Campbell Systematic Reviews
2015:15
First published: 01 September 2015
Search executed: July 2012

Community-based Rehabilitation for People With Disabilities in Low- and Middle-income Countries: A Systematic Review

Valentina Iemmi, Lorna Gibson, Karl Blanchet, K Suresh Kumar, Santosh Rath, Sally Hartley, Gudlavalleti VS Murthy, Vikram Patel, Joerg Weber, Hannah Kuper

THE CAMPBELL COLLABORATION

Colophon

Title	Community-based Rehabilitation for People With Disabilities in Low- and Middle-income Countries: A Systematic Review
Institution	The Campbell Collaboration

Authors	Valentina Iemmi[1,2], Lorna Gibson[3], Karl Blanchet[4], K Suresh Kumar[5], Santosh Rath[1,6], Sally Hartley[1], Gudlavalleti VS Murthy[7], Vikram Patel[8], Joerg Weber[1], Hannah Kuper[1] [1]International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine, London, UK [2]LSE Health and Social Care, London School of Economics and Political Science, London, UK [3]London School of Hygiene and Tropical Medicine, London, UK [4]International Centre for Eye Health, London School of Hygiene & Tropical Medicine, London, UK [5]Clinical Research Department, London School of Hygiene and Tropical Medicine, London, UK [6]The George Institute for Global Health, University of Oxford, Oxford, UK [7]Indian Institute of Public Health, Hyderabad, India [8]Centre for Global Mental Health, London School of Hygiene & Tropical Medicine, London, UK

DOI	10.4073/csr.2015.15
No. of pages	177
Citation	Iemmi V, Gibson L, Blanchet K, Suresh Kumar K, Rath S, Hartley S, Murthy GVS, Patel V, Weber J, Kuper H. Community-based Rehabilitation for People With Disabilities in Low- and Middle-income Countries: A Systematic Review Campbell Systematic Reviews 2015:15 DOI: 10.4073/csr.2015.15
ISSN	1891-1803

Roles and responsibilities	Valentina Iemmi: coordinating the review; designing the review; data collection for the review; data management for the review; analysis of data; interpretation of data; writing the review. Lorna Gibson: data collection for the review; data management for the review; analysis of data; writing the review. Suresh Kumar: designing the review; data collection for the review; analysis of data. Santosh Rath: data collection for the review. Karl Blanchet: conceiving the review; designing the review; data collection for the review; securing funding for the review. Sally Hartley: designing the review; providing advice on the review. Gudlavaletti Murthy: designing the review; providing advice on the review. Vikram Patel: designing the review; providing advice on the review. Joerg Weber: designing the review; providing advice on the review; data collection for the review. Hannah Kuper: conceiving the review; designing the review; data collection for the review; interpretation of data; writing the review; securing funding for the review.
Editors for this review	Editor: Hugh Waddington Associate Editor: Shari Krishnaratne Managing editor: Emma Gallagher

Sources of support

This review was supported by a grant from the International Initiative for Impact Evaluation (3ie).
We thank the Campbell Collaboration (International Development Coordinating Group) for assistance throughout the review process.

The authors of the review would like to thank Chapal Khasnabis (World Health Organization), Elena Schmidt (Sightsavers), Philippe Chervin (International Foundation of Applied Disability Research), Richard Wormald (London School of Hygiene and Tropical Medicine), Susie Miles (Institute of Education, Manchester), Sue Lukersmith (University of Sydney), Harry Finkenflügel and all the experts and authors we contacted for their valuable support, and Alejandra Hernandez for help with translations.

Declarations of interest

Professor Patel has a Wellcome Trust grant for a randomised controlled trial for a CBR intervention for schizophrenia in India. Several members of the group have previously undertaken systematic reviews on related subjects but not on this particular topic. There are no further conflicts of interest.

Corresponding author

Valentina Iemmi
International Centre for Evidence on Disability
London School of Hygiene & Tropical Medicine
Keppel Street
London WC1E 7HT
United Kingdom
E-mail: valentina.iemmi@lshtm.ac.uk; v.iemmi@lse.ac.uk

Campbell Systematic Reviews

The Campbell Collaboration (C2) was founded on the principle that systematic reviews on the effects of interventions will inform and help improve policy and services. C2 offers editorial and methodological support to review authors throughout the process of producing a systematic review. A number of C2's editors, librarians, methodologists and external peer-reviewers contribute.

The Campbell Collaboration
P.O. Box 7004 St. Olavs plass
0130 Oslo, Norway
www.campbellcollaboration.org

Table of contents

Synopsis/Plain Language Summary

COMMUNITY-BASED REHABILITATION FOR PEOPLE WITH DISABILITIES IN LOW- AND MIDDLE-INCOME COUNTRIES: A SYSTEMATIC REVIEW.

Review question

We reviewed the evidence about the impact of community-based rehabilitation on the lives of people with disabilities and their carers in low- and middle-income countries.

Background

People with disabilities include those who have long-term physical, mental, intellectual or sensory impairments, which in interaction with various barriers may hinder their full and effective participation in society on an equal basis with others. There are estimated to be over one billion people with disabilities globally and 80% of them live in low- and middle-income countries. They are often excluded from education, health, and employment and other aspects of society leading to an increased risk of poverty. Community-based rehabilitation interventions are the strategy endorsed by the World Health Organization and other international organisations (e.g. ILO, IDDC) for addressing the needs of this group of people in low- and middle-income countries. These interventions aim to enhance the quality of life of people with disabilities and their carers, by trying to meet their basic needs and ensuring inclusion and participation using predominantly local resources. These interventions are composed of up to five components: health, education, livelihood, social and empowerment. Currently only few people who need them benefit from these interventions, and so it is important to assess the available evidence to identify how to best implement these programmes.

Study characteristics

The evidence in this review is current to July 2012. This review identified 15 studies that assessed the impact of community-based rehabilitation on the lives of people with disabilities and their carers in low- and middle-income countries. The studies included in the review used different types of community-based rehabilitation interventions and targeted different types of physical (stroke, arthritis, chronic

obstructive pulmonary disease) and mental disabilities (schizophrenia, dementia, intellectual impairment).

Key results

Overall, randomised controlled trials suggested a beneficial effect of community-based rehabilitation interventions in the lives of people with physical disabilities (stroke and chronic obstructive pulmonary disease). Similar results were found for non-randomised studies for physical disabilities (stroke and arthritis) with the exception of one non-randomised study on stroke showing community-based rehabilitation was less favourable than hospital-based rehabilitation. Overall, randomised controlled trials suggested a modest beneficial effect of community-based rehabilitation interventions for people with mental disabilities (schizophrenia, dementia, intellectual impairment), and for their carers (dementia). Similar results were found for non-randomised studies for mental disabilities (schizophrenia). However, the methodological constraints of many of these studies limit the strength of our results. In order to build stronger evidence, future studies will need to adopt better study designs, will need to focus on broader clients group, and to include economic evaluations.

RÉADAPTATION À BASE COMMUNAUTAIRE POUR LES PERSONNES HANDICAPÉES DANS LES PAYS À FAIBLE REVENU ET REVENU MOYEN: UNE REVUE SYSTÉMATIQUE

Ojectif

Nous avions conduit une revue systématique sur l'impact de la réadaptation à base communautaire sur la vie des personnes handicapées et de leurs familles dans les pays à faible revenu et revenu moyen.

Contexte

Les personnes handicapées sont des personnes qui ont des déficiences physiques, mentales, intellectuelles ou sensorielles à long terme, dont leur environnement peut constituer un obstacle à leur pleine et effective participation dans la société. On estime que plus d'un milliard de la population mondiale présente un handicap, dont 80% vivant dans des pays à faible revenu et revenu moyen. Les personnes handicapées sont souvent exclues du système éducatif, de la santé, de l'emploi et d'autres aspects de la société, conduisant à un risque d'appauvrissement accru. La réadaptation à base communautaire est une stratégie approuvée par l'Organisation Mondiale de la Santé et d'autres organisations internationales (telles que OIT, IDDC) pour répondre aux besoins des personnes handicapées et de leurs familles dans les pays à faible revenu et à revenu moyen. Ces interventions visent à améliorer la qualité de vie des personnes handicapées et de leurs familles, satisfaire leurs besoins de base et favoriser l'inclusion et la participation, principalement par l'utilisation de ressources locales. Ces interventions sont composées de cinq composantes: santé, éducation, moyens de subsistance, social et autonomisation. Actuellement, dans les pays a faible revenu et revenu moyen, seulement une faible proportion des personnes qui pourraient bénéficier de la réadaptation à base communautaire ont accès a ces interventions, et il est donc important d'évaluer la littérature disponible pour identifier comment mettre en œuvre au mieux ces programmes.

Characteristiques des éudes

Les études de cette révue systématique arrivent jusqu'à Juillet 2012. Cette revue systématique a identifié 15 études qui ont évalué l'impact de la réadaptation à base communautaire sur la vie des personnes handicapées et de leurs familles dans les pays à faible revenu et revenu moyen. Les études inclues dans la revue systématique utilisent différents types d'interventions de réadaptation à base communautaire et s'adressent à différents types de handicaps physiques (accident vasculaire cérébral, arthrite, broncho-pneumopathie chronique obstructive) et mentaux (schizophrénie, démence, déficience intellectuelle).

Résultats principaux

Dans l'ensemble, les essais contrôlés randomisés suggèrent un effet bénéfique des interventions de réadaptation à base communautaire dans la vie des personnes handicapées physiques (accident vasculaire cérébral et broncho-pneumopathie chronique obstructive). Des résultats similaires ont été trouvés pour les études non randomisées pour le handicap physique (accident vasculaire cérébral et arthrite), à l'exception d'une étude non randomisée sur les accidents vasculaires cérébraux démontrant que la réadaptation a base communautaire est moins efficace que la réadaptation en milieu hospitalier. Dans l'ensemble, les essais contrôlés randomisés ont suggéré un effet bénéfique modeste des interventions de réadaptation à base communautaire sur les personnes ayant un handicap mental (schizophrénie, démence, déficience intellectuelle), et sur leurs familles (démence). Des résultats similaires ont été trouvés pour les études non randomisées pour le handicap mental (schizophrénie). Cependant, les contraintes méthodologiques de plusieurs de ces études limitent la robustesse de nos résultats. Afin d'établir des preuves plus solides, les futures études devront adopter de meilleures méthodologies, étudier un nombre de cas plus large, et inclure des évaluations économiques.

REHABILITACIÓN BASADA EN LA COMUNIDAD PARA LAS PERSONAS CON DISCAPACIDAD EN LOS PAÍSES DE BAJO Y MEDIO INGRESO: UNA REVISIÓN SISTEMÁTICA

Ojetivo

Se revisó la evidencia sobre el impacto de la rehabilitación basada en la comunidad en la vida de las personas con discapacidad y de sus cuidadores en países de bajo y medio ingreso.

Contexto

Las personas con discapacidad incluyen a aquellas que tienen deficiencias físicas, mentales, intelectuales o sensoriales a largo plazo que, al interactuar con diversas barreras, pueden ver impedida su participación plena y efectiva en la sociedad. Se estima que más de mil millones de personas viven en el mundo con alguna forma de discapacidad y 80% de ellos viven en países de bajo y medio ingreso. A menudo son excluidos de la educación, de la salud, del empleo y de otros aspectos de la sociedad, y esto conduce a un mayor riesgo de pobreza. Las intervenciones de rehabilitación basada en la comunidad son la estrategia aprobada por la Organización Mundial de la Salud y otras organizaciones internacionales (por ejemplo, OIT, IDDC) para hacer frente a las necesidades de este grupo de personas en países menos desarrollados. Estas intervenciones tienen como objetivo mejorar la calidad de vida de las personas con discapacidad y sus cuidadores, satisfacer sus necesidades básicas y garantizar su inclusión y participación utilizando principalmente recursos locales. Estas intervenciones consisten de cinco componentes claves: salud, educación, subsistencia, social y fortalecimiento. Actualmente, de las personas que necesitan este tipo de intervenciones, sólo pocas se benefician de ellas, por lo que es importante evaluar la evidencia disponible para identificar cómo mejorar su implementación.

Características de los estudios

La evidencia en esta revisión sistemática está actualizada a Julio 2012. Esta revisión sistemática identificó 15 estudios que evaluaron el impacto de la rehabilitación basada en la comunidad en la vida de las personas con discapacidad y de sus cuidadores en países de bajo y medio ingreso. Los estudios incluidos en la revisión sistemática analizan diferentes tipos de intervenciones de rehabilitación basada en la comunidad y se dirigen a diferentes tipos de discapacidad física (accidente cerebrovascular, artritis, enfermedad pulmonar obstructiva crónica) y mental (esquizofrenia, demencia, deficiencia intelectual).

Resultados principales

En general, los ensayos clínicos aleatorios sugieren un efecto positivo de las intervenciones de rehabilitación basada en la comunidad en la vida de las personas

con discapacidad física (accidente cerebrovascular y enfermedad pulmonar obstructiva crónica). Se encuentran resultados similares para los estudios no aleatorios para discapacidad física (accidente cerebrovascular y artritis) con la excepción de un estudio no aleatorio que muestra que la rehabilitación basada en la comunidad por las personas que sobreviven a un accidente cerebrovascular tiene un efecto positivo menor que la rehabilitación en el hospital. En general, los ensayos clínicos aleatorios sugieren un efecto positivo modesto de las intervenciones de rehabilitación basada en la comunidad en la vida de las personas con discapacidad mental (esquizofrenia, demencia, deficiencia intelectual), y en la vida de sus cuidadores (demencia). Se encontraron resultados similares para los estudios no aleatorios por las personas con discapacidad mental (esquizofrenia). Sin embargo, las limitaciones metodológicas de muchos de estos estudios limitan la fuerza de nuestros resultados. Con el fin de construir una evidencia más robusta, los estudios futuros necesitarán adoptar mejores diseños de estudio, analizar grupos de estudio más amplios e incluir evaluaciones económicas.

Executive Summary/Abstract

BACKGROUND

Recent estimates suggest that there are over one billion people with disabilities in the world and 80% of them live in low- and middle-income countries. Community-based rehabilitation (CBR) is the strategy endorsed by the WHO and other international organisations (ILO, IDDC and others) to promote the inclusion of people with disabilities, particularly in low- and middle-income countries. The coverage of CBR is currently very low, and the evidence-base for its effectiveness needs to be assessed in consideration of scaling up of this intervention.

OBJECTIVES

To assess the effectiveness and cost-effectiveness of CBR for people with physical and mental disabilities in low- and middle-income countries, and/or their family, their carers, and their community.

SEARCH METHODS

The search for studies was not restricted by language or publication status. Searches were limited to studies published after 1976. We searched 23 electronic databases: AIM, CAB Abstract, CENTRAL, CINHAL Plus, Cochrane Database of Systematic Reviews, DARE (The Cochrane Library), EconLit, EMBASE, ERIC, Global Health, HTA Database, IBSS, IMEMR, IMSEAR, LILACS, MEDLINE, NHSEED, PAIS International, PsycINFO, The Campbell Collaboration Library of Systematic Reviews, Web of Science, WHOLIS, and WPRIM. We also searched relevant websites, contacted authors, screened the reference lists and tracked citations of included studies. The latest search for trials was in July 2012.

SELECTION CRITERIA

Controlled studies evaluating the impact of CBR offered to people with physical or mental disabilities and/or their family, their carers, and their community in low- and middle-income countries. The following study designs were eligible: randomised controlled trials, non-randomised controlled trials, controlled before-after studies, controlled interrupted time series studies, and economic studies. We

excluded studies where CBR intervention took place only in health facilities or schools.

DATA COLLECTION AND ANALYSIS

Pairs of authors independently screened the search results by titles/abstracts and then by full-text, independently assessed the risk of bias, and independently extracted data. We presented standardised mean differences (SMDs) and 95% confidence intervals (CI) for continuous data and risk ratios and 95% CI for dichotomous data. We undertook meta-analysis only on outcomes extracted from studies for which the disabilities, research designs and outcome measures were agreed to be sufficiently consistent to allow pooling of data. Meta-analysis was not performed on other outcomes because the outcomes extracted from studies did not measured the same construct, the intervention was not directed at the same disability condition, or the research designs were not similar. This decision about pooling was made post-hoc and differs from the protocol.

RESULTS

We included 15 studies: 10 randomised controlled studies, two non-randomised controlled studies, two controlled before-after studies, and one interrupted time series study. The primary focus of 14 of the interventions was on the health component of the CBR matrix, one focused on the education component, and few included other components. Of the 15 studies, six focused on physical disabilities (stroke, arthritis, chronic obstructive pulmonary disease) and nine on mental disabilities (schizophrenia, dementia, intellectual impairment). Most of the interventions targeted both people with disabilities and their carers, although most of the studies evaluated the effect of the intervention on the person with disabilities only. Only one study focused on children as the beneficiaries of CBR. There were eight studies from East Asia and Pacific, two from South Asia, two from Europe and Central Asia, one from the Sub-Saharan Africa, one from Latin America & the Caribbean, and one from the Middle East and North Africa.

The heterogeneity between studies in terms of disabilities, research designs and outcomes meant that the review relies on a narrative summary of the studies and meta-analysis was only conducted with the three studies on dementia, and only for a limited set of outcomes on users and carers. Among the six studies focusing on CBR for people with physical disabilities, two randomised controlled trials and one controlled before-after study showed a beneficial effect of the intervention for stroke on a range of outcomes while one non-randomised controlled trial found a less beneficial effect; one interrupted time series study found a beneficial impact of CBR for arthritis; and one non-randomised controlled trial showed a positive impact of CBR for people with chronic obstructive pulmonary disease. The nine studies assessing the impact of CBR for people with mental disabilities showed a beneficial

effect, including: three randomised controlled trials, one non-randomised controlled trial, and one controlled before-after study on CBR for schizophrenia; three randomised controlled trials on CBR for dementia; one randomised controlled trial on CBR for intellectual disability. The dementia trials were under-powered to show a significant result, but when pooling data from the three studies, meta-analyses suggested the intervention improved carers' clinical status (SMD=-0.37, 95% CI=-1.06-0.32) and carers' physical quality of life (SMD=0.51, 95% CI=0.09-0.94) and carers' social quality of life (SMD=0.54, 95% CI=0.12-5.97). However, they also suggested the intervention did not improve clinical status (SMD=0.09, 95% CI=-0.47-0.28) and quality of life (SMD=0.22, 95% CI=-0.33-0.77) of people with disabilities, carers' burden (SMD=-0.85, 95% CI=-1.24-0.45), carers' distress (SMD=-0.16, 95% CI=-0.54-0.22), carers' psychological quality of life (SMD=0.11, 95% CI=-0.31-0.53), or carers' environmental quality of life (SMD=0.07, 95% CI=-0.35-0.49).

No economic evaluations meeting the inclusion criteria were found. Methodological concerns were raised about the quality of the studies.

AUTHORS' CONCLUSIONS

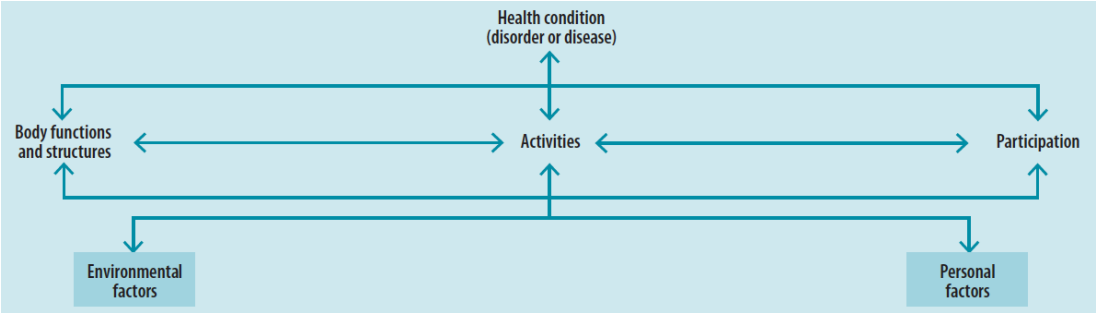
The evidence on the effectiveness of CBR for people with disabilities in low- and middle-income countries suggests that CBR may be effective in improving the clinical outcomes and enhancing functioning and quality of life of the person with disabilities and his/her carer. However the heterogeneity of the interventions and scarcity of good-quality evidence means that we should interpret these findings with caution. More well-designed and reported randomised controlled trials are needed to build a stronger evidence-base. These studies need to be sufficiently powered, and focus on all different components of the CBR matrix and not only the health component. Furthermore, evidence is needed on a broader client groups including children, and economic evidence must be collected.

1 Background

1.1 THE PROBLEM, CONDITION, OR ISSUE

Disability is an umbrella term for impairments, activity limitations, and participation restrictions, denoting the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors) (WHO and World Bank, 2011; WHO, 2001). People with disabilities therefore include those who have long-term physical, mental, intellectual or sensory impairments, which, in interaction with various barriers, may hinder their full and effective participation in society on an equal basis with others (see Figure 1) (UN, 2008). This view of disability is therefore an expansion beyond the limited medical view, which focuses only on the presence of impairments to define disability.

Figure 1: Bio-psycho-social model of disability



Note: From WHO2011, Box 1.1, page 5.

The World Disability Report estimates that there are over one billion people with disabilities in the world, of whom 110-190 million experience very significant difficulties (WHO and World Bank, 2011). This corresponds to about 15% of the world's population, and is higher than previous World Health Organization (WHO) estimates (WHO, 1981). Amongst them, 80% of persons with disabilities live in low- and middle-income countries (WHO and World Bank, 2011).

These figures therefore suggest an increase in the prevalence of disability, potentially due to population ageing and the rise in chronic conditions. However, the data underlying these estimates are sparse making it difficult to gauge trends over time or their causes with confidence.

It is widely reported that people with disabilities are excluded from education, health, employment and other aspects of society, and that this can potentially lead to or exacerbate poverty (WHO and World Bank, 2011). This exclusion is contrary to the spirit of the United Nations (UN) Convention on the Rights of Persons with Disabilities, which is an international human rights instrument of the UN intended to protect the dignities and rights to inclusion of people with disabilities (UN, 2008). The text was adopted by the UN General Assembly in 2006, and came into force in 2008. By October 2013, it had 158 signatories and 138 parties. Effective interventions therefore need to be identified that will enhance participation in society by people with disabilities and thereby enforce the Convention.

1.2 THE INTERVENTION

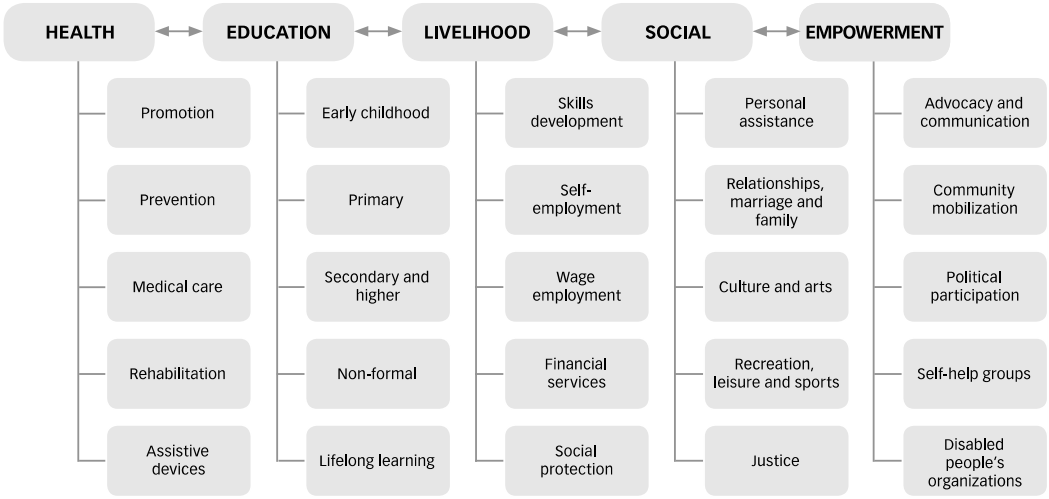
The UN Convention states that comprehensive rehabilitation services including health, employment, education and social services are needed "to enable people with disabilities to attain and maintain maximum independence, full physical, mental, social and vocational ability, and full inclusion and participation in all aspects of life" (UN 2008, article 26). A range of interventions can be made available to people with disabilities, extending from purely medical (for example, hospital treatments) to exclusively social (for example, inclusion in family events). Comprehensive rehabilitation services may be preferred to isolated interventions, given the recommendation of the UN convention and the wide range of barriers found by people with disabilities to effective participation.

