Leonard Cheshire Disability and Inclusive Development Centre

Pakistan Earthquake Assessment – Field Report 2005

January 2008

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Working Paper Series: No. 7
Acknowledgements

The team wish to thank Tanya Barron and Leonard Cheshire Disability for funding and organising this visit. We wish also to thank Mr Robert Naylor, Chief Executive, UCL Hospitals Foundation Trust for continuing support to Jim Ryan and releasing him to lead the team.

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<tr>
<td>AFIRM</td>
<td>Armed Forces Institute for Rehabilitation Medicine (Islamabad)</td>
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<td>AIMS</td>
<td>Abbas Institute of Medical Science (Abbottabad)</td>
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<td>AJ&amp;K</td>
<td>Azad Jammu &amp; Kashmir</td>
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<td>CMH</td>
<td>Combined Military Hospital (Rawalpindi)</td>
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<td>CAMP</td>
<td>Community Appraisal and Motivation Programme (Peshawar)</td>
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<td>DIID</td>
<td>Department for International Development (UK)</td>
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<td>FATA</td>
<td>Federally Administered Tribal Areas</td>
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<td>HEC</td>
<td>Higher Education Commission</td>
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<td>LCC</td>
<td>Leonard Cheshire Centre of Conflict Recovery</td>
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<td>LCI</td>
<td>Leonard Cheshire International</td>
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<td>LoC</td>
<td>Line of Control</td>
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<td>OCHA</td>
<td>Office for the Coordination of Humanitarian Affairs</td>
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<td>NWFP</td>
<td>Northwest Frontier Province</td>
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<td>PIMS</td>
<td>Pakistan Institute of Medical Sciences (Islamabad)</td>
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<td>PIPOS</td>
<td>Pakistan Institute of Prosthetic and Orthotic Sciences (Peshawar)</td>
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<td>PTC</td>
<td>Primary Trauma Care</td>
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<td>RCDP</td>
<td>Rehabilitation Centre for the Physically Disabled (Peshawar)</td>
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<td>SIUT</td>
<td>Sindh Institute of Urology and Transplantation (Karachi)</td>
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<td>UN</td>
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<td>UNDP</td>
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1. Geopolitical Outline

On 8th October 2005, just before 0900 hrs (local time), a powerful earthquake of 7.6 magnitude occurred, affecting Pakistan, India and Afghanistan (see map). The first quake was followed by a series of significant aftershocks of magnitudes 5.4 and 5.9. Aftershocks continue and to date more than 900 have been recorded. These pose a significant threat to already damaged infrastructures, causing buildings to collapse and landslides.

The Azad Jammu & Kashmir (AJ&K) region of Pakistan was the most seriously affected area, with the epicentre close to the provincial capital, Muzaffarabad, which has been largely destroyed. The earthquake affected other districts in AJ&K, as well as the Punjab and Northwest Frontier Province (NWFP), where a number of villages have been totally destroyed. Significant damage was also caused to building in the cities of Islamabad and Rawalpindi. The affected area comprises large swathes of forest clad mountainous terrain, part of the Himalayan mountain range, where many areas are inaccessible by road or air. Moreover, winter is fast approaching and many of the mountains are already snow-capped, and nights are freezing cold.

Over two and a half million people live in the Pakistan-administered side of the disputed AJ&K region.\(^1\) Initial estimates put the death toll at 50,000 but this is continuously increasing, and currently stands at almost 80,000, with over 120,000 people injured and over three million people displaced and homeless.\(^2\) The number of casualties and deaths from an earthquake is usually high as there is little warning prior to the earthquake and people become trapped under collapsed buildings, hit by falling debris, asphyxiated by dust or caught in fires. Greater chance of survival is linked to speed of extrication. Many people suffer delayed consequences – both physical (such

