There are only two families in the world, as my grandmother used to say: The haves and the have-nots. Sancho Panza in Don Quijote de la Mancha, Miguel de Cervantes

Introduction

The wealth of nations, a prerequisite for an adequate health care, shows a grossly unequal distribution. In affluent areas of the world, comprising North America, European Union, Australia, Japan and Australia, with only 14 % of the world population, the average gross domestic product (GDP/capita) is more than 25 times higher than that of the least developed nations (Table 1).

Table 1

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (Millions)</th>
<th>GDP/capita (US$)</th>
<th>Human development index (Maximum 1.0)</th>
</tr>
</thead>
<tbody>
<tr>
<td>USA</td>
<td>296</td>
<td>37'812</td>
<td>0.944</td>
</tr>
<tr>
<td>Canada</td>
<td>33</td>
<td>27'125</td>
<td>0.949</td>
</tr>
<tr>
<td>European Union</td>
<td>456</td>
<td>28'100</td>
<td>0.929</td>
</tr>
<tr>
<td>Australia</td>
<td>21</td>
<td>25'380</td>
<td>0.955</td>
</tr>
<tr>
<td>Japan</td>
<td>128</td>
<td>33'942</td>
<td>0.943</td>
</tr>
<tr>
<td>Least developed nations</td>
<td>1'274</td>
<td></td>
<td>0.448</td>
</tr>
</tbody>
</table>

Equally, the human development index (1), which in highly developed nations lies between 0.929 - 0.955 (1.0 being the absolute maximum), can be found in the least developed nations at values of 0.448 or less. Cardio-thoracic surgery, which requires strong logistic support and extensive infrastructure, provides good coverage and care only in highly developed nations. Indeed, the density of cardio-thoracic surgeons in a particular world area shows a strict correlation with GDP (Fig. 1).
Many countries are in desperate need of help in cardio-thoracic surgery; even in some developed nations in Europe, there might be space for improvement, due to their lack of structured postgraduate education, limitations of international contacts, and financial restrictions of foreign travel.

**Various approaches to the improvement in the field of cardio-thoracic surgery**

International Developmental Assistance. Governmental institutions of the developed nations customarily deliver developmental and humanitarian aid to the under-developed or war-ravaged countries. It usually involves multi-million dollar projects like building new hospitals and opening specialised wards (3, 4). The financial investment is considerable; buildings are completed with all necessary equipment and instrumentation, but no provisions are sometimes made for continuous operation by the local authorities, leading to the deterioration of care, exodus of highly trained personnel or even closure of these prestigious objects.

Professional charitable organisations. For financial means, they usually depend on donations. They send a complete team with surgeons, anaesthetists, intensive care specialists, nursing staff and pump technicians, to the underdeveloped nations to perform a series of operations in local hospitals. A small group of patients profits from this activity, but the general development of the specialty in the visited country is not necessarily facilitated. Financial means necessary for such a visit are substantial (travel costs, board and lodging, transporting the bulky and expensive equipment), and the institution in which the team normally functions has to agree to a prolonged leave of absence of the whole team, with its financial consequences. Good results, which the visiting surgeons accomplish, are due to their large experience and to the optimal composition of their highly experienced team. After the visiting team has departed, the local institution is left to its own means and visitors' good results are difficult to match when operations are performed by the local team.

Surgery in advanced centres. Direct help for the children with complex surgical problems is provided by several international humanitarian organisations like Terre des Hommes (5) or Chaîne de l’ Espoir (6). These organisations - besides other aspects of their activity - bring the sick children to the developed countries to receive proper treatment. Although costly, this method of humanitarian aid has saved many children and continues to be a highly respected modality of humanitarian aid. It requires substantial financial means, due to
the costs of transportation and lodging for both patients and accompanying persons, as well as payment of
direct hospital costs; although the operations are performed free of charge by the participating surgical teams.