Community-based rehabilitation (CBR) is the strategy endorsed by WHO and other international organisations (ILO, IDCC and others) for general community development for the rehabilitation, poverty reduction, equalisation of opportunities, and social inclusion of people with disabilities, particularly in low- and middle-income countries (WHO, 2010a). The concept was first introduced in the late 1970s (WHO, 1976; Finkenflugel, 2004) as a promising strategy to provide rehabilitation for people with disabilities in developing countries and as part of the broader goal of reaching 'Health for All by the Year 2000' (WHO, 1978). The concept has evolved to become a multi-sectoral strategy since the first training manual published in 1980 (Helander, Mendis & Nelson, 1980) and updated in 1989 (Helander et al., 1989). CBR is implemented through the combined efforts of people with disabilities, their families and communities, and the relevant governmental and non-governmental health, educational, vocational, social and other services (ILO, UNESCO & WHO, 2004). CBR is delivered within the community using predominantly local resources.

The CBR matrix (WHO, 2010a) (see Figure 2) provides a basic framework for CBR programmes. It highlights the need to target intervention at different aspects of life including the five key components: health, education, livelihood, social, and empowerment. Each component includes five elements where the different activities are listed. A CBR programme is formed by one or more activities in one or more of the five components. Thus, a CBR programme is not expected to implement every

component of the CBR matrix, and not all people with disabilities require assistance in each component of the matrix. However, a CBR programme should be developed in partnership with people with disabilities to best meet local needs, priorities and resources.

Figure 2: CBR Matrix



Note: From WHO2010a, Figure 1, page 25.

The CBR guidelines were launched in October 2010 to provide further direction on how CBR programmes should be developed and implemented (WHO, 2010a). Although CBR is currently implemented in over 90 countries, in reality few people with disabilities have access even to basic health and rehabilitation services (Meikle, 2002). The scaling up of CBR is therefore urgently needed, but there is also a need for a stronger evidence base on the efficacy and effectiveness of CBR programs (Finkenflugel, Wolffers & Huijsman, 2005; Hartley et al., 2009; WHO & World Bank, 2011) to support the expansion in coverage of CBR.

1.3 HOW THE INTERVENTION MIGHT WORK

The way in which CBR might work varies depending on the targets of specific components included in the programme: health, education, livelihood, social, and empowerment. The conceptual framework for pathways to action of CBR is described in Figure 3 and structured according to the CBR matrix and the CBR Guidelines Outcomes (WHO, 2010a). The overall approach includes a focus on including people with disabilities into existing services, as well as creating new interventions specifically considering people with disabilities and their families.

The health component of the matrix aims for people with disabilities to achieve their highest attainable standard of health. It includes health promotion, prevention of

impairment or illness, medical care provision, rehabilitation and provision of assistive devices.

The education component of the matrix has as its goal that people with disabilities access education and lifelong learning, leading to fulfillment of potential, a sense of dignity and self-worth, and effective participation in society. It includes formal and non-formal education as well as life-long learning.

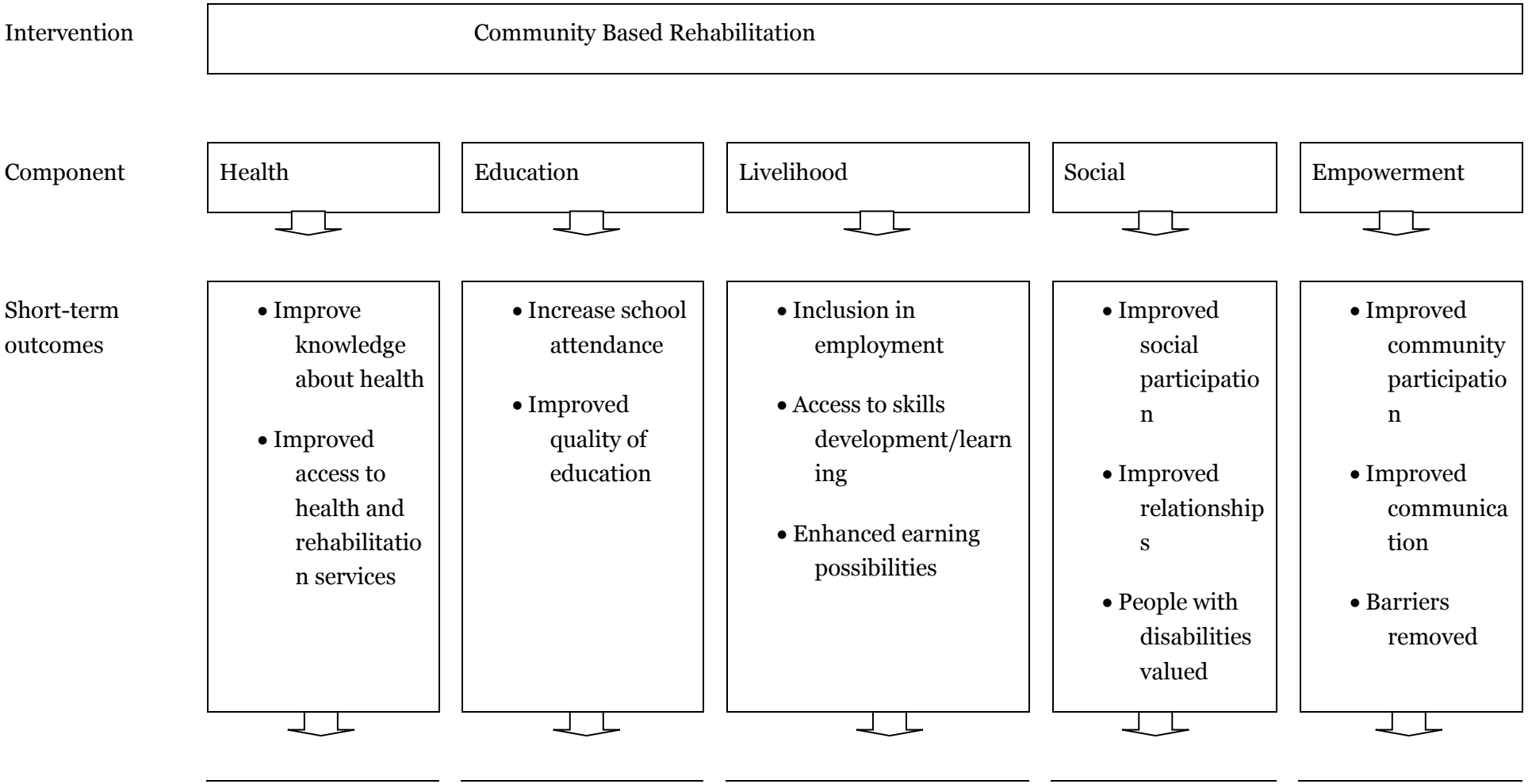
The livelihood component of the CBR matrix aims that people with disabilities can gain a livelihood, have access to social protection measures and are able to earn enough income to lead dignified lives and contribute economically to their families and communities. It includes skills development, self-employment, wage employment, financial services and social protection.

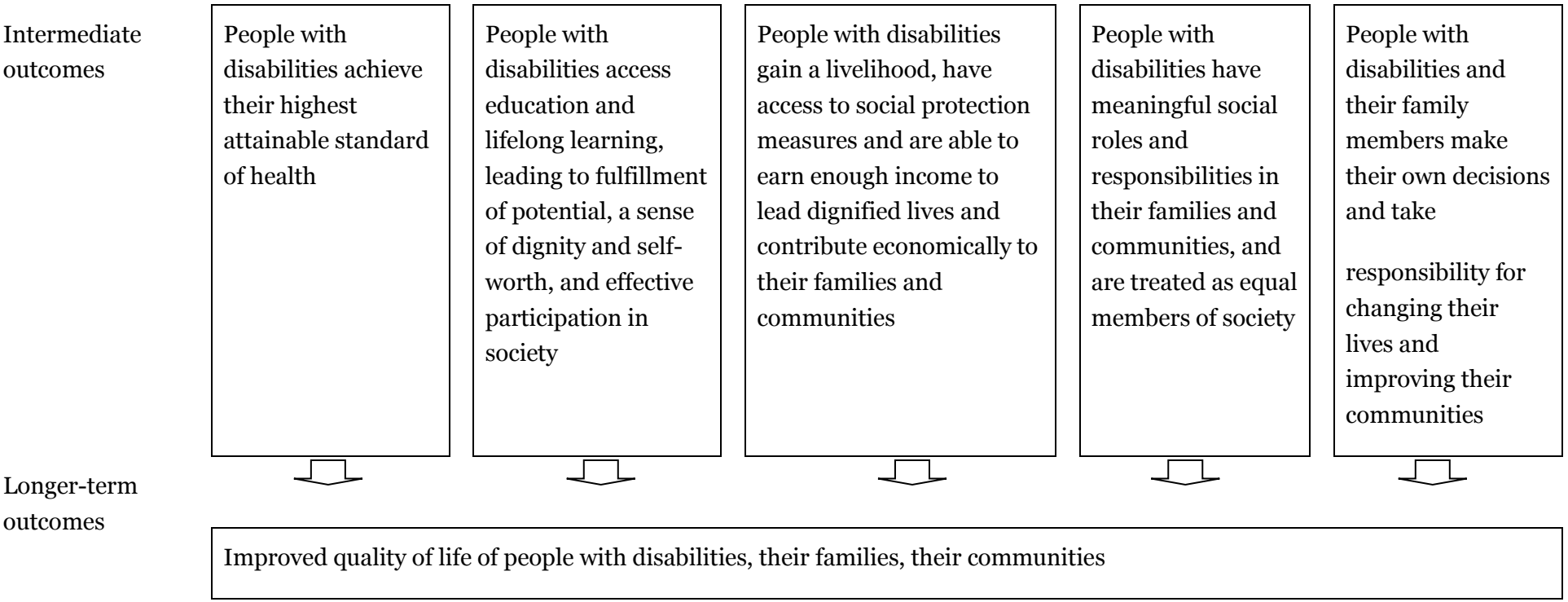
The social component aims for people with disabilities to have meaningful social roles and responsibilities in their families and communities, and be treated as equal members of society. It encompasses personal assistance, support with relationships, marriage and family, inclusion in culture and arts, recreation, leisure and sports and access to justice.

The empowerment component of the matrix is a cross-cutting theme of the CBR programme with the goal to allow people with disabilities and their family members to make their own decisions and take responsibility for changing their lives and improving their communities. It includes advocacy and communication, community mobilisation, supporting political participation, establishing self-help groups and disabled peoples organisations (DPOs).

Through these intermediate outcomes the ultimate outcome of CBR is reached, which is to improve the quality of life of people with disabilities and their families.

Figure 3: Causal chain for the impact of community based rehabilitation programmes for people with disabilities




Intermediate outcomes
People with disabilities achieve their highest attainable standard of health
People with disabilities access education and lifelong learning, leading to fulfillment of potential, a sense of dignity and self-worth, and effective participation in society
People with disabilities gain a livelihood, have access to social protection measures and are able to earn enough income to lead dignified lives and contribute economically to their families and communities
People with disabilities have meaningful social roles and responsibilities in their families and communities, and are treated as equal members of society
People with disabilities and their family members make their own decisions and take
responsibility for changing their lives and improving their communities
Longer-term outcomes
Improved quality of life of people with disabilities, their families, their communities

1.4 WHY IT IS IMPORTANT TO DO THE REVIEW

There are estimated to be at least one billion people with some form of disability in the world of which 80% live in low- and middle-income countries (WHO & World Bank, 2011). Many of these people with disabilities would potentially benefit from CBR (WHO & World Bank, 2011). Unfortunately the coverage of CBR is currently very low (Meikle, 2002), and the evidence has not been comprehensively assessed to identify whether CBR is effective and under which circumstances. Establishing an evidence base for the effectiveness of CBR is inherently difficult (Hartley et al., 2009). Each individual programme is tailored to the specific needs and setting and therefore may include a different focus, different components and different client types. Furthermore, the impact of CBR can be measured in a variety of domains. The only available literature review on CBR in low- and middle-countries (Finkenflugel, Wolffers & Huijsman, 2005, page 187) found that the impact evidence base is "fragmented and incoherent" for almost all aspects of CBR and noted methodological concerns with many studies. However, the authors did not assess the overall effect of CBR on the lives of people with disabilities in their review, as they did not systematically collect and synthesise data on final outcomes. Other literature reviews have reported more positively on the literature, but were more limited in scope, focusing on specific geographical locations (Velema, Ebenso & Fuzikawa, 2008) or types of disability (Robertson et al., 2012; Wiley-Exley, 2007; Evans & Brewis, 2008), single CBR interventions (for example, Mayo-Wilson, Montgomery & Dennis, 2008a; Mayo-Wilson, Montgomery & Dennis, 2008b) or single aspects of disability (for example, Mayo-Wilson, Montgomery & Dennis, 2008c; Mayo-Wilson, Montgomery & Dennis, 2008d; Mayo-Wilson, Montgomery & Dennis, 2008e).

There is a need to assess the full evidence base to address the question 'What are the impacts of community-based rehabilitation for people with disabilities in low- and middle-income countries?' systematically collecting data on both completed and ongoing studies available in different languages, conducting a rigorous critical appraisal of the studies using transparent methods to synthesise the findings, and presenting implications of the analysis for research, practice and policy makers. This will be the first systematic review to our knowledge to address this question comprehensively. The protocol of this review has been published elsewhere (Iemmi et al., 2013).

2 Objectives

To assess the effectiveness and cost-effectiveness of community-based rehabilitation for people with physical and mental disabilities in low- and middle-income countries, and/or their family, their carers, and their community.

3 Methods

3.1 CRITERIA FOR CONSIDERING STUDIES FOR THIS REVIEW

3.1.1 Types of studies

Randomised controlled trials, non-randomised controlled trials, controlled before-after studies (with one point of evaluation after the intervention), controlled interrupted time series studies (with multiple points of evaluation after the intervention), economic studies (cost-effectiveness analysis, cost-utility analysis, cost-benefit analysis, economic modelling) in which the outcome is measured before and after the intervention or an intervention is studied against another intervention with baseline data, other types of controlled trials.

3.1.2 Types of participants

People with disabilities who live in low- and middle-income countries, and/or their family, their carers, and their community.

Disability is defined through the presence of impairments, activity limitations, or participation restrictions denoting the negative aspects of the interaction between an individual (with a health condition) and that individual's contextual factors (environmental and personal factors) (WHO & World Bank, 2011; WHO, 2001). Due to the lack of a recognised list of long-term physical or mental health conditions associated with disability, we consulted disability experts and created such a list (see Appendix 11.1).

Participants from low- and middle-income countries only (see Appendix 11.2) as, not only this was the original commitment of CBR (Helander et al., 1989), but also the place with the highest prevalence (WHO & World Bank, 2011) and lowest access to treatment (Meikle, 2002).

3.1.3 Types of interventions

After the definition provided within the CBR Guidelines (WHO, 2010a) and its recent operationalisation (Lukersmith et al., 2013), we define CBR as:

- a programme for people with disabilities and/or their family, their carers, their community;

- delivered at the community level;
- implemented through the combined efforts of people with disabilities and/or their family/carer with at least one of the following stakeholder groups: the community, relevant governmental and non-governmental health, education, vocational, social, and other services;
- focusing on at least one of the following areas: health, education, livelihood, social, empowerment; and
- forming part of local community development.

A CBR programme is formed by one or more activities in one or more of the five components (health, education, livelihood, social, empowerment).

CBR interventions were compared with:

- facility-based interventions;
- other types of CBR interventions;
- other interventions;
- any mix of the above;
- no intervention.

Studies were excluded if the CBR intervention took place only in health facilities or schools. Health facilities are defined as places that provide health care: hospitals, clinics, outpatient care centres, specialised care centres.

3.1.4 Types of outcome measures

Primary outcomes

- Functional outcomes, including education (for example, education level), employment (for example, employment status), social participation (for example, number of social activities engaged in), empowerment (for example, awareness of the condition, awareness of the possible interventions available).
- Disability outcomes, such as extent of disability, measured using validated instruments (for example, Disability Rating Scale or DRS; Expanded Disability Status Scale or EDSS; Global Mental Health Assessment Tool or GMHAT; Clinical Global Impressions Scale or CGIS).

Secondary outcomes

- Quality of life, measured using validated instruments (for example, WHO Quality of Life-BREF or WHOQOL-BREF; Health-Related Quality of Life or HRQoL; Medical Outcome Study Short Form 36 or SF36).
- Use of health resources.
- Economic impact, including cost-effectiveness, cost-utility, cost-benefit.
- Adverse effects.

3.2 SEARCH METHODS FOR IDENTIFICATION OF STUDIES

3.2.1 Electronic searches

The search for studies was not restricted by language or publication status. Searches were limited to studies published after 1976 as this is the year when the concept of CBR was first introduced (WHO, 1976; Finkenflugel, 2004). Low- and middle-income countries were identified using the World Bank Atlas method (World Bank, 2012) (see Appendix 11.2).

The following electronic databases were searched:

Biomedical databases

- AIM (African Index Medicus) (Global Health Library)
- CENTRAL (Cochrane Register of Controlled Trials) (The Cochrane Library)
- CINAHL Plus (Cumulative Index to Nursing and Allied Health Literature) (EBSCO)
- Cochrane Database of Systematic Reviews (The Cochrane Library)
- EMBASE (OvidSP)
- Global Health (OvidSP)
- IMEMR (Index Medicus for the Eastern Mediterranean Region) (Global Health Library)
- IMSEAR (Index Medicus for South East Asia Region) (Global Health Library)
- LILACS (Latin American and Caribbean Health Sciences Literature) (Global Health Library)
- MEDLINE (OvidSP)
- PsycINFO (OvidSP)
- WHOLIS (World Health Organisation Library Information System) (Global Health Library)
- WPRIM (Western Pacific Region Index Medicus) (Global Health Library)

Social sciences databases

- CAB Abstract (OvidSP)
- DARE (Database of Abstracts of Reviews of Effectiveness) (The Cochrane Library)
- EconLit (OvidSP)
- ERIC (ProQuest)
- HTA Database (The Cochrane Library)
- IBSS (International Bibliography of the Social Sciences) (ProQuest)
- NHSEED (NHS Economic Evaluation Database) (The Cochrane Library)
- PAIS International (Public Affairs Information Services) (ProQuest)

- The Campbell Collaboration Library of Systematic Reviews (The Campbell Library)
- Web of Science (Web of Knowledge)

The MEDLINE strategy was adapted as necessary, for use in searching each of the other databases (see Appendix 11.3).

3.2.2 Searching other resources

We searched relevant websites from governmental and non-governmental organisations, academics, and disabled people's organisations using Google Advanced Search (see Appendix 11.4). Relevant embedded databases and libraries within the websites were searched manually. We contacted key authors and institutions to request details of recently published, in press, unpublished or ongoing studies. Reference sections of included studies and literature reviews were searched for additional studies. Citations of included studies were tracked using Google Scholar.

3.3 DATA COLLECTION AND ANALYSIS

3.3.1 Selection of studies

The title and abstract of studies identified through the electronic searches were independently screened by pairs of review authors (KB-VI, HK-VI, SR-VI) against the inclusion criteria for this review. If, from the title and abstract, it was not clear whether a study should be included or not, the full-text report was retrieved. Full-text reports of studies meeting the inclusion criteria were retrieved and screened by two review authors (KB-SR, HK-LJG, HK-VI) against the inclusion criteria. The fulltext of studies in languages other than English and available in the review author team (French, Spanish, Portuguese, German, Italian) were screened by one author only (JW, KB, LJG). Disagreements were resolved through consultation with a third author. Selection of studies was performed in EndNote and Zotero.

Included studies were listed under section 7.1. Characteristics of included studies were reported in Table 8.1. Studies for which this information could not be obtained were listed under Section 7.3. In order to avoid language bias, studies published in a language other than English, French, Spanish, Portuguese, German or Italian were not excluded but listed under Section 7.3. Details of studies awaiting classification were provided in Table 8.3. Excluded studies, with the reason for their exclusion, are given in Table 8.2. Unpublished trials are not included in the review but listed in section 7.4 and reported in Table 8.4.

3.3.2 Data extraction and management

Two pairs of authors (LJG-HK, SK-HK) extracted data independently using forms designed for this purpose. Data extraction from studies in languages other than English (French, Spanish, Portuguese, German, Italian) was performed by one

author only. Disagreements were solved through consultation with a third review author. Data extracted included

- Methods: including study design and duration of the study.
- Participants: including type of disability, age, sex, country.
- Interventions: details on both intervention and comparison; including type(s) of CBR, intervention (or comparison) details (for example, intensity, frequency), agent(s), setting(s).
- Outcomes: including type of outcome(s), measurement instrument(s) (for example, scale, questionnaire), time-points measured.
- Publication: including publication type (for example, article, report), publication language.
- Notes: including comments on the study not covered by the previous categories.

In order to avoid outcome reporting bias, studies were not excluded on the basis of outcomes only. Data extraction was performed in Excel.

3.3.3 Assessment of risk of bias in included studies

Two authors (LJG-HK) independently assessed the methodological quality of selected studies: the first author assessed risk of bias using the data extraction form and the second author verified the correctness of data against the study report. Disagreements were resolved through discussion.

For randomised controlled trials, we used the 'Risk of Bias' tool from section 8.5 of the Cochrane Handbook for Systematic Reviews of Interventions (Higgins & Green, 2011).

This assesses the quality of trials using a seven-component rating system:

- random sequence generation (selection bias)
- allocation concealement (selection bias)
- blinding of participants and personnel (performance bias)
- blinding of outcome assessment (detection bias)
- incomplete outcome data (attrition bias)
- selective reporting (reporting bias)
- other sources of bias (for example, generalization)

Each component was scored as either 'yes' for low risk of bias, 'no' for high risk of bias, or 'unclear' when the available information was not sufficient to make a decision. Detailed guidelines and a scoring help are available in Higgins and Green (2011). Risk of bias for randomised controlled trials was summarised in Table 2 and detailed in Table 3. Assessment of risk of bias for randomised controlled trials was performed in Review Manager 5.

For non-randomised studies, we used a checklist-based quality assessment tool for quantitative studies, Effective Public Health Practice Project (EPHPP) quality assessment tool for quantitative studies (Armijo-Olivo, 2012). This assesses quality using six-component rating systems:

- selection bias
- study design
- confounding
- blinding
- data collection method
- withdrawals and dropouts.

Each component was scored as either 'strong', 'moderate' or 'weak'. If none of the six components was scored 'weak', EPHPP marked the study 'strong'; if there was one 'weak' rating, the tool marked the study 'moderate'; any with two or more 'weak ratings were considered 'weak'. Detailed guidelines and the checklist of quality assessment are given in Appendix 11.5 and Appendix 11.6. Risk of bias non-randomised controlled studies was summarised in Table 4 and detailed in Table 5. Assessment of risk of bias for non-randomised controlled studies was performed in Excel.

We attempted to reduce the publication bias not only by searching multiple electronic databases but also by performing supplementary searches (websites searches, contacting authors, snowballing, citation tracking). We reported the file drawer effect describing the studies with outcome reporting bias for both randomised controlled trials (see Table 3) and non-randomised controlled studies (see Table 5). The use of funnel plots to visualize asymmetry and statistical testing for funnel plot asymmetry was not possible due to the small number of studies.

3.3.4 Measures of treatment effect

Where scales measuring the same outcome had different directions of benefit, a minus sign was added to that measuring a negative direction to ensure that all measurements could be read in the same direction.

3.3.5 Dealing with missing data

We obtained any missing information necessary for screening by contacting the authors of the study. Proportions of missing participants were reported in the risk of bias assessment (see Table 8.1), reasons given for missing data were provided in the narrative summary and the extent to which the results were altered by missing data was discussed.

3.3.6 Data synthesis

The process of selection of included studies was described and illustrated in Figure 4. The main characteristics of included studies were described and summarised in Table 1.

A narrative synthesis of the results was presented by type of interventions, by models of delivery of the intervention, and by type of outcomes.

