Quality Rehabilitation for All

Lessons learned from integrating rehabilitation services in two general hospitals in Bangladesh

Centre for Disability in Development (CDD)
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Therapeutic play between a caregiver and children.
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Lessons learned from integrating rehabilitation services in two general hospitals in Bangladesh

For the millions of persons in Bangladesh that have disabilities, rehabilitation is an essential service that many are missing out on. Rehabilitation services, including the provision of assistive devices and therapeutic care, enables people not only to function as independently as possible, but also to fulfil their potential when they take part in education, employment and their communities. In Bangladesh, rehabilitation centres and services are part of the social welfare system of the Ministry of Social Welfare rather than part of the health system. Rehabilitation centres are set up as separate facilities from hospitals and clinics. Although the intention to control the quality of rehabilitation services by offering these in specialized centres is clear, the question remains whether it would not be more efficient and effective if rehabilitation were to be offered as part of the larger health care system.
Rehabilitation in Bangladesh

The current health care system in Bangladesh covers a variety of levels. Primary health care is provided at Thana/Upazila level - including community clinics for basic health awareness, union health centres for minor treatment and prevention, and Thana/Upazila health complexes providing primary health care and serving as the first base for referral. Secondary health care is organized at district level, with district hospitals providing general medical services, handling referral from primary health centres and referring upward where needed to the tertiary level which include the country's 12 medical colleges and hospitals and several national specialized hospitals. In this model, there is currently little attention for rehabilitation, with only several of the medical colleges offering rehabilitation services.
Figure 1: Organizational Chart

[Diagram showing an organizational structure with roles such as Minister of Health, Deputy Director, Assistant Director, Deputy Program Manager, District Health Officer, etc.]

Photo (below the diagram): Physiotherapist collecting centis history from the caregiver (mother)
Rehabilitation is, historically, not part of the Ministry of Health and Family Welfare, but covered by the Ministry of Social Welfare. A majority of the rehabilitation services provided in the country is through NGOs and other charity based organisations. This provides for a rehabilitation sector which is relatively unregulated and is not spread evenly enough throughout the country to reach all those who need the services. In recent years, the Ministry of Social Welfare has established One Stop Service Centres (OSSCs), which provide information and rehabilitation services and function as a resource for persons with disabilities. These centres, run by Jadun Protibondhi Unnayan Foundation (JPUF) under the Ministry of Social Welfare, offer, amongst others, physiotherapy, speech and language therapy, occupational therapy, hearing and visual tests, and counselling and training, free of cost.
Figure 3: Map with coverage of rehabilitation services provided by CDD
One Stop Services Centres have helped to spread basic rehabilitation services more evenly at district level, and to incorporate multiple needs in one place. However, research demonstrates that persons with disabilities are often unaware of the availability and importance of rehabilitation services, as are doctors in hospitals that could potentially refer.

Working from the theory that integrating basic rehabilitation care within hospitals and the health care system, rather than as a standalone element, could greatly improve awareness of and access to rehabilitation services, the Centre for Disability and Development (CDD) wanted to pilot setting up therapeutic care units within district hospitals. Therefore, in 2015 CDD established therapeutic care units within five district hospitals, the purpose being to observe whether this was an effective solution to improving access to rehabilitation services. We compared the results and services of the rehabilitation centres at the hospitals to three stand-alone rehabilitation centres, and this report presents the lessons we have learned.
The process of introducing and operating rehabilitation services in the district hospitals

The current system of health care in Bangladesh has set rehabilitation apart from regular health care services. By integrating two rehabilitation centres into district hospitals, we aimed to understand whether this way of working would increase access to rehabilitation services for persons needing these services.

In order to start up the pilots, CEDR approached the Ministry of Health for approval to work with two government hospitals. The hospitals that were chosen by the Ministry of Health were Sholakia and Dinajpur district hospitals. Both hospitals have a pool of specialists, and cater to several hundreds of clients per day. Both hospitals are located near busy national highways, meaning that the casualty departments deal with a significant number of road traffic victims daily. This implies that, besides for persons with permanent disabilities, the rehabilitation centres could prove to be of use to persons with a variety of temporary impairments as well.

