In this article, the authors describe an unprecedented study on peer-support services for landmine survivors and victims of explosive remnants of war based on the strategic approach implemented by Survivor Corps, in which survivors were trained to provide psychosocial assistance to other survivors. The study’s methodology is thoroughly explained and analyzed by the authors.

**Problem Statement**

Between 1997 and 2009, LSN/SC operated Peer Support networks in Bosnia, El Salvador, Ethiopia, Jordan and Vietnam. A program was also conducted with Iraqi refugees in Jordan. The programs strove to "empower individuals, families and communities affected by landmines to recover from trauma, fulfill their rights and reclaim their lives." The principle methodology was peer support, defined by LSN as "encouragement and assistance provided by a trained survivor who has successfully overcome a traumatic experience to another survivor in order to engender self-confidence and autonomy." As early as 2002, research on LSN beneficiaries revealed the importance of peer support to limbo-loss survivors. LSN’s five network programs employed a total of 44 outreach workers—themselves amputee landmine survivors who received four weeks of training in basic counseling techniques—to locate and contact other survivors, many of whom suffered alone in self-imposed isolation. Forming a bond of trust and understanding is the first step toward reintegrating survivors into society, helping them regain self-confidence, find work and train, and participate in community activities. Outreach workers initially visited survivors in their homes and, in many cases, introduced survivors to support groups where they could engage in income-generation activities, sports or other forms of socialization.

Outreach workers acted as role models, demonstrating the importance of peer support in countries heavily affected by landmines and ERW. LSN/SC’s programmatic model provided support to landmine survivors in healthcare, economic opportunity and human rights. The model recognized that peer support would have limited success without addressing barriers and obstacles survivors face in post-conflict settings. LSN/SC’s peer-support strategy empowered individual survivors to claim their rights and draw attention to issues of inclusion.

**Peer Support and Recovery from Limb Loss in Post-conflict Settings**

Despite his continued success and fervent defense of PWDs, Martínez still recalls the words of the soldier who carried him from the minefield after his accident: “God brought you into the world with your legs, but now he has permitted you to lose them. You can still move forward.” Martínez now says, “My greatest satisfaction is knowing that I can help others.”

**Conclusion**

Aboudi, Gonfa, Martínez, Hoa and others have trained hundreds of social workers and outreach workers to provide peer-support visits and other therapeutic contacts to landmine survivors and their families. They have transformed themselves from victims to active citizens in their communities, and their work and inspiration has helped survivors make even greater strides in accessing services, rights and opportunities as they worked to reclaim their lives.

Survivors’ peer skills are in many cases essential in helping other survivors recover. In addition to counseling, outreach workers help survivors obtain training, benefits and healthcare through local-service providers. Aboudi, Gonfa, Martínez and Hoa help start survivor support groups in their respective countries, thus allowing victims to take that first important step in helping survivors help themselves, and continuing to assist and lead them to go on to become independent organizations. Thankfully for the global community, their work’s impact continues to greatly benefit the lives of landmine, trauma and armed-violence survivors, as well as their families and communities. See endnotes page 80

**Kenneth Rutherford, Ph.D.,** serves as Director of the Center for Stabilization and Recovery at James Madison University. CSR helps support survivor assistance initiatives around the world and has led efforts to promote peer-to-peer support on four continents, including people with disabilities in landmine-removal programs of war-risk programs, trained outreach workers to work with torture victims, and championed the rights of all survivors, persons with disabilities, women and children. The work of CSR, formerly the Mine Information Center, reinforces JMU’s post-conflict and stability operations. Rutherford is in a unique position to help advance several of these policy goals. In 2011, CSR’s ongoing programs and new projects will, for example, advocate disability rights as human rights in landmine/ERW recovery programming, promote peace and reconciliation through survivors-led collective action and address the longer-term humanitarian assistance needs for survivors of landmines and cluster munitions.

**Issue Highlight**

Between 1997 and 2010, Landmine Survivors Network (LSN)’s five network programs employed a total of 44 outreach workers—themselves amputee landmine survivors who received four weeks of training in basic counseling techniques—to locate and contact other survivors, many of whom suffered alone in self-imposed isolation. Forming a bond of trust and understanding is the first step toward reintegrating survivors into society, helping them regain self-confidence, find work and train, and participate in community activities. Outreach workers initially visited survivors in their homes and, in many cases, introduced survivors to support groups where they could engage in income-generation activities, sports or other forms of socialization.