Due to the depth of the multi-dimensionality of both CBR and disabilities noted during the data extraction, post hoc decision not anticipated in the protocol was made regarding the presentation of the results. We presented the effects of interventions for physical and mental disabilities separately as they require different types of treatments. Within each group, the effects were presented separately for each different disability, as their causes and treatments are sufficiently different to justify separate analysis. Results were summarised in Tables 6-8. The analysis of the impact was carried out separately for randomised controlled trials and non-randomised controlled trials. Also results from people with disabilities and for their carers were presented separately as they are conceptually different, the former addressing the direct impact of disabilities on people suffering from them and the latter the indirect consequences of disabilities on relatives and carers.

Dichotomous Outcome Data

For dichotomous endpoint measures, we present the number of participants who showed an improvement as a proportion of the total number of participants treated. We calculated risk ratios (RR) by dividing the risk in one group with the risk in the other group, and present these with 95 per cent confidence intervals (CI). Not all dichotomous measures indexed relative risks of improvement over time and, for some measures, we provided the relative risk of a positive state (for example, correct knowledge) at post-intervention.

Continuous Outcome Data

For continuous outcomes, we estimated the mean differences (MDs) between groups. In the case of continuous outcome measures, where data were reported on different scales, we analysed data using the standardised mean difference (SMD), calculated by dividing the MD in post-intervention scores between the intervention and control groups by the standard deviation. We presented the SMDs and 95 per cent CIs for all meta-analyses and individual outcomes from individual studies (that is, where no meta-analysis was undertaken).

The analyses of the different outcomes were performed separately. If loss to follow-up was not reported, then we calculated the SMD based on the baseline sample size intervention and control.

$$\text{SMD} = \frac{\text{Difference in mean outcomes between groups}}{\text{Standard deviation of outcome among participants}}$$

Effect-size was calculated using the effect-size calculator in the Campbell Collaboration website (Wilson, 2015).

Due to the depth of the multi-dimensionality of both CBR and disabilities noted during the data extraction, post hoc decision not anticipated in the protocol was made regarding the pooling. We undertook meta-analysis only on outcomes extracted from studies for which the interventions, study designs and outcome measures were agreed to be sufficiently consistent to allow pooling of data: the three dementia studies. Meta-analysis was not performed on other outcomes because either the outcomes were not measured in other studies or, if measured, studies were not deemed sufficiently consistent on interventions and research designs to allow pooling of data. For continuous data, the effect-size was measured using SMD and 95 per cent CIs. In our meta-analyses we used a random effect model because grouped studies were not functionally equivalent, as performed by researchers independently. Only independent effect sizes were reported as all studies were based on independent datasets. Outcomes measured at multiple timepoints were assessed separately. We assessed homogeneity using Chi^2 test and I^2 statistic.

$$I^2 = \left(\frac{Chi^2 - \text{degrees of freedom}}{Chi^2} \right) * 100\%$$

Sensitivity analysis was not possible due to insufficient data. Exploration of potential sources of heterogeneity was not possible due to the small number of studies in the meta-analysis. Meta-analyisis was performed separately for users and carers. Results were summarised in Table 9 and Table 10, and forest plots reported in Figures 5-15 at the end of the report. Meta-analysis was performed in Review Manager 5.

While we intended to use funnel plots to explore publication bias for outcomes synthesised in the meta-analyses, this was not possible due to too few studies. We attempted to reduce the publication bias by including unpublished studies, by searching multiple electronic databases, and by performing supplementary searches (websites searches, contacting authors, snowballing, citation tracking).

4 Results

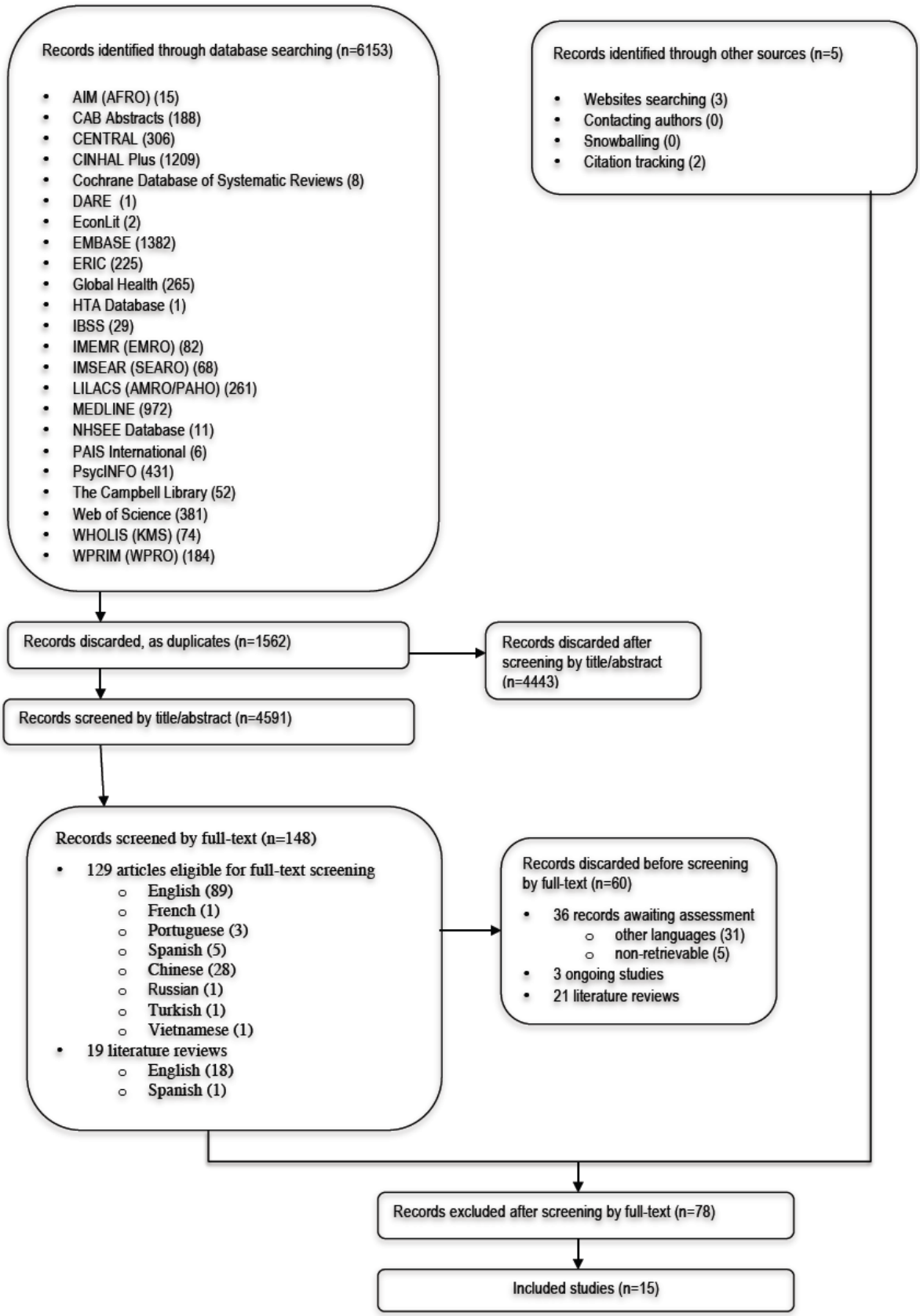
4.1 DESCRIPTION OF STUDIES

4.1.1 Results of the search

The original search of electronic databases yielded 6153 references, of which 4591 remained after discarding duplicates. After screening by title/abstract, 148 records remained of which 129 were primary studies (89 English, one French, three Portuguese, five Spanish, 28 Chinese, one Russian, one Turkish, one Vietnamese) and 19 literature reviews (18 English, one Spanish). Five more studies were identified through the other searches (websites searches, contacting key authors, snowballing, citation tracking).

Of these 153, 60 references were discarded before screening by full-text: 31 were not able to be assessed as they were in languages not known by any of the authors but have been reported in Table 8.3, five publications were not able to be retrieved but have been reported in Table 8.3, three were ongoing studies reported in Table 8.4 and 21 were literature reviews on CBR (see Appendix 11.7), leaving 93 possible inclusions. Seventy-eight were excluded after screening by full-text as they did not meet the inclusion criteria (see Table 8.2). This process resulted in 15 studies being selected for inclusion. See flowchart for study selection (see Figure 4).

Figure 4: Process of Selection of Included Studies.



4.1.2 Included studies

We included 15 studies comprising 3201 individuals. Table 1 summarise the main characteristics of the included studies, which are reported in more detail in Table 8.1. There was a great deal of variation across the studies which were published between 1992 and 2010. They ranged in sample size from 30 (Shin et al., 2009) to 844 (Darmawan et al., 1992). The majority of studies took place in East Asia and Pacific: four in China (Zhang et al., 1994b; Zhang et al., 1998; Ran et al., 2003; Yu et al., 2009), two in Thailand (Noonill et al., 2007; Chinchai, Bunyamark & Sirisatayawong, 2010), one in Vietnam (Shin et al., 2009) and one in Indonesia (Darmawan et al., 1992). There were two studies from South Asia, both from India (Chatterjee et al., 2003; Dias et al., 2008). There were two studies from Europe and Central Asia: one in Turkey (Ozdemir et al., 2001) and one in Russia (Gavrilova et al., 2009). There was one study from the Sub-Saharan Africa, in South Africa (Botha et al., 2010), one from Latin America & the Caribbean, Peru (Guerra et al., 2011), and one from the Middle East and North Africa, in Iran (Habibzadeh, Gofranipoor & Ahmadi, 2007). One study focused on children (Shin et al., 2009), 11 on adults (Botha et al., 2010; Chatterjee et al., 2003; Ran et al., 2003; Zhang et al., 1994b; Zhang et al., 1998; Darmawan et al., 1992; Noonill et al., 2007; Chinchai, Bunyamark & Sirisatayawong, 2010; Habibzadeh, Gofranipoor & Ahmadi, 2007; Ozdemir et al., 2001; Yu et al., 2009) and three on older people (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011).

The selected studies included 10 randomised controlled trials (Botha et al., 2010; Chinchai, Bunyamark & Sirisatayawong, 2010; Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011; Noonill et al., 2007; Ran et al., 2003; Shin et al., 2009; Yu et al., 2009; Zhang et al., 1994b), two non-randomised controlled trials (Ozdemir et al., 2001; Zhang et al., 1998); two controlled before-after studies (Chatterjee et al., 2003; Habibzadeh, Gofranipoor & Ahmadi, 2007), and one interrupted time series study (Darmawan et al., 1992). Follow-up ranged from two months to one year for the studies on physical disability and from six months to three years for those on mental disability.

All the studies except one (Shin et al. 2009) were classified under ‘health’ in the CBR matrix; either providing information or education and training to the people with disabilities and/or their family/carers with respect to health, or providing intensive home-based care. The remaining study was classified under 'education' (Shin et al., 2009). Several of the studies included other aspects of the CBR matrix as minor components, such as 'social' (Chatterjee et al., 2003; Chinchai, Bunyamark & Sirisatayawong, 2010; Habibzadeh, Gofranipoor & Ahmadi, 2007) and 'livelihood' (Chatterjee et al., 2003).

The included studies were very different in outcome measures (different measures of assessment, timing of measurements, presentation of results), the type of intervention assessed, length of follow-up and outcome measure, even among those

with the same type of participant group. When pooling the results and performing a meta-analysis was possible, the meta-analysis complements the narrative synthesis. The studies were grouped according to the type of disability and type of intervention.

Table 1: Description of included studies

Author, publication year	Country of study	Region of study	Type of disability	Type of condition/ impairment	Target group	Study design	No. of subjects	Follow-up	Primary component of CBR matrix assessed
Chinchai 2010	Thailand	EAP	Physical	Stroke	Adults	RCT	60	2 months	Health
Yu 2009	China	EAP	Physical	Stroke	Adults	RCT	737	5 months	Health
Ozdemir 2001	Turkey	ECA	Physical	Stroke	Adults	Non-RCT	60	64 days	Health
Habibzadeh 2007	Iran	MNA	Physical	Stroke	Adults	CBA	60	45 days	Health
Darmawan 1992	Indonesia	EAP	Physical	Arthritis	Adults	ITS	844	6 months	Health
Noonill 2007	Thailand	EAP	Physical	COPD	Adults	RCT	88	3 months	Health
Botha 2010	South Africa	SSA	Mental	Schizophrenia	Adults	RCT	60	12 months	Health
Ran 2003	China	EAP	Mental	Schizophrenia	Adults	RCT	357	9 months	Health
Zhang 1994b	China	EAP	Mental	Schizophrenia	Adults	RCT	83	18 months	Health
Zhang 1998	China	EAP	Mental	Schizophrenia	Adults	Non-RCT	409	36 months	Health
Chatterjee 2003	India	SAS	Mental	Schizophrenia	Adults	CBA	207	12 months	Health
Dias 2008	India	SAS	Mental	Dementia	Older people	RCT	81	6 months	Health
Gavrilova 2009	Russia	ECA	Mental	Dementia	Older people	RCT	60	6 months	Health
Guerra 2011	Peru	LAC	Mental	Dementia	Older people	RCT	58	6 months	Health
Shin 2009	Vietnam	EAP	Mental	Intellectual impairment	Children	RCT	37	12 months	Education

Note: EAP East Asia and Pacific. ECA Europe and Central Asia. LAC Latin America & the Caribbean. MNA Middle East and North Africa. SAS South Asia. SSA Sub-Saharan Africa.

4.1.3 Excluded studies

We excluded 78 studies, which are listed in Section 7.2. Out of them, 48 studies did not evaluate a CBR program, 28 studies were not controlled, one study is not focus on disability and one does not take place in a LMIC. For a full list of the reasons why studies were excluded refer to Table 8.2.

4.2 RISK OF BIAS IN INCLUDED STUDIES

4.2.1 Assessment of the risk of bias

It was not possible to accurately assess the quality of all 10 randomised trials included in the review due to lack of information about the randomisation procedure, even after contacting authors. Details of the allocation concealment could be assessed in only two (Gavrilova et al., 2009; Guerra et al., 2011) studies as these had off-site randomisation in a central facility in London. No randomisation method was described in four (Noonill et al., 2007; Shin et al., 2009; Yu et al., 2009; Zhang et al. ,1994b), one was described as cluster random sampling (Chinchai, Bunyamark & Sirisatayawong, 2010), and two reported to have used a stratified permuted block randomisation method (Gavrilova et al., 2009; Guerra et al., 2011). See Table 2 for a summary of the assessment of bias and Table 3 for details on each bias.

Table 2: Risk of bias summary for randomised controlled trials

	Random sequence generation (selection bias)	Allocation concealment (selection bias)	Blinding of participants and personnel (performance bias)	Blinding of outcome assessment (detection bias)	Incomplete outcome data (attrition bias)	Selective reporting (reporting bias)	Other bias
Botha 2010	+	?	-	?	?	?	?
Chinchnai 2010	-	?	+	+	+	?	?
Dias 2008	+	?	?	?	?	+	-
Gavrilova 2009	+	+	+	+	+	+	?
Guerra 2011	+	+	+	+	-	?	-
Noonill 2007	?	?	?	?	+	+	+

Ran 2003	+	?	?	+	+	+	+
Shin 2009	?	?	?	?	?	?	?
Yu 2009	?	?	-	+	?	?	+
Zhang 1994b	?	?	?	+	-	?	?

Note: + stands for low risk of bias. – stands for high risk of bias. ? stands for unclear risk of bias.

Table 3 Risk of bias details for randomised controlled trials

Allocation (selection bias)	One trial reported no difference between the numbers of inviduals randomised and assessed (Chinchai, Bunyamark & Sirisatayawong, 2010) Nine trials reported differences in the numbers of individuals randomised and assessed (Botha et al., 2010; Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011; Noonill et al., 2007; Ran et al., 2003; Shin et al., 2009; Yu et al., 2009; Zhang et al., 1994b)
Blinding (performance bias and detection bias)	Two trials reported blinding of participants, personnel and outcome assessor (Gavrilova et al., 2009; Guerra et al., 2011) Two trials reported blinding of participants, and outcome assessor (Yu et al., 2009; Ran et al., 2003) Two trials reported blinding of outcome assessor (Chinchai, Bunyamark & Sirisatayawong, 2010; Dias et al., 2008) Four trials did not report blinding (Botha et al., 2010; Noonill et al., 2007; Shin et al., 2009; Zhang et al., 1994b)
Incomplete outcome data (attrition bias)	Eight trials gave full details by group allocation (Botha et al., 2010, Dias et al., 2008; Gavrilova et al., 2009; Noonill et al., 2007; Ran et al., 2003; Shin et al., 2009; Yu et al., 2009; Zhang et al., 1994b) One trial did not report any loss to follow-up (Chinchai, Bunyamark & Sirisatayawong, 2010) One trial gave no details of those lost to follow-up (Guerra et al., 2011)
Selective reporting (reporting bias)	One trial stated that WHO-QOL and medication were measured but did not report the results (Botha et al., 2010) One trial stated that ER visits, hospitalisation and hospital stay were measured but did not report the results (Noonill et al., 2007) One trial did not report results for PSE-9 (only p-value); no results reported for SDSS (Ran et al., 2003)
Other potential sources of bias	One trial was of limited generalizability as limited to male participants (Zhang et al., 1994b) One trial was of limited generalizability as limited to mixed ethnicity (Botha et al., 2010).

The Table 8.1 gives information on the balance of baseline characteristics, details of patients excluded after randomisation, definitions of the outcome measures, and duration of follow-up. Eight trials reported balanced baseline characteristics (Chinchai, Bunyamark & Sirisatayawong, 2010; Diaset al., 2008; Gavrilova et al., 2009; Noonill et al., 2007; Ranet al., 2003; Zhang et al., 1994b; Guerra et al., 2011; Shin et al., 2009), while two trials did not comment on baseline characteristics (Botha et al., 2010; Yu et al., 2009), thus not providing sufficient information to permit judgement on the similarity between intervention and control group, and so the validity of the comparison. The control and intervention groups were generally

well balanced with respect to the baseline characteristics reported. Confounding, including confounding by indication, is therefore unlikely to have been an important influence on the results of the studies.

Five non-randomised studies were included in the review and using the EPHPP Quality Assessment Tool (see Appendix 11.5), three were assessed to be of moderate quality (Chatterjee et al., 2003; Darmawan et al., 1992; Zhang et al., 1998) and two as strong quality (Habibzadeh, Gofranipoor & Ahmadi, 2007; Ozdemir et al., 2001). However, one study was at high risk of bias for blinding (Chatterjee et al., 2003), one for the data collection methods (Darmawan et al., 1992) and one for withdrawals/dropouts (Zhang et al., 1998). See Table 4 for a summary of the assessment of bias and Table 5 for details on each bias.

Table 4: Risk of bias summary for non randomised controlled trials

POSSIBLE BIAS	Chatterjee 2003	Darmawan 1992	Habibzadeh 2007	Ozdemir 2001	Zhang 1998
A selection bias	MODERATE	STRONG	MODERATE	MODERATE	MODERATE
B study design	MODERATE	MODERATE	MODERATE	MODERATE	MODERATE
C confounders	STRONG	STRONG	STRONG	STRONG	STRONG
D blinding	WEAK	MODERATE	MODERATE	MODERATE	MODERATE
E data collection methods	STRONG	WEAK	STRONG	STRONG	STRONG
F withdrawals /drop-outs	MODERATE	STRONG	MODERATE	STRONG	WEAK
GLOBAL RATING	MODERATE	MODERATE	STRONG	STRONG	MODERATE

Note: WEAK stands for high risk of bias. MODERATE stands for moderate risk of bias. STRONG stands for low risk of bias.

Table 5 Risk of bias details for non randomised controlled trials

Allocation (selection bias)	Two studies reported the numbers of individuals starting and completing the study (Chatterjee et al., 2003; Darmawan et al., 1992). Two studies did not reported any difference between the numbers of individuals included and assessed (Ozdemir et al., 2001; Habibzadeh, Gofranipoor & Ahmadi, 2007) One study only reported the number of individuals assessed and so this number has to be used as the number included (Zhang et al., 1998)
Blinding (performance bias and detection bias)	Four studies did not report blinding (Darmawan et al., 1992; Habibzadeh, Gofranipoor & Ahmadi, 2007; Zhang et al., 1998; Ozdemir et al., 2001) One study reported not blinding of outcome assessor (Chatterjee et al., 2003)
Incomplete outcome data (attrition bias)	Three studies did not report any loss to follow-up (Habibzadeh, Gofranipoor & Ahmadi, 2007; Ozdemir et al., 2001; Zhang et al., 1998) Two studies gave no details of those lost to follow-up (Chatterjee et al., 2003; Darmawan et al., 1992)
Selective reporting	One study only reported detailed results for sub-groups of participants

(reporting bias)	(Darmawan et al., 1992). The results for the complete group were only reported in the text, and then only for the intervention group. The review authors requested information by email but the study was published 21 years ago; no response was received.
Other potential sources of bias	None

4.3 SYNTHESIS OF RESULTS

4.3.1 Type of interventions

Nine of the 15 studies evaluated CBR for people with mental disability: five for people with schizophrenia (Botha et al., 2010; Chatterjee et al., 2003; Ran et al., 2003; Zhang et al., 1994b; Zhang et al., 1998); three for people with dementia (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011), one for people with intellectual impairment (Shin et al., 2009). Six studies evaluated CBR for people with physical disability: four for stroke survivors (Chinchai, Bunyamark & Sirisatayawong, 2010; Habibzadeh, Gofranipoor & Ahmadi, 2007; Ozdemir et al., 2001; Yu et al., 2009); one for people with arthritis (Darmawan et al., 1992); one for people with Chronic Obstructive Pulmonary Disease (COPD) (Noonill et al., 2007). Of the 10 that were trials, seven studied mental disability (three schizophrenia (Botha et al., 2010; Ran et al., 2003; Zhang et al., 1994b), three dementia (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011), one intellectual disability (Shin et al., 2009), and three studied physical disability, stroke (Chinchai, Bunyamark & Sirisatayawong, 2010; Yu et al., 2009) and COPD (Noonill et al., 2007). There were no studies including participants where the disability was due to a sensory (vision or hearing) impairment.

CBR for people with physical disabilities

Stroke

Chinchai, Bunyamark and Sirisatayawong (2010) carried out a randomised controlled trial in Thailand (n=60) to investigate the effect of home health care and rehabilitation on quality of life of the person with disabilities, a stroke survivor who had been discharged less than 18 months previously, versus usual care. An educational programme was provided for the carers and conducted at three health centres, one day weekly for three weeks. Lectures were given by occupational therapists experienced in home health care and community rehabilitation. The health care covered a basic knowledge of cerebrovascular disease (CVD), supervision of medication, nutrition, stress management, information regarding errands and transportation. Stroke rehabilitation covered therapeutic exercise, Activities of Daily Living (ADL) techniques, adaptive device usage, strategies for prevention of complications (joint stiffness, muscle spasm etc), socialising, home and environmental modification. Carers were asked to encourage the people with

disabilities to join community activities. This education allowed the carers to practice basic ADL techniques. Health care and rehabilitation books were distributed. Health service volunteers visited the carers at home once per week during the two-month intervention, to encourage them to apply the knowledge they had learned. The control group received the usual care information from the health centres.

Yu et al. (2009) conducted a single-blind, multi-centre randomised controlled trial in China (n=737) of five months' additional home-based rehabilitation (community rehabilitation group) versus no intervention (community control group). Participants were recruited from five centres in Shanghai. The intervention involved a hierarchical training scheme: experienced rehabilitation medical professionals trained general practitioners (GPs) from community health centres who trained family/carers at home in simple rehabilitation techniques (details not given). The person with disabilities was instructed to do functional exercises for 45 minutes a minimum of three times per week, helped by the carer. The GPs followed up the intervention group 10 times (once weekly for one month, once fortnightly for two months, once monthly for the remaining two months). Participants were also telephoned by the therapists to supervise and help with functional exercises. The control group did not receive the community-based rehabilitation therapy but may have exercised under the guidance of other doctors or helped by their relatives.

