

Tele-rehab Program "Sambhav"



Introduction:

Telerehabilitation is the clinical application of consultative, preventative, diagnostic, and therapeutic rehabilitation services via two-way interactive telecommunication technology. It is developed to provide reasonable access to geographically remote individuals and to those who are physically and economically disadvantaged and also has the capacity to improve the quality of rehabilitation health care. Tele-rehabilitation relates to the services delivered by several health disciplines including physiotherapy, speech pathology, occupational therapy, biomedical engineering. It optimizes the timing, intensity and duration of therapy that is often not possible within the constraints of face-to-face treatment protocols in current health systems.



Need:

On the role of telemedicine in the health care service delivery, a patient survey predicts that 75% of all patients expect to use digital services in future. 75% of the country's healthcare infrastructure is concentrated in urban areas while more than 75% of the population lives in rural areas. The majority (69%) of the persons with disabilities reside in rural areas. 71 % of children with disabilities live in rural India and facing a range of barriers. E- Rehabilitation technology will thus provide an opportunity to serve the poorer and marginalized sections of the community.

Benefits:

- Best benefit for the end-user (i.e., an individual with a disability) within their environment
- Therapist does not need to visit service user at their home
- Better clinical support in local communities
- Improved access to specialized services
- Caregivers/service users need not to overcome structural barriers when want to access the rehabilitation service
- Caregivers need not go to rehabilitation centre
- Decreased travel between rural communities and rehabilitation centre, cost-effective, and reduce the cost of rehabilitation (centre-based)
- Tele rehabilitation is equally as effective as conventional rehabilitation in improving activities of daily living, motor function, and quality of life
- Telerehabilitation now changing ways of thinking and acting in service delivery provision and hope to cover the maximum living in the remote terrains

Telerehabilitation in CBR setting:

- Telerehabilitation can be used to improve Community Based Rehabilitation (CBR) systems, particularly in developing countries where rehabilitation services are very expensive and not available at the community level. Community-based rehabilitation programs can be strengthened by using tele rehabilitation, and that telerehabilitation can address the unserved needs of persons with disabilities located in the remote area.
- Telerehabilitation can provide synchronous and comparatively low cost but quality rehabilitation services regardless of time, space, and location. It's flexibility, remote availability, and cost-effectiveness is helpful for community-based settings.

- Telerehabilitation methodology can be used to provide rehabilitation services to achieve WHO goals (e.g., improved access to health care services and professionals).
- The use of digital technology in the CBR/CBID has extended the scopes of various professionals working in the field of rehabilitation to reach the maximum and found telerehabilitation is as effective as conventional rehabilitation.

Understanding project “Sambhav”: (JVS Telerehabilitation Unit):

With the rapid evolution of digital technology seen as an opportunity to improve rehabilitation services in remote parts of the country, Jan Vikas Samiti has introduced telerehabilitation project “Sambhav” with a motto *reaching the unreached* using the web portal and the mobile app for a better individual rehabilitation plan and service delivery. The project “Sambhav” aims to capacitate CBR facilitators on rehabilitation diagnosis, making custom made treatment/rehabilitation plans and providing appropriate therapies to the children and youth with disabilities who are most in need in the rural parts of India using recent technology. The main purpose and focus of the project Sambhav is the application of the web portal and mobile app for purpose of assessment and rehabilitation plan, progress and outcomes.

Methodology:

At present, JVS Telerehabilitation unit (ICT) is providing guidance for the physical rehabilitation service to selected Partner Organisations (POs) in Uttar Pradesh, Bihar, Uttarakhand, Jharkhand and Madhya Pradesh under this project. A protocol for the physical rehabilitation diagnosis/planning of children with developmental disabilities is made at JVS to help the selected partner organizations to develop their capacities in term of providing quality physical rehabilitation service. To provide better Telerehabilitation service delivery, regular training programs are conducted for selected CBR workers from the Partner Organisations (POs) on video filming and the use of rehabilitation protocol. Web portal and Mobile app on Telerehabilitation is developed by JVS and the same is shared with the selected CBR workers. Store and Forward (in which after video shooting, it can be stored and at the time of need can be forwarded to the JVS headquarter for intervention planning) method of technology which is quite practical and suites well to the concept of telerehabilitation and as per need real-time interaction and guidance have been provided to the parents/caregivers and field staffs as well. Rehabilitation professional/expert at JVS Telerehabilitation unit regularly receives videos of children with disabilities and assesses the case and provides treatment protocol/rehabilitation plan to the POs and periodically monitors the progress of cases.

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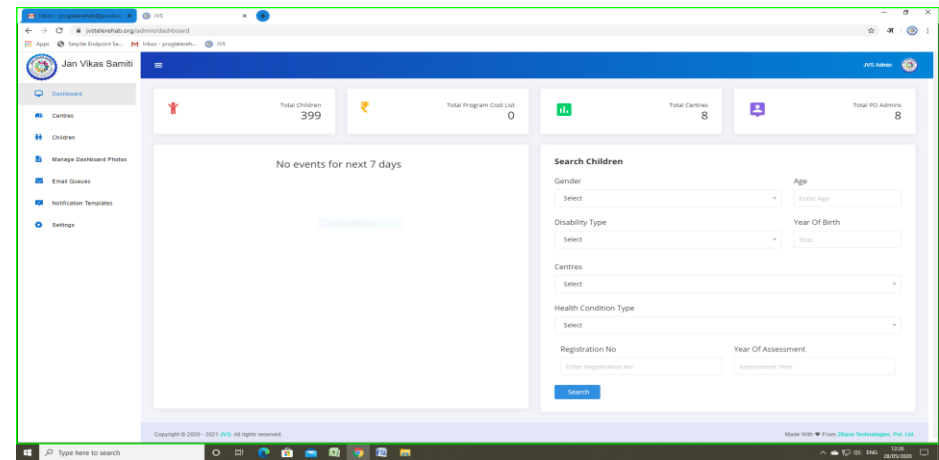


Outcomes:

Telerehabilitation service delivery will give the best benefit to the end-user (i.e., an individual with a disability) within their environment. It optimizes the timing, intensity and duration of therapy that is often not possible within the constraints of face-to-face treatment protocols in current health systems. From the inception of the program in mid-2018 to May 2020 more than 350 children with disabilities are assessed and their rehabilitation plan has been made in the pilot phase. PO heads and field staff have shared that they are now able to provide quality intervention in remote areas as per the physical rehabilitation protocol through tele-rehabilitation.

Web portal: <https://www.jvstelerehab.org>

A web portal has been developed by JVS for telerehabilitation service delivery, by using the web portal any field staff can upload information including consent, personal details, assessment form, ICF, baselines, individual activities, progress report, videos and photos. The details of any child can be printed for documentation and to keep records. Through web portal at JVS tele-rehabilitation unit expert will check all the details (including videos of children with disabilities) which are uploaded by field staff and will provide necessary inputs so that field staff apply the same in the field and will regularly provide resources on recent update in the field of disability rehabilitation to concerned field staff.



Mobile app: JVS Sambhav (Available on Google Play store)

A mobile app is also developed to complement the web portal and through this app, all the information can be uploaded which will respond to the web portal, that means one can access all the information on the web portal simultaneously. This app is available on Google Play Store and the assigned POs can download and install in the android mobile phone/tab with preloaded consent, personal details, assessment form, ICF, baselines, individual activities, progress report and options given to upload and download videos and photos. This app aims to capacitate to rehabilitation diagnosis, custom-made treatment/rehabilitation plan and providing quality and appropriate therapy to children with disabilities, who are most in need and located in the remotest part of the country with due consideration to all ethical concerns.

