



A Spinal Injury Rehabilitation Center in Nepal- report 2005

- Background to spinal injury in Nepal and need for the Rehabilitation Center
- Report on the Center's accomplishments and challenges

Summary: The Spinal Injury Rehabilitation Center in Kathmandu opened on 7 April 2002 and has completed four years of serving patients in excruciating need, who earlier would have had no institution to turn to. Working with limited resources, the Center's staff and caregivers have been able to create a place of hope for the spinally injured. Having demonstrated the need for a rehabilitation center, and also the ability of the staff members to run such a facility to the highest humanitarian standards, it is important to find human and material support so that the Center can provide better rehabilitation services to the spinally injured. Over the coming months, the Center will have to upgrade its physiotherapy department with additional staff as well as skills, enhance the nursing and medical unit, improve its occupational therapy department and integrate counseling and vocational training into the patient support activities. The Center will need guidance and volunteer support, as well as material sustenance.

Introduction

Nepal is known around the world for its mountains, but its 'vertical' landscape is responsible for a disproportionate number of head and spinal injuries, with porters slipping off precipitous trails and women and children, in particular, falling while collecting tree fodder or following livestock on cliffs. With the spread of the road network, there is a sharp increase in spinal trauma from highway accidents. Injuries are also on the rise from construction and industrial activity, and the spread with the growth of adventure sports. Even so, the majority of the injury results from the confluence of subsistence living and hilly terrain.

Victims of accidents affecting the spine have had to struggle and suffer like few places elsewhere. Support and access to care and rehabilitation has been meager, if at all available. Nepal is one of the most underserved countries in the world in terms of medical and public health facilities, and until now there has been no Center to cater to the special needs of those with head and back injuries.

Injury to the spinal column is one of the most grievous kinds of bodily damage. It affects the use of limbs and other organs, and drastically reduces the quality of life of the victims. It tends to leave the injured and their families in deep despair, and the poorer the family the harder it is to cope with the additional burden. The kind of understanding, care and long-term support required by the victims is very difficult to provide when most of the victims are part of the subsistence peasantry.

The scale of these challenges relating to grievous and often-irreversible spinal injury often leads to a fatalistic mindset among families and caregivers alike. On humanitarian and practical grounds, it is necessary to reject this attitude, and to concentrate on improving the quality of life of those who have suffered these life-changing injuries.

It is to address the silent cry of the spinally injured that the Spinal Injury Sangha Nepal was organized in the fall of 2001. The Sangha (society) has now established a rehabilitation facility at Jorpati, Kathmandu, in collaboration with the Nepal Disabled Association. Opened on 7 April 2002 by Sir Edmund Hillary, the Spinal Injury Rehabilitation Center has begun to help patients respond to the short- and long-term effects of severe head and back injuries.

(At the inaugural, Sir Edmund said that in the course of his work of helping the people of the Solu-Khumbu region he had come to realize the extent of the problem relating to spinal injury in Nepal. He was glad, therefore, that the first facility dedicated to rehabilitation of the spinally injured was now a reality.)

Spinal Injury in Nepal

Given the poor state of medical and health services for the population at large, spinal injury victims and their families do what they can to cope in villages and accident sites. To begin with, there are no dedicated rescue facilities. The transport of victims to hospitals, when it does take place, is over rough terrain and tends to compound the injury to the spinal column.

While rescue and transport are wholly inadequate, there are now hospitals in the country that do cater to the spinally injured. Even those fortunate to receive treatment, however, have missed specialized rehabilitation support. Without such support, including physiotherapy and occupational therapy, the quality of life of the victim is significantly reduced, leading to further, ongoing complications and issues.

While there is no country-wide data available on the incidence of spinal injury in the country, the information collected by the Neurosurgery Department of the government-run Bir Hospital in Kathmandu over the past decade highlights both the distressing economic status of victims in general as well as the disproportionate representation of women and children among the spinally injured. The experience of Bir Hospital as well as other hospitals and nursing homes around the country also point to the desperate need for a rehabilitation center to pick up the challenge of therapy for patients with neck and back injuries.