Ozdemir et al. (2001) reported a non-randomised controlled trial in Turkey (n=60) of home-based rehabilitation using conventional exercises with carers and limited professional supervision versus acute inpatient hospital-based rehabilitation. The home-based groups were shown convenient bed positioning and exercises to be performed by the person with disabilities/carer for two hours per day. Orthotics and devices were provided. No neuromuscular exercises were possible as they require supervision. A team consisting of a rehabilitation clinician and physiotherapist visited for two hours weekly. Medical care was also provided if necessary. The inpatients had therapeutic exercises, neuromuscular exercises, occupational therapy; this was evaluated daily by medical staff. Any stroke-related symptoms/complications were treated by a multidisciplinary approach.

Habibzadeh, Gofranipoor and Ahmadi (2007) reported on a controlled before-after study in Iran (n=60) comparing planned self-care home-based education intervention on ADL status with a control group (details not given). Between six and eight educational sessions were delivered at home (after discharge) and in five steps:

- Self-care needs definition;
- 1-3 sessions of 90 minutes for carers and person with disabilities for the physical dimension;
- 1-2 sessions of 90 minutes for the psychiatric dimension;
- 1-2 sessions of 90 minutes for the social dimension;
- End stage evaluation.

This programme used proposals from both the carer and people with disabilities so that they could follow the self-care programme without the researcher. After finishing step 2, participants were given 45 days to carry out the home-based plan. A researcher visited twice weekly.

Arthritis

Darmawan et al. (1992) reported on a controlled interrupted time series study in rural Indonesia (n=844) of attendance of the people at an arthritis community education programme by traditional puppet shadow play (wayang) versus no intervention (details not reported). Wayang is an ancient form of puppetry and one of the most popular entertainments of rural Java. The intervention group attended a special session, which included simple instructions for coping with neck and back pain, and stiff, swollen or painful joints.

Chronic Obstructive Pulmonary Disease

Noonill et al. (2007) conducted a cluster randomised controlled trial in Thailand to test the effectiveness of a community-based care programme on health outcomes and patient satisfaction (n=88) versus a control group (details not reported). This intervention, coordinated by a community nurse and carried out at home, was called "Community Care for COPD" which supports people with disabilities in coping with and adjusting to the limitations of the illness with support from the family and community, and consists of three parts: education, integration of lifestyle changes, appropriate mobilisation of community resources. The intervention group received community-based group education (including people with disabilities, carers, health volunteers), individualised home-based care and skill training, enhanced psychosocial support (monthly home visit by community nurse and twice monthly visit from health volunteer), and family supervision. By including people with disabilities, family and community health volunteers, the programme results in community-based competence in management of chronic diseases.

CBR for people with mental disabilities

Schizophrenia

Botha et al. (2010) conducted a non-blinded randomised controlled trial in South Africa (n=60) in a group of participants of a mixture of ethnicities comparing an assertive community treatment intervention tailored for the individual participants (involving the people with disabilities, their families, and key health workers) with standard community care. Each member of the intervention group was assigned a key worker (senior social worker or chief professional nurse) who worked to build a therapeutic relationship with the person with disabilities and carer before discharge. The key worker was the main coordinator and more than half of the intervention took place at home. The major focus was on engagement and adherence to treatment. Subjects were frequently referred to occupational therapy and psychology

services. Participants from the control group were discharged into the existing community mental health service and only contacted for final assessment.

Ran et al. (2003) compared three groups (n=357) in a cluster randomised controlled trial in China. The intervention group included family psycho-education with drug treatment and was compared against drug treatment alone or no treatment. This was developed using two published models and the rationale was that this type of intervention increases the impact of the family at all levels. The intervention group received, at home or the health centre: family education monthly for nine months (for carer but people with disabilities encouraged to join), family workshops every three months (discussions, carers' shared experiences), crisis intervention when necessary, health education via local village radio for first two months. Family intervention was by psychiatrists and village doctors.

Zhang et al. (1994b) conducted a randomised controlled trial of first-admission male participants in China (n=83) comparing family intervention (group counselling session at hospital) with standard care. Medication for members of the intervention and control groups was obtained at the outpatient department. In addition, counselling was provided to family members by one session on management of the people with disabilities's treatment and then a group session on management of the people with disabilities and the importance of medication adherence, after three months. Those families with common problems then attended three monthly sessions, where topics covered included attitudes of the family, realisation that schizophrenia was an illness, dealing with the people with disabilities. Those with unique/complex problems were seen at outpatients for individual counselling, again every three months, for 18 months. Home visits were made for those that did not attend the counselling sessions. Members of the control group and their family could be seen at outpatient department whenever they wished but were not necessarily seen by the same clinician; they were not actively followed-up.

Zhang et al. (1998) reported on a non-randomised controlled trial in China (n=409) comparing a psychosocial education programme given to families in addition to the routine community mental health service versus the routine service. Over the three years, the intervention (delivered at the health centre) comprised 16 lectures of one hour by trained psychiatrists/nurses plus seven group discussions. The lectures covered the illness, types of medication and long term use, detection and prevention of relapse, supervision, care and coping with the person with disabilities, knowledge of strategies to help both the person with disabilities and the carer.

Chatterjee et al. (2003) conducted a controlled before-after study in India (n=207) to compare community-based rehabilitation which comprised a three-tiered service-delivery system (outpatient care, community mental health workers, family members, key community people forming local village health groups) with outpatient treatment (services provided at one clinic, monthly follow-up during which drug treatment was reviewed, education about illness given, and

rehabilitation strategies discussed). The intervention took place in both the clinic and community as the first tier was out-patient care, the second relied on community health workers, the third involved family and community members.

Dementia

The 10/66 Dementia Research group undertook the intervention "Helping Carers to Care" in three settings: India (Dias et al., 2008), Russia (Gavrilova et al., 2009) and Peru (Guerra et al., 2011), to assess the impact of supporting carers in improving outcomes for the person with disabilities and carer. These are described below.

Dias et al. (2008) conducted a randomised controlled trial in India (n=81) comparing immediate intervention or intervention delayed for six months. The intervention was a flexible stepped home-care programme tailored to the needs of the individual and family, delivered by a community team, with a control arm who only received education and information on dementia. The intervention aimed to increase the carer's knowledge of dementia, provide emotional support to carers, and improve their skills. The community team comprised two home care advisors, a part time local psychiatrist from the public health service, and a part time lay counsellor. The team visited the people with disabilities at least twice monthly for six months, more if needed. The carer and person with disabilities were encouraged to visit the psychiatrist at the clinic (to minimise cost). The main focus of the intervention was the carer.

Gavrilova et al. (2009) conducted a single blind, parallel group randomised controlled trial in Russia (n=60) on the addition of carer education and training to usual medical care to investigate if there was a positive effect on the burden of care and mental health of the carer in a setting where knowledge of dementia is low and the family care for the person with dementia. The carer intervention was developed in India and was specifically designed for countries with limited health and social care resources so that it could be delivered at home using existing resources. Newly qualified clinicians with no experience of dementia were used to deliver the intervention. The intervention, delivered in a health centre, targeted the main carer (also included other family members) and provided basic education plus training on managing problem behaviour. There were three modules with weekly sessions of 30 minutes: assessment (one session), education (two sessions), and management of problem behaviour (two sessions).

Guerra et al. (2011) conducted a single blind, parallel group randomised controlled trial in Peru (n=58) on the addition of carer intervention and education to usual care to investigate whether there was a positive effect on the carer. As for the Russian intervention, the carer intervention was developed in India specifically designed for countries with limited health and social care resources and capable of being delivered at home using existing resources. Junior psychologists and social workers were used to deliver the intervention. The intervention, delivered at the local memory clinic, targeted the main carer (also included other family members) and

provided basic education plus training on managing problem behaviour. There were three modules with weekly sessions of 30 minutes: assessment (one session), education (two sessions), and management of problem behaviour (two sessions).

Intellectual impairment

Shin et al. (2009) conducted a randomised controlled trial in Vietnam (n=37) to assess the effects of a home-based intervention for young children with intellectual impairments. Children were randomly assigned to the intervention group, where parents were trained to work with their children, or the control group. Eleven teachers with at least four years' experience working with children with mental disabilities received three months of weekly training, supported by two experienced supervisors. The teachers then held weekly sessions of one hour with the parents to train them to work with their children through modelling and coaching. In the sessions they reviewed the homework assignment, reviewed the new teaching objectives and demonstrated the objectives.

4.3.2 Models of delivery of the intervention

The studies could broadly be divided into three categories: home-based care, educational programmes, and educational programmes with usual care.

Home-based care

Four studies (Botha et al., 2010; Chatterjee et al., 2003; Noonill et al., 2007; Ozdemir et al., 2001) utilised different programmes of home-based care. Botha et al. (2010): assertive community treatment (assigned key health worker) tailored for the individual; Chatterjee et al. (2003): three-tiered service-delivery system: outpatient care, community mental health workers, family members and key community people who formed local village health groups; Noonill et al. (2007): individualised home-based care and skill training with psychosocial support by home visits; Ozdemir et al. (2001): home-based rehabilitation by family of patients with visits by health professionals.

Educational programmes

Four studies (Chinchai, Bunyamark & Sirisatayawong, 2010; Darmawan et al., 1992; Habibzadeh, Gofranipoor & Ahmadi, 2007; Yu et al., 2009) were based on educational programmes. Chinchai, Bunyamark and Sirisatayawong (2010): weekly educational sessions in primary health station plus weekly home visits by health service volunteers; Darmawan et al. (1992): arthritis community education programme through puppet shadow play; Habibzadeh, Gofranipoor and Ahmadi (2007): home-based educational sessions (6-8) of 90 minutes; Yu et al. (2009): home-based rehabilitation.

Educational programmes with usual care

Seven studies (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011; Ran et al., 2003; Shin et al., 2009; Zhang et al., 1994b; Zhang et al., 1998) combined educational programmes with usual care. Dias et al. (2008); Gavrilova et al. (2009); Guerra et al. (2011): carers given basic education about dementia and specific training on managing problem behaviours plus usual medical care; Ran et al. (2003): psycho-educational family intervention in addition to drug treatment; Shin et al. (2009): education for families on how to work with their children plus usual educational services; Zhang et al. (1998): psychosocial education programme for families in addition to the routine community mental health service.

4.3.3 Type of outcomes

Physical disability

Activities

Five measures were used for activities: Six-Minute Walk Distance (6MWD), St George's Respiratory Questionnaire (SGRQ), Dyspnea Visual Analog Scale (DVAS), Activities of Daily Living (ADL), questionnaire on the knowledge of the correct ways of performing Activities of Daily Living. Three (6MWD, SGRQ, DVAS) were used for the COPD study (Noonill et al., 2007), one (questionnaire on knowledge of the correct ways of performing Activities of Daily Living) for the arthritis study (Darmawan et al., 1992), and one (ADL) for two of the stroke studies (Habibzadeh, Gofranipoor & Ahmadi, 2007; Ozdemir et al., 2001). Ozdemir et al. (2001) used the Functional Independence Measure of this instrument.

Clinical status

Four instruments were used to measure clinical status and no study used the same instrument. Three were used by Ozdemir et al. (2001) (Brunnstrom Motor Evaluation Scale, Spasticity – Ashworth scale, Mini Mental State Examination) and one by Yu et al. (2009) (Clinical Neurological Function Deficit Scale).

Quality of Life

Three instruments were used to measure quality of life. One of the stroke studies (Chinchai, Bunyamark & Sirisatayawong, 2010) measured quality of life as the primary (and only) outcome using the World Health Organization Quality of Life Brief Test Thai version (WHOQOLBREF-THAI); the COPD study (Noonill et al., 2007) measured Patient Satisfaction with Care Questionnaire (PSCQ) and Health Related Quality of Life (HRQL).

Use of health resources

Three indicators were used to measure use of health resources. Hospital utilisation was reported in one study as number of visits and length of stay (Noonill et al., 2007). Mortality was reported in two studies (Noonill et al., 2007; Yu et al., 2009).

Adverse effects

One indicator was used to measure adverse effects. One of the stroke studies (Ozdemir et al., 2001) reported complications.

Carer outcomes

Carer outcomes were not reported for the physical disability studies.

Mental disability

Activities

Three measures were used for activities: patient's working ability, Everyday Abilities Scale for India (EASI), 1984 Vineland Adaptive Behavior Scales (VABS). One schizophrenia study (Ran et al., 2003) reported on patient's working ability. One dementia study (Dias et al., 2008) measured activity using EASI. The educational intervention for children with intellectual impairments (Shin et al., 2009) measured child functioning through the VABS for adaptive behaviour and developmental competence.

Clinical Status

Eleven instruments were used to measure clinical status: Positive and Negative Syndrome Scale for Schizophrenia (PANSS), Social and Occupational Functional Assessment Scale (SOFAS), Extrapyramidal Symptom Rating Scale (ESRS), Calgary Depression Scale (CDSS), Disability Assessment Scale (DAS), Neuro-Psychiatric Inventory (NPI), Social Disability Screening Schedule (SDSS), Present State Examination (PSE9), Brief Psychiatric Rating (BPRS), Global Assessment Scale (GAS), and a questionnaire on severity of illness. Only two instruments (PANSS and DAS) were each used by two studies, the other seven by one study only. The three dementia studies (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011) all used the Neuro-Psychiatric Inventory, but reported the results in different ways (β coefficient and mean). Two schizophrenia studies (Botha et al., 2010; Chatterjee et al., 2003) used the PANSS. Two different schizophrenia studies (Chatterjee et al., 2003; Zhang et al., 1998) used the Disability Assessment Scale (DAS). Three (BPRS, GAS, questionnaire on severity of illness) were used for another schizophrenia study (Zhang et al., 1994b). Two (PSE9, SDSS) were used in another schizophrenia study (Ran et al., 2003). One schizophrenia study (Botha et al., 2010) also used three additional instruments (CDSS, ESRS, SOFAS).

Quality of Life

Two instruments were used to measure quality of life. One of the schizophrenia study (Botha et al., 2010) measured quality of life using the WHO Quality of Life questionnaire (WHO-QOL). Two dementia studies (Gavrilova et al., 2009; Guerra et al., 2011) used the dementia-specific health related quality of life (DEMQOL).

Use of health resources

Seven indicators were used to measure use of health resources: readmission, relapse, treatment compliance, recovery, mortality, at work, days in hospital (psychiatric and non psychiatric). Amongst schizophrenia studies, three (Botha et al., 2010; Zhang et al., 1994b; Zhang et al., 1998) reported readmission, three (Botha et al., 2010; Ran et al., 2003; Zhang et al., 1998) relapse, three (Chatterjee et al., 2003; Ran et al., 2003; Zhang et al., 1994b) treatment compliance, one (Ran et al., 2003) recovery, one (Botha et al., 2010) days in hospital, and one (Zhang et al., 1998) at work. Two schizophrenia studies (Botha et al., 2010; Ran et al., 2003) and two dementia studies (Dias et al., 2008; Gavrilova et al., 2009) reported mortality.

Adverse effects

Adverse effects were not reported for the mental disability studies.

Carer outcomes

Five carer outcomes were reported: distress, psychological morbidity, role strain, quality of life, knowledge of disease. Nine measures were used for carer outcomes: Neuro-Psychiatric Inventory (NPI), General Health Questionnaire (GHQ), selfreporting questionnaire (SRQ-20), Zarit Burden Scale (ZBS), Family Burden Interview Schedule (FIS), WHO Quality of Life questionnaire (WHOQOL-BREF), Relatives Investigation Scale, Relatives' Beliefs Scale, and a quiz on knowledge about mental illness. The three dementia studies (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011) used the NPI to measure carer distress. Carer psychological morbidity was measured in two studies (Dias et al., 2008; Zhang et al., 1998) using the GHQ and in two dementia studies (Gavrilova et al., 2009; Guerra et al., 2011) using the SRQ-20. The three dementia studies (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011) used the ZBS to measure carer role strain, while one schizophrenia study (Zhang et al., 1998) used the FIS. Two dementia studies (Gavrilova et al., 2009; Guerra et al., 2011) used the WHOQOL-BREF to measure carer quality of life. Carer knowledge of the disease was measured in one schizophrenia study (Ran et al., 2003) using two measures (Relatives Investigation Scale and Relatives' Beliefs Scale) and in another schizophrenia study (Zhang et al., 1998) using a quiz on knowledge about mental illness.

4.3.4 Effects of interventions

For effect sizes of SMD, values greater than 0.70 have been treated as large; values between 0.40 and 0.70 as moderate; and values less than 0.40 but greater than 0.10 as small (Higgins & Green, 2011).

Physical disability

Table 6 summarises the effects of CBR for people with physical disabilities per each outcome evaluated in the included studies for people with physical disabilities.

Table 6 Effects of CBR for people with physical disabilities on people with disabilities

	CBR	Control	
RCT			
STROKE: Chinchai 2010	Mean (SD) at 2 months	Mean (SD) at 2 months	Standardised mean difference (95% CI)
WHOQOL-BREF-THAI: physical	23.73 (2.23)	20.50 (1.89)	1.56 (0.98-2.13)
WHOQOL-BREF-THAI: psychological	20.90 (1.88)	18.07 (2.36)	1.33 (0.77-1.89)
WHOQOL-BREF-THAI: social	8.60 (0.89)	7.90 (1.42)	0.59 (0.07-1.11)
WHOQOL-BREF-THAI: environmental	25.90 (2.23)	23.67 (2.76)	0.88 (0.36-1.42)
STROKE: Yu 2009	Mean (SD) at 5 months	Mean (SD) at 5 months	Standardised mean difference (95% CI)
Clinical Neurological Function Deficit Scale: total group	10.14 (7.54)	13.56 (8.70)	-0.42 (-0.57- -0.27)
Clinical Neurological Function Deficit Scale: cerebral infarction	10.31 (7.41)	14.03 (9.15)	-0.45 (-0.62- -0.28)
Clinical Neurological Function Deficit Scale: cerebral haemorrhage	9.53 (7.98)	11.95 (6.79)	-0.32 (-0.64- -0.01)
COPD (RCT): Noonill 2007	Mean (SD) at 3 months	Mean (SD) at 3 months	Standardised mean difference (95% CI)
6MWD	342.77 (106.06)	265.07 (94.35)	0.77 (0.34-1.21)
DVAS	4.46 (2.21)	6.22 (1.83)	-0.87 (-1.31- -0.43)
HRQL	30.27 (19.4)	52.40 (21.34)	-1.09 (-1.54- -0.64)
PSCQ	91.09 (10.67)	74.93 (15.36)	1.22 (0.77-1.68)
HU: ER visit (Z-score)	Not reported	Not reported	
HU: not hospitalised (Z-score)	Not reported	Not reported	
HU: did not stay (Z-score)	Not reported	Not reported	
Non-RCT			
STROKE: Ozdemir 2001	Mean change (SD) at 64 days	Mean change (SD) at 64 days: inpatient	Standardised mean difference (95% CI)
ADL: FIM	12.30 (13.38)	59.63 (14.19)	-3.43 (-4.23- -2.64)

MMSE	2.03 (2.12)	4.83 (5.03)	-0.73 (-1.25- -0.20)
Ashworth Scale lower extremity	23(0.50)	0.46 (1.22)	24.18 (19.82-28.53)
Ashworth Scale upper extremity	0.10 (0.30)	0.20 (1.21)	-0.11 (-0.62-0.39)
Brunnstrom Motor Evaluation Scale upper extremity	0.33 (0.60)	2.00 (1.20)	-1.76 (-2.36- -1.16)
Brunnstrom Motor Evaluation Scale lower extremity	0.83 (0.59)	2.36 (1.18)	-1.64 (-2.23- -1.06)
Brunnstrom Motor Evaluation Scale hand	0.36 (0.85)	1.86 (1.27)	-1.39 (-1.95- -0.82)

STROKE: Habibzadeh 2007	Mean score (SD) at 3 months	Mean score (SD) at 3 months	Standardised mean difference (95% CI)
ADL score (mean change after versus before)	74 (25.7)	38 (23.4)	1.46 (0.89-2.03)
Individual hygiene	3.8 (1.27)	2.5 (1.54)	0.92 (0.39-1.45)
Bathing	3.6 (1.40)	2.4 (1.58)	0.80 (0.28-1.33)
Feeding	7.7 (2.5)	4.6 (2.7)	1.19 (0.64-1.74)
Water and closet	7.1 (2.9)	3.9 (3.2)	1.05 (0.51-1.59)
Hair combing	8.7 (2.2)	5.0 (2.6)	1.54 (0.96-2.11)
Wearing clothes	7.4 (2.8)	4.1 (2.6)	1.22 (0.67-1.77)
Bowel control	7.6 (3.0)	3.3 (2.6)	1.53 (0.96-2.11)
Bladder control	7.1 (3.5)	3.7 (3.2)	1.01 (0.48-1.55)
Moments	11.3 (3.9)	5.4 (4.5)	1.40 (0.84-1.97)
Moving from bed to chair	10.5 (4.2)	4.2 (3.6)	1.61 (1.03-2.19)

ARTHRITIS: Darmawan 1992	Total correct responses at 6 months	Total correct responses at 6 months	Risk ratio (95% CI)
Correct knowledge on performance of ADL: all participants	77.5%	not given	Not applicable
Correct knowledge on performance of ADL: illiterates	57.6%	50.0%	1.15 (1.01-1.31)
Correct knowledge on performance of ADL: attended primary school	77.1%	72.2%	1.07 (0.98-1.16)
Correct knowledge on performance of ADL: attended junior high school	78.6%	76.3%	1.03 (0.95-1.11)

Correct knowledge on performance of ADL: attended senior high school	80.0%	77.8%	1.03 (0.96-1.11)
Correct knowledge on performance of ADL: attended academy or university	100.0%	96.4%	1.04 (1.02-1.06)

Footnotes: RCT Randomised Controlled Trial. Non-RCT Non Randomised Controlled Trial. CBA Controlled Before-After Study. ITS Interrupted Time Series study. Yu 2009: CI=cerebral infarction. Yu 2009: CH=cerebral haemorrhage.

Stroke

Four studies evaluated CBR for stroke, two randomised controlled trials (Chinchai, Bunyamark & Sirisatayawong, 2010; Yu et al., 2009), one non-randomised controlled trial (Ozdemir et al., 2001) and one controlled before-after study (Habibzadeh, Gofranipoor & Ahmadi, 2007).

Among the two randomised controlled trials, Chinchai, Bunyamark and Sirisatayawong (2010) compared an education programme of home health care and rehabilitation for care-givers versus usual care. Quality of life did not differ between the experimental and control groups before the intervention. At two months, the rehabilitation group showed a large difference in mean for the physical (SMD=1.56, 95% CI=0.98-2.13), psychological (SMD=1.33, 95% CI=0.77-1.89) and environment sub-scales (SMD=0.88, 95% CI=0.36-1.42) of the WHOQOL-BREF compared to the control arm, while the difference for the social relation sub-scale of the WHOQOL-BREF was moderate (SMD=0.59, 95% CI=0.07-1.11). In Yu et al. (2009), at five months, the rehabilitation group showed a moderate difference in the Clinical Neurological Function Deficit Scale compared to the control group (SMD=-0.42, 95% CI=-0.57- -0.27). This moderate difference was also apparent when the analyses were restricted to the cerebral infarction group (SMD=-0.45, 95% CI=-0.62- -0.28), whereas the difference was small for the cerebral haemorrhage group (SMD=-0.32, 95% CI=-0.64- -0.01).

Among the non-randomised studies, in Habibzadeh, Gofranipoor and Ahmadi (2007) controlled before-after study, 45 days after the home-based education programme finished, there were large differences in the Activities of Daily Living (ADL) score at follow-up between the intervention and the control arm for all measures (SMD=1.46, 95% CI=0.89-2.03), with the results more favourable in the intervention arm . In Ozdemir et al. (2001) non-randomised controlled trial, the mean change at 64 days was reported in the intervention and control arms, rather than the absolute score at follow-up. The results showed that the mean change in different scores was smaller in the family-based rehabilitation than participants rehabilitated in hospital, with large differences in mean change for motor and functional outcomes (all SMD>-1.39) and moderate change in cognitive outcomes (SMD=-0.73, 95% CI=-1.25- -0.20).

Meta-analysis was not conducted for the four stroke studies as they used three different study designs (randomised controlled trial, non-randomised controlled trial, controlled before-after study) and the outcomes of the two randomised controlled trials were not conceptually comparable: quality of life (Chinchai, Bunyamark and Sirisatayawong, 2010) and clinical status (Yu et al., 2009).