After signing formal Memorandum of Understanding with the Directorate General of Health Services, rooms were allocated within the hospitals for the therapeutic care units. CEDR set up all the necessary equipment to make these rehabilitation centres functional, as well as adding accessibility features such as ramps to ensure barrier free entry into the centres. Specialized staff was appointed to work in the centres. To make sure the other hospital staff was also prepared to welcome and refer clients with a disability, CEDR provided them with basic training on disability. At this point, the integrated rehabilitation centres were ready for business.
Staff and services at the rehabilitation centres

Each of the hospital-based rehabilitation centres had:
- One full-time physiotherapist with a Graduate degree
- Two full-time physiotherapists with Diploma degrees
- One part-time physiotherapist trained in Autism assessment and screening

Services offered at the centres included:
- Assessment of clients
- Counselling on the prevention of therapy and promotion of (sensory)
  impairments
- Physiotherapy
- Referral
- Distribution of assistive devices, particularly Prosthetic and Orthotic devices
- Screening and assessment of children with Autism

Therapist providing therapeutic exercises to children with disabilities.
The results and impact of mainstreaming rehabilitation services in district hospitals

By 2017, the two rehabilitation centres in Sirajganj and Jamalpur district hospitals had been up and running for two years. Initially, attendance at the centres was quite low, with a total number of 994 clients being attended to in the first half year of their existence. However, as the centres gained more publicity, attendance slowly ramped up, with 2194 clients having visited the two centres by March 2017.

The goal of these two pilot centres being to understand whether mainstreaming rehabilitation services in hospitals is more effective than setting up separate rehabilitation centres, this chapter provides some initial results.
1. The drop out of clients is reduced
At the hospital-based rehabilitation centres, the drop out rate of clients was 9.4% at Sivajani hospital, and 10.9% at Jaiakalp hospital. In comparison, in the stand-alone rehabilitation centres we studied, the drop-out rates ranged from 20.7% (Hatkakona) and 22.5% (Sivajani Commercial Centre) to 36.9% (Jescona). In addition, at this hospital based centres, almost all clients attended to their appointments regularly as scheduled, whereas at Hatkakona and Jescona regular attendance was limited to 70% and 55% of clients respectively.

We cannot conclusively say why it is that the drop out rates are much lower at the hospital-based rehabilitation centres than at the other centres. But we would assume that, when rehabilitation is provided at the hospital location, more clients will go to the rehabilitation services since it means that they can stop in quickly when they are at the hospital anyway. If they have to go to a separate location, they might see it as a barrier and not make the time, or have the opportunity, to actually travel to that location. In other words, less clients might drop out as they do not have to go to a separate location when they are referred from the hospital.

2. It is cost effective
We calculated the per-session cost for the two hospital-based rehabilitation centres, and compared this to the per-session cost at two stand-alone rehabilitation centres in the same districts. These costs were significantly lower when the rehabilitation centres were integrated
into the hospitals. A large portion of the costs at the stand-alone rehabilitation centres go to house rent and utility costs - hiring a guard and cleaner, electricity costs, a receptionist, administration etc. These are costs which are not borne by the hospital-based rehabilitation centres as they share the space and services of the hospitals.

3. Clients see a reduction in time spent and transport costs

With regards to less transport costs and travel time in getting to the hospital as compared to getting to a stand-alone rehabilitation centre, we chose to compare the hospital in Sreepur with a commercially run rehabilitation centre in Sreepur, due to both being in the same location and therefore comparable.

The hospital is located on a public transportation route, with buses and auto-rickshaws coming from peripheral townships stopping nearby. This is not the case for the stand-alone rehabilitation centre. Whereas 44% of clients arrive at the hospital by bus or auto-rickshaw (and only the remaining 36% by rickshaw), 84% of the clients at the stand-alone rehabilitation centre use a rickshaw to get to the clinic - which take more time due to traffic congestion and are more expensive than public transport.

In addition, clients travelling to the hospital also have less travel time, with all clients reporting that it took less than an hour to reach the hospital (and 59% took less than thirty minutes). This is significantly less than those travelling to the stand-alone rehabilitation centre, with 64% of clients reporting that they travelled over an hour to get to the clinic.

Considering that district hospitals are often more centrally located then stand-alone rehabilitation centres, we suspect they are thus easier to get to, and therefore more time and transport efficient for clients.

4. Both persons with and without disabilities benefit from rehabilitation services

In the current system, the general assumption amongst the population is that rehabilitation services are only for persons with disabilities. However, rehabilitation services could also benefit persons with temporary impairments, and in fact prevent their impairments from becoming permanent problems.

At the hospital-based rehabilitation centres, we saw that persons with and without disabilities were being treated in equal numbers. The majority of the clients with temporary disabilities were persons recovering from a stroke or facial paralysis, or people suffering from fractures or bone and joint related ailments. In the overall physical rehabilitation infrastructure is still very weak in Bangladesh, there are very few places for persons with temporary impairments to find the support they need. Many would not feel comfortable visiting the Out Patient Services
Centres for services such as physiotherapy, because of the association with disability, many of them would most likely have sought support from traditional healers, or not sought any support at all, which could have led to permanent disabilities.

5. Increased referral between medical services and rehabilitation services

In the current system of stand-alone rehabilitation centres, we assume that staff at the rehabilitation centres might not know to refer clients with regular health problems to the hospital, and likewise, hospital staff might not know to refer clients with rehabilitation needs to the rehabilitation centres. Having rehabilitation centres within the hospital facility, would potentially increase staff sensitivity to the availability of additional services, and thereby increase referrals.