The Rehabilitation Center

The Spinal Injury Rehabilitation Center at Jorpati is the first activity of the Spinal Injury Sangha Nepal, a registered non-profit society set up in late 2001. Of the many challenges that need to be addressed, a rehabilitation facility was considered the most urgent. The Center's services complement the work already being done by hospitals, and focus on ensuring that patients receive specialized care, support and counseling. Even with the limited resources at hand, the Center has concentrated on providing patients with the skills and knowledge to remain active and able, to the best of their abilities, given the nature of their injuries. The Center makes it possible for patients and their families to eventually return home and enjoy a reasonable quality of life.

The facility has been set up in a small converted hospital at Jorpati, in the outskirts of Kathmandu city, on the road from the Baudha Stupa to the Gokarna Reserve. It is located within the quiet campus of the Nepal Disabled Association, amidst wide lawns and conveniently close to other facilities with a similar focus of care and support, including an orthopedic hospital, an orphanage for disabled children, and a residential center for the disabled.

The Rehabilitation Center is staffed with a hard-working group of qualified caregivers including a doctor, staff nurse, a physiotherapist, assistant physiotherapist's, four health assistants, occupational therapy assistant's and other management staff. When fully operational, besides out-patient physiotherapy support,

the Center will provide live-in-care for up to forty individuals. Facilities around the courtyard of the single-storey building of the Rehabilitation Center include male and female wards, a physiotherapy wing, an occupational therapy and vocational training wing, a library, kitchen and dining space, rest area for the patients' family members, and backyard garden space.

The Rehabilitation Center operates through the funds raised by the Spinal Injury Sangha Nepal. A modest all-inclusive charge is asked of the patients, Rs 100 for board and facilities and Rs. 50 for food totaling Rs. 150 a day, equivalent to USD 2.02. A fund for the needy will be set up so that those who are unable to pay this amount will receive subsidy. A limit is placed on the length of stay for patients in order to allow space for others in need.

The Spinal Injury Sangha Nepal

The Spinal Injury Sangha Nepal is a registered non-profit society. It seeks to roll back, as far as possible, the despair that is the burden of the victims of spinal injury and their families. While responding to the 'traditional' injuries of the spine – mainly resulting from fall from heights – the Sangha also seeks to address the rising incidence of spinal trauma from 'modern-day' accidents.

The society's initial focus is exclusively on running the rehabilitation facility, but in future it plans engage in other areas – including public advocacy, developing evacuation procedures, and addressing issues of patient-handling in the absence of specialist care. Over time, the Sangha will also try and ensure that trauma Centers and health posts around the country are better prepared to cater to spinal injury.

The founding members of the Spinal Injury Sangha Nepal represents a cross-section of prominent and societally-oriented individuals from Nepali society. The idea of the Sangha was promoted by the founding chairman, who suffered from a broken back in a trekking accident in August 2000 and managed to recover completely over the course of the next year.

Report on the first 4 years: Our accomplishments

In the first 4 years after the Center was opened by Sir Edmund Hillary, we have been operating at 3/4 capacity – that is, we have kept a cap of patients at 30 because we are not able to provide quality service to more than this number. The demand for our services indicates that, as was expected, there is a critical need for a facility such as this in Nepal. The patients come from vastly different backgrounds, and most of the accidents are from falling while carrying out activities related to subsistence living in the hills, that is, falling off trees, cliffs, trails and unprotected rural stairs. At the same time, there are patients suffering from gunshot wounds, bus and motorcycle accidents.

Most of the patients at the Center have been seen and operated by proficient surgeons in one of Kathmandu Valley's hospitals. On the other hand, none of them had received adequate rehabilitation care. A majority of the families had been forced to take the patients home ill prepared to care for them, and the patients themselves had not received adequate physiotherapy, occupational therapy or counseling. Many came to the Center with deep bedsores that would over time have proved fatal. Many of them had had negligible physiotherapy support.

In the four years of our operation, we have provided support to 300 patients from 67 districts. During this year, we have done the maximum possible with our skeleton staff of one physiotherapy assistant, one occupational therapist assistant, one medical in charge doctor, one resident nurse, and support staff of eight health assistants, and so on. The changes that have been brought about in the physical and mental state of the patients by and large have been dramatic. The bedsores have been the first challenges to tackle, but after that

is done the focus has been on physiotherapy and occupational therapy mostly using practically locally-fabricated equipment.

