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Does community-based rehabilitation improve lives of people with disabilities?

According to the World Health Organization (WHO), there are currently one billion people living with disabilities, of which 80 per cent live in low- and middle- income countries (L&MICs). Physical, intellectual, mental or sensory impairments affect people’s active participation in society.

Disabled people are often stigmatised, and lack social and economic opportunities, potentially leading them further into poverty. A focus on disability-related issues is therefore key for a holistic approach to international development with a human rights perspective.

What is community-based rehabilitation?

Community-based rehabilitation (CBR) is a WHO-endorsed strategy for rehabilitation, poverty reduction, equalisation of opportunities and social inclusion of people living with disabilities. Inspired by participatory development approaches, CBR is designed to work by including people with disabilities in existing services as well as by creating new interventions. CBR initiatives are delivered at the community level using local resources to ensure they are adapted to local needs and are cost-effective.

Main findings

- **Impact of CBR on physical disabilities**
Home-based healthcare and rehabilitation and education interventions were effective for stroke survivors.
- **Impact of CBR on mental disabilities**
Effective in lowering relapse and repeated hospitalisation among people with schizophrenia in China, India and South Africa. Significant improvement in the clinical status and quality of life for the caregivers of dementia patients.
- **Livelihood and social inclusion outcomes**
Increased occupational activity among people living with schizophrenia. No encouraging results for social inclusion.

Evaluations should look at the full range of outcomes and not focus only on health to estimate the true impact of the programme and arrive at an accurate cost-benefit analysis.

Impact of home-based healthcare

In Thailand, researchers compared the impact of home-based healthcare to regular care. The home-based healthcare intervention was primarily an educational programme for carers, which included lectures by occupational therapists and weekly home visits. At the two months' follow-up, the stroke survivors in the intervention group had 9–16 per cent higher scores for quality of life as compared to the control group.



Main findings

A recent 3ie-funded systematic review provides the first systematic synthesis of the evidence available on the impacts of CBR programmes implemented in L&MICs. The evidence suggests that CBR may be effective in improving the lives of people with disabilities and their families.

Impact of CBR on physical disabilities

Six studies looked at the impact of CBR on three types of physical disabilities, namely stroke, arthritis and a chronic obstructive pulmonary disease (COPD). Interventions around home-based healthcare and rehabilitation in China and Thailand, home-based education in Iran and community-based education in Turkey were found to be effective for stroke survivors. Though CBR was found to be effective for patients suffering from arthritis and COPD, the evidence is drawn from only one study in Indonesia and one in Thailand, respectively.

Impact of CBR on mental disabilities

Nine studies looked at the impact of CBR on mental disabilities, primarily schizophrenia and dementia, with only one study looking at intellectual impairment among children. CBR was found to be effective in lowering relapse and repeated hospitalisation among people with schizophrenia in China, India and South Africa. Three studies, one each in India, Peru and Russia, evaluated the 'helping the carers to care' intervention for people living with dementia. The intervention showed significant improvement in the carers' clinical status and quality of life across these three studies. However, there were no positive impacts on the outcomes for those suffering from dementia. The intervention on training the parents of intellectually impaired children in Vietnam also did not find any impacts of the programme on outcomes that were of interest.

Livelihood and social inclusion outcomes

Studies in China and India find increased occupational activity among people living with schizophrenia. However, results are not encouraging for social inclusion. Of the five studies on social inclusion, only one in Thailand finds CBR to increase participation among stroke survivors. Education and empowerment were potentially eligible for inclusion in the review, but no studies of CBR have examined these as primary outcomes.

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Effect of CBR on schizophrenia patients in Sichuan, China

In the Sichuan province in China, a study found that patients with schizophrenia were 85 per cent more likely to recover fully when, along with medicines, their carers at home or the healthcare centre received the following:

- education on a monthly basis for nine months
- family workshops every three months
- crisis intervention when necessary and health education through the local radio for the first two months. The compliance rate was six times higher as compared to those in the control group that received no treatment. These interventions delivered by psychiatrists and village doctors also led to a four-fold decrease in relapse rates among patients. The intervention also helped bring favourable changes in relatives' beliefs about the illness.

Implications for policy, programming and research

Policy and programming

Early evidence on the effectiveness of CBR is encouraging. Studies show positive impacts on a range of outcomes. However, decisive recommendations for policy and programming can be made only if there is a stronger evidence base on CBR. There is need for more studies that use rigorous evaluation methodologies and that collect data along the causal chain to provide evidence on how and why these programmes may work.

CBR was found to be effective in lowering relapse and repeated hospitalisation among people with schizophrenia in China, India and South Africa.

Research

To produce more robust studies, the authors recommend using randomised-controlled studies and larger sample sizes to get reliable results in broader contexts. There is also need for focusing on populations that are currently underrepresented in research, which include children with disabilities and a broad-based user or target group of CBR interventions beyond those living with disabilities. More studies on a wider range of disabilities, including sensory impairments and those covering more geographies, such as Africa, are crucial. This will ensure that the evidence is more conclusive about the effectiveness of CBR. Economic evaluations can help account for cost-effectiveness of CBR programmes. These evaluations should look at the full range of outcomes and not focus only on health to estimate the true impact of the programme and arrive at an accurate cost-benefit analysis.



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What is a systematic review?

3ie-funded systematic reviews use rigorous and transparent methods to identify, appraise and synthesise all of the qualifying studies and reviews addressing a specific review question. Review authors search for published and unpublished research and use a theory-based approach to determine what evidence may be generalised and what is more context specific. Where possible, cost-effectiveness analysis is done. The result is an unbiased assessment of what works, for whom, why and at what cost.

About the systematic review

This brief is based on the *Community-based rehabilitation for people with disabilities in low- and middle-income countries*, 3ie systematic review 18 by Valentina Lemmi, Karl Blanchet, Lorna Gibson, K Suresh Kumar, Santosh Rath, Sally Hartley, Gudlavalleti VS Murthy, Vikram Patel, Joerg Weber and Hannah Kuper. It synthesises evidence from 15 impact evaluations, primarily from Asia, to understand the effectiveness of CBR programmes for the disabled. Studies where CBR interventions took place only in health facilities or schools were excluded. The evidence mainly focused on adults and elderly people, except for one study on children.

About 3ie

The International Initiative for Impact Evaluation (3ie) is an international grant-making NGO promoting evidence-informed development policies and programmes. We are the global leader in funding, producing and synthesising high-quality evidence of what works, for whom, why and at what cost. We believe that high-quality and policy-relevant evidence will help make development more effective and improve people's lives.



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