And indeed, of the various centres that we looked at, the two that have the most clients coming in through hospital referrals are those two that are based at the hospital (65% of all clients at Sinjaqen hospital, and 33% at Westerbro hospital, come in through referrals from hospital departments). At the rehabilitation centre at Westerbro hospital, the lower rate of hospital referrals can be explained by the fact that it took them comparatively longer to earn the acceptance of hospital doctors, but the amount of referrals by doctors is now steadily increasing. At the three stand-alone rehabilitation centres, the bulk of the clients find their way to the centre through referral of other clients, or rehabilitation centre staff themselves.
Vicuvars, anecdotal evidence also demonstrated that during assessment at the rehabilitation centres integrated in the hospitals, rehabilitation staff identified additional conditions and needs in their clients, and then referred them to relevant specialists and experts within the hospital. We can thus safely conclude that having rehabilitation centres within hospital facilities increased referral between the hospital and the rehabilitation services.

6. Positive mentality amongst health professionals

Although we have no statistically viable proof, anecdotal evidence from the CEO team does indicate that hospital doctors are increasingly more accepting of the rehabilitation centre as a professional service and of persons with disabilities as clients. In addition, referrals from the hospital to the rehabilitation centres are increasing, which could also indicate increased recognition of the services provided by the centre.

"Some conditions such as Bell’s palsy, stroke, cerebral palsy and Guillain-Barré syndrome need general treatment and therapy both together. Without a therapy unit in the hospital it is difficult to complete the treatment in one place."

- Senior orthopaedic surgeon at Monikunj Government Hospital

"A therapeutic care unit is very important within the hospital territory. Persons with disabilities and persons with temporary impairments both get benefit and device supports from this centre."

- Consultant Orthopaedics, Sirojgunj General Hospital
Conclusions

The rehabilitation centres at Hamilton and Springfield district hospitals have now been in function for two years, and we can already note that this system seems to provide a few unique advantages over stand-alone rehabilitation centres. For instance, hospitals are often based at central locations, with easier access to main roads and public transport. This provides ease of access for clients with rehabilitation needs. In addition, hospital-based rehabilitation centres seem to be cost-efficient; both for clients who have reduced transport costs and travel time, as well as for the health care system as a whole. Lastly, placing rehabilitation centres on hospital grounds increases referral both ways - increasing access to health care for persons with disabilities, and access to rehabilitation services for persons with temporary impairments.

Our research was too small to measure individual choice - did clients really attend the hospital-based centre versus the One Stop Service Centres because they made the choice to do so, or because it was the only rehabilitation centre that they knew about? In addition, the hospital-based centres were significantly smaller than the separate rehabilitation centres, which also offer services such as speech and language therapy, and an assistive device repair centre. However, these past two years have only been the start. Integrating rehabilitation centres into hospitals already seems to be a positive, effective and cost-efficient move - one that provides for a more holistic view of health care that recognizes that individuals can have both medical as well as rehabilitation needs.
Annex: Methodology of the Study

For this study, we researched the two hospital-based rehabilitation centers as well as three stand-alone rehabilitation centers in order to draw a comparison. These three centers included a one-stop service center in the district of Ramban, a one-stop service center in the district of Jammu, and a government-run rehabilitation center in Srinagar.

We collected a multitude of data for comparison between the different centers. This included interviews and semi-formal conversations with programme and hospital staff, as well as requesting the centres to provide insights into their data management system and budget. We asked the centres to provide us with data on the clients they served in 2016. In addition, CIDO staff went to each of the five centres, and interviewed all clients attending the centre during a period of three consecutive days in February 2017. All clients were interviewed according to a pre-designed questionnaire, with attending parents responding in lieu of any minors.

Table 1: Amount of collected data per centre.

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<th>Srinagar</th>
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Data was disaggregated by gender, disability or temporary impairment, as well as type of disability as classified by the Rights & Protection of Persons with Disabilities Act, 2016.
The Centre for Disability in Development (CDD) is a not for profit organization established in 1994 to develop a more inclusive society for persons with a disability. It is estimated that 14 million people in Bangladesh are living with a disability, receiving little or no assistance and excluded from mainstream life. CDD's mission is to address this by simultaneously educating the community in how to be more inclusive whilst also enabling persons with a disability to participate in society by providing them with essential supports. In this way, persons with disabilities can enjoy the same rights, freedoms, dignity and quality of life as everyone else.

CDD works in partnership with a network of over 350 organizations both nationally and internationally. Our innovative approach to disability inclusion is now being used as a model in other countries.

Light for the World is an international development organization working in Africa, Asia and Latin America. Its mission is to contribute to a world in which persons with disabilities fully exercise their rights as laid down in the UN Convention on the Rights of Persons with Disabilities.

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