\(^1\)http://www.alertnet.org/printed.htm?URL=/thefacts/reliefresources/112971382078.htm
\(^2\)http://www.who.int/hac/crises/international/pakistan_earthquake/sitrepWHOsitrep20SouthAsiaEarthquake2-7Nov.pdf
A rescue mission was launched by the Pakistan Government, with assistance from a number of international search and rescue teams, including from the UK. These initial efforts swiftly shifted to distribution of relief supplies. Currently, Pakistan Army mule trains and helicopters are attempting access to remote areas before the Himalayan winter sets in. However, the window of opportunity is short. In contrast to other large-scale disasters, for example the Indian Ocean Tsunami, this has actually increased in magnitude as time has passed, with the death toll rising as more bodies are found in inaccessible areas, bad weather delaying on-going rescue missions and conditions for survivors deteriorating as time passes. Rescue efforts were further hampered due to the proximity of the affected areas to the disputed India-Pakistan border, known as the Line of Control (LoC). This means access to many villages in the disputed territory is not possible because of military restrictions, though talks are currently in process with the aim of opening up these areas for relief teams. Not only is access restricted, but the LoC is also a heavily mined area and it has been noted that landmines may have been disturbed or dislodged after the earthquake, increasing risk and danger.

Roads and infrastructure in NWFP were markedly better prior to the earthquake than in AJ&K, where poor and treacherous roads are hindering the arrival of motorised aid convoys and helicopter rescue/aid missions. This is the result of an overall lack of infrastructure development and investment following decades of conflict over the region. It is well documented that

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4 Three points have now been opened along the LoC – however, these are for the distribution of relief materials and not for civilians to cross. This has led to incidents along the LoC when Pakistani police fired shots in the air and tear gas shells to disperse angry crowds attempting to cross the border (BBC News 07/11/05). http://news.bbc.co.uk/2/hi/south_asia/4413318.stm
5 There are numerous undetermined areas sown with so called ‘butterfly mines’ which are not mapped. These pose a particular risk to children because of their resemblance to toys. http://www.icbl.org/lm/2001/pakistan/
earthquakes in poorer countries have far more devastating effects due to the lack of building regulations, quality of building materials, lack of emergency resources and poor disaster planning. In addition, the earthquake happened during something of a political vacuum two days after elections for local mayors and councillors. As the results had not been finalised there was no one taking political control at local level. This was especially problematic at field level in terms of responsibility and resource allocation.

As the disaster unfolded, there was some initial difficulty coordinating all the various organisations and individuals, who, however well-meaning, often add to the initial chaos and confusion. The UN implemented its humanitarian supply management system, the Logistics Support System (LSS), whereby a UN organisation takes responsibility for leading a cluster (e.g. health, early reconstruction, etc). This decentralised system aims to achieve better coordination, avoid duplication and respond more quickly and accurately to needs. In Pakistan, the government agreed to allocate a counterpart to each cluster (i.e. the health cluster is jointly led by the WHO and the Pakistan Ministry of Health). This ensures that the international relief and development organisations work in tandem with national governments. Relief is being allocated through ‘humanitarian hubs’ in five affected areas. However, the UN has been critical of the international community for what it perceives as a slow response to the ever-growing crisis. Donations have been slow and fall well short of the US$ 272 million the UN has estimated the recovery and reconstruction process will take. Moreover, many donations so far have been for long term reconstruction efforts, rather than immediate aid. Winter tents and blankets remain in short supply and are still desperately needed. In

8 Muzaffarabad, Mansehra, Bagh, Balakot and Rawalakot.
9 OCHA Situation Report No. 6.
addition, there is still a large volume of people requiring surgical treatment and management.

2. Socioeconomic Background

The World Bank classifies one third of Pakistan’s population as poor, with no appreciable change in development indicators during the ten years preceding 1999. There are also increasing structural inequalities, and an increasing gap between rich and poor. The poor have very little say in decisions that directly affect their lives. Moreover, this inequity results in unequal access to education, healthcare and a number of other public services.\(^\text{10}\) The overwhelming majority of the poor reside in the rural areas, many in the contested Kashmir region. The rural poor are especially vulnerable to economic “shocks” such as drought and other weather conditions affecting livelihoods.