More than anything else, what has pleased the organizers is the motivation of the staff, which has provided the Center with a positive atmosphere. Despite working at what are relatively low wages, it is the dedication and commitment of the kind that has given the Center an atmosphere of hope and pleasantness. The fact that the patients are in a ward rather than in individual rooms also seems to help in developing bonding and providing a lighthearted atmosphere, given the circumstances.

Children from Rato Bangala School, Lincoln school, British school and other local school come over to perform cultural program for the patients.

A primary reason for the success achieved during the four years has been the close and almost symbiotic relationship that has been established with the neighbouring Nepal Orthopedic Hospital, a pro bono facility which is run by Dr. Anil Shrestha, who is also Medical Director of the Rehabilitation Center. The NOH staff has continuously supported the Rehabilitation Center during the these years, in fields as diverse as medical support and accounting help.

The newly established Occupational therapy department has been an added charm of the centre. Now with the fully functional OT department, patients are more active and gradually assisted into having normal and independent lives. It uses activity-based programs to solve issues in the treatment rehabilitation on the individuals with basic anatomical, physiological and neuro-physiological problems.

The department has been helping patients to be independent and do their activities of daily living as self-care and transfers. It also identifies the right mobility and other aids for the patients to their work. The patients are trained as per their home environment. The OT department also helps patients to identify their capabilities and helps them to receive the appropriate vocational training.

In the future, the OT department plans to have its own halfway home where the patients will practice living in their actual home environment. As of now, the OT department only has an occupational therapy assistant who has received 3 month training from an OT from UK. It is very difficult to find occupational therapists in Nepal and hence we have to depend on volunteers for that. Therefore we have plans to train our own staff as OT and OT assistant.

We have now opened a cabin for patient's room higher society or rich patients. The charge of the room will be Rs 500 inclusive of bed charge, dressing charge, physiotherapy and occupational therapy facility. The income from this cabin will be used the treat the poor patients from backward community of Nepal.

Along with Motivation SIRC has started a new project of assembling the wheelchairs. These wheelchairs are called worldmade wheelchairs and are according to the need of the patient. These are lighter and come with a pressure relieving mattress.

Also a new department, social service department has been set up. That takes care of patient's financial and psychosocial need. The department also takes care of the vocational training need of the patients and heads the vocational training department. In this department we provide sewing, candle making, bag making, basket making chalk making training etc. The aim of this department is to make the patient financially independent.

Our challenges

While the Spinal Injury Sangha Nepal has larger plans for the future, its present focus is entirely geared to making the Rehabilitation Center run at full strength, with efficiency and caring. We are fortunate to have a full-fledged former hospital at our disposal, which means that initially there will be no dearth of space or basic equipment, but there is a need for guidance as we expand our work, volunteer and expert support in specialized areas, and material support to allow us to complete the activities planned.

To begin with, we want to open up the entire facility so that we can house a full complement of forty patients as well as provide outpatient physiotherapy and occupational therapy support. In order to do this, we need to:

- a) Raise our financial status to allow for the additional equipment, particularly physiotherapy equipment, occupational therapy equipment as well as a full complement of wheelchairs.
- b) Provide modest increments to salaries of staff across the board.
- c) Additional training and exposure for our very able physiotherapy department, occupational department and all the staff.
- d) Add dedicated counseling and social worker support.

Among the other requirements that have to be fulfilled in the coming year are:

- a) Establishing a full-fledged entertainment room.
- b) Creating a proper rest-room for family caregivers.
- c) Transportation for staff.
- d) A larger corpus fund to support the needy who are not able to pay the minimum fees of the Center.
- e) Renovation of the building as required, including the physiotherapy room, occupational therapy and vocational training unit and the corridors which need a smoother surface for wheelchairs.
- f) Further landscaping and gardening of the courtyard and backyard, including with the help of capable patients.
- g) Getting a trained staff in all the unit or get the present staff trained in the specific field

Supporting the Rehabilitation Center

The Spinal Injury Sangha Nepal is seeking individuals and organizations empathetic towards the victims of spinal injury, and asks them to support the work of the Rehabilitation Center. The annual cost of running the Rehabilitation Center at full strength is NPR 46 lakh, equivalent to USD 62,139. (The breakdown of this budget is provided in the Annex.) The first two years of the Center's existence has proved both the critical need for such a facility as well as our ability to run it with professionalism and caring. We now need to stay the course, and expand the number of lives we can touch and assist.