Outreach workers acted as role models, demonstrating that limb-loss survivors can overcome physical, social and economic barriers to interact normally in society. Outreach workers accompanied or hosted (linked) survivors to agencies and institutions where jobs, education or financial assistance could be obtained, or they referred survivors to local service providers. These links and referrals constituted a major source of survivor support and made use of locally available services. The
LSN/SC outreach workers located the survivors in their communities and invited them to receive peer-support services. If the subject agreed, an initial interview was conducted, the SF-36 was administered and services were then initiated. As part of LSN/SC’s counseling program, survivors were encouraged to develop a detailed list of personal achievement objectives that they wished to pursue during the next two years. With outreach workers’ assistance, accomplishing these objectives then became the survivor’s primary focus. The Interim Interview was conducted after approximately one year of peer support, and the Exit Interview was given as the survivor prepared to end his or her participation in the peer-support program, not more than one year after the Interim Interview.

Results

In comparing the overall scores for physical health and mental health, those survivors who scored high on the initial administration of the SF-36 tended to show little change on subsequent administrations, and in some cases subsequent scores were lower. The lower the initial score, the greater the change seen in subsequent scores.

Statistically significant changes were observed in SF-36 scores of nearly all survivors studied, including those injured more than two years previously, as shown in Figure 7 (next page). These survivors had already achieved some recovery, but once they began receiving peer support they showed an additional increase in their self-perceived mental and physical health.

Statistically significant increases were observed in all SF-36 domains (Figure 8 on the next page). Most survivors, with the help of their outreach workers, succeeded in achieving the majority of their objectives by the time of the Exit Interview, resulting in improved self-perceived mental health.

The success of LSN/SC’s peer outreach model was evident in the area of social empowerment, and empowerment is seen as crucial to reaching greater social capital and reduced violence. Survivors exhibited significant improvement in their access to information, decision making, ability to self-advocate for their rights, understanding of disability as a rights issue, and capacity to describe local laws and policies related to encouraging or meeting the needs of people with disabilities (see Figure 10 on the next page). Upon entering the program, few survivors could discuss disability from a rights-perspec- tive or describe local laws or policies affecting them, while 67 percent could do so after one year of peer support.

Analysis and Discussion

LSN/SC relied heavily on the SF-36 to show that peer support is effective, and certainly the use of other instruments would have allowed for some triangulation. However, trauma survivors in conflict zones are often reticent to submit to psychometric testing; therefore, the administration of a single questionnaire with multiple domains was deemed sufficient. The use of a control group would have strengthened the study design and, as a result, the attribution of change due to peer support would have been better demonstrated, but the changes were evident among survivors who, several years after receiving injuries, still manifested significant improvements from peer-support services.

"Peer support" generally focuses on emotional and psychological support, whereas LSN/SC offered a full range of services through local providers and made every effort to address social issues including unemployment, human-rights violations, vocational needs and access to healthcare, in addition to providing psychological counseling. In this respect, LSN/SC was broad and holistic in its vision and benefited survivors as thoroughly as possible under the austere conditions present in these post-conflict settings.

Conclusion

The LSN/SC model for psychosocial rehabilitation for trauma survivors was neither complex nor exceptionally difficult to implement, and results presented here indicate that

<table>
<thead>
<tr>
<th>Country</th>
<th>Number of Survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bosnia &amp; Herzegovina</td>
<td>77</td>
</tr>
<tr>
<td>El Salvador</td>
<td>84</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>27</td>
</tr>
<tr>
<td>Iraq</td>
<td>67</td>
</tr>
<tr>
<td>Jordan</td>
<td>121</td>
</tr>
<tr>
<td>Vietnam</td>
<td>114</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Cause of Injury/Paralysis</th>
<th>Number of Survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Landmine/Landmine</td>
<td>256</td>
</tr>
<tr>
<td>Diabetes</td>
<td>91</td>
</tr>
<tr>
<td>Other Disease/Injury</td>
<td>20</td>
</tr>
<tr>
<td>Accident</td>
<td>53</td>
</tr>
<tr>
<td>Act of Violence</td>
<td>7</td>
</tr>
<tr>
<td>Other</td>
<td>43</td>
</tr>
</tbody>
</table>

Table 1: Number of Limb Amputations by Cause of Injury/Paralysis.