Pakistan is ranked 135\(^\text{th}\) in the Human Development Index.\(^\text{11}\) However, though overall these indicators have shown some improvement there remain a number of discrepancies, in particular between urban and rural populations, and gender inequalities. The gender gap in literacy has not decreased since 1990, and in many regions school enrolment is low, particularly among girls. In terms of health indicators (see also section 3), maternal and child mortality is high in comparison to other countries of similar income. While considerable efforts are in place to improve these conditions, the rural population are the least equipped to deal with the after effects on the recent earthquake.

There are other factors which are impacting on the fate of survivors. These include the loss of family members, homes, and lack of shelter, as well as loss of livelihoods. The number of single-headed families has undoubtedly

increased, and this may have an impact for women left to look after families alone with little social support. UNICEF has also expressed concerns for other vulnerable groups such as the number of unaccompanied young women and children in camps or hospitals and has begun registering children in camps. Many were separated from their families in the chaos after the earthquake, and the government have issued directives that children must not be discharged from medical care unless to a member of their family. In addition to the more practical concerns, there are enormous psychosocial issues that have yet to be addressed.

As well as the actual problems of day to day survival in the makeshift camps and temporary accommodation, there are a number of potential problems likely to increase over time. Many people working in the regions, for example medical staff in the hospitals and sanitation workers, were not from the AJ&K region, therefore fled after the earthquake to their own homes and families. There is an overall lack of social welfare for families affected by bereavement, homelessness, loss of livelihoods, loss of social support networks; and no fully comprehensive rehabilitation services for the large numbers of people injured as a result of the earthquake. One or two people voiced concerns that people displaced from there homes in the region may not want to return; however, as yet there has not been any evidence of this.

3. Health Situation Overview

Despite having an extensive healthcare system, including rural-based healthcare units, district level hospitals and tertiary referral centres, Pakistan has been criticised for still not fully meeting the needs of its population as it is curative in its delivery, and has an overly urban bias. Moreover, there is a robust parallel private sector.

According to the WHO, life expectancy at birth in Pakistan is 63.2 years

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12 'Child quake survivors face trauma' The International News Tuesday 25th October 2005 (Pakistan)
(2003). Total expenditure on health is 3.2% of GDP. Under five child mortality is 98/1000 (males) and 108/1000 (girls). Tuberculosis, measles and polio are reported, though a nationwide polio eradication campaign has seen a decline in reported cases. These indicators put Pakistan at the lower end of the scale in comparison with other countries in WHO Eastern Mediterranean Region. Furthermore, there are a number of variations in health data statistics, particularly in the Kashmir region. It is also worth noting that the military are one of the major healthcare providers in the Kashmir region. Though the military had the command, control and infrastructure to deliver aid and relief, they too suffered heavy losses as a result of the earthquake and were therefore slower to respond than may have initially been expected.

Following the earthquake, a number of immediate needs were identified - the essentials of food, water, shelter and sanitation, alongside blankets and warm clothing. The lack of these essentials alone increases the risk of co-morbidity from diarrhoea (due to poor sanitation), hypothermia and malnutrition. In addition, much of the pre-existing healthcare infrastructure was destroyed – according to WHO reports, 26 hospitals and 600 health clinics in affected areas were destroyed or rendered too unstable for use. This has led to a reliance on temporary field hospitals provided by international and national relief organisations, or makeshift wards located in the grounds of existing hospital structures, in part because patients are too afraid to be inside with all the aftershocks, and because the buildings themselves may actually be at risk of collapse. The more fortunate were in tents or under makeshift shelters. Other difficulties including keeping track of patients as relatives often moved beds around (i.e. to seek shade). The team also heard that some people were removing family members from medical centres before treatment was

13 http://southasia.oneworld.net/article/view/96965/1/5339
14 By way of comparison, unofficial estimates of military expenditure run as high as 50% of GDP.
16 http://www.who.int/countries/pak/en/
17 WHO Pakistan earthquake: WHO health facts.
completed so they could be looked after by their families. However, there are many factors that may have driven them to this, including bereavement or a lack of understanding about the nature of the condition or extent of injuries.

