shown to be closely related to the development of coronary artery disease. Increased risk of coronary heart disease is closely associated with high levels of low density lipoproteins (bad cholesterol) and triglycerides, as well as with decreased levels of high density lipoproteins (good cholesterol). Recent experimental studies have provided evidence that it is not the high levels of cholesterol per se but the levels of oxidized cholesterol (cholesterol exposed to oxygen) which determine the development of atherosclerosis. The oxidation of cholesterol occurs due to oxidative stress, an oxidation process which generates oxyradicals and oxidants in the body. Thus, it appears that the prevalence of thrombosis, atherosclerosis and coronary artery spasms, as well as their underlying mechanisms need to be established in the South Asians if we have to deal with the problem of their increased susceptibility to coronary artery disease.

It is essential for the recovery of cardiac function to institute reflow of blood to the ischemic heart (myocardium) after the blockade of coronary artery. This has been done with procedures such as angioplasty (removal of the block by inserting a balloon catheter in the coronary artery) and coronary by-pass surgery (connecting arteries by a graft) or thrombolytic therapy (dissolving the clot). All these interventions have been generally found to produce beneficial effects in the long run in spite of initial abnormal heart rhythm and depression of cardiac function. On the other hand, if reperfusion of the ischemic myocardium with blood flow is not carried out within a certain period of time (2 to 4 hours after the ischemic insult), the heart is affected adversely and a wide variety of cardiovascular complications occur. Thus, there is an urgent need of agents, which can be given before starting angioplasty, coronary by-pass surgery or thrombolytic therapy. Extensive clinical trials in this regard are being undertaken by some drug development companies and it is hoped that we will have a positive outcome within 1 to 2 years. Nonetheless, it needs to be investigated if the outcome of procedure for establishing reperfusion in ischemic hearts of South Asians is different from that in other populations.

The heart dysfunction due to ischemia-reperfusion occurs at the level of cardiomyocytes (cardiac cells) and is associated with reduction in energy status and structural damage. Two major mechanisms, namely the development of oxidative stress and the occurrence of intracellular calcium overload (excessive amount of calcium in the cell) in cardiomyocytes have been suggested to explain the ischemia-reperfusion injury. Formation of highly reactive species of oxygen (oxyradicals) and oxidants within the ischemic myocardium has been observed to result in membrane disruption, imbalance of ionic distribution and development of intracellular calcium overload. The occurrence of intracellular calcium overload has also been shown to happen in the ischemic-reperfused hearts as a consequence of the accumulation of hydrogen ions, which causes the acidic environment in the cells and subsequent dysfunction of the different channels present in the cardiac cells. It should be pointed out that a little bit of calcium in the cardiac cell is essential for maintaining its excitability and appropriate cellular function. However, an excessive amount of calcium in the cell is known to promote protein degradation and hydrolysis of cell membrane phospholipids leading to cardiac dysfunction. Both oxyradical and intracellular Ca²⁺ overload have been reported to affect the cardiac gene expression and this may account for the delayed recovery of the ischemic-reperfused hearts. Thus, antioxidants and anti-proteolytic agents can be seen to produce beneficial effects on recovery of the ischemia-reperfused hearts.

