

### Manned and Virtual Ways to Provide Health Care to Persons with Disabilities in Rural India

#### Training grassroots level workers

**The Challenge:** The size of our population with disabilities (5-10% of 1.25 billion people) and the enormous diversity of context, language, culture and food make the provision of rehab services in our country challenging. In addition, the poverty and the lack of opportunity for much of our rural population (i.e. 70% of our people) makes poverty one of the most severe and insidious disabilities which needs to be addressed if poor people are to have a say in their destiny.

**The solution:** Over the year, different solutions have been used: Formal and non-formal training, paid workers and volunteers, centralised and decentralised supervision, innovative new solutions and upscaling existing solutions. In CMC Vellore, Dr Ida Scudder reached out to the people in the rural areas through “Road Side Clinics” and camps. Dr Paul Brand addressed difficulty in finding people to work with leprosy patients by training leprosy cured persons as Hand and Leprosy Physio Technicians. The need to involve the family in the treatment of persons with mental illness resulted in programmes for training the mothers of mentally challenged children to become their prime therapist. Part Time Community Health Workers trained in MCH work were later trained in early diagnosis and interventions for PWD. Full time CBR volunteers were used in an urban slum setting to become our resource for rehabilitation in PWD in the community. Dr P K Shetty pioneered the use of local craftsmen to make the famous Jaipur foot prosthesis. More than 1.3 million persons have been fitted with Jaipur foot since then. Mr Sanjit “Bunker” Roy started a barefoot college in Tilonia where he trained village grandmothers to become hand pump mechanics, solar engineers, F.M Operators and fabricators and masons. He said “literacy is what you learn in school, education is what you acquire in life from family, traditions, culture, environment and personal experiences....so everyone is an educational resource”. “Use the knowledge, skills and wisdom existing in villages for development before importing. Put sophisticated technology in the hands of poor so they are not exploited” The Arvind Eye Care System was started by the visionary Dr G Venkataswamy in Madurai in 1970s, who himself had rheumatoid arthritis and was appalled at the huge number of needless blinds in our country. He used the Mac Donalds business concept of combining mass production with unerring quality, by intensive training of village girls in specific tasks. Each task was broken down to its components and unnecessary parts omitted and essential ones optimised.

**The result:** World class treatment at Indian prices for millions of people at many centres in Tamil Nadu with complication rates less than those in the NHS of the UK. Training grassroots level workers is challenging because of the size and diversity of our land and the range of skills required for different disabilities. Some key features in the exemplary solutions are: a visionary who is able to see the problem; see local, available people and their skills as resources; are able to demystify and disseminate complex technology, and encourage innovation and lifelong learning.

#### Tele-Rehabilitation

Tele-rehab is the use of communication or information or information technology (IT) to assist in the diagnosis, prognosis, treatment and follow-up of persons with disabilities through the transmission of data between two different physical locations. Initially, telecommunication through telephone advice lines was particularly useful in Counselling and Psychiatry. The availability of Video link consultation brought in specialities like Dermatology and Ophthalmology. Improved data digitisation and transmission brought in the laboratories, Radiology and cardiology. Now there is no speciality that cannot improve its reach and effectiveness through IT. Telemedicine is known as tele care. The explosive growth of information and educational material on the internet and dramatic decrease in cost and increase ease of access is a boon for the education of PWD and their families enabling them to network and make more informed choices. Professionals in rural settings can keep up with recent developments and good evidence of the efficacy and cost benefit ratio of interventions. Online marketing has made many functional aids and devices available to persons in rural areas. There are disadvantages in Tele rehab: treatment and developments can become Technology driven rather than patient centered and patient led; a master, not a tool. Instead of enhancing best practice, technology can replace it and tele rehab that does not tie in with appropriate clinical services can cause harm. A little knowledge is a dangerous thing! Evidence of clinical effectiveness and ethical soundness are yet to be developed: It is new but is it better? Robust clinical, financial and legal governance is yet to be put in place: who is responsible?

**Instead of “Taking Rehabilitation Medicine to rural India”. I hope that at end of the talk participants will be encouraged to “Discover rehabilitation Medicine in Rural India” and also “Discover rural India in Rehabilitation” and join with our poor, both rural and urban, to promote true independence and true choices.**

– Dr Suranjan Bhattacharya