All hospital facilities are stretched to capacity and most other services have ceased to function. Yet people still require the basic day-to-day healthcare they needed before the earthquake; as yet it is unclear what is happening to those with heart disease, diabetes, and chronic illnesses. Care and treatment for pregnant women is varied, but babies have been successfully delivered at numerous hospitals since the earthquake. There is a lack of estate facilities, and most hospitals are relying on generator-power for electricity, and donations of water, food and blankets. There is also a lack of medical and surgical supplies (and a fear of diversion of supplies to the black market by some doctors). Despite amazing resilience on behalf of medical staff, early on after the quake there was a lack of command and control in many hospitals which led to breakdown in communications across disciplines. However, this has improved with time in a number of hospitals, for example as staff worked shifts in operating theatres and teams come from other parts of Pakistan to assist. Overall, hospitals and health centres are acutely short staffed, and need more nurses, physiotherapists, and other ancillary personnel. The lack of these is leading to difficulties providing post-operative care. In addition, there is nowhere for patients to be discharged to due to the lack of convalescent facilities, loss of homes and social support structures, and conditions for those who do leave the hospitals.18 This has led to hospitals becoming ‘temporary’ accommodation for patients, as well as their relatives and friends.

Treatment of those injured by the earthquake has been compounded by a number of emerging factors:

18 According to a recent WHO Situation Report MSF have now set up a ‘post operative village’ in Muzaffarabad for around 70 patients.

Increasing risk of communicable diseases i.e. measles; tetanus; polio, as well as skin infections

Renal problems – crush syndrome/’time-under-rubble’.\(^{19}\)

Surgical problems – sepsis/infection; (neglected) trauma; fractures/mal-union; spinal cord injuries; amputations

Among the many reasons for delays and late presentation of injuries are distance and actual ability to travel, or because families were waiting for the removal of bodies trapped under rubble so they could bury them according to Muslim traditions, and it may take several days for bodies to be extracted. However, delays may lead to the kinds of problems highlighted above, which in turn impact on the outcome of surgery, need for further surgery, healing time, rehabilitation, and long-term prognosis. Nevertheless, despite the fact that many local doctors are accustomed to late presentation of injuries,\(^{20}\) orthopaedic surgeons the team spoke to acknowledged the severity of many of the presenting injuries and the subsequent need for surgical interventions and/or amputations.

Even several weeks later there is still a large volume of people requiring surgical treatment and management.\(^{21}\) In affected areas, trauma accounts for over 44 per cent of treatments provided.\(^{22}\) One Consultant Orthopaedic Surgeon working at the Ayub Medical College and Complex in Abbottabad has collated his own estimates of trauma patients seen by him and his team


\(^{19}\) ’Time under rubble’ has been determined as a hidden cause of death following long periods of entrapment. Renal impairment is rarely seen in isolation, and patient often present with multiple injuries.

\(^{20}\) This is apparently a relatively common occurrence in the NWFP and FATA regions, usually as a result of firearms injuries, but also other injuries including falls from heights, RTAs, collapsed buildings (many people live in mud brick constructed houses which can collapse in the rain). These areas do not have good road connections, and very limited trauma care, so delays as patients make their way to tertiary centres are common. Some patients come from Afghanistan; therefore, it may be many days after they first occurred. (personal communication, Professor Durrani, Hyatabad Hospital, Peshawar NWFP)

Women represented over 62 per cent (208) of the total 333 patients - consistent with the fact that many women and children were at home or school whilst men were out working when the earthquake struck; children under 16 accounted for 46 per cent of these patients, over 80 per cent of injuries were fractures – predominantly of the lower limbs. There were a significant number of spinal cord injuries (7.5 per cent).  

As noted above, most of the injuries require orthopaedic and trauma surgery. Problems were compounded by an initial lack of triage, and delayed or late presentation of injuries has increased complications, impairments and fatalities. The WHO has noted “The number of patients who suffered severe trauma or gangrene and who underwent amputation is being assessed. It is essential that treatment and rehabilitation needs of disabled people are included in the needs assessment exercises”.

