Building the Foundation for Sustainable Prosthetic and Orthotic Services in Cambodia

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The Cambodia Trust

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Building the Foundation for Sustainable Prosthetic and Orthotic Services in Cambodia

The Cambodia Trust was formed in 1989 to meet the rehabilitative needs of Cambodia’s many landmine survivors. Five years after its inception, the Trust helped establish the Cambodian School of Prosthetics and Orthotics, which has since provided invaluable services to Cambodia’s landmine survivors. This article explores the various ways rehabilitation services are being strengthened in Cambodia through this school and its partnership with other organizations.

Cambodia’s population includes an estimated 43,926 landmine survivors. After suffering from nearly three decades of conflict, Cambodia is one of the countries most severely affected by landmines and explosive remnants of war. During the Khmer Rouge regime, the health-care system was destroyed and the majority of Cambodia’s educated citizens were murdered, were killed through forced labor, or fled the country. As a result, when the Cambodia Trust opened its first rehabilitation center in 1990, there were no qualified Cambodian prosthetists/orthotists. This shortage severely hindered the development of sustainable, low-cost rehabilitation services for the large numbers of amputees and other persons with disabilities.

Another major barrier in Cambodia to landmine survivors’ reintegration into their communities is the discrimination they continue to face at every level of society. The presence of extreme poverty, prejudice and cultural taboos means that PWDs are often viewed as noth- ing more than a burden on their families and society. Frequently excluded from education and job opportunities, PWDs who lack support means that PWDs are often viewed as not- ing more than a burden on their families and society. Frequently excluded from education and job opportunities, PWDs who lack support still consider prosthetics and orthotics to be a craft instead of a profession, and there were no prosthetics/orthotics standards required by law. Consequently, some of the survivor-assistance organizations used local materials such as leather and bamboo to create the assistive devices, while others used thermo-plastics and total contact sockets, along with proper alignment and training.

Two key initiatives encouraged cooperation between the organizations: 1. The ICRC established a factory in Phnom Penh to provide prosthetic and orthotic components (using polypropylene technology) free of charge to all physical rehabilitation centers in Cambodia. This initiative greatly encouraged the adoption of common standards of technology across the country.

2. The Cambodia Trust, in conjunction with AFSC, established the Cambodian School of Prosthetics and Orthotics in Phnom Penh in 1994. The school aims to provide internationally recognized prosthetic and orthotic training for Cambodians, thereby helping to build the foundation as a sustainable, locally run physical-rehabilitation service for landmine survivors and disabled persons.

These steps allowed the various organizations to agree on common standards of conduct and educational training in prosthetics/orthotics. The first tentative steps have been taken toward closer institutional involvement with the Cambodian government. Various organizations encourage the Cambodian government to take responsibility for the rights and rehabilitation of the country’s disabled citizens. While progress has been made, this process still has a long way to go.

CSPO’s Impact in Cambodia

Five partner organizations currently support the 11 physical-rehabilitation centers in Cambodia: three of the centers are managed by the Cambodia Trust and the other eight are managed by the partners. Today, all prosthetic/orthotic services in Cambodia are delivered by graduates from CSPO. Developing this capacity has reduced reliance on expatriate expertise and helped to develop technologically sustainable physical-rehabilitation services in the country.

As of 2009, 94 Cambodians have graduated from CSPO, many of whom are employed in physical-rehabilitation centers across the country. Nineteen of CSPO’s graduates have now earned bachelor’s degrees outside of Cambodia as part of an initiative to develop regional professionals as leaders and educators. This trend marks the next step in CSPO’s sustainability, with bachelor’s degree holders taking over from expatriate lecturers and managers, enabling the school to localize its staff and reduce costs.

Beyond Cambodia: A Regional Role

Since CSPO was accredited as a Category III training center by the International Society for Prosthetics and Orthotics in 1999, CSPO has offered training to students from other low-income countries in the region. Currently, CSPO trains students from 11 nations: Cambodia, Democratic People’s Republic of Korea, East Timor, Indonesia, Malaysia, Myanmar, Nepal, Thailand, Timor-Leste, Vietnam, and the United Kingdom.

The Cambodian School of Prosthetics and Orthotics is the only prosthetics and orthotics school in the world with ISO 9001:2000 certification. This quality-management standard helps to build technical and managerial sustainability by establishing processes that focus on continuous improvement and the satisfaction of its students and PWDs who seek its aid.

Courses at CSPO are instructed in English and foreign students undertake local language classes in order to be able to communicate with Cambodian PWDs during their practical work. The CSPO course is a three-year, full-time program that accepts a maximum of 14 students for each intake year. Students spend approximately one-third of their time learning theory and two-thirds of their time learning clinical and technical procedures. A functioning rehabilitation center is attached to the CSPO, providing a structured and real-life learning environment for students. Third-year students complete their clinical placement in the rehabilitation center. Student fees are provided by international and philanthropic organizations and individual donors with an interest in prosthetics and orthotics.