Arthritis

No randomised controlled trials evaluated CBR for arthritis, but only an interrupted time series study (Darmawan et al., 1992). Using Wayang as an intervention method of community education, knowledge of correct ways of performing ADL was assessed by a questionnaire. The difference of mean scores between baseline and six months was reported for the groups separately. In the intervention group the percentage of people giving a correct response increased on average 7.9 per cent across the domains, while in the control group it fell by 1.7 per cent. There was a statistically significantly higher correct knowledge on performance of ADL score for illiterates (Risk ratio=1.15, 95% CI=1.01-1.31) and those with the highest levels of education (Risk ratio=1.04, 95% CI=1.02-1.06) in the intervention group compared to the control group. Results were not given for all participants.

Chronic Obstructive Pulmonary Disease

One randomised controlled trial evaluated CBR for chronic obstructive pulmonary disease (Noonill et al., 2007). The comparison of the mean scores between the groups at the end of the three month programme showed large differences in exercise tolerance, dyspnoea, HRQL and satisfaction with care in the intervention versus control group (all SMD>0.77), with scores more favourable at follow-up in the intervention group. Hospital utilisation had not significantly reduced between the two groups.

Mental disability

Table 7 and Table 8 summarise the effects of CBR for people with mental disabilities per each outcome evaluated in the included studies for both people with physical disabilities and their carers respectively.

Table 7 Effects of CBR for people with mental disabilities on people with disabilities

	CBR	**Control**	
RCT			
SCHIZOPHRENIA: Botha 2010	Mean (SD) at 12 months	Mean (SD) at 12 months	Standardised mean difference (95% CI)
PANNS total	57.52 (17.4)	73.52 (19.2)	-0.88 (-1.47- -0.29)
PANNS positive	12.52 (6.0)	19.38 (8.8)	-0.94 (-1.53- -0.35)
PANNS negative	16.55 (6.1)	19.33 (4.6)	-0.50 (-1.07-0.07)

PANNS general	28.45 (8.2)	34.81 (9.1)	-0.74 (-1.32- -0.16)
SOFAS	61.97 (9.1)	54.90 (10.8)	0.72 (0.14-1.30)
CDSS total	0.69 (1.4)	0.81 (3.3)	-0.05 (-0.61-0.51)
ESRS-questionnaire	1.90 (1.23)	1.90 (1.51)	0 (-0.56-0.56)
ESRS-parkinsonism	9.03 (8.20)	0.48 (8.07)	1.05 (0.45-1.65)
ESRS-dyskinetic	0.55 (1.24)	0.57 (1.57)	-0.01 (-0.58-0.55)
Number readmissions	0.41 (0.63)	1.19 (0.98)	-0.98(-1.58- -0.39)
Days in hospital	24.69 (47.43)	67.19 (76.31)	-0.70 (-1.27- -0.12)
Non-psychiatric days in hospital	0.07 (0.37)	2.33 (5.65)	-0.62 (-1.19- -0.04)
Medication	Not reported	Not reported	Not significant (text only)
WHO-QOL	Not reported	Not reported	Not significant (text only)
			Risk ratio (95% CI)
Remission	44.83%	28.57%	1.57 (0.71-3.45)
Readmission	34.48%	71.43%	2.07 (1.10-3.90)

SCHIZOPHRENIA : Ran 2003	Score at 9 months	Score at 9 months	Risk ratio (95% CI)
Clinical status Fully recovered	42.1%	22.7%	1.85 (1.22-2.82)
Patient's working ability Full-time	57.9%	54.6%	1.06 (0.84-1.34)
Relapse rate	16.3%	61.5%	0.27 (0.17-0.41)
Treatment compliance regular treatment	34.9%	5.2%	6.71 (2.78-16.22)
Mental disability Mild	18.3%	20.6%	0.89 (0.52-1.52)

SCHIZOPHRENIA: Zhang 1994	Mean (SD) at 18 months	Mean (SD) at 18 months	Standardised mean difference (95% CI)
BPRS (not readmitted)	25.5 (3.6)	30.6 (4.7)	-1.21 (-1.70- -0.74)
GAS (not readmitted)	66.5 (8.2)	54.6 (8.5)	1.42 (0.92-1.92)
			Risk ratio (95% CI)
Readmission	15.4%	53.8%	0.29 (0.13-0.63)
Medication non-compliance	20.5%	43.6%	0.47 (0.23-0.96)

DEMENTIA: Dias 2008	Mean (SD) at 6 months	Mean (SD) at 6 months	Standardised mean difference (95% CI)
EASI	8.5 (2.3)	8.7 (2.2)	-0.09 (-0.60-0.43)

NPI-Q severity	6.7 (4.8)	8.4 (5.1)	-0.34 (-0.86-0.17)

DEMENTIA: Gavrilova 2008	Mean difference (SD) at 6 months	Mean difference (SD) at 6 months	Standardised mean difference (95% CI)
NPI-Q severity	-1.0 (2.1)	-0.6 (2.8)	-0.16 (-0.70-0.38)
DEMQOL	3.3 (7.5)	-0.4 (7.0)	0.51 (-0.04-1.06)

DEMENTIA: Guerra 2011	Mean difference (SD) at 6 months	Mean difference (SD) at 6 months	Standardised mean difference (95% CI)
NPI-Q severity	-1.7 (3.3)	-1.6 (2.6)	-0.03 (-0.56-0.49)
DEMQOL	1.0 (8.0)	-2.0 (22.8)	0.17 (-0.35-0.70)

INTELLECTUAL: Shin 2009	Mean (SD) at 12months	Mean (SD) at 12 months	Standardised mean difference (95% CI)
Vineland scale: adaptive behaviour composite	57.4 (13.7)	56.3 (11.2)	0.09 (-0.63-0.80)
Vineland scale: communication	55.1 (23.3)	52.4 (18.8)	0.13 (-0.59-0.84)
Vineland scale: daily living skills	68.9 (28.5)	66.3 (24.5)	0.10 (-0.62-0.82)
Vineland scale: social skills	53.2 (18.4)	52.7 (13.7)	0.03 (-0.69-0.75)
Vineland scale: motor skills	53.9 (16.4)	52.9 (16.3)	0.06 (-0.66-0.78)

Non-RCT			
SCHIZOPHRENIA: Zhang 1998	Mean (SD) at 3 years	Mean (SD) at 3 years	Standardised mean difference (95% CI)
WHO-DAS: total score	16.5 (8.2)	17.7 (10.9)	-0.13 (-0.33-0.07)
			Risk ratio (95% CI)
Annual relapse rate %	10.4	15.2	0.68 (0.41-1.15)
Hospitalisation rate %	6.4	10.2	0.63 (0.32-1.22)

SCHIZOPHRENIA: Chatterjee 2003	Mean change (95% CI) at 12 months: ITT	Mean change (95% CI) at 12 months: ITT	Standardised mean difference (95% CI)
PANNS general	26.4 (24-29)	24.6 (23-27)	0.14 (-0.14-0.42)
PANNS negative	13.9 (12-15)	12.3 (11-13)	0.22 (-0.06-0.50)
PANNS positive	15.6 (14-17)	14.1 (13-15)	0.20 (-0.08-0.48)
DAS behavioural	9.6 (9-11)	8.6 (8-9)	0.21 (-0.07-0.48)
DAS occupation	6.8 (6-8)	4.7 (4-6)	0.40 (0.11-0.68)
DAS social	10.7 (9-12)	8.2 (7-9)	0.34 (0.06-0.62)

Footnotes: RCT Randomised Controlled Trial. Non-RCT Non Randomised Controlled Trial. CBA Controlled Before-After Study.

Table 8 Effects of CBR for people with mental disabilities on carer of people with disabilities

	CBR	**Control**	
RCT			
DEMENTIA: Dias 2008	Mean (SD) at 6 months	Mean (SD) at 6 months	Standardised mean difference (95% CI)
Zarit Burden Scale	19.0 (13.0)	21.4 (6.7)	-0.04 (-0.55-0.47)
NPIQ-D	4.4 (3.8)	7.1 (6.4)	-0.10 (-0.62-0.41)
GHQ	2.6 (2.3)	3.3 (3.6)	-0.04 (-0.53-0.44)
DEMENTIA: Gavrilova 2008	Mean difference (SD) at 6 months	Mean difference (SD) at 6 months	Standardised mean difference (95% CI)
Zarit Burden Scale	-2.6 (7.7)	2.8 (7.7)	-0.14 (-0.68-0.40)
SRQ-20	-1.2 (1.3)	-0.5 (2.9)	-0.06 (-0.60-0.48)
NPIQ-D	1.8 (4.3)	-0.2 (4.5)	0.14 (-0.40-0.68)
WHOQOL-BREF: physical	1.1 (4.3)	-3.1 (8.1)	0.12 (-0.42-0.66)
WHOQOL-BREF: psychological	4.0 (9.3)	2.7 (12.0)	0.02 (-0.52-0.56)
WHOQOL-BREF: social	2.5 (6.8)	-0.7 (1.6)	0.14 (-0.40-0.68)
WHOQOL-BREF: environment	1.3 (9.3)	-0.6 (8.2)	0.04 (-0.50-0.58)
DEMENTIA: Guerra 2011	Mean difference (SD) at 6 months	Mean difference (SD) at 6 months	Standardised mean difference (95% CI)
Zarit Burden Scale	-3.6 (4.6)	0.3 (2.9)	-0.20 (-0.72-0.33)
SRQ-20	-3.1 (4.0)	-3.0 (3.1)	-0.01 (-0.53-0.52)
NPIQ-D	-2.3 (4.7)	-2.4 (4.6)	0.004 (-0.52-0.53)
WHOQOL-BREF: physical	-9.7 (18.7)	-15.5 (13.9)	0.07 (-0.46-0.59)
WHOQOL-BREF: psychological	10.0 (11.5)	8.9 (11.1)	0.02 (-0.51-0.54)
WHOQOL-BREF: social	7.1 (12.6)	1.7 (15.2)	0.07 (-0.45-0.60)
WHOQOL-BREF: environment	7.6 (11.4)	9.5 (13.0)	-0.03 (-0.55-0.49)
Non_RCT			

SCHIZOPHRENIA : Zhang 1998	Mean (SD) at 3 years	Mean (SD) at 3 years	Standardised mean difference (95% CI)
GHQ total: mean	2.8 (4.4)	3.1 (4.3)	-0.005 (-0.20-0.19)
FIS total: mean	9.7 (10.1)	13.6 (10.3)	-0.03 (-0.23-0.17)
Lack of knowledge concerning:			Risk ratio (95% CI)
Diagnosis of illness	1.2%	1.9%	-0.26 (-1.15-0.63)
Symptoms of illness	4.0%	8.2%	-0.42 (-0.89-0.05)
Effects of medication	4.0%	8.9%	-0.47 (-0.93- -0.009)
Side effects of Medication	13.9%	26.6%	-0.45 (-0.72- -0.17)
Early signs of relapse	8.4%	16.5%	-0.42 (-0.76- -0.09)
Coping with odd behaviour	13.5%	21.5%	-0.31 (-0.60- -0.02)

Footnotes: RCT Randomised Controlled Trial. Non-RCT Non Randomised Controlled Trial.

Schizophrenia

Five studies evaluated CBR for schizophrenia, three randomised controlled trials (Botha et al., 2010; Ran et al., 2003; Zhang et al., 1994b), one non-randomised controlled trial (Zhang et al., 1998) and one controlled before-after study (Chatterjee et al., 2003).

Higher PANSS and DAS scores indicate increasing clinical severity.

Among the three randomised controlled trials, Botha et al. (2010) compared an assertive community treatment intervention with standard community care. After 12 months there was a large difference in PANSS score (SMD=-0.88, 95% CI=-1.47- -0.29) and SOFAS scores (SMD=0.72, 95% CI=0.14-1.30) between the intervention and control arms with better clinical status in the intervention arm. Hospital readmissions were substantially higher in the control (71.43%) compared to intervention group (34.48%), and the number of readmissions and days in hospital were higher in the control group. The WHO-QOL score was reported as not significantly different between the two groups, nor were differences detectable in the ESRS rating scale, except for ESRS-parkinsonism (SMD=1.05, 95% CI=0.45-1.65). Ran et al. (2003) randomised controlled trial had three arms: drug treatment plus psycho-educational family intervention, drug treatment only, and no intervention. The comparison presented here is CBR versus no intervention. At nine months follow-up, people in the intervention group were more likely to be fully recovered compared to those in the control group (Risk ratio=1.85, 95% CI=1.22-2.82). The relapse rate was almost four-fold higher in the control group (61.5%) compared to the intervention group (16.3%) (Risk ratio=0.27, 95% CI=0.17-0.41), and treatment compliance was more than six-fold higher (Risk ratio=6.71, 95% CI=2.78-16.22).

There was no difference in the patient's ability to work full time or to have mild disability between the control and intervention group. The authors also reported a generally favourable change in relatives' beliefs on illness after the intervention. In Zhang et al. (1994b) randomised controlled trial, at 18 months follow-up, the family intervention group had superior results to standard care. There were large differences in clinical status measured by BPRS (severity of clinical symptoms – SMD=-1.21, 95% CI=-1.70- -0.74) and overall level of functioning measured by GAS (SMD=1.42, 95% CI=0.92-1.92) between the intervention compared to control group for those who were not readmitted to hospital. Non-compliance with treatment (20.5% v 43.6%; Risk ratio=0.47, 95% CI=0.23-0.96) and the risk of readmission were also lower (15.4% v 53.8%; Risk ratio=0.29, 95% CI=0.13-0.63) in the intervention compared to control group.

Among the non-randomised controlled trials, Zhang et al. (1998) non-randomised controlled trial evaluated the addition of a family psychosocial education programme to the routine care. At three years follow-up, there was no difference in mean WHO-DAS score between the intervention and the control arm (SMD=-0.13, 95% CI=-0.33-0.07). The participants of the intervention group had a lower rate of relapse (10.4% versus 15.2%) and hospitalisation (6.4% versus 10.2%), although these differences were not statistically significant. Chatterjee et al. (2003) controlled before-after study compared community-based rehabilitation as the intervention with outpatient care. At 12 months, the change in mean scores from baseline was measured in both groups. The intervention group showed a small greater increase in DAS occupation (SMD=0.40, 95% CI=0.11-0.68) and DAS social (SMD=0.34, 95% CI=0.06-0.62) scores in the intervention group.

Meta-analysis was not conducted for the five schizophrenia studies as they used three different study designs (randomised controlled trial, non-randomised controlled trial, controlled before-after study) and the outcomes of the three randomised controlled trials were not conceptually comparable: activities (social and occupational functioning), clinical status (schizophrenia, extrapyramidal symptoms, depression), use of health resources (days in psychiatric hospital, days in non-psychiatric hospital, remission, readmission) (Botha et al., 2010); activities (working ability), clinical status (psychiatric symptoms, mental disability), use of health resources (relapse, medication compliance) (Ran et al., 2003); clinical status (psychiatric symptoms, psychosocial assessment), use of health resources (medication compliance, readmission) (Zhang et al., 1994b). In particular, while readmission rate was evaluated in two studies, meta-analysis was not conducted because the outcomes were measured at two different time points, 12 months (Botha et al., 2010) and 18 months (Zhang et al., 1994b). Similarly, while medication compliance was evaluated in two studies, meta-analysis was not conducted because the outcomes were measured at two different time points, 9 months (Ran et al., 2003) and 18 months (Zhang et al., 1994b). Finally, while psychiatric symptoms were evaluated in two studies, meta-analysis was not conducted because the

outcomes were measured for two different populations, for all participants (Ran et al., 2003) and only for not readmitted users (Zhang et al., 1994b).

Dementia

Three randomised controlled trials evaluated CBR for dementia (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011). In Dias et al. (2008), both groups received the intervention but in the control group, it was delayed for six months. At six months, it was found that there were no differences in behaviour or activities of daily living between the intervention and control arm. There was a non-significant decreased mortality in the intervention (Odds ratio=0.34, 95% CI=0.01 to 1.03) compared to the control arm. No differences were apparent in carer outcomes between the intervention and control arm, with respect to carer mental health, perceived burden or psychological quality of life. Gavrilova et al. (2009) added carer education and training to usual medical care and compared the mean difference from baseline to six months between the groups. At six months, quality of life had not improved in either the intervention or control group, and there was no difference in this change between the two groups. There was a small reduction in carer psychological morbidity and carer distress among the intervention compared to the control arm, as well as lower carer burden and improvements in carer quality of life in some domains, which did not reach statistical significance. However, the standardised mean differences did not suggest obvious differences in change in score between the two groups for any of these measures. Guerra et al. (2011) added carer education and training to usual medical care and compared the mean difference from baseline to six months between the groups. At follow-up there was no difference in the change in quality of life between people with dementia in the intervention and control arms. The intervention group showed a higher reduction in carer burden than the control arm, but the standardised mean differences did not reveal apparent differences in change between the two groups for any domains. The three randomised controlled trials being sufficiently homogeneous, results were pooled and meta-analyses were performed for both people with dementia and their carers. Meta-analysis was performed only on outcomes that were consistently measured across the three randomised controlled trials. Meta-analysis was not possible on the other outcomes measured in the three trials due to the lack of consistent measures across them. Measures of heterogeneity were not always reliable because low number of studies. Table 9 summarises the meta-analysis results for people with dementia, while forest plots are reported in Figures 5-7 at the end of the report.

Clinical status

Three trials (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011) including 168 participants reported the mean scores of the Neuro-Psychiatric Inventory (NPI-Q) at six months. People with dementia receiving CBR were more likely to have a lower NPI-Q score (better clinical status), but the difference was not

statistically significant (SMD=-0.09, 95% CI=-0.47-0.28). There was no statistical heterogeneity between trials (Chi^2=0.11, df=1 (P=0.75); I^2=0%).

Quality of life

Two trials (Gavrilova et al., 2009; Guerra et al., 2011) including 109 participants reported the mean scores of the dementia-specific health-related quality of life (DEMQOL) at six months. People with dementia receiving CBR were more likely to have a higher DEMQOL (better quality of life), but the difference was not statistically significant (SMD=0.22, 95% CI=-0.33 -0.77). There was moderate statistical heterogeneity between trials (Chi^2=2.10, df=1 (P=0.15); I^2=52%).

Table 9: Effect of CBR for people with dementia: CBR vs. treatment as usual (TAU)

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
1.1 Activities: Everyday Abilities Scale for India (EASI), at various times over follow-up [higher scores indicate worse levels of functional impairment]	1		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
1.1.1 At 3 months	1	66	Std. Mean Difference (IV, Random, 95% CI)	Not estimable
1.1.2 At 6 months	1	59	Std. Mean Difference (IV, Random, 95% CI)	Not estimable
1.2 Clinical status: Neuro-Psychiatric Inventory (NPI-Q severity), at various times over follow-up	3		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
1.2.1 At 3 months	1	66	Std. Mean Difference (IV, Random, 95% CI)	Not estimable
1.2.2 At 6 months	3	168	Std. Mean Difference (IV, Random, 95% CI)	-0.09 [-0.47, 0.28]
1. 3 Quality of life: dementia-specific health-related quality of life (DEMQOL) at 6 months	2	109	Std. Mean Difference (IV, Random, 95% CI)	0.22 [-0.33, 0.77]

Table 10 summarises the meta-analysis results for carer of people with dementia, while forest plots are reported in Figures 8-15 at the end of the report.

Carer burden

Three trials (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011) including 168 participants reported the mean scores of the Zarit Burden Scale (ZBS) and Neuro-Psychiatric Inventory (NPIQ-D) at six months. People with dementia receiving CBR were more likely to have a lower ZBS score (lower burden), but the difference was not statistically significant (SMD=-0.85, 95% CI=-1.24--0.45). There was no statistical heterogeneity between trials (Chi^2=0.62, df=1 (P=0.43); I^2=0%). People with dementia receiving CBR were more likely to have a lower NPIQ-D score (lower distress), but the difference was not statistically significant (SMD=-0.16, 95% CI=-0.54-0.22). There was no statistical heterogeneity between trials (Chi^2=0.97, df=1 (P=0.33); I^2=0%).

Carer clinical status

Two trials (Gavrilova et al., 2009; Guerra et al., 2011) including 109 participants reported the mean scores of the Self-Reporting Questionnaire 20 (SRQ-20) at six months. People with dementia receiving CBR were more likely to have a lower SRQ-20 score (better mental health), and the difference was statistically significant but small (SMD=-0.37, 95% CI=-1.06-0.32). There was substantial statistical heterogeneity between trials (Chi^2=3.24, df=1 (P=0.07); I^2=69%).

Carer quality of life

Two trials (Gavrilova et al., 2009; Guerra et al., 2011) including 88 participants reported the mean scores of the WHO Quality of Life questionnaire at six months. People with dementia receiving CBR had significantly higher WHOQOL-BREF physical score (SMD=0.51, 95% CI=0.09-0.94) and social score (SMD=0.54, 95% CI=0.12-5.97) at 6 months, showing a moderate difference. They also reported better WHOQOL-BREF psychological (SMD=0.11, 95% CI=-0.31-0.53) and environmental (SMD=0.07, 95% CI=-0.35-0.49) scores, but these differences were not statistically significant. There was no statistical heterogeneity between trials (physical: Chi^2=0.42, df=1 (P=0.52); I^2=0%; psychological: Chi^2=0.00, df=1 (P=0.97); I^2=0%; social Chi^2=0.00, df=1 (P=0.96); I^2=0%; or environment Chi^2=0.39, df=1 (P=0.53); I^2=0%).

Table 10: Effect of CBR for carers of people with dementia: CBR vs. treatment as usual (TAU)

Outcome or Subgroup	Studies	Participants	Statistical Method	Effect Estimate
2.1 Carer burden: Zarit Burden Scale (ZBS), at various times over follow-up [higher scores indicate higher levels of burden]	3		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
2.1.1 At 3 months	1	66	Std. Mean Difference (IV, Random, 95%	Not estimable

			CI)	
2.1.2 At 6 months	3	168	Std. Mean Difference (IV, Random, 95% CI)	-0.85 [-1.24, -0.45]
2.2 Carer distress: Neuro-Psychiatric Inventory (NPIQ-D), at various times over follow-up	3		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
2.2.1 At 3 months	1	0	Std. Mean Difference (IV, Random, 95% CI)	Not estimable
2.2.2 At 6 months	3	168	Std. Mean Difference (IV, Random, 95% CI)	-0.16 [-0.54, 0.22]
2.3 Carer psychological morbidity: Self-Reporting Questionnaire 20 (SRQ-20) at 6 months [higher scores indicate higher levels of morbidity]	2	109	Std. Mean Difference (IV, Random, 95% CI)	-0.37 [-1.06, 0.32]
2.4 Carer psychological morbidity: General Health Questionnaire (GHQ), at various times over follow-up [higher scores indicate higher levels of psychological morbidity]	1		Std. Mean Difference (IV, Random, 95% CI)	Subtotals only
2.4.1 At 3 months	1	71	Std. Mean Difference (IV, Random, 95% CI)	Not estimable
2.4.2 At 6 months	1	65	Std. Mean Difference (IV, Random, 95% CI)	Not estimable
2.5 Carer quality of life: WHO Quality of Life questionnaire (WHOQOL- BREF, physical) at 6 months	2	88	Std. Mean Difference (IV, Random, 95% CI)	0.51 [0.09, 0.94]
2.6 Carer quality of life: WHO Quality of Life questionnaire (WHOQOL-BREF, psychological) at 6 months	2	88	Std. Mean Difference (IV, Random, 95% CI)	0.11 [-0.31, 0.53]

2.7 Carer quality of life: WHO Quality of Life questionnaire (WHOQOL-BREF, social) at 6 months	2	88	Std. Mean Difference (IV, Random, 95% CI)	0.54 [0.12, 0.97]
2.8 Carer quality of life: WHO Quality of Life questionnaire (WHOQOL-BREF, environment) at 6 months	2	88	Std. Mean Difference (IV, Random, 95% CI)	0.07 [-0.35, 0.49]

Intellectual impairment

One randomised controlled trial evaluated CBR for children with intellectual impairment (Shin et al., 2009). Shin et al. (2009) added parents' education and training to usual educational services and compared the mean score at baseline, 6 and 12 months in each group. There were no differences in outcomes at 12 months in the intervention and control groups.

5 Discussion

5.1 SUMMARY OF MAIN RESULTS

This review describes a very mixed range of studies of mixed patient populations, carried out over nearly 30 years.