4. Overview of Disability Services, Policy, and Practice in Pakistan

4.1 Current Situation
In Pakistan legislation, the Disabled Person (Empowerment and Rehabilitation) Ordinance (1981) protects the employment, welfare and rehabilitation rights of disabled people, and is implemented through the National Council for the Rehabilitation of Disabled Persons. However, some organisations have voiced criticism of how well legislation is implemented, and how well it actually

http://www.who.int/hac/crises/international/pakistan_earthquake/Bulletin2.pdf

As Dr Sahibzada Sohail himself notes, data for the first few days was impossible to collate, and these numbers are based on data collected between 15th -0 18th October 2005 (personal communication).

According to doctors at AFIRM, over 3000 spinal cord injuries have been reported to date (interview 24/10/05).


This legislation includes a one per cent quota for employment of disabled persons in all public and private sector establishments employing more than 100 persons.

http://www.apcdproject.org/countryprofile/pakistan/pakistan_current.html
Protects disabled peoples rights in Pakistan. Pakistani laws and regulations do not apply to the FATA areas. Social welfare is provided by both public and private institutions in Pakistan, with the Ministry of Women’s Development, Social Welfare and Special Education undertaking overall responsibility for welfare issues. There are a number of international and local NGOs as well as privately funded individual organisations who provide services for disabled people. These range from ‘special schools’ to advocacy. But as yet there is little in the way of grassroots disability movements in Pakistan and very few disabled people’s organizations (DPOs). Those that do exist have a strong urban bias.

As the World Bank notes, socio-economic data on disabled people in Pakistan is scarce, and the incidence is often underestimated: according to the 1998 National Census, 2.49 per cent of the total population were disabled, well below the WHO estimates of 10 per cent of an average population. It is not clear whether this low estimation is because disabled people were not ‘visible’, therefore not included, or whether it was because people felt there was no reason to self-identify as disabled as they would be excluded (i.e. from employment). Moreover, the data is based on the nature of the impairment, is not disaggregated, and thus perpetuates the tendency to refer to the disabled community as a homogenous group, with the same issues and problems. Previous research has indicated the need to acknowledge diversity within the disability community taking into account differences of age, gender, class, income, ethnicity etc. The World Bank estimate that over 66 per cent of

99_407&ContentID=1366
29 Disability News and Information Service 3 (21) November 2005.
30 For list of local organisations, see http://www.apcdproject.org/countryprofile/pakistan/pakistan_org.html
PAKISTANEXTN/0,,contentMDK:20637797~pagePK:1497618~piPK:217854~theSite
PK:293052.00.html.
It has been acknowledged by the Government that the 1998 Census disability prevalence rate is low and does not represent the true extent of persons with disabilities in the country.
33 http://www.disabilitykar.net/docs/thematic_conflict.doc
disabled people live in rural areas; only 14 per cent of disabled people are in paid work, and 70 per cent are reliant on family members for financial support. There are no specific programs for disabled women. These figures indicate that the situation for disabled people in Pakistan is often one of dire poverty.

Poverty Alleviation programmes such as capacity-building, social security and sustainable livelihood programs are gradually being introduced by the Government. Other efforts include a recent World Bank ‘Development Marketplace’ initiative, launched in September 2005. The aim of ‘Mazoori Majboori Nahin’ (‘disability does not mean helplessness’) is to provide the ‘impetus to the Government of Pakistan and Civil Society efforts to mainstream persons with disabilities into national development’. The World Bank has worked in partnership with the Ministry of [Women’s Development] Social Welfare and Special Education on the ‘Draft National Plan of Action for Persons with Disabilities, which complements the National Policy (formalised in 2002).