Although different risk factors including diabetes, cholesterol and hypertension (high blood pressure) are considered to make the heart become more susceptible to the ischemia-reperfusion injury, the mechanisms of such a modification of myocardium are far from clear. For example, diabetes, which is associated with high risk of atherosclerosis, hypertension and myocardial infarction accounts for about 60% of deaths due to cardiovascular disorders. In fact, the overall mortality due to ischemic heart disease is increased 2 to 3 folds and the life expectancy is reduced by 5 to 10 years by diabetes. It should be noted that diabetes has been reported to induce microvascular complications at the level of kidneys, eyes and brain cells, whereas diabetes-associated macrovascular problems include coronary heart disease and peripheral vascular disease. Diabetes has also been observed to produce direct effects on the cardiomyocytes (cardiomyopathy); these changes are generally obscured by the appearance of atherosclerosis in diabetic patients. Thus, chronic diabetes can be seen to prime the cardiovascular system to become more susceptible to the ischemia-reperfusion injury. The increased incidence of diabetes may therefore be one of the major factors, which may account for the greater risk of ischemic episodes in the South Asian population. Whether other risk factors such as hypertension, hyperlipidemia (excessive fat in the blood) and lack of exercise also remodel the cardiac and vascular cells for increased sen-
Belgrade Satellite Symposium of the XIV International Symposium on Atherosclerosis was held on June 15-16, 2006 at the Military Medical Academy, Belgrade, Serbia entitled “From Vascular Biology to the Atherosclerosis Prevention: An Eastern European Perspective”. This satellite symposium was apart of the ISA Rome 2006 Congress (June 18-22, 2006, Italy) and was organized by Serbian Association of Arteriosclerosis, Thrombosis and Vascular Biology and Serbian Physiological Society. Dragan Djuric, School of Medicine University of Belgrade served as Chairman of this satellite symposium (program/organizing committee) and Vladimir Jakovljevic, Faculty of Medicine University of Kragujevac served as Secretary General. Honorary Co-chairmen were Nagano Makoto (Tokyo, Japan), Naranjan S. Dhalla (Winnipeg, Canada) and Ljubisa Rakic (Serbian Academy of Sciences and Arts, Belgrade, Serbia). The symposium was supported by the Military Medical Academy, CME Centre of the School of Medicine University of Belgrade, Faculty of Medicine University of Kragujevac, Ministry of Science and Environmental Protection, Ministry of Health, Special Hospital for Cerebrovascular Disease “Sveti Sava” and by few pharmaceutical and industry sponsors. The Union of European Medical Specialists and European Board of Internal Medicine granted 12 hours of European external CME credits (ECMEC) by European Accreditation Council for Continuing Medical Education (EACCME) to the symposium. For the occasion, a special issue of Experimental and Clinical Cardiology was published (vol. 11, No 2, 2006) including 11 full-length papers. Scientific work and educational activity were presented in seven International sessions in English language (risk factors and risk assessment, atherosclerosis in children, food factors and atherosclerosis, autoimmunity and atherothrombosis, other clinical aspects of atherothrombosis, treatment of atherothrombosis and hyperlipidemia and vascular biology) and one CME session in Serbian which was accredited by the School of Medicine University of Belgrade as well as Faculty of Medicine, University of Kragujevac. The total number of participants was more than 300 from 20 countries (mostly from Serbia). The participants have been also presidents and officials from national atherosclerosis societies in Central and Eastern Europe (Russian Federation, Czech Republic, Slovak Republic, Hungary, Germany, Greece), Romanian Society for Laboratory Medicine, European Society for Surgical Research, International Academy of Cardiovascular Sciences, and also a WHO expert for cardiovascular prevention from Japan presented his work on the basis of long-term Asian experience. The satellite symposium was advertised at web sites of XIV International Symposium on Atherosclerosis ISA Rome 2006, Union of European Medical Specialists, Serbian Ministry of Science and Environmental Protection, Serbian Physiological Society and Serbian Medical Society and in the IACS Bulletin “CV Network”. We appreciate very much that the Symposium has been held under the auspices of International Atherosclerosis Society and with support of Union of European Medical Specialists and International Academy of Cardiovascular Sciences. During the Belgrade Satellite Symposium of ISA Rome 2006, a Serbian Physiological Society Award for Lifetime Achievement was presented to distinguished professor, scientist and great teacher Naranjan S. Dhalla (Winnipeg, Canada).

We are delighted to announce that Ms Eva Little has become Administrative Assistant for the Academy. She is located in Dr. Naranjan Dhalla’s office in Winnipeg.

The Academy will be forever indebted to Susan Zettler. She will not be far away when we need her since she is Administrative Assistant to Dr. Larry Hryshko, Director of the Institute of Cardiovascular Sciences in Winnipeg.
Presently, there is only one medical school in Angola for a total population of about 15 million people. It is located in Luanda, the capital, where 70% of medical doctors live. Between 1976 and 1985 only 224 doctors graduated in the entire country, an average 22.4 each year. The overall MD/population ratio was estimated as 1 MD/46 000 inhabitants. The medical education lasts 6 years and there are few centers for specialization. By now, there are about 1,000 doctors working in Angola but almost 70% work in the capital.

There is no cardiovascular specialization and post graduation in Angola. Cardiovascular sciences are not the focus of all governments as the country suffers from many infective diseases. The majority of cardiovascular diseases are related to rheumatic fever, congenital defects and diseases of myocardio. There is a great need for help in the areas of health education and prevention of various types of cardiovascular diseases. Angola is calling for scientific improvement, health education and promotion, especially in the cardiovascular field as they don’t have means of modern diagnostic and treatment.