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of Survivors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-17 years</td>
<td>26</td>
</tr>
<tr>
<td>18-29 years</td>
<td>41</td>
</tr>
<tr>
<td>30-39 years</td>
<td>68</td>
</tr>
<tr>
<td>40-49 years</td>
<td>103</td>
</tr>
<tr>
<td>50-59 years</td>
<td>96</td>
</tr>
<tr>
<td>&gt;60 years</td>
<td>142</td>
</tr>
</tbody>
</table>

Table 2: Number of Limb Amputations by Age.

<table>
<thead>
<tr>
<th>SF-36 Domains</th>
<th>Initial Score (M)±SD</th>
<th>Exit Score (M)±SD</th>
<th>Mean Change (M)±SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Health</td>
<td>50.8±13.6</td>
<td>61.4±14.9</td>
<td>10.6±14.9</td>
</tr>
<tr>
<td>Mental Health</td>
<td>50.2±14.1</td>
<td>59.1±15.2</td>
<td>8.9±15.2</td>
</tr>
</tbody>
</table>

Table 3: Comparison of Initial Score with Change in SF-36 Score by Exit (Mental Health).

Figure 1. Distribution of survivors by country.

Figure 2. Distribution of survivors by number of limb amputations.

Figure 3. Distribution of survivors by cause of injury.

Figure 4. Sex of survivors.

Figure 5. Age of survivors.

Figure 6. Initial physical and mental-health SF-36 score by sex.

Figure 7. Time since amputation/injury compared to change in SF-36 score (exit).

Figure 8. SF-36 Domain Scores (interim).
Art Therapy and Sport Activities Enhance Psychosocial Rehabilitation

The Tajikistan Mine Action Centre has worked to improve the physical and psychological health of landmine survivors through its summer camps in Dushanbe, Tajikistan. Using sport activities, survivors improve their ability to function physically and learn to adjust to life with their disability, while art therapy helps them overcome fears of self-expression, enabling them to form healthy relationships with others.

by Reykhan Muminova, M.D., Ph.D. [Tajikistan Mine Action Centre]

Tajikistan joined the Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-personnel Mines and Their Destruction (also known as the Anti-personnel Mine Ban Convention or APMBc) on 1 April 2000 and is one of the 26 States Parties with a significant number of landmine victims. The Victim Assistance Program of the Tajikistan Mine Action Centre has recorded approximately 828 landmine/unexploded-ordnance victims since 1992, with 466 injured and 362 killed by landmines. However, the total number of Tajikistan’s landmine victims is still not known because accidents sometimes go unreported.

Survivors are often left with permanent physical disabilities, which can affect their ability to work and can lead to workplace discrimination and loss of employment. As a rule, most landmine survivors show symptoms of chronic post-traumatic stress disorder, and survivors often have reduced emotional well-being due to depression, anxiety, fear, anger, dependence on others and isolation due to feelings of shame and discrimination.

For mine victims to become “survivors,” in addition to needing medical care and prosthetic devices, they generally need psychological rehabilitation. TMAC has found that survivors benefit from peer-to-peer support (which allows them to share their experience and pain with someone who has experienced a similar trauma) to learning that they are not alone, overcome isolation, and ultimately become contributing members of society. However, in Tajikistan, like in many other post-conflict countries, the hospitals and clinics have no specialists in psychological support who can treat landmine survivors and no existing peer-to-peer support groups.

TMAC Summer Camps

TMAC, in cooperation with Tajikistan’s Ministry of Labor and Social Protection as well as a number of International Organizations such as the United Nations Development Programme, Red Crescent Society of Tajikistan, Canadian Centre for Mine Action Technologies, and other partners, conducts summer camps in order to provide psychological and physiological rehabilitation to landmine survivors. Since 2005, a total of 169 landmine/explosive remnants of war survivors have enjoyed two weeks at TMAC summer rehabilitation camps. Each year one group of up to 25 survivors of different ages has the opportunity to enjoy the camps which are located in hospitals and resorts in the picturesque Rumi and Varzob valleys in the Dushanbe vicinity. The summer camps have positively affected survivors’ general health by bringing together physical therapy and adaptive sport in a friendly atmosphere to enhance the participants’ communication and social integration abilities. The summer camps have also provided psycho-

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