Other state initiatives include early detection, intervention and education programmes; integrated education programmes; access to built environment and transportation; access to information and communication, and the establishment of a number of prosthetic workshops around the country. Landmines and other improvised explosive devices are regularly used in Pakistan. Indeed it has been noted that numbers of landmine casualties increased significantly in the year 2004 compared to previous years, yet “existing facilities…are highly inadequate to meet the growing needs of the disabled persons.” According to estimates, due to the levels of conflict-

36 Landmine Monitor Report 2005
37 http://www.apcdproject.org/countryprofile/pakistan/pakistan_current.html
related violence and injuries there are over one million disabled people living in the AJ&K region.38

Early indications are then that despite Pakistani legislations and initiatives, access to services by disabled people in Pakistan prior to the earthquake varied according to locality and level of poverty. Preliminary evidence suggests that these services will not be adequate for the number of people impaired as a result of injuries sustained from the earthquake in addition to those already using these services.

4.2 Disability in Disaster Situations
Previous research has highlighted that in emergency situations disabled people are very often the least visible and sustain disproportionately higher rates of morbidity and mortality. This may be due to injuries sustained from the earthquake, and those whose injuries and impairments may be exacerbated by inadequate healthcare, poverty, and/or malnutrition in the post-disaster phase. Contributing factors to this include the loss of support structures (including family members), loss of mobility and accessibility aids, and change in terrain or location. Disabled people may have difficulty accessing emergency registration systems or relief efforts, and may therefore be denied access to aid.39 Agencies need to include disabled people in both immediate assessments and programme implementation, as well as in long term rehabilitation and reconstruction projects.

Initial assessments indicate that Pakistan does lack the facilities and equipment to cope with numbers of people requiring rehabilitation, prosthesis and other mobility aids, particularly in the AJ&K region. Disability services currently lack capacity to promote early inclusion, and disabled people have little representation as there is a desperate lack of services and centres,

especially for disabled women, and a real lack of any DPO capacity. Early inclusion of disabled people in rehabilitation and reconstruction projects promotes equality and effectiveness, improves accessibility and reduces barriers to participation. These barriers include physical access, transportation and homes, as well as attitudinal, social, cultural and political. Initially much of the focus in Pakistan has inevitably and necessarily been on physical needs, for example rehabilitation, physiotherapy, prosthesis and other mobility aids, but so far there has been little discussion on the need for early inclusion in long term rehabilitation and reconstruction plans.

4.3 Orthotics and Prosthetic Services in Pakistan
Currently most rehabilitation and prosthetics services are based in the bigger cities. There are some local NGOs who provide community based services (CBR) in regional areas, but very few are in the NWFP or AJ&K regions. Mobility aids and prosthetics are made locally in Pakistan by both state-funded institutions and local NGOs, but services are limited and based on interviews with services undertaken by the LCC team will be unable to supply projected demand. There are limited places for fully integrated rehabilitation services. The cost of mobility aids and prosthesis varies according to quality and type, for example, a below knee prosthesis can cost around US$600-$700, though this cost may be offset by donor funding, NGOs or be calculated on a payment scale according to what the person can afford and the practice of the service.

Some of the services available include the Fauji Foundation supported Artificial Limb Centre in Rawalpindi; the Pakistan Institute of Prosthetic and Orthotic Sciences (PIPOS) in Peshawar and the Rehabilitation Centre for the

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41 Apparently there is one local NGO, Helpline Trust, ‘committed to improving the quality of life of the citizens by advocacy and demanding good governance, rule of law and accountability in government and society’. Among its many programmes, it is actively working for the rights of disabled people in the AJ&K region. http://www.helplinetrust.org/
Physically Disabled (RCDP). The RCDP programme offers a fully inclusive service including CBR programmes, vocational training, physiotherapy and rehabilitation services through day centre and residential facilities – though limited. It also employs a number of disabled people through its vocational programmes. RCDP houses an orthotic workshop in its Peshawar center, and has established a number of smaller centres in other provinces across Pakistan. These provided prosthesis and other mobility aids free of charge, or for a nominal amount. PIPOS offers students a four year training programme in orthotic sciences, as well as providing prosthetic services and rehabilitation programme. They are currently seeking to develop their CBR training module. Members of its team contribute to international consultancies and training in the field of orthotics. PIPOS has a small in-patient unit at the Hyatabad Hospital. It does charge for its services, though has some facilities for funding through the ICRC and other organisations. It is administered through the NWFP Department of Health.