We included 15 studies evaluating the effectiveness of community-based rehabilitation interventions for people with disabilities in low- and middle-income countries. The disparate nature of the studies covering different client populations, interventions and outcomes meant that it was only possible to pool data meaningfully across three studies on dementia (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011). The primary focus of 14 of the interventions was on the health component of the CBR matrix, and only one (Shin et al., 2009) focused on the education component. Some of the studies included other components of the matrix as a minor focus. Most of the interventions targeted both people with disabilities and their carers, although most of the studies evaluated the effect of the intervention on the people with disabilities only.

Six studies focused on physical disabilities (stroke, arthritis, chronic obstructive pulmonary disease). For stroke, one randomised controlled trial in Thailand (Chinchai, Bunyamark & Sirisatayawong, 2010) showed a large beneficial effect of home health care and rehabilitation for carers in improving quality of life of people with disabilities. Similarly, another randomised controlled trial undertaken in China (Yu et al., 2009) showed a moderate impact of home-based rehabilitation for people with disabilities and their carers in improving clinical outcomes. We also found evidence from an Iranian controlled before-after study (Habibzadeh, Gofranipoor & Ahmadi, 2007) to support planned self-care home-based education for people with disabilities and their carers as the intervention was related to large improvements in activities of daily living . However, a non-randomised controlled trial undertaken in Turkey (Ozdemir et al., 2001) showed that home-based rehabilitation was less beneficial than hospital-based care at improving motor, functional and cognitive outcomes post-stroke. For arthritis, an interrupted time series study (Darmawan et al., 1992) showed that an educational programme by traditional puppet shadow play in Indonesia improved knowledge on activities of daily living by 7.9 per cent among the intervention group, while it fell by 1.7 per cent in the control group. For chronic obstructive pulmonary disease, a randomised controlled trial undertaken in Thailand (Noonill et al., 2007) found evidence to support large improvements in

exercise tolerance, quality of life, and satisfaction with care related to community-based group education for people with disabilities and their carers.

Nine studies focused on mental disabilities (schizophrenia, dementia, intellectual impairment). For schizophrenia, a randomised controlled trial (Botha et al., 2010) showed that an assertive community treatment for people with disabilities and their carers in South Africa produced large improvements in clinical status and halved hospitalisations. Another randomised controlled trial in rural China (Ran et al., 2003) found evidence to support psycho-educational family intervention for people with disabilities and their carers in improving compliance 6.7-fold in comparison to controls, and 4-fold lower relapse rates. Another randomised controlled trial undertaken in China showed evidence to support group counselling for people with disabilities and their carers relating to large improvements in clinical status, doubling in compliance, and in decreasing readmissions 3-fold (Zhang et al., 1994b). A further non-randomised controlled trial undertaken in China found little impact of family psychosocial education programme for people with disabilities and their carers in terms of improving disability scores, or reducing relapse or hospitalisation rates (Zhang et al., 1998). A controlled before-after study undertaken in India (Chatterjee et al., 2003) indicated that CBR with a three-tiered service-delivery system for people with disabilities and their carers created a small improvement in clinical outcomes among people with disabilities who were fully compliant compared to controls. Three smallrandomised controlled trials were conducted to assess the effectiveness of home-care programme for people with disabilities and their carers in India (Dias et al., 2008), Russia (Gavrilova et al., 2009), and in Peru (Guerra et al., 2011). Individually, the studies did not show a clear impact of the intervention either for the person with dementia or the carer. However, when pooling data from the three studies (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011), meta-analyses showed evidence for the intervention "Helping Carers to Care" for carers of people with disabilities in improving carers' clinical status and carer's quality of life (physical and social) – but not carers' burden -, but not in improving clinical status and quality of life of people with disabilities. The randomised controlled trial of a home-based intervention for young children with intellectual impairment in Vietnam (Shin et al., 2009) demonstrated little improvement in the child's adaptive behavior.

No economic evaluations meeting the inclusion criteria were found. Only one study (Shin et al., 2009) focused on children as the target for CBR, rather than adults.

A further contribution of our review is with respect to the methodology: designing the search strategy for CBR and disability. Although definitions of both CBR and disability are available in the international literature, their operationalisation was needed. We undertook this process through consulting the international literature for CBR (WHO, 2001; WHO, 2010a; Lukersmith et al., 2013) and disability (WHO & World Bank, 2011) followed by consultations with international experts. This process resulted in operational definitions for CBR and disabilities that were used to

inform a detailed search strategy attempting to cover the complexity of both concepts through the use of appropriate key words and electronic databases and websites.

5.2 OVERALL COMPLETENESS AND APPLICABILITY OF EVIDENCE

The findings from this review must be viewed with caution in light of the complexities in measuring CBR and disability, as well as the methodological constraints of the studies included.

Overall there was fairly consistent evidence for a positive impact of CBR in the lives of people with disabilities. The beneficial results were not always statistically significant, attributable in part to the small sample sizes of some of the studies (Dias et al., 2008; Gavrilova et al., 2009). A broad range of outcomes was covered, including clinical, quality of life and activity/participation measures, use of health resources and effectiveness of CBR was observed across this range. Cost-effectiveness is one of the key determinants of whether there is sufficient evidence for the scaling up of these CBR programmes. Although this review identified some evidence for effectiveness of CBR, none of the studies measured cost.

CBR highlights the need to include up to five key components in programmes in order to best meet the needs of people with disabilities: health, education, livelihood, social, and empowerment. However, all but one of the included studies were classified under the health component in the CBR matrix – either providing information/education/training to people with disabilities and/or family/carer with respect to health or providing home-based care. The final study focused on the education component of the matrix (Shin et al., 2009). Some other aspects were included, but only as minor components of the programme (for example, social participation). This highlights important gaps in our understanding of the impact of CBR on the lives of people with disabilities.

There was also limited coverage of the studies included in terms of which participant groups were investigated. We used a broad definition of disability, and included some categories (stroke, arthritis, schizophrenia) which may be considered as health conditions rather than disabilities. Despite this broad view, there was limited range in the types of client groups included. Most of the studies focused on people with schizophrenia, dementia or stroke. Only one study (Shin et al., 2009) included people with impairment (intellectual disabilities), rather than health conditions. None of the studies specifically included people with sensory impairments (hearing or vision) or who were broadly categorised as having a disability.

CBR was developed as an approach for providing services to people with disabilities in LMIC. However, the geographical coverage of the studies included was very restricted. The majority of the studies were undertaken in Asia, particularly in

China. Only one study (Botha et al., 2010) was included from Africa, and that was from South Africa, despite the large emphasis on implementation of CBR programmes in Africa. Furthermore, only one study (Shin et al., 2009) focused on children as the target for CBR, rather than adults.

Our review therefore highlights the needs for studies that assess the impact of a holistic CBR programme, targeting people with a range of disabilities, and undertaken in Sub-Saharan Africa. This is at odds with current practice of CBR, which emphasises multiple targets for intervention for people with a range of types of disabilities (WHO, 2010a).

5.3 QUALITY OF THE EVIDENCE

The quality of the evidence is mixed. The 10 RCTs were assessed for risk of bias in seven domains (sequence generation, allocation concealment, blinding of participants and personnel, blinding of outcome assessment, incomplete outcome data, selective reporting, and other bias). Due to the lack of information in one or more than one of the seven domains, a final judgement on the risk of bias was not possible in all 10 RCTs. Information on the randomisation was incomplete in four studies (Noonill et al., 2007; Shin et al., 2009; Yu et al., 2009; Zhang et al., 1994b), on blinding of participants and personnel in five studies (Dias et al., 2008; Noonill et al., 2007; Ran et al., 2003; Shin et al., 2009; Zhang et al., 1994b), on blinding of outcome assessment in four studies (Botha et al., 2010; Dias et al., 2008; Noonill et al., 2007; Shin et al., 2009), on incomplete outcome data in four studies (Botha et al., 2010; Dias et al., 2008; Shin et al., 2009; Yu et al., 2009), and on selective reporting in six studies (Botha et al., 2010; Chinchai, Bunyamark & Sirisatayawong, 2010; Guerra et al., 2011; Shin et al., 2009; Yu et al., 2009; Zhang et al., 1994b). Only two studies (Gavrilova et al., 2009; Guerra et al., 2011) reported information on allocation concealment: randomisation was carried out in London so was off-site.

The five non-randomised studies were assessed for risk of bias in five domains (selection bias, study design, confounders, blinding, data collection methods, withdrawals/drop-outs). A final judgement on the risk of bias was possible in all five non-randomised studies, with two as high quality and three as moderate quality studies. The quality against the risk of selection bias was assessed as high in one study (Darmawan et al., 1992) and moderate in all others. The quality against blinding was assessed as weak in one study (Chatterjee et al., 2003) and moderate in all others. The quality against data collection methods was assessed as weak in one study (Darmawan et al., 1992) and high in all others. The quality against withdrawals/drop-outs was assessed as weak in one study (Zhang et al., 1998), moderate in two studies (Chatterjee et al., 2003, Habibzadeh, Gofranipoor & Ahmadi, 2007) and high in the other two (Darmawan et al., 1992; Ozdemir et al., 2001). All studies were assessed of moderate quality against the risk of bias due to the study design, and of high quality against confounders, while acknowledging that

RCT is a more robust study design than non-randomised studies for assessing impact.

The quality of evidence was compromised in several studies by the small sample size, which reduced the power to be able to detect a difference between the intervention and control groups (Dias et al., 2008; Gavrilova et al., 2009; Guerra et al., 2011).

5.4 LIMITATIONS AND POTENTIAL BIASES IN THE REVIEW PROCESS

We attempted to reduce the publication bias not only by searching multiple electronic databases but also by performing supplementary searches (websites searches, contacting authors, snowballing, citation tracking). We also minimised the time lag bias by searching trials repository and contacting authors. In order to reduce the potential for multiple publication bias, we ran the analysis by project rather than by publication. In reality, this was not a necessary precaution, as we did not find duplicate publications on the same study. Location bias was addressed by searching electronic databases and websites specialised not only in high-income countries but also in low- and middle-income countries. We attempted to minimise citation bias by searching the reference list not only of included studies but also of similar literature reviews identified, which list is reported as Appendix 11.7. We tried to reduce the language bias by including studies published not only in English but also in other languages available in the author team (French, Spanish, Portuguese, German, Italian). Although we were not able to screen the full-text of papers in other languages (Chinese, Russian, Turkish, Vietnamese), we reported the full references in Section 7.3 to be screened during future update of the review. We summarised all outcomes reported in the included studies, but we cannot exclude the possibility of outcome reporting bias as certain outcomes collected during the studies may have not been reported in the publications.

One of the key potential criticisms of our review process is in terms of the definition of CBR. We used a broad definition of CBR in order to maximise the limited data available. Consequently, some interventions were included which arguably could be classified as community-based care programmes, rather than CBR. This may have contributed to the emphasis of the health component of the matrix within the eligible studies. Similarly, we used a broad definition of disability and included studies where the client group may be classified as having a health condition rather than a disability (for example, schizophrenia, stroke). Again, this broad definition may have skewed the review towards the inclusion of studies with a health intervention component. However, using a more restrictive definition of CBR or disability would have substantially reduced the pool of eligible publications found during the searches, and despite the broad definition the majority of excluded studies were discarded because their intervention was not defined as CBR.

5.5 AGREEMENTS AND DISAGREEMENTS WITH OTHER STUDIES OR REVIEWS

Establishing an evidence base for the effectiveness of CBR has been difficult (Hartley et al., 2009). Each individual programme is tailored to the specific needs and setting and therefore includes a different focus, different components and different client types. Furthermore, the impact of CBR can be measured in a variety of domains, including participation, quality of life and clinical outcomes. Consequently, the evidence base is qualitatively rich and quantitatively poor and a comprehensive systematic review has not been undertaken previously.

Other studies agree that the vast majority of studies on CBR are descriptive. The most extensive review included 128 articles published between 1978 and 2002, only 10 of which were classified as intervention studies (Finkenflugel, Wolffers & Huijsman, 2005). The author commented on the methodological issues with the intervention studies, and the need for more data, and concluded that "the evidence base for CBR is fragmented and incoherent on almost all aspects of CBR". However, the authors did not assess the overall impact of CBR in their review, nor did they consider the inclusion of different components of the CBR matrix in the programmes studied.

Other reviews have reported more positively on the literature, but were more limited in scope. Velema and colleagues identified 29 reports on rehabilitation in community programmes in LMICs (Velema, Ebenso & Fuzikawa, 2008). There was evidence that these programmes were effective at increasing independence, self-esteem, school attendance, mobility and communication skills, and reducing poverty. The studies were often small, and of 12 studies presenting data on the individual progress of people with disabilities, only four based their conclusions on repeated, before and after assessment using standardised scales.

Studies have also assessed the effectiveness of CBR for specific types of disability. Wiley-Exley (2007) identified 17 intervention studies evaluating community mental health care in LMICs. These interventions improved mental health outcomes and were cost saving (where this was assessed), however, only one of the interventions was described as CBR (Chatterjee et al., 2003). Another review of 11 studies assessing CBR programmes for adults with traumatic brain injury also found some evidence for effectiveness (Evans & Brewis, 2008).

Most of these reviews echoed our findings of methodological concerns with the studies conducted.

6 Authors' Conclusions

6.1 IMPLICATIONS FOR PRACTICE AND POLICY

The evidence on the effectiveness of community-based rehabilitation in low- and middle-income countries suggests that CBR may be effective in improving the clinical outcomes and enhancing functioning and quality of life of the people with disabilities and his/her carer. However the heterogeneity of the interventions and scarcity of good-quality evidence means that we should interpret these patterns with caution.

Physical disability

- Stroke: there is limited evidence from two randomised controlled trials suggesting a large beneficial effect of home health care and rehabilitation on quality of life (Thailand) (Chinchai, Bunyamark & Sirisatayawong, 2010), and a moderate impact of home-based rehabilitation in improving clinical outcomes (China) (Yu et al., 2009). There is also evidence from a controlled before-after study suggesting large improvements in activities of daily living among people receiving planned self-care home-based education (Iran) (Habibzadeh, Gofranipoor & Ahmadi, 2007). In contrast, one non-randomised controlled trial found that CBR was less effective than hospital based rehabilitation (Turkey) (Ozdemir et al., 2001).
- Arthritis: no randomised controlled trial was found, but one interrupted time series study suggested an educational programmes by traditional puppet shadow play improved knowledge about correct performance of activities of daily living by 7.9 per cent (Indonesia) (Darmawan et al., 1992).
- Chronic obstructive pulmonary disease: one randomised controlled trial indicated that community-based group education resulted in large improvements in exercise tolerance, quality of life, and satisfaction with care (Thailand) (Noonill et al., 2007).

Mental disability

- Schizophrenia: there is limited evidence from three randomised controlled trials suggesting assertive community treatment produced

large improvements in clinical status and halved hospitalisations (South Africa) (Botha et al., 2010), psycho-educational family intervention improved compliance 6.7-fold and reduced relapses 4-fold compared to controls (China) (Ran et al., 2003), and group counselling produced large improvements in clinical status, doubling in compliance and reducing relapse or hospitalisation rate (China) (Zhang et al., 1994b). There is also evidence from a non-randomised controlled trial (Zhang et al., 1998) supporting the evidence of group counseling for schizophrenia found in the latter randomised controlled study (China) (Zhang et al., 1994b). One controlled before-after study suggested that community-based rehabilitation with a three-tiered service-delivery system created a small improvement in clinical outcomes among people with disabilities who were fully compliant compared to controls (India) (Chatterjee et al., 2003).

- Dementia: The 10/66 Dementia Research Group undertook the brief carer intervention "Helping Carers to Care" in three settings: Peru (Guerra et al., 2011), India (Dias et al., 2008) and Russia (Gavrilova et al., 2009). Individually, the three randomised controlled trials did not show a clear impact of the intervention, but the small sample size of the studies limited the power to detect an impact. However, meta-analyses suggested the intervention "Helping Carers to Care" improved carers' clinical status and carer's quality of life (physical and social) – but not carers' burden -, but did not improved clinical status and quality of life of people with disabilities.
- Intellectual impairment: one randomised controlled trial demonstrated little improvement in the chld's adaptive behaviour after parents' education (Vietnam) (Shin et al., 2009).

No evidence on cost-effectiveness was found.

6.2 IMPLICATIONS FOR RESEARCH

Evaluations and economic evaluations of community-based rehabilitation for people with disabilities in low- and middle-income countries are difficult due to the complexity of CBR, the variety of disabilities, and the additional challenge in undertaking research in low- and middle-income countries.

Notwithstanding these challenges, more well-designed and reported RCTs which are sufficiently powered are needed to build a stronger evidence-base. This would allow pooling results for meta-analysis.

Evaluations focusing on all different components of the CBR matrix, and not only the health component, are necessary to capture the impact of all aspects of CBR.

The impact of CBR needs to be assessed for a broader client group, beyond those with specific types of physical and mental disabilities. Furthermore, the impact of CBR needs to be explored for children with disabilities and not only adults or elderly people. More studies are needed to evaluate the effectiveness of CBR within Africa.

A common clear definition of both disability and CBR need to be adopted in future studies.

Economic evaluation is needed to supplement and strengthen the evidence on effectiveness in order to understand whether resource allocation is appropriate in resource limited low- and middle-income countries.

7 References

7.1 REFERENCES TO INCLUDED STUDIES

Botha, U.A., Koen, L., Joska, J.A., Hering, L.M., & Oosthuizen, P.P. (2010). Assessing the efficacy of a modified assertive community-based treatment programme in a developing country. *BMC Psychiatry,* 73. [PubMed: doi: 10.1186/1471-244X-10-73]

Chatterjee, S., Patel, V., Chatterjee, A., & Weiss H.A. (2003). Evaluation of a community-based rehabilitation model for chronic schizophrenia in rural India. *British Journal of Psychiatry*, 182, 57-62.

Chinchai, P., Bunyamark, T., & Sirisatayawong, P. (2010). Effects of caregiver education in stroke rehabilitation on the quality of life of stroke survivors. *WFOT Bulletin,* 61, 56-63.

Darmawan, J., Muirden, K.D., Wigley, R.D., & Valkenburg, H.A. (1992). Arthritis community education by leather puppet (wayang kulit) shadow play in rural Indonesia (Java). *Rheumatology international*, 12(3), 97-101.

Dias, A., Dewey, M.E, D'Souza, J., Dhume, R., Motghare, D.D., Shaji, K.S., Menon, R., Prince, M., & Patel, V. (2008). The effectiveness of a home care program for supporting caregivers of persons with dementia in developing countries: A randomised controlled trial from Goa, India. *PLoS ONE,* 3(6), e2333.

Gavrilova, S.I., Ferri, C.P., Mikhaylova, N., Sokolova, O., Banerjee, S., & Prince, M. (2009). Helping carers to care: the 10/66 dementia research group's randomized control trial of a caregiver intervention in Russia International. *Journal of Geriatric Psychiatry*, 24(4), 347-354.

Guerra, M., Ferri, C.P., Fonsec, M., Banerjee, S., & Prince, M. (2011). Helping carers to care: the 10/66 Dementia Research Group's randomized control trial of a caregiver intervention in Peru. [Ajudando os cuidadores a cuidar: uma prova clinica randomizada da intervencao para o cuidador desenvolvida pelo grupo 10/66 no Peru]. *Revista Brasileira de Psiquiatria,* 33(1), 47-54.

Habibzadeh, H., Gofranipoor, F., & Ahmadi, F. (2007). A study on the effect of self care plan on activity daily living status in patient with cerebro vascular accident. *Journal of Medical Sciences*, 7(1), 126-130.

Noonill, N., Sindhu, S., Hanucharurnkul, S., & Suwonnaroop, N. (2007). An integrated approach to coordination of community resources improves health outcomes and satisfaction in care of Thai patients with COPD. *Thai Journal of Nursing Research,* 11(2), 118-131.

Ozdemir, F., Birtane, M., Tabatabaei, R., Kokino, S., & Ekuklu, G. (2001). Comparing stroke rehabilitation outcomes between acute inpatient and non intense home settings. *Archives of Physical Medicine & Rehabilitation*, 82(10), 1375-1379.

Ran, M.S., Xiang, M.Z., Chan, C.L.W., Leff, J., Simpson, P., Huang, M.S., Shan, Y.H., & Li, S.G. (2003). Effectiveness of psychoeducational intervention for rural Chinese families experiencing schizophrenia - a randomised controlled trial. *Social Psychiatry & Psychiatric Epidemiology*, 38(2), 69-75.

Shin, J.Y., Nhan, N.V., Lee, S.B., Crittenden, K.S., Flory, M., & Hong, H.T.D. (2009). The effects of a home-based intervention for young children with intellectual disabilities in Vietnam. *Journal of Intellectual Disability Research*, 53(4), 339-352.

Yu, J.J., Hu, Y.S., Wu, Y., Chen, W.H., Zhu, Y.L., Cui, X., Lu, W.B., Qi, Q., Qu, P.Y., & Shen, X.H. (2009). The effects of community-based rehabilitation on stroke patients in China: a single-blind, randomized controlled multicentre trial. *Clinical Rehabilitation*, 23(5), 408-417.

Zhang, M., Wang, M., Li, J., & Phillips, M.R. (1994). Randomised-control trial of family intervention for 78 first-episode male schizophrenic patients An 18-month study in Suzhou, Jiangsu. *British Journal of Psychiatry Supplement*, 24, 96-102.

Zhang, M.Y., Zhu, Z.Q., Yan, H.Q., Song, C.C., & Liu, F.Z. (1998). Group psychosocial education for relatives of schizophrenic patients in community: A three-year experience Hong Kong. *Journal of Psychiatry*, 8(1), 33-37.

7.2 REFERENCES TO EXCLUDED STUDIES

Acharya, K.M. (2002). Leprosy eradication and CBR in urban areas of Jamnagar District (Gujarat State)-an overview of 23 years. *Indian Journal of Leprosy*, 74(3), 281-3.

Altin Ertekin, O., Gelecek, N., Yildirim, Y., & Akdal, G. (2009). Supervised versus home physiotherapy outcomes in stroke patients with unilateral visual neglect: A randomized controlled follow-up study. *Journal of Neurological Sciences,* 26(3), 325-334.

Baltussen, R., & Smith, A. (2009). Cost-effectiveness of selected interventions for hearing impairment in Africa and Asia: a mathematical modelling approach. *International Journal of Audiology,* 48(3), 144-158.

Berman, P.A., & Sisler, D.G. (1984). Rehabilitation of the rural blind: an economic assessment of a project in the Philippines, 1978-198. New York, US: Helen Keller International.

Biggeri, M., Deepak, S., Mauro, V., Trani, J.F., Kumar, J., Ramasamy, P., Bakhshi, P., & Giriyappa, R. (2012). *Impact of CBR Impact of community-based rehabilitation programme in Karnataka India.* Bologna, Italy: Italian Association Amici di Raoul Follereau (AIFO).

Bravo, M.I., & García Codocedo, C. (2006). Community-based rehabilitation (CBR) [Spanish]. *Kinesiologia,* 25(4), 35-38.

Breen, A., Swartz, L., Flisher, A.J., Joska, J.A., Corrigall, J., Plaatjies, L., & McDonald, D.A. (2007). Experience of mental disorder in the context of basic service reforms: The impact on caregiving environments in South Africa. *International Journal of Environmental Health Research*, 17(5), 327-334.

Caglar, A.T., Gurses, H.N., Mutluay, F.K., & Kiziltan, G. (2005). Effects of home exercises on motor performance in patients with Parkinson's disease. *Clinical Rehabilitation,* 19(8), 870-877.

Chaipinyo, K., & Karoonsupcharoen, O. (2009). No difference between home-based strength training and home-based balance training on pain in patients with knee osteoarthritis: a randomised trial. *Australian Journal of Physiotherapy*, 55(1), 25-30.

Chiu, L., Shyu, W., & Chen, T.J. (1997). A cost-effectiveness analysis of home care and community-based nursing homes for stroke patients and their families. *Journal of Advanced Nursing*, 26(5), 872-878.

Congdon, N., Li, L., Zhang, M., Yang, A., Gao, Y., Griffiths, S., Wu, J., Sharma, A., & Lam, D.S. (2011). Randomized, controlled trial of an educational intervention to promote spectacle use in rural China: the see well to learn well study. *Ophthalmology,* 118(12), 2342-2350.