We in Brazil have a unique opportunity to help in Angola because we share Portuguese roots and language. We will start helping Angola on the field of Cardiovascular Education, providing centers in Brazil where they can come to improve, specialize or do post graduation and attend medical congresses. We will help in providing Brazilian literature and books and produce a net link of Brazilian doctors in various fields to discuss and answer questions by a chat or e-mail. For the future, we will plan a medical conference held in Angola with the participation of Brazilian doctors. During that time we will be able to exchange ideas and practice diagnoses and procedures.

Now there are two Doctors from Angola attending our Post Graduation course on Cardiology in Rio de Janeiro. They will spend about 2 years with us taking classes and doing practise in some Hospitals in Rio. In May, we hosted the Director of a Hospital in Lubango, Dr. Stephen Foster in our Brazilian Congress on Intensive Cardiology held in Vitória. He attended the Congress and had some meetings about medical conditions in Angola, stimulating Brazilian doctors to share their knowledge and help Angola. Prof. Otoni Gomes was the chairman of the Congress and suggested the IACS could program a Medical Symposium on Intensive Cardiology in Angola in 2008 or 2009.

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Renowned heart specialist Sir Magdi Yacoub has said he is "absolutely delighted" at the outcome of a pioneering operation that saw a 12-year-old's own heart brought back to life.

Sir Magdi had performed Hannah Clark's original transplant operation a decade ago, after she was diagnosed with cardiomyopathy, which made her heart double the size it should have been and therefore likely to give out within a year.

At the family's request, he came out of retirement to advise on the complicated procedure in which Hannah's own heart was brought back to life after removing her donor organ.

He said: "Her own heart has recovered. It really is absolutely wonderful news."

It was "not usual" for a transplant patient's original heart to be left in place, but doctors had thought ahead, he told BBC Breakfast.

"At the time we had the idea that she had this very severe muscle disease and there was the outside possibility that her heart would recover.

"That was the idea and it worked out, so that was wonderful.

"Now she is a happy little girl with her own normal heart. The complications have all gone. This is a very happy ending."

The girl from Wales is believed to be the first patient in the world to have her heart transplant reversed, doctors said.

Doctors at London's Great Ormond Street Hospital removed Hannah Clark's donated heart after her body rejected it. They then restarted her own heart, which had never been removed.

The 12-year-old, who comes from South Wales, had a heterotopic transplant operation 10 years earlier.

The procedure is called a "piggyback" because the donor organ is placed next to the patient's original heart.

At two years old, Hannah had cardiomyopathy, a condition that causes the heart to become inflamed and to function poorly. Her heart doubled in size and Hannah was at risk for heart failure.

She was given a new heart and it took over pumping blood while her own heart rested while still continuing to beat.

Her new heart worked fine until November 2005 when doctors found that her body was rejecting it. She has also battled lymph cancer for the past few years but is currently in remission after a successful course of chemotherapy in January of this year.

They decided to remove the heart and, during the operation on Feb. 20, they found that her own heart was working quite well.

After removing the donor heart, they reconnected her original heart and it took over pumping blood.

Prof. Peter Weissburg, medical director of the British Heart Foundation, said the transplant reversal was an important event in the understanding of how heart diseases progress.

He said the modern treatment for Hannah's condition would be to install a ventricular assist device, a temporary mechanical aid that would be removed after a few months.

Such devices were not considered reliable enough 10 years ago, which is why Hannah received a new heart.

Hannah is now feeling well enough to contemplate taking part in the Transplant Games later this year when she hopes to compete in swimming, long jump and table tennis.
The V Hopecardioglobal Congress will provide physicians the opportunity to hear about many new aspects of cardiology. Provide state-of-art Knowledge in latest concepts and technologies for cardiology through lectures and discussion of the most important clinical trials. Proposed topics featured on presentations:

- Cardiovascular Risk Factors
- Coronary Artery Disease (CAD) and Ischemic Heart Disease
- Heart Failure and Cardiomyopathies
- Dyslipidemias & Hypertension
- Diabetes Mellitus and Metabolic Disorders
- Generalized Atherosclerosis & Atherothrombosis
- Cardiovascular Pharmacology

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