The Armed Forces Institute for Rehabilitation Medicine (AFIRM) in Rawalpindi provides comprehensive in-patient services, physiotherapy, occupational therapy and rehabilitation, psychological support as well as provision of mobility aids and prosthetics for members of the armed forces. However, in the aftermath of the earthquake it has expanded its remit and taken in civilians as well as military personnel, and is becoming a specialist centre for spinal injuries. At present, 66 of its 100 in-patients have spinal cord injuries: 44 civilian and 22 military. Of these, 21 are women and two are children. The majority of patients have thoracic and lumber spinal cord injuries sustained as a result of the earthquake (those with high spinal cord injuries i.e. C1-3 were at much greater risk of dying through lack of immediate specialist medical care). All the facilities above cater for adults and children but have limited capacity at present. This centre has two psychologists who work closely with patients who have lost families, homes and livelihoods as well as experienced life-threatening injuries. However, this service is stretched to capacity, and is offered through this specialist rehabilitation unit.
Overall, there is a very limited option for rehabilitation services. Facilities for such services are very limited, and predominantly based in urban areas. There is also limited availability of mobility and other aids. Those that access services may have waited a considerable length of time. Cost may also be a restriction. Many disabled people are cared for by their families or long-term residential services. There is very little support for home based users in terms of welfare, benefits or provisions of facilities to aid independent living.

5. Conclusions

The aim of this LCC preliminary assessment visit was to undertake a rapid assessment of surgical and trauma needs in areas most severely affected by the earthquake; the nature of injuries and subsequent needs, and what impact these will have on planning and implementing disability services. As this report demonstrates, this situation is changing rapidly; nevertheless, it provides an overview of the current situation and demonstrates the pressing need to highlight disability issues that were both already present and are emerging as a consequence of the disaster.

Many local and international NGOs inevitably shift their work to focus on the immediate needs of people in the post-disaster phase; however this does mean that other planned programmes get sidelined, and result in people being marginalised without this support. But overall, there have been some very effective local responses to the earthquake and subsequent disaster in Pakistan, given all the constraints. These include poor infrastructure; access; lack of assets; weather; terrain; transport difficulties; communications; manpower – all of which was compounded by the political situation in the region. It is therefore vital that the ongoing response needs to continue to work with national and international co-ordinating bodies.

The team undertook to provide expert trauma advice and assistance where it was required: however, local surgeons had responded well and headed to the disaster areas, often as part of a government team. Most of the local orthopaedic and trauma surgeons have expert skills and experience (i.e.
dealing with late presentation of injuries). Nevertheless, they were working in
difficult and dangerous circumstances so inevitably complications and
problems have emerged, not least access to field hospitals and surgery in the
first place. Sanitation is a major issue, as is over-crowding and post-operative
care. Sepsis and other post-operative complications are common due to the
nature of injuries and wounds.

Referral to tertiary care centres or receiving hospitals in other cities across
Pakistan requires the facilities, transport and personnel to undertake difficult
evacuations. These were hampered by weather, road conditions, facilities
and lack of money. Though there is increasing evidence highlighting the need
for key assets to have a more ‘forward’ role, for example, a fully functioning
renal dialysis unit, these are costly and require specialist knowledge.
Preliminary assessment of hospitals indicates enormous infrastructure
damage and requirements, including paramedical requirements (especially
rehabilitation facilities; psychological care; mobility aids; physiotherapists and
occupational therapists). The earthquake has affected people of all ages and
genders. Many have lost their homes and families. These factors will
compound the recovery and rehabilitation of people and communities.
Therefore any interventions must also carefully consider psychosocial needs,
taking into account local cultural social and religious beliefs and needs, as
well as working to fight the stigma that disabled people and persons with
mental health conditions face.  