**EACTS Activities**

During its early formative period, The European Association for Cardio-Thoracic Surgery (EACTS) has not been
involved in the humanitarian aid. The main objective of the EACTS, as specified in its constitution (7) and
spelled out in Article 3 is "to advance education in the field of cardio-thoracic surgery". Normally, this aspect is
covered by the annual meeting, postgraduate courses and Techno-College, and by the scientific journals of the
EACTS. Very soon after its beginning, the EACTS realized that it is reaching only a small group of Western
European surgeons, our Eastern European colleagues being prevented from large-scale participation
predominantly by political and financial limitations. In the early years of the EACTS, the congress fee was
waived for Eastern European colleagues, and for some years they even received the journal free of charge.
First EACTS educational effort for Eastern European surgeons was started by Hans Borst as a private initiative:
he enabled a series of visits by Eastern European surgeons to the leading institutions in Western Europe, a
highly successful method for establishing closer ties to the colleagues in Eastern Europe (8). More formalised
education and transfer of knowledge is being developed by the International Cooperation Committee, using
the financial assistance of the EACTS. Presently, ICC is concentrating its activity in the field of the transfer of
knowledge, with three major areas where the Committee presently acts:

1. **Scholarships for the European School of Cardio-Thoracic Surgery in Bergamo.** This school, which came
into being with generous help of Lucio Parenzan, is presently offering three annual courses in cardiac
and in thoracic surgery (9) and ICC is sponsoring participation of the younger surgeons if their
institution cannot support the cost of the course and of their stay. Until September 2006 a total of
41,430 Euros have been allocated for various scholarships at the International School, and 19
surgeons from 10 different countries were supported with a total expenditure of 41,430 Euros. The
specific information about this scholarships is available at the homepage of the EACTS (10).
2. **Visiting fellowship programme.** This is another form of knowledge transfer, which enables surgeons to
spend a certain period of time in a hosting institution, to improve their knowledge of specific
procedures and to get acquainted with various organisational details in the other institution. This
program (11) is very popular, but only a limited number of requests can be supported, given the
financial limitations of the ICC.
3. **EACTS Teaching courses.** Instead of bringing some surgeons to the other institutions and having them
observe the work there, ICC felt that a much more efficient method of knowledge transfer is the
organisation of the intensive teaching courses. They should be performed in a locality which is easy to
reach without resulting to expensive airline travel, and which can offer low cost board and lodging for
the participants. Two such courses, "Applied Science for Cardio-Thoracic Surgeons" and "Advanced
Techniques in Cardiac Surgery" were organised in 2006 in Prague and Krakow, respectively. The
thoracic course is planned for beginning of 2007 in Venice, and will be followed by other activities of
the Thoracic Committee. Both the Science and the Cardiac Course were highly popular with the
participants, and there is a strong demand for continuing these activities in the future. Participants
appreciate the possibility of the direct contact with the Faculty, not only during the formal part of the
course, but in the free time as well. ICC has decided to continue this activity through 2007 with a next
Science and Cardiac Course planned in spring and early summer (Science Course in Prague April 19 -
21, Advanced Cardiac Course May 30 - June 1, Advanced Thoracic Course March 8 - 10 in Venice).

ICC is presently exploring further methods of knowledge transfer, with instructive operating activity combined
with teaching in some African countries The organisational difficulties are substantial, and this activity will be
carefully explored in the near future.

**Summary**

It is obvious that professional organisations like EACTS cannot embark on large-scale humanitarian programs
requiring professional fund raising organisation, substantial staff, and long-term involvement in other
countries. Such an activity is definitively beyond the scope of EACTS, but the transfer of knowledge remains an
activity which is within the means of the Association and which continues along the previously established
lines of humanitarian efforts, practiced individually by many members of the EACTS. Presently, scholarship for the Bergamo School, Visiting Fellowships and Teaching Courses remain the mainstay of the knowledge transfer activity of the EACTS.

Literature:

3. [http://www.gov.cn/misc/2006-03/31/content_241509.htm](http://www.gov.cn/misc/2006-03/31/content_241509.htm)
5. [http://www.tdh.ch/](http://www.tdh.ch/)