Das, S., Saravanan, B., Karunakaran, K.P., Manoranjitham, S., Ezhilarasu, P., & Jacob, K.S. (2006). Effect of a structured educational intervention on explanatory models of relatives of patients with schizophrenia: randomised controlled trial. *The British Journal of Psychiatry,* 188, 286-287.

Dolan, C., Concha, M.E., & Nyathi, E. (1995). Community rehabilitation workers Do they offer hope to disabled people in South-Africa rural-areas. *International Journal of Rehabilitation Research*, 18(3), 187-200.

Finkenflugel, H.J. (1991). Help for the disabled: in hospital and at home. *World Health Forum*, 12(3), 325-330.

Gandi, J.C., & Wai, P.S. (2010). Impact of Partnership in Coping in mental health recovery: an experimental study at the Federal Neuro-Psychiatric Hospital, Kaduna. *International journal of mental health nursing,* 19(5), 322-330.

Goldbart, J., & Mukherjee, S. (2001). A comparative evaluation of two models of service delivery for families with a child with cerebral palsy International. *Journal of Rehabilitation Research,* 24(4), 325-328.

Grossmann, H. (2010). Community-oriented rehabilitation (COR) A model to promote the rights of children with disabilities in Tanzania. *South African Journal of Occupational Therapy,* 40(S), 9-11.

Guo, X., Zhai, J., Liu, Z., Fang, M., Wang, B., Wang, C., Hu, B., Sun, X., Lv, L., Lu, Z., Ma, C., He, X., Guo, T., Xie, S., Wu, R., Xue, Z., Chen, J., Twamley, E.W., Jin, H., & Zhao, J. (2010). Effect of antipsychotic medication alone vs combined with psychosocial intervention on outcomes of early-stage schizophrenia: A randomized, 1-year study. *Archives of General Psychiatry*, 67(9), 895-904.

Gutièrrez-Maldonado, J., Caqueo-Urìzar, A., & Ferrer-Garcìa, M. (2009). Effects of a psychoeducational intervention program on the attitudes and health perceptions of relatives of patients with schizophrenia. *Social Psychiatry and Psychiatric Epidemiology*, 44(5), 343-348.

Hai, T.T. (1993). Community-based rehabilitation programme. *Tropical & Geographical Medicine,* 45(5), 216-217.

Hamblin, T., & Musa, I. (2006). Family-based rehabilitation for children with cerebral palsy: a Kolkata project. *Physiotherapy*, 92(1), 55-60.

Huang, Y., & Ren, J. (2010). Cost-benefit analysis of a community-based stroke prevention program in Bao Shan District, Shanghai, China. *International Journal of Collaborative Research on Internal Medicine and Public Health*, 2(9), 307-316.

Javadpour, A., Ahmadzadeh, L., & Bahredar, M.J. (2009). An educative support group for female family caregivers Impact on caregivers psychological distress and patient's neuropsychiatry symptoms. *International Journal of Geriatric Psychiatry*, 24(5), 469-471.

Javed, M.A. (1993). Argotherapy: new concept of rehabilitation for chronic schizophrenics in Pakistan. *Journal of the Pakistan Medical Association*, 43(12), 251-253.

Jitapunkul, S., Bunnag, S., & Ebrahim, S. (1998). Effectiveness and cost analysis of community-based rehabilitation service in Bangkok. *Journal of the Medical Association of Thailand,* 81(8), 572-578.

Kanungpairn, T., Sitthimongkol, Y., Wattanapailin, A., & Klainin, P. (2007). Effects of a symptom management program on auditory hallucinations in Thai outpatients with a diagnosis of schizophrenia: a pilot study. *Nursing & Health Sciences*, 9(1), 34-39.

Kulhara, P., Chakrabarti, S., Avasthi, A., Sharma, A., & Sharma, S. (2009). Psychoeducational intervention for caregivers of Indian patients with schizophrenia: a randomised-controlled trial Acta. *Psychiatrica Scandinavica*, 119(6), 472-483.

Kuptniratsaikul, V., Tosayanonda, O., Nilganuwong, S., & Thamalikitkul, V. (2002). The efficacy of a muscle exercise program to improve functional performance of the knee in patients with osteoarthritis. *Journal of the Medical Association of Thailand*, 85(1), 33-40.

Lara-Muñoz, M.C., Robles-García, R., Orozco, R., Saltijeral Méndez, M.T., Medina-Mora, M.E., & Chisholm, D. (2010). Cost effectiveness study of schizophrenia a management in Mexico [Spanish]. *Salud Mental*, 33(3), 211-218.

Latimer, E.A. (2008). Individual placement and support programme increases rates of obtaining employment in people with severe mental illness. *Evidence Based Mental Health,* 11(2), 52.

Luo, K., & Yu, D. (1994). Enterprise-based sheltered workshops in Nanjing. A new model for the community rehabilitation of mentally ill workers. *British Journal of Psychiatry*, Supplement(24), 89-95.

Makharadze, T., Kitiashvili, A., & Bricout, J.C. (2010). Community-based day-care services for people with intellectual disabilities in Georgia: a step towards their social integration. *Journal of Intellectual Disabilities*, 14(4), 289-30.

Maneesakorn, S., Robson, D., Gournay, K., & Gray, R. (2007). An RCT of adherence therapy for people with schizophrenia in Chiang Mai, Thailand. *Journal of Clinical Nursing,* 16(7), 1302-1312.

McConachie, H., Huq, S., Munir, S., Ferdous, S., Zaman, S., & Khan, N.Z. (2002). A randomized controlled trial of alternative modes of service provision to young children with cerebral palsy in Bangladesh. *Journal of Pediatrics*, 137(6), 769-776.

Methapatara, W., & Srisurapanont, M. (2011). Pedometer walking plus motivational interviewing program for Thai schizophrenic patients with obesity or overweight: a 12-week, randomized, controlled trial. *Psychiatry and Clinical Neurosciences*, 65(4), 374-380.

Narayan, S. (1990). Community based rehabilitation for the mentally handicapped: a model. *Indian Journal of Social Work*, L1(1), 157-164.

O'Toole, B. (1988). A Community-Based Rehabilitation Programme for pre-school disabled children in Guyana. *International Journal of Rehabilitation Research*, 11(4), 323-334.

O'Toole, B. (1990). *'Step by Step'. A community based rehabilitation project with disabled children in Guyana*. Paris, France: United Nations Educational, Scientific and Cultural Organization (UNESCO). Available at http://unesdoc.unesco.org/images/0008/000884/088487mb.pdf (accessed on 19 July 2014).

O'Toole, B. (1991). Community involvement in rehabilitation programmes for disabled children: a Guyanese experience. *Community Development Journal*, 26(3), 202-209.

O'Toole, B., & Maison-Halls, G. (1991). Community-based rehabilitation and development: disabled children in Guyana. *Development In Practice*, 4(1), 23-24.

Ojha, K., Gupta, S., Dhingra, N., & Menon, D. (1993). Public awareness towards mental handicap: within a CBR framework. *Indian Journal of Disability & Rehabilitation,* 17(1), 37-51.

Olusanya, B.O., Emokpae, A., Renner, J.K., & Wirz, S.L. (2009). Costs and performance of early hearing detection programmes in Lagos, Nigeria. *Transactions of the Royal Society of Tropical Medicine and Hygiene,* 103(2), 179-186.

Oupra, R., Griffiths, R., Pryor, J., & Mott, S. (2010). Effectiveness of supportive educative learning programme on the level of strain experienced by caregivers of stroke patients in Thailand. *Health and Social Care in the Community*, 18(1), 10-20.

Pai, S, & Roberts, E.J. (1983). Follow-up study of schizophrenic patients initially treated with home care. *British Journal of Psychiatry*, 143, 447-450.

Pan, L., Mellor, D., McCabe, M., Hill, B., Tan, W., & Xu, Y. (2011). An evaluation of the shanghai mental health service schizophrenia rehabilitation program. *American Journal of Psychiatric Rehabilitation*, 14(4), 287-306.

Pati, B. (2011). Inclusive education of children with intellectual disability under education for all (Sarva Shiksha Abhiyan) programme in Orissa. *Social Science International,* 27(1), 123-130.

Patra, S., Kar, N., Mishra, A., & Singh, S.P. (2011). Single-session psychoeducation in schizophrenia: a feasibility and effectiveness study in an Indian patient population. *Clinical Schizophrenia & Related Psychoses*, 5(2), 107-108.

Pavão, S.L., Silva, F.P.S., & Rocha, N.A.C. (2011). The effect of in-home instruction on the functional performance of children with special needs [Portugueses]. *Revista Motricidade*, 7(1), 21-29.

Penny, N., Zulianello, R., Dreise, M., & Steenbeek, M. (2007). Community-based rehabilitation and orthopaedic surgery for children with motor impairment in an African context. *Disability & Rehabilitation*, 29(11-12), 839-843.

Perón, C., & Nince, M.V. (2004). Experience on the community based rehabilitation in a Family Health Unit in the municipality of Diamantino (MT) [Portuguese]. *Divulgação em Saúde para Debate*, 30, 103-106.

Petersen, I., Lund, C., Bhana, A., & Flisher, A.J. (2012). Mental Health and Poverty Research Programme Consortium. A task shifting approach to primary mental health care for adults in South Africa: human resource requirements and costs for rural settings. *Health Policy & Planning*, 27(1), 42-51.

Powell, C., & Grantham-McGregor, S. (1989). Home visiting of varying frequency and child development. *Pediatrics,* 84(1), 157-164.

Qutteina, M., Nilsson, A., & Harami, G. (2009). Impact of the CBR Program in Palestine on persons with intellectual disabilities. *Journal of Policy and Practice in Intellectual Disabilities*, 6(2), 142.

Rana, A.K., Lundborg, C.S., Wahlin, A., Ahmed, S.M., & Kabir, Z.N. (2008). The impact of health education in managing self-reported arthritis-related illness among elderly persons in rural Bangladesh. *Health Education Research*, 23(1), 94-105.

Rana, A., Kabir, Z., Lundborg, C., & Wahlin, A. (2010). Health education improves both arthritis-related illness and self-rated health: An intervention study among older people in rural Bangladesh. *Public Health*, 124(12), 705-712.

Rao, P.H., Venkatesan, S., & Vepuri, V.G. (1993). Community-Based Rehabilitation Services for People with Disabilities: An Experimental Study. *International Journal of Rehabilitation Research*, 16(3), 245-250.

Rawiworrakul, T., Sirapo-ngam, Y., Davis, A.H.T., Malathum, P., Kulthanan, T., & Vorapongsathorn, T. (2007). A community-based exercise program promotes self-efficacy for exercise among Thai women with osteoarthritis of the knee. *Thai Journal of Nursing Research*, 11(2), 132-150.

Russell, P.S.S., John, J.K., & Lakshmanan, J.L. (1999). Family intervention for intellectually disabled children Randomised controlled trial. British Journal of Psychiatry, 174, 254-258.

Sahebalzamani, M., Aliloo, L., & Shakibi, A. (2009). The efficacy of self-care education on rehabilitation of stroke patients. *Saudi Medical Journal*, 30(4), 550-554.

Sepúlveda Jara, R. (1994). A intracommunitary model of rehabilitation for handicapped persons due to psychiatric cause [Spanish]. *Cuadernos médico-sociales (Santiago de Chile)*, 135(3), 25-29.

Srinivasa Murthy, R., Kishore Kumar, K.V., Chisholm, D., Thomas, T., Sekar, K., & Chandrashekari, C.R. (2005). Community outreach for untreated schizophrenia in rural India: a follow-up study of symptoms, disability, family burden and costs. *Psychological Medicine*, 35(3), 341-351.

Sritipsukho, P., Riewpaiboon, A., Chaiyawat, P., & Kulkantrakorn, K. (2010). Cost-effectiveness analysis of home rehabilitation programs for Thai stroke patients. *Journal of the Medical Association of Thailand*, 93(Suppl 7), S262-270.

Sutter, E., & Maphorogo, S. (1996). Integration of community-based trachoma control in primary health care in South Africa [French]. *Revue internationale du trachome et de pathologie oculaire tropicale et subtropicale et de santé publique*, 73, 19-50.

Suwanwela, N.C., Phanthumchinda, K., Limtongkul, S., & Suvanprakorn P. (2002). Thai Red Cross Volunteers Bureau. Comparison of short (3-day) hospitalization followed by home care treatment and conventional (10-day) hospitalization for acute ischemic stroke. *Cerebrovascular diseases (Basel, Switzerland)*, 13(4), 267-271.

Tariah, H.A., Almalty, A., Sbeih, Z., Al-Oraibi, S., Bernhardt, J., & Rowe, V. (2010). Constraint induced movement therapy for stroke survivors in Jordon: a home-based model. *International Journal of Therapy & Rehabilitation*, 17(12), 638-646.

Thorburn, M.J. (1992). Parent evaluation of community based rehabilitation in Jamaica. *International Journal of Rehabilitation Research*, 15(2), 170-176.

Unger, M., Faure, M., & Frieg, A. (2006). Strength training in adolescent learners with cerebral palsy: a randomized controlled trial. *Clinical Rehabilitation*, 20(6), 469-477.

Uys, L. (1994). An evaluation of the implementation and the effectiveness of two treatment and organizational strategies in the rehabilitation of long-term psychiatric outpatients. *Curationis*, 17(4), 11-19.

Uys, L., Phillips, N., & Zulu, R.N. (1997). Vocational rehabilitation in rural South Africa. *Psychiatric Rehabilitation Journal*, 21(1), 31-39.

Valencia, M., Rascon, M.L., Juarez, F., & Murow, E. (2007). A psychosocial skills training approach in Mexican out-patients with schizophrenia. *Psychological Medicine*, 37(10), 1393-1402.

WHO, & UNHCR. (1996). *Equal opportunities for all: a community-based rehabilitation project for refugees, Kampala, Uganda, 23-27 September 1996*. Geneva, Switzerland: World Health Organization & United Nations High Commissioner for Refugees. Available at http://whqlibdoc.who.int/hq/1996/NAD_UNHCR_WHO_RHB.9.pdf (accessed on 19 July 2014).

Wortmann, M. (2011). An intervention tool for lower and middle-income countries: 'Helping carers to care'. *Alzheimer's & Dementia,* 7(4), S493.

Xiang, Y.T., Weng, Y.Z., Li, W.Y., Gao, L., Chen, G.L., Xie, L., Chang, Y.L., Tang, W.K., & Ungvari, G.S. (2006). Training patients with schizophrenia with the community re-entry module: a controlled study. *Social Psychiatry & Psychiatric Epidemiology,* 41(6), 464-469.

Xiang, Y.T., Weng, Y.Z., Li, W.Y., Gao, L., Chen, G.L., Xie, L., Chang, Y.L., Tang, W.K., & Ungvari, G.S. (2007). Efficacy of the Community Re-Entry Module for patients with schizophrenia in Beijing, China: outcome at 2-year follow-up. *British Journal of Psychiatry*, 190, 49-56.

Xiong, W., Phillips, M.R., Hu, X., Wang, R., Dai, Q., Kleinman, J., Kleinman, A. (1994). Family-based intervention for schizophrenic patients in China. A randomised controlled trial. *British Journal of Psychiatry*, 165(2), 239-247.

Zavradashvili, N., Donisi, V., Grigoletti, L., Pertile, R., Gelashvili, K., Eliashvili, M., & Amaddeo, F. (2010). Is the implementation of assertive community treatment in a low-income country feasible? The experience of Tbilisi, Georgia. *Social Psychiatry and Psychiatric Epidemiology,* 45(8), 779-783.

Zhang, M., Yan, H., Yao, C., Ye, J, & co-authors. (1993). Effectiveness of psychoeducation of relatives of schizophrenic patients: A prospective cohort study in five cities of China. *International Journal of Mental Health*, 22(1), 47-59.

Zhang, M., Yan, H., & Phillips, M.R. (1994). Community-based psychiatric rehabilitation in Shanghai. Facilities, services, outcome, and culture-specific characteristics. *British Journal of Psychiatry*, Supplement(24), 70-79.

7.3 REFERENCES TO STUDIES AWAITING CLASSIFICATION

Al Wazna, T.H. (1999). Rehabilitation of persons with dementia in an institute and community. *Neurosciences*, 4(3), 182-183.

Anonymous. (2009). Title unavailable [Chinese]. *Chinese Journal of Rehabilitation Medicine,* 24(11), 1021-1023.

Calis, M., Turgut, A.O., Kirnap, M., Demir, H., & Yaman, N. (2004). The comparison of hospital-based rehabilitation programme and home-based exercise programme in hemiplegic patients [Turkish]. *Turkiye Fiziksel Tip ve Rehabilitasyon Dergisi,* 50(6), 14-17.

Chen, X.F. (2006). Effect of community-based-rehabilitation on activities of daily life and cognitive function in stroke patients [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 10(32), 4-6.

Contreras Briceño, N. (1991). Community base rehabilitation and effectiveness in the urban area from Caracas [Spanish]. Caracas, Venezuela: n.a.

Cui, X., Zhou, C., Hu, Y., Wu, Y., Qu, P., Ni, H., Zeng, H., Huang, C., Shi, J., & Zhao, J. (2009). Effect of acupuncture combined with rehabilitation therapy to improve comprehensive function among patients with stroke in communities [Chinese]. *Chinese Journal of General Practitioners*, 8(11), 789-791.

Feng, Z., Zhang, H., & Hu, Y. (2002). Efficacy study on familial rehabilitation nursing of cerebral apoplexy patients in community [Chinese]. *Chinese Nursing Research*, 16(11), 627-629.

Feng, Z., Zhang, H., Hu, Y., Wang, B., Qian, X., & Lu, H. (2003). The affection of home-based rehabilitation nursing intervention on motor function of daily living in patients with stroke [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 7(5), 730-731.

Filatov, V.I. (1980). Home rehabilitation of the disabled after bilateral amputation of the upper extremities [Russian]. *Ortopediia Travmatologiia i Protezirovanie*, 2, 49-52.

He, J.Y., & Long, R.F. (2005). Effects of social occupation technique exercises on the social functional recovery of rural schizophrenic patients [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 9(8), 48-50.

Hong, Y.R. (1997). Home care of the visually disabled patient [Chinese]. *Chinese Journal of Nursing*, 632(7), 394-396.

Hu, H., Tang, M.N., Ma, C., Miao, G.D., Hu, W.S., & Zheng, H.B. (2006). Evaluation on the effects of community management mode in improving the quality of life in patients with dementia [Chinese]. *Chinese Journal of Clinical Rehabilitation,* 10(14), 3-6.

Huang, B. (2003). The effect of community of rehabilitation on motor function and ability of daily life of patients with stroke [Chinese]. *Chinese Journal of Clinical Rehabilitation,* 7(5), 850.

Huang, M., & Shi, Y.B. (2004). Effect of family intervention on rehabilitation of patients with schizophrenia [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 8(15), 2818-2819.

Jara Atencia, J. (1997). Rehabilitation based on the community: care model in indigenous communities [Spanish]. Juliaca, Peru: s.n.

Li, S., Wu, H.R., & Chang, G.S. (2011). Family positive reinforcement therapy for schizophrenic patients [Chinese]. *Journal of Clinical Rehabilitative Tissue Engineering Research,* 11(34), 6823-3826.

Liu, S., Ni, C., Han, R., Li, Z., Sun, H., Gao, S., & Wu. Community based rehabilitation of cognitive deficits in stroke patients [Chinese]. *Chinese Journal of Physical Medicine and Rehabilitation,* 7(5), 734-735, 745.

Murphy, C.F.B. (2008). Development of software for auditory training and application in children with dyslexia [Portuguese]. São Paulo, Brazil: s.n.

Qi, S., Yin, L., Sun, S., Wu, Y., Wu, J., Qi, C., Fan, R., Zheng, Y., & Yu, Y. (2009). Supplementing the effects of a stroke unit with community health services for stroke patients [Chinese]. *Chinese Journal of Physical Medicine and Rehabilitation,* 31(11), 744-747.

Saren, T., Xiang, Y., Weng, Y., & Feng, Y. (2003). Social skill training for rehabilitating social skill disability of schizophrenics in the community [Chinese]. *Journal of Clinical Rehabilitation*, 7(5), 65-68.

Shen, Y.C. (1985). Socio-familial participation in the prevention and treatment of psychotic disorders: a pilot study in Haidian District of Beijing [Chinese]. *Chinese Journal of Neurology & Psychiatry*, 18(2), 65-68.

Sun, L.H., Li, X.Z., Yuan, L.J., & Zhang, Y.L. (2005). Differences of curative efficacy, relapse rate and cost between female patients with chronic schizophrenia under community-based rehabilitation and inpatient care [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 9(24), 28-30.

Tan, B., Xiang, E.P., & He, Y.F. (2009). Effect of community prevention and treatment in patients with schizophrenia and their family economic burden [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 9(28), 24-26.

Tran Trong, H. (2005). Evaluating the quality of making orthotics and protheses by appropriate technology in community-based rehabilitation program in Vietnam [Vietnamese]. *Journal of Practical Medicine*, 0(12), 46-48.

U, J., Wu, Y., Lu, W., Gao, Y., & Zhang, F. (2011). Evaluation of community rehabilitation program for stroke patients [Chinese]. *Chinese Journal of General Practitioners*, 10(2), 112-114.

Wang, S.C., Zhou, T.X., Zhang, M.Y., & colleagues. (1993). Community-based family intervention for schizophrenic patients [Chinese]. *Shanghai Archives of Psychiatry*, 5, 162-169.

Wang, Y., Du, X., Dong, J., Ding, L., Wang, J., Heng, Q., Jia, Y., Liu, X., Liu, Y., & Yang, Y. (2008). Performance evaluation of community continuous rehabilitation intervention on patients with stroke [Chinese]. *Chinese Journal of Practical Nursing*, 24(30), 1-4.

Wang, J. (2010). Differentiated nursing and effect of patients with lumbar intervertebral disc protrusion [Chinese]. *Chinese Journal of Practical Nursing*, 26(23):14-16.

Wang, Z., Mu, J., & Liu, R. (2010). Community nursing intervention on quality of life in patients with senile dementia [Chinese]. *Modern Preventive Medicine*, 37(5), 840-841.

Wang, F., Mao, F., Wang, F., Jiang, H., Wang, Y., Zhao, Y., Jin, X., & Xu, L. (2011). Effect of community-based rehabilitation training on cognitive disorders of cerebral apoplexy patients [Chinese]. *Chinese Journal of Primary Medicine and Pharmacy*, 18(8), 1014-1016.

Xu, H., Yang, Q., Zhou, Y., Liu, Y., Xie, Y., Tian, F., & Xiao, J. (2003). Effects of community-based comprehensive prevention on incidence and mortality of stroke [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 7(10), 1547-1549.

Yu, J., Hu, Y., Wu, Y., Chen, W., Cui, X., Lu, W., Zhu, Y., Qi, Q., Qu, P., & Shen, X. (1983). Effects of Standardized Community-Based Rehabilitation on Motor Function of Patients with Cerebral Apoplexy [Chinese]. *Chinese Journal of Sports Medicine*, 0, 03.

Yu, J., Hu, Y., Wu, Y., Chen, W., Cui, X., Lu, W., Zhu, Y., Zhu, B., Qi, Q., Qu, P., & Shen, X. (2008). An analysis of the effects of community-based rehabilitation therapy on activity of daily living performance of the Chinese stroke patients: a single blind, randomized, controlled, multicenter trial [Chinese]. *Journal of Physical Medicine and Rehabilitation*, 30(4), 260-264.

Zhang, H., Feng, Z.Y., Hu, Y.S., Wang, B.L., & Qian, X.L. (2003). Effects of home-based rehabilitation nursing intervention on self-care ability of patients after stroke [Chinese]. *Chinese Journal of Clinical Rehabilitation*, 7(28), 3844-3845.

Zhang, Q., Wang, L., Li, X.P., Xu, N., & Huang, W.D. (2011). Effect of the group model intervention on the quality of life in patients with post-stroke hemiplegia in

urban communities [Chinese]. *Chinese Journal of Cerebrovascular Diseases,* 8(10), 518-521.