CSPO has received support from several international donors, notably The Nippon Foundation of Japan, which has also supported the establishment of the schools of prosthetics and orthotics in Sri Lanka and Indonesia in partnership with the Ministry of Health and the Cambodia Trust. In addition, CSPO receives financial support from the United Kingdom Department of International Development.
Four prosthetists/orthotists with a prosthetic limb. *Photo courtesy of the Cambodian Mine Victims Information System (CMVIS).*

Indonesia, Iraq, Lao People’s Democratic Republic, Nepal, Pakistan, Papua New Guinea, the Philippines and Sri Lanka. Of CSPO’s students, 41 percent are women and 11 percent are persons with disabilities. The Cambodia Trust is now exporting the CSPO model to other conflict- and poverty-affected countries in the region, with schools in Indonesia and Sri Lanka established and funded by The Nippon Foundation of Japan. Further expansion to the Philippines is under consideration. The Cambodian prosthetists/orthotists trained at CSPO are now playing an active role in this expansion through staff exchanges.

Conclusion

With 15 years of prosthetic/orthotic education experience, CSPO is helping to meet the need for prosthetic/orthotic education in low-income countries where this training is not available. This education enables thousands of people with disabilities in these countries to receive prosthetic and orthotic services each year. In total, 143 graduates have completed their training at CSPO and are now working in the profession in their home countries such as Afghanistan, Burma/Myanmar and Iraq. With the spread and development of CSPO training methods, the number of professionals will continue to grow, as will the number of landmine survivors and persons with disabilities that receive their invaluable aid.

See Endnotes, Page 82

Cambodia Mine Victims Information System

The Cambodia Mine Victims Information System is one of the leading casualty collection systems in the world. CMVIS was established in 1994 by the Cambodian Red Cross and Handicap International to provide continuous and systematic collection, analysis, interpretation and dissemination of information about casualties due to landmines, unexploded ordnance, improvised explosive devices and abandoned explosive ordnance. The data is obtained through a chain of operations that begins with an expansive volunteer network at the community level and ends with the dissemination of the data to the end-users.

A positive development in Cambodia during the last decade has been the significant drop in the number of victims of landmines and UXO reported and recorded by CMVIS.

<table>
<thead>
<tr>
<th>Years</th>
<th>Total Number of Victims</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000-2002</td>
<td>1,238</td>
</tr>
<tr>
<td>2003-2004</td>
<td>1,068</td>
</tr>
<tr>
<td>2006-2008</td>
<td>443</td>
</tr>
</tbody>
</table>

Victims of landmines and UXO in Cambodia

by Aron Larsson and Love Ekenberg [Stockholm University] and Åsa Wiesel and Håvard Bach [GICHD]

Non-technical Survey: A Model for Evidence-based Assessment

The Geneva International Centre for Humanitarian Demining has developed an Evidence Assessment Model that may form part of a wider Non-technical Survey and enable decisions about when it is appropriate to release land by Non-technical Survey and when/how much Technical Survey is required. The first model was created in collaboration with Norwegian People’s Aid to enhance NPA’s land-release approach in Angola. A second, similar model was developed in support of the Cambodian Mine Action Centre’s land-release approach in Cambodia.

Although these models are in use and working fairly well, the GICHD wanted to test the quality of the model to ensure the validity of its logic procedures and develop an improved interface. The primary objective was to devise a credible, practical and user-friendly model for Non-technical Survey by August 2009. The project was a joint effort between the Department of Computer and Systems Sciences of Stockholm University and the GICHD, and it was partially funded by the Swedish Program for Information and Communication Technology in Developing Regions. GICHD asked the decision-analysis experts of the DECIDE Research Group at Stockholm University to assist with the project.

The project was initiated in March 2009, and the first phase was completed in September 2009, with the delivery of a revised CMAC Evidence Assessment Model to be used in pilot cases in Cambodia.

The Context and Work Process

The model is designed as a complementary tool in the existing process in which a team of field operators collects and analyses information about an area suspected to be contaminated by landmines. Traditionally, the decision on whether an area can be released from suspicion of mines without any further mine-action support has been made by the field operator, based on personal experience and conviction. This method has often caused conservative decisions because it has been far easier and less risky for the survey teams to classify land as mine-suspected areas as opposed to “mine free” areas. A credible evidence-assessment model that shifts liability from the operator to the model, or the underlying concept, will encourage more appropriate decisions.

The model described in this article rates the importance, or value, of each individual piece of evidence about the mine threat provided by various informants. The model further contains the degree of trust in, or credibility of each source of information. If the credibility of an informant is low, the evidence weight will be reduced and will consequently contribute less to the final survey conclusion.

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