

IFSSH Scientific Committee on Education: Hand Surgery Training, Humanitarian Missions

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Report submitted October 2012

Organisation of Hand Injury Services and the Developing World:

Challenges and Opportunities

Kofi Annan, former Secretary General of the United Nations, defined a developed country as follows: "A Developed Country is one that allows all its citizens to enjoy a free and healthy life and a safe environment". However according to the United Nations Statistics Division there is no established convention for the designation of the developed and developing countries or areas in the United Nations System. For the purposes of this report, a developing country is one in which all its citizens do not enjoy a free and healthy life or a safe environment.

In developing countries the population is poor and most of the population earn their living by their hands. Hand injuries and infections are more common than in developed countries, as are diseases such as leprosy. Burns and neglected trauma are high on the list of medical necessities. There are many locations where civil wars and land mines are still an issue. Congenital malformations are frequent and go virtually untreated, with severe implications on the ability of these children to get a job.

There are few surgeons to treat these patients with hand problems. Most of those in the field are general surgeons with minimal training in hand surgery and rehabilitation. The authors have worked in countries with less than five general surgeons in the entire country.

Hand Surgery outreach

Members of the IFSSH over many years have been involved in volunteer hand surgery and rehabilitation projects in many developing countries around the world. Some of the member surgeons have worked individually through private contracts. Some members have been associated with their professional college umbrella e.g. Orthopaedic Outreach from the Orthopaedic Association of Australia.

Others have been involved with Interplast, GraceWorks, Leprosy Mission, Resurge International and Cuban Medical Internationalism. Some have founded and/or managed nonprofit organisations or NGOs dedicated to hand surgery in developing countries.

Australian orthopaedic outreach programmes started around 1970 with the CARE MEDICO programme in Indonesia. Subsequent educational programmes have been

active and progressive in many nations. Individual surgeons work in many centres and this may lead to more formalised activity as they develop. Specific formal programmes of the Australian Orthopaedic Association occur now in Fiji, Papua New Guinea and the Solomon Islands, including training in hand surgery.

In 1991, the American Society for Surgery of the Hand established a Volunteer Services Committee to foster international medical work by ASSH members in developing countries. The development of the 'Hands Around the World' Committee by the International Federation of Societies for Surgery of the Hand in 1992 presented a unique opportunity for world-wide collaboration in this work by Hand Surgeons.

In 1995 the Royal Australasian College of Surgeons successfully tendered for the Australian government AudAID project and became the provider of all tertiary surgical health services to the Pacific Island nations and Papua New Guinea. In 1998 the second phase of this activity began, with the upgrade of the Fiji School of Medicine and distance learning and teaching.

Member contributions

- Ulrich Mennen (President of the IFSSH and based in South Africa) feels that in developing countries it is more important to train willing practitioners how to do Hand Surgery, rather than to train them to become fully fledged Hand Surgeons. Gujera (from India) has the same view. Corrianne Van Velze (Past-President of the IFSHT and based in South Africa) has for many years been actively involved in training therapists in many developing countries on basic principles in Hand Therapy, splint making and rehabilitation, on occasion combined with Hand Surgery input from Ulrich Mennen.
- David Green has extensive experiences in non-sponsored volunteerism in Haiti (the State University Hospital of Haiti).
- Barry Gainor, Chairman of Health Volunteers overseas Inc. continues his work in Peru.
- Graham Gumley has for years organised Hand Surgical and other surgical treatments for the poor and underprivileged people at the Sihanouk Hospital Centre of Hope in Phnom Penh, Cambodia.

- Bruce Conolly and Peter Scougall have been involved in Hand Surgery and Rehabilitation projects in Vietnam, Laos and Myanmar. Bruce Conolly has also been involved in other projects in Africa, the Middle East and many South East Asian and Pacific Island countries.
- Grace Warren over many, years has done Leprosy and other Hand Reconstruction work in numerous developing countries around the world.
- Des Soares, a Hand Surgeon based in Brisbane Australia from 1990 to

1997 worked as a Reconstructive Surgeon in the Leprosy Hospital in Nepal and since then has been involved in Pacific Island Projects (PIOA) with the support of Orthopaedic Outreach of the RACS of Australia.

- James Kong from Hong Kong and Burma has organised excellent Trauma courses in the Asia Pacific Region.
- Marco Lanzetta (Milan, Italy) has been involved in programs in Africa. In Africa a specific hand surgery humanitarian programme is provided by the NGO GICAM, an International Organisation with headquarters in Italy. Currently, this NGO is involved in programmes in the following countries: Ghana, Togo, Benin, Burkina Faso (all in West Africa) and Kenya. GICAM has also completed a three year programme in Sierra Leone where they built and managed a small hospital in Makeni, about four hours' drive north of the capital Freetown. Typically, GICAM teams are formed by 6-7 members which include two Hand Surgeons, one anaesthesiologist, two or three nurses, including a scrubbing nurse and one hand therapist. The team flies to specific hospitals where basic equipment for surgery and nursing care in the ward are guaranteed. All the necessary surgical instruments to perform low, medium and high level difficulty hand reconstructions are carried in specially designed steel trolleys which accompany the team by air. Used material is reintegrated after every visit and prepared for the next trip.

The visits are planned every three months and work is done on patients selected and put on a waiting list by the previous team. The average length of stay is about two weeks. GICAM Volunteer workers have come from Italy, Switzerland, Canada, Poland, and Czech Republic. GICAM deals mainly with paediatric post-traumatic disorders, congenital malformations, as well as secondary reconstruction of neglected trauma cases.

For more information on voluntary organisations see the list below:

- 1. Medical Missions www.medicalmissions.org/missiontrips/hand-surgery-(orthopedic)/
- 2. Gracepatt Ecotours www.gracepattecotourskenya.org
- 3. ReSurge International www.resurge.org
- 4. Emergency Surgery of the Hand in Developing Countries www.ptolemy.ca/members/archives/2006/hand_1.htm
- 5. Healing Hands Globalportal.umich.edu/healing-hands.php

EDITOR'S NOTE: The above Report is not necessarily exhaustive. Much goodwill to reach out and help is done by many more in far-flung places. On behalf of the IFSSH, a sincere appreciation is extended to all Hand Surgeons and Hand Therapists who so willingly give freely, to help those unfortunate who are in need. Also, a word of thanks is due to all those who generously support these humanitarian missions.