Contacting the Rehabilitation Center for queries, visits:

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Annex One

The SIRC Management Committee

The nine-member Management Committee of the Rehabilitation Center includes all the founding members of the Spinal Injury Sangha Nepal as well as three members representing the Nepal Disabled Association. Before and during the first quarter of the Center's functioning, the Center met more than once a month in order to provide guidelines and directions to the Center Staff. The day-to-day working of the Center is carried out by a Working Committee made up of Dr. Anil Shrestha, Kanak Mani Dixit and Esha Thapa.

The members of the Committee are:

Kanak Mani Dixit (journalist, Chair of Center)
Meera Jyoti (social worker, Treasurer of Center)
Dr. Anil Shrestha (orthopedic doctor, Medical Director of Center)
Dr. Shanta Dixit (epidemiologist and educationist)
Kiran Raj Poudyal (administrator),
Madan Krishna Shrestha (humourist)
Tashi Jangbu Sherpa (mountaineer and business executive)
Rajalakshmi Golcha (social worker)
Rajyalaxmi Koirala (social worker)
Member Secretary and Center Director: Esha Thapa

Annex Two

Budget of the Center

There is a need to find various kinds of support for the Center. While help in terms of volunteers and useful equipment and material is crucial for the Center, it requires a certain amount of funding support in order to run smoothly and at optimum capacity. The 4 years of experience has given us a fair idea of the amount of money required to run the Center annually, while making sure that there is optimum utilization of a modest-sized staff. Accordingly, the Center requires approx USD 80,000 to run for a year, with full facilities and 31 in-patients. While a corpus fund will be sought to be created in the coming years to provide at least half of this amount through bank interest, the Spinal Injury Center Nepal hopes to raise funds both domestically as well as through well-wishers outside Nepal.

The following is the breakdown of the approx USD 80,000 required for a full year of running the Spinal Injury Rehabilitation Center, through 2006-2007, according to the Nepali financial year.

Exchange rate: USD 1 = NRS 70.

SPINAL INJURY REHABILITATION CENTRE, JORPATI

Proposed Budget for the 2006-2007

Budget Head No.	Budget Head	Proposed Budget for 2006-7
	<i>Revenue Expenditure</i>	
1	<i>Consumption Expenses</i>	
1.01	Remuneration	2,109,082.00
1.01.1	Salary	2,084,082.00
1.01.2	Home Leave/Sick Leave Pay	25,000.00
1.02	Allowances	35,000.00
1.02.1	Staff Overtime Allowance	35,000.00
1.03	Travel & Transportation	100,000.00
1.04	Dress Allowance	30,000.00
1.05	Hospitality	50,000.00
2	<i>Office Operating & Service Expenses</i>	
2.01	Water & Electricity	260,000.00
2.02	Communication Expenses	60,000.00

2.03	Other Services Expenses	347,500.00
2.03.1	Postage & Telegram	5,000.00
2.03.2	Bank Charges	2,500.00
2.03.3	Advertisement	15,000.00
2.03.4	Training, Seminar	300,000.00
2.03.5	Other wages	25,000.00
2.04	Rent	900,000.00
2.05	Repair & Renewals	215,000.00
2.05.1	Building	50,000.00
2.05.2	Vehicles	50,000.00
2.05.3	Surgical & Medical Equipment	40,000.00
2.05.4	Miscellaneous Assets	25,000.00
2.06	Stationers	50,000.00
2.07	Other Goods	140,000.00
2.07.1	Sanitation	25,000
2.07.2	Linen & Bedding	75,000.00
2.07.3	electrical appliances	40,000.00
2.08	Printing	75,000.00
2.09	News-paper & Books	10,000.00
2.10	Vehicle Fuel	225,000.00
2.11	Other Fuel	50,000.00
2.12	Medical Consumable	250,000.00
2.13	Miscellaneous Expenses	60,000.00
3	Subsidy & Charity	250,000.00
3.01	Charity Expenses	250,000.00
	<i>Capital Expenditure</i>	
4	Capital Formation	320,000.00
4.01	Furniture	60,000.00
4.02	Surgical & Medical Equipment	60,000.00
4.03	Constructional Works	100,000.00
4.04	Office Assets	50,000.00
4.05	Miscellaneous Assets	50,000.00