Early inclusion in rehabilitation and reconstruction projects promotes equality,
effectiveness, and accessibility as well as being cost effective.  Disability is a
cross-cutting issue; yet often when disabled people are ‘included’, they are
often seen as a ‘specialist’ area or a vulnerable group, and thus lacking rights.
Disabled people require many of the same support structures, aid and
interventions as may other sections of the population, such as elderly people,

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42 http://www.disabilitykar.net/docs/thematic_conflict.doc
Bank, World Bank. See also Sphere Project: Humanitarian Charter and Minimum
Standards in Disaster Response (2004);
children, pregnant women and people living with HIV/AIDS. Early inclusion promotes the awareness of rights and needs of disabled people, within both the agencies and communities concerned and counteracts attitudinal barriers.

The AJ&K region already has higher than average rates of disabled people, primarily due to conflict-related injuries, but also due to the poverty experienced in the region and inability to access medical care or other welfare services. Initial data indicates numbers of people injured or with pre-existing impairments exacerbated by the earthquake to be high. As noted above, early assessments indicate that Pakistan lacks the facilities and equipment to cope with numbers of people requiring rehabilitation, prosthesis and other mobility aids, particularly in the AJ&K region. In addition to these aspects, disability legislation is often poorly implemented, and the aftermath of a disaster may provide an opportunity to reinforce legislations or implement new ones, as well as promote the development of civil society organisations such as disabled women’s groups and DPOs.

LCC/LCI can offer support through partnership with existing services/NGOs/DPOs to specifically targeted areas such as CBR – including the implementation of training programmes in CBR; education, and employment programmes, given their expertise in these areas. LCC contributed to earlier research advocating the early inclusion of disabled people in post-disaster relief and rehabilitation programmes. This aimed to raise awareness of disabled people within both local and international organisations, the resources available and how they were used, and what networks were already in place. Following this research LCC have made a number of connections with other experts working in this field and have access to a wide range of resources.

46 CBR is used here in its broadest terms, not solely focusing on the physical rehabilitation of disabled people, but the whole process of rehabilitation, including families and communities.
Members of the team can continue to offer expert surgical and trauma advice to colleagues requiring support. This will include follow up training for use of BIOMET orthopaedic equipment donated during the visit as part of an ongoing project to provide equipment and training to surgeons in resource-poor environments. Members of the team can also facilitate links between UK training bodies (e.g. Royal College of Surgeons) and local Pakistani equivalents.

LCC can advise local authorities and organisations on the reconstruction of medical facilities and services, as well as offer expertise in planning for and managing disaster responses, both at national and local level. Local resources are often assumed to be insufficient therefore more money is spent on external systems rather than bolstering local building capacity or ways in which local people could act as monitors or wardens in the case of an emergency.47 This is another area where disabled people must be included and considered, and early on in national disaster planning processes.48 It is important to link research to practical programme work so that all those involved benefit directly in return for sharing information.

Finally it must be acknowledged that a disaster of this magnitude takes a long time to recover from – programmes implemented now should consider long-term aims and goals. Many people in the region have experienced bereavement, upheaval, displacement as well as the loss of homes and livelihoods. Many have also had significant injuries that will require ongoing interventions as well as rehabilitation. Previous examples, for example, of DPOs formed after the earthquake in Bam, Iraq, demonstrate that disabled people can become a vocal group, lobbying for their own rights and inclusions. It is important now to promote independence and inclusion, otherwise this opportunity to improve conditions and services for disabled people may be lost. As a recent ALNAP publication has noted, disability “…is a significant

issues following earthquakes due to numbers of injuries received… this area has not been well covered in previous responses, but is also likely to be a major factor in the current [South Asia] emergency”. From the initial assessments undertaken this would seem to be more than a likely factor, and one that demands more responses. Leonard Cheshire are well placed to undertake some of these responses.

49 ALNAP ‘South Asia Earthquake: learning from previous earthquake relief operations’
http://www.alnap.org/pubs/pdfs/ALNAP-ProVention_SAsia_Quake_Lessonsa.pdf