5	<i>Contingency</i>	
5.01	Contingency fund	50,000.00
	Total Budget	5,586,582.00
	IN USD	79,808.31

Annex Three

Patients Received Till date: 300 from 67 districts

Patients Received in 2005: 87

Patients requiring wheelchair: 65

Wheelchair Distributed: 65

List of the patients needing wheelchairs:

SN	NAME	ADDRESS
1.	Bal Bahadur Tamang	Lalitpur
2.	Dawa lama	Makawanpur
3.	Bal bahadur bista	Jhapa
4.	Chandra Prasad pokhrel	Tanahun
5.	Gopal Das basi	Bhaktapur
6.	Dhan bahadyr shrestha	Dolakha
7.	Nani maya sunuwar	Reamecchhap
8.	Sanu maya tamang	Dhading
9.	Purna bahadur shrestha	Nuwakot
10.	Biswaram budhathoki	Kavre
11.	Krishan lal dhungel	Dolakha
12.	Indra bahadur tamang	Kavre
13.	Shanta ghimire	Lamjung
14.	Tara Prasad pokhrel	Jhapa
15.	Bhim bahadur thakuri	Nuwakot
16.	Nawang sherpa	Solikhumbu
17.	Sanu tamang	Lalitpur
18.	Dipen chemjong	Panchthar
19.	Purna kala Bk	Dang
20.	Shiva neupane	Tanahun
21.	Tul bahadur thapa	Arghakhanchi
22.	Jagat bahadur karki	okhaldhunga
23.	Nir bahadur tamang	Sindhupalchowk
24.	Mitra bahadur magrati	Gorkha
25.	Ram Prasad bhakharel	Ramechapp
26.	Dhani ram bhusal	Gulmi
27.	Shree narayan chaudary	Mahottari
28.	Bishnu bdr bhandari	Chitwan
29.	Saraswoti chapagain	Dhankuta
30.	Krishna prasad kandel	Chitwan
31.	Uma kantha pantha	Gorkha
32.	Man bahadur adhikari	Lamgunj
33.	Lal bahadur magar	Ramechapp
34.	Januka purakoti	lalitpur
35.	Bhim prasad gautam	Kavre
36.	Durga bahadur ale	Bhojpur
37.	Kesab bahadyr chettri	Kavre
38.	Dinesh kadka	Ramechapp
39.	Ranjit kumar singh	rautahat
40.	Kesan karki	Sarlahi
41.	Krishna rana magar	Kathmandu
42.	Rijan shrestha	Bhaktapur

43.	Thuli kanchi mainali	kavre
44.	Kalpna dahal	Okhaldhunga
45.	Dhyan bahadur tamang	Ramechapp
46.	Prajapati chapagain	chitwan
47.	Deepak siraula	Kathmandu
48.	Rudra bahadur magar	Palpa
49.	Devi acharya	Butwal
50.	Chandra maya awal	Bhaktapur
51.	Dil pahadur pahari	Sindhupalchowk
52.	Indra bahadur tamang	Morang
53.	Manu maya lama	Sindhupalchowk
54.	Krishna maharjan	Kirtipur
55.	Khadga saru magar	Ramechapp
56.	Nanda lal adhikari	Kathmandu
57.	Khel bahadur gurung	Nuwakot
58.	Jhamak kumari ghimire	Okhaldhunga
59.	Upendra singh	Sarlahi
60.	Kamala tamang	Udayapur
61.	Nari maya lama	Parsa
62.	Tek bahadir ranabhat	Chitwan
63.	Sonika Dhakal	Sindhuli
64.	Sita Shrestha	Kathmandu
65.	Raj Kishore Thakur	Kathmandu