Zhou, J.F., Xue, Z.Q., Zhang, S.P., & Zhou, H.J. (2008). To evaluate the efficacy of the intervention on the schizophrenia patients in community [Chinese]. *Journal of Environmental & Occupational Medicine*, 25(3), 275-277.

7.4 REFERENCES TO ONGOING STUDIES

Carney, N., Petroni, G., Lujan, S., Ballarini, N., Faguagua, G., Du Coudray, H., & Huddleston, A. (2012). Home-care intervention for pediatric traumatic brain injury in Argentina: Process and methods for a multi-center randomized controlled trial. *Brain Injury*, 26(4-5), 417.

Chatterjee, S., Leese, M., Koschorke, M., McCrone, P., Naik, S., John, S., Dabholkar, H., Goldsmith, K., Balaji, M., Varghese, M., Thara, R., Patel, V., & Thornicroft, G. (2011). Community care for People with Schizophrenia in India group. Collaborative community based care for people and their families living with schizophrenia in India: protocol for a randomised controlled trial. *Trials*, 12, 12.

Wallander, J.L., McClure, E., Biasini, F., Goudar, S.S., Pasha, O., Chomba, E., Shearer, D., Wright, L., Thorsten, V., Chakraborty, H., Dhaded, S.M., Mahantshetti, N.S., Bellad, R.M., Abbasi, Z., Carlo, W., & The Brain-Hit Investigators. (2010). Brain research to ameliorate impaired neurodevelopment: home-based intervention trial (BRAIN-HIT). *BMC Pediatrics*, 10, 27.

7.5 ADDITIONAL REFERENCES

Armijo-Olivo, S., Stiles, C.R., Hagen, N.A., Biondo, P.D., & Cummings, G.G. (2012). Assessment of study quality for systematic reviews: a comparison of the Cochrane Collaboration Risk of Bias Tool and the Effective Public Health Practice Project Quality Assessment tool: methodological research. *Journal of Evaluation in Clinical Practice*, 18(1), 12-18.

Evans, L., & Brewis, C. (2008). The efficacy of community-based rehabilitation programmes for adults with TBI. *International Journal of Therapy and Rehabilitation*, 15(10), 446-458.

Finkenflugel, H. (2004). *Empowered to differ. Stakeholders' influences in community-based rehabilitation.* Rotterdam, Netherlands: Vrije Universiteit. Available at http://dare.ubvu.vu.nl/bitstream/handle/1871/10205/Empowered_to_differ.pdf?sequence=1 (accessed on 29 August 2012).

Finkenflugel, H., Wolffers, I., & Huijsman, R. (2005). The evidence base for community-based rehabilitation: a literature review. *International journal of rehabilitation research*, 28(3), 187-201.

Hartley, S., Finkenflugel, H., Kuipers, P., & Thomas, M. (2009). Community-based rehabilitation: opportunity and challenge. *Lancet,* 374(9704), 1803-1804.

Helander, E., Mendis, P., & Nelson, G. (1980). Training disabled people in the community. An experimental manual on rehabilitation for developing countries. Geneva, Switzerland: World Health Organization.

Helander, E., Mendis, P., Nelson, G., & Goerdt, A. (1989). *Training in the Community for People with Disabilities*. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/disabilities/publications/cbr/training/en/index.html (accessed on 1 June 2012).

Higgins, J.P.T., & Green, S. (editors). (2011). *Cochrane Handbook for Systematic Reviews of Interventions Version 5.1.0 [updated March 2011]*. The Cochrane Collaboration. Available at www.cochrane-handbook.org (accessed on 1 June 2012).

Iemmi, V., Kumar, S.K., Blanchet, K., Gibson, L., Hartley, S., Murthy, G.V.S., Patel, V., Weber, J., & Kuper, H. (2013). *Community-based rehabilitation for people with physical and mental disabilities in low- and middle-income countries*. The Campbell Collaboration. Available at http://www.campbellcollaboration.org/lib/project/244/ (accessed on 1 December 2014).

ILO, UNESCO, & WHO. (2004). CBR. A strategy for rehabilitation, equalization of opportunities, poverty reduction and social inclusion of people with disabilities. Joint Position Paper 2004. Geneva, Switzerland: World Health Organization. Available at http://whqlibdoc.who.int/publications/2004/9241592389_eng.pdf (accessed on 19 July 2014).

Lukersmith, S., Hartley, S., Kuipers, K., Madden, R., Llewellyn, G., & Dune, T. (2013). Community-based rehabilitation (CBR) monitoring and evaluation methods and tools: a literature review. *Disability & Rehabilitation*, 35(23), 1941-1953.

Mayo-Wilson, E., Montgomery, P., & Dennis, J.A. (2008a). *Personal assistance for adults (19-64) with both physical and intellectual impairments*. Cochrane Database of Systematic Reviews, 2. Art. No.: CD006860 DOI:10.1002/14651858.CD006860.pub2.

Mayo-Wilson, E., Montgomery, P., & Dennis, J. (2008b). *Personal assistance for adults (19-64) with both physical and intellectual impairments*. Campbell Systematic Reviews, 2. DOI: 10.4073/csr.2008.2.

Mayo-Wilson, E., Montgomery, P., & Dennis, J.A. (2008c). *Personal assistance for children and adolescents (0-18) with both physical and intellectual impairments*. Cochrane Database of Systematic Reviews, 3. Art. No.: CD006859 DOI:10.1002/14651858.CD006859.pub2.

Mayo-Wilson, E., Montgomery, P., & Dennis, J. (2008d). *Personal assistance for children and adolescents (0-18) with physical impairments*. Campbell Systematic Reviews, 6. DOI: 10.4073/csr.2008.6.

Mayo-Wilson, E., Montgomery, P., & Dennis, J. (2008e). *Personal assistance for children and adolescents (0-18) with intellectual impairments*. Campbell Systematic Reviews, 4. DOI: 10.4073/csr.2008.4.

Meikle, L. (2002). Disability, poverty and development. *World hospitals and health services*, 38(1), 21-33.

Robertson, J., Emerson, E., Hatton, C., & Yasamy, M. (2012). Efficacy of Community-Based Rehabilitation for Children with or at Significant Risk of Intellectual Disabilities in Low- and Middle-Income Countries: A Review. *Journal of Applied Research in Intellectual Disabilities*, 25(2), 143-154.

Schulz, K.F., Chalmers, I., Hayes, R.J., & Altman, D.G (1995). Empirical evidence of bias: Dimensions of methodological quality associated with estimates of treatment effects in controlled trials. *JAMA*, 273(5), 408-12.

UN. (2008). *UN Convention on the Rights of Persons with Disabilities*. New York: United Nations. Available at http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf (accessed on 19 July 2014).

Velema, J.P., Ebenso, B., & Fuzikawa, P.L. (2008). Evidence for the effectiveness of rehabilitation-in-the-community programmes. *Leprosy review*, 79(1), 65-82.

WHO. (1976). *Disability prevention and rehabilitation (No. A29/InfDoc/1.28)*. Geneva, Switzerland: World Health Organization. (Unpublished).

WHO. (1978). *Declaration of Alma-Ata: international conference on primary health care, USSR, 6–12 September 1978*. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/publications/almaata_declaration_en.pdf (accessed on 19 July 2014).

WHO. (1981). Disability prevention and rehabilitation: Report of the WHO expert committee on disability prevention and rehabilitation. Technical Report Series edition. Vol. 668. Geneva, Switzerland: World Health Organization. Available at http://whqlibdoc.who.int/trs/WHO_TRS_668.pdf (accessed on 19 July 2014).

WHO. (2001). *The International Classification of Functioning, Disability and Health*. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/classifications/icf/en/ (accessed on 19 July 2014).

WHO. (2010a). *Community-Based Rehabilitation: CBR Guidelines*. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/disabilities/cbr/guidelines/en/ (accessed on 19 July 2014).

WHO. (2010b). *International Statistical Classification of Diseases and Related Health Problems. 10th Revision*. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/classifications/icd/en/ (accessed on 19 July 2014).

WHO, & World Bank. (2011). *World Report on Disability*. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/disabilities/world_report/2011/en/ (accessed on 19 July 2014).

Wiley-Exley, E. (2007). Evaluations of community mental health care in low- and middle-income countries: a 10-year review of the literature. *Social science & medicine*, 64(6), 1231-1241.

Wilson, D.B. (2015). *Practical Meta-Analysis Effect Size Calculator*. Oslo, Norway: The Campbell Collaboration. Available at http://www.campbellcollaboration.org/escalc/html/EffectSizeCalculator-Home.php (accessed on 15 March 2015).

World Bank. (2012). *World Bank Atlas Method*. Washington DC, US: World Bank. Available at http://data.worldbank.org/about/country-classifications (accessed on 6 February 2012).

8 Information About This Review

8.1 REVIEW AUTHORS

Lead review author:

The lead author is the person who develops and co-ordinates the review team, discusses and assigns roles for individual members of the review team, liaises with the editorial base and takes responsibility for the on-going updates of the review.

Name:	Valentina Iemmi
Title:	Ms
Affiliation:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine/LSE Health and Social Care, London School of Economics and Political Science
Address:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	Valentina.Iemmi@Lshtm.ac.uk

Co-author(s): (There should be at least one co-author)

Name:	Lorna Gibson
Title:	
Affiliation:	London School of Hygiene and Tropical Medicine, London, UK
Address:	London School of Hygiene and Tropical Medicine, 15-17 Tavistock Place
City, State, Province or County:	London
Postal Code:	WC1H 9SH

Country:	United Kingdom
Phone:	
Mobile:	
Email:	Lorna.Gibson@Lshtm.ac.uk
Name:	Karl Blanchet
Title:	Dr
Affiliation:	International Centre for Eye Health, London School of Hygiene & Tropical Medicine
Address:	International Centre for Eye Health, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	Karl.Blanchet@Lshtm.ac.uk
Name:	K Suresh Kumar
Title:	Mr
Affiliation:	Clinical Research Department, London School of Hygiene and Tropical Medicine
Address:	Clinical Research Department, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	Suresh.Kumar@Lshtm.ac.uk
Name:	Santosh Rath
Title:	Dr
Affiliation:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine/The George Institute for Global Health, University of Oxford
Address:	Nuffield Department of Population Health, University of Oxford, Richard Doll Building, Old Road Campus, Roosevelt Drive
City, State, Province or County:	Oxford
Postal Code:	OX3 7LF
Country:	United Kingdom

Phone:	
Mobile:	
Email:	Santosh.Rath@georgeinstitute.ox.ac.uk
Name:	Sally Hartley
Title:	
Affiliation:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine
Address:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	sallydianehartley@gmail.com
Name:	Gudlavalleti VS Murthy
Title:	Dr
Affiliation:	Indian Institute of Public Health
Address:	
City, State, Province or County:	Hyderabad
Postal Code:	
Country:	India
Phone:	
Mobile:	
Email:	GVS.Murthy@Lshtm.ac.uk
Name:	Vikram Patel
Title:	Professor
Affiliation:	Centre for Global Mental Health, London School of Hygiene & Tropical Medicine
Address:	Centre for Global Mental Health, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	Vikram.Patel@Lshtm.ac.uk

Name:	Joerg Weber
Title:	Mr
Affiliation:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine
Address:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	Joerg.G.Weber@Lshtm.ac.uk
Name:	Hannah Kuper
Title:	Dr
Affiliation:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine
Address:	International Centre for Evidence on Disability, London School of Hygiene & Tropical Medicine, Keppel Street
City, State, Province or County:	London
Postal Code:	WC1E 7HT
Country:	United Kingdom
Phone:	
Mobile:	
Email:	Hannah.Kuper@Lshtm.ac.uk

Duplicate the Co-Author table as necessary to include all co-authors.

8.2 ROLES AND RESPONSIBILITIES

Please give brief description of content and methodological expertise within the review team. The recommended optimal review team composition includes at least one person on the review team who has content expertise, at least one person who has methodological expertise and at least one person who has statistical expertise. It is also recommended to have one person with information retrieval expertise.

Who is responsible for the below areas? Please list their names:

- Content:
- Systematic review methods:
- Statistical analysis:

- Information retrieval:

8.3 SOURCES OF SUPPORT

This review was supported by a grant from the International Initiative for Impact Evaluation (3ie).

We thank the Campbell Collaboration (International Development Coordinating Group) for assistance throughout the review process.

The authors of the review would like to thank Chapal Khasnabis (World Health Organization), Elena Schmidt (Sightsavers), Philippe Chervin (International Foundation of Applied Disability Research), Richard Wormald (London School of Hygiene and Tropical Medicine), Susie Miles (Institute of Education, Manchester), Sue Lukersmith (University of Sydney), Harry Finkenflügel and all the experts and authors we contacted for their valuable support, and Alejandra Hernandez for help with translations.

8.4 DECLARATIONS OF INTEREST

Professor Patel has a Wellcome Trust grant for a randomised controlled trial for a CBR intervention for schizophrenia in India. Several members of the group have previously undertaken systematic reviews on related subjects but not on this particular topic. There are no further conflicts of interest.

8.5 PLANS FOR UPDATING THE REVIEW

In future updates of this review, only RCTs will be eligible for inclusion. This is supported by the reasonable number of completed RCT (10) and ongoing RCT (three) identified by this review.

8.6 AUTHOR DECLARATION

Authors' responsibilities

By completing this form, you accept responsibility for maintaining the review in light of new evidence, comments and criticisms, and other developments, and updating the review at least once every five years, or, if requested, transferring responsibility for maintaining the review to others as agreed with the Coordinating Group. If an update is not submitted according to agreed plans, or if we are unable to contact you for an extended period, the relevant Coordinating Group has the right to propose the update to alternative authors.

Publication in the Campbell Library

The Campbell Collaboration places no restrictions on publication of the findings of a Campbell systematic review in a more abbreviated form as a journal article either before or after the publication of the monograph version in *Campbell Systematic Reviews*. Some journals, however, have restrictions that preclude publication of findings that have been, or will be, reported elsewhere, and authors considering publication in such a journal should be aware of possible conflict with publication of the monograph version in *Campbell Systematic Reviews*. Publication in a journal after publication or in press status in *Campbell Systematic Reviews* should acknowledge the Campbell version and include a citation to it. Note that systematic reviews published in *Campbell Systematic Reviews* and co-registered with the Cochrane Collaboration may have additional requirements or restrictions for co-publication. Review authors accept responsibility for meeting any co-publication requirements.

I understand the commitment required to update a Campbell review, and agree to publish in the Campbell Library. Signed on behalf of the authors:

Form completed by: Ms Valentina Iemmi Date: 24 November 2014

9 Tables

9.1 CHARACTERISTICS OF INCLUDED STUDIES

Botha 2010

Methods	Type of study: randomised controlled trial Date of study: 2007/2008 Geographical location: South Africa (Cape Town)
Participants	Type of disability: mental Condition/impairment: diagnosis of schizophrenia or schizo-affective disorder Ethnicity: mixed race/black/Caucasian Mean age in intervention vs. control: 30.55 vs. 34.81 Total number=60 Total number in intervention vs. control: randomised 34 vs. 26; endpoint 29 vs. 21 Intervention: 5 did not complete the study: 3 were not discharged during study period; 1 died before study completion; 1 was readmitted within 2 weeks of discharge Control: 5 dropouts: 2 lost to FU after 12m; 1 did not receive standard care; 2 transferred to long-stay wards
Interventions	Intervention (assertive community treatment) vs. treatment as usual (standard community mental health service) Intervention: >50% contacts are home visits; patients referred to hospital-based after- hours service coordinated by ACT; frequency of contact individualised according to patient need Control: office based; no FU of missed appointments/reports of non-compliance; monthly to three monthly contact; after-hours service of catchment area Duration: 12 months
Outcomes	Clinical status: Positive and Negative Syndrome Scale for Schizophrenia (PANSS); Social and Occupational Functioning Assessment Scale (SOFAS); Extrapyramidal Symptoms Rating Scale (ESRS); Calgary Depression Scale (CDSS) Quality of Life: WHO Quality of Life questionnaire (WHO-QOL) Use of health resources: readmission; relapse; days in hospital; days in hospital (non psychiatric); mortality Assessment: at inclusion, prior to discharge and at 12 months after inclusion Single assessor performed all assessments
Notes	Authors' conclusions: Assertive community treatment may not only reduce readmission rates in a setting with limited resources, but may also impact on the severity of the psychopathology and level of functioning. Ethnic

	distribution in sample not representative of the entire population of South Africa, since the study was conducted in area where predominant ethnicity was mixed

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Low risk	Randomisation using standardised tables
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	High risk	Unblinded - blinding not possible
Blinding of outcome assessment (detection bias)	Unclear risk	Single assessor performed all assessments
Incomplete outcome data (attrition bias)	Unclear risk	Five participants in each arm did not complete the study. Analysis was not ITT; carried out on 85% vs. 81%
Selective reporting (reporting bias)	Unclear risk	Some specified outcomes were not reported, i.e. WHO-QOL, CDSS
Other bias	Unclear risk	Numbers recruited were lower than expected and from a single site, which could limit generalisability. The ethnic distribution of the sample was not representative of the entire population of the country

9.1.1

Chatterjee 2003

Methods	Type of study: controlled before-after study Date of study: Dec 1997-Dec 1998 Geographical location: India (Goa)
Participants	Type of disability: mental Condition/impairment: diagnosis of chronic schizophrenia (first presentation to services and suffered from symptoms at least 2 years before recruitment) Ethnicity: not reported Mean age in intervention vs. control: 38.1 vs. 36.6 Gender proportion in intervention vs. control: 61% vs. 55% male Total number=207 Total number in intervention vs. control:127 vs. 80 Lost to FU=24 Intervention: 80/127 fully compliant; 19 partially; 28 non-compliant Control: 37/80

	fully compliant; 19 partially
Interventions	Intervention (CBR) vs. treatment as usual (out-patient care) Intervention: contact with health worker once per week for 60-90 minutes; plus user group meeting once every 2 weeks and community group meetings once every 4 weeks, drug treatment, psycho-education, family counselling, vocational rehabilitation, enhancing social networks, access to social benefits. Control: visit to clinic once per month for 20-30 minutes, drug treatment, psycho-education, family counselling. Clinical services provided exclusively at clinic in Ashagram Duration: 12 months
Outcomes	Clinical status: Positive and Negative Syndrome Scale for Schizophrenia (PANSS); WHO Disability Assessment Scale (DAS) Use of health resources: compliance Four different comparisons: all compliant patients; male patients; female patients; compliant vs. partially or non-compliant Assessment: at baseline and 12 months
Notes	Limitations cited by the authors: the study was not an RCT and biases might have influenced the findings; the outcomes focused on clinical symptoms and disability; economic and social outcomes and specific therapeutic ingredients of the CBR model were not measured; FU data were unobtainable for the non-compliant outpatient group so the outcome for these had to be estimated using two different methods

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Allocation concealment (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of participants and personnel (performance bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of outcome assessment (detection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Incomplete outcome data (attrition bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Selective reporting (reporting bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Other bias	Unclear risk	Not applicable: non-randomised study (see Table 4)

Chinchai 2010

Methods	Type of study: randomised controlled trial (cluster) Date of study: not reported Geographical location: Thailand (Chiang Mai)
Participants	Type of disability: physical Condition/impairment: diagnosis of stroke (discharged from hospital < 18 months, physical function recovery level 2 to 4 on Brunnstorm scale) Ethnicity: not reported Age in intervention vs. control: 9 vs. 4 aged < 40; 8 vs. 8 aged 40-59; 9 vs. 5 aged 60-69; 7 vs. 13 aged 70-79 Gender proportion in intervention vs. control: 60% vs. 53% male Total number=60 Total number in intervention vs. control:30 vs. 30 Lost to FU: not reported
Interventions	Intervention (education programme for carers) vs. usual care (information from community health stations) Intervention: three one day, 7 hour education sessions once per week for 3 consecutive weeks, plus weekly visits Control: information from community health stations Duration: 2 months
Outcomes	Quality of Life: WHO Quality of Life Brief Test Thai version (WHOQOL-BREF-THAI) Assessment: 7 days pre-intervention and 2 months post intervention
Notes	Authors' conclusions: significant pre-test, post-test differences for patients in the experimental group and significant differences in QOL measure between the experimental and control group at 2 months follow-up

Bias	**Authors' judgement**	**Support for judgement**
Random sequence generation (selection bias)	High risk	Reported as cluster random sampling; the procedure for generating a random sequence was not reported
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	Low risk	Personnel blinded to group assignment. As control participants received usual care, the (lack of) intervention could have been obvious
Blinding of outcome assessment (detection bias)	Low risk	Assessors blinded to group assignment
Incomplete outcome data (attrition bias)	Low risk	No drop outs or exclusions
Selective reporting (reporting bias)	Unclear risk	When describing the WHOQOL-BREF-THAI, the

		authors report the individual items for overall health and overall QOL, as well as a total score; these were not presented in the results
Other bias	Unclear risk	Short follow-up

Darmawan 1992

Methods	Type of study: controlled interrupted time series study (with three points of evaluation) Dates of study: not reported Geographical location: Indonesia (rural Java)
Participants	Type of disability: physical Condition/impairment: diagnosis of arthritis Ethnicity: not reported Age: > 15 years Gender proportion: not reported Total number=844 Total number in intervention vs. control:443 vs. 401 (baseline 401 vs. 382; at 1 month 398 vs. 360; at 6 months 401 vs. 375) Lost to FU: not reported
Interventions	Intervention (arthritis Community Education Programme by traditional puppet shadow play or 'wayang') vs. no intervention (no 'wayang') Intervention: the intervention group attended a special session of the puppet play which included simple instructions for coping with neck and back pain, and stiff, swollen or painful joints Control: no intervention Duration: not reported
Outcomes	Activities: questionnaire on knowledge of correct ways of performing Activities of Daily Living Subgroup analysis: by educational level Assessment: at baseline, 1 month, 6 months
Notes	Authors' conclusions: the 'wayang' appeared feasible and effective for transferring knowledge to both the semi-literates and illiterates in the sample population with musculoskeletal pain

Bias	**Authors' judgement**	**Support for judgement**
Random sequence generation (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Allocation concealment (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of participants and personnel (performance bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of outcome assessment (detection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)

Incomplete outcome data (attrition bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Selective reporting (reporting bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Other bias	Unclear risk	Not applicable: non-randomised study (see Table 4)

Dias 2008

Methods	Type of study: randomised controlled trial Date of study: not reported Geographical location: India (Goa)
Participants	Type of disability: mental Condition/impairment: diagnosis of mild to moderate dementia Ethnicity: not reported Mean age in intervention vs. control: 79.4 vs. 77.3 Gender proportion in intervention vs. control: 63.4% vs. 67.5% male Total number=81 Total number in intervention vs. control: 41 vs. 40 Lost to FU: 18 deaths, 2 moved away, 2 refused FU Baseline characteristics: no baseline differences in SES and psychiatric co-morbidity
Interventions	Intervention (flexible home-care programme tailored to the needs of the individual and the family) vs. other intervention (education and information on dementia) Intervention: flexible home-care programme tailored to the needs of the individual and the family (education, support, networking, advice delivered by a community team) Control:education and information on dementia Duration: 6 months (at the end of the 6 months, the control group received the intervention)
Outcomes	Activities: Everyday Abilities Scale for India (EASI) Clinical status: Neuro-Psychiatric Inventory (NPI-S and NPI-D) Use of health resources: mortality Carer outcomes: carer burden (Zarit Burden Scale or ZBS); carer general health (GHQ); carer distress (Neuro-psychiatric Inventory-Distress or NPI-D) Assessment: at baseline, 3 months, 6 months
Notes	Authors' conclusions: although the intervention improved carer mental health, it did not have a significant impact on the person with dementia. Key limitation is the small sample size which was probably inadequately powered to detect significant reductions. Short FU period

Bias	**Authors' judgement**	**Support for judgement**

Random sequence generation (selection bias)	Low risk	Randomisation of dyads comprising the person with dementia and carer carried out by independent person. Based on simple random number tables
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	Unclear risk	Not reported though blinding of intervention difficult
Blinding of outcome assessment (detection bias)	Unclear risk	Although blinded, during the course of their outcome evaluation, researchers guessed the allocation status in nearly two-thirds of individuals
Incomplete outcome data (attrition bias)	Unclear risk	33/41 vs. 26/40 (80% vs. 65%) completed the study due to 6 vs. 12 deaths. High follow-up rate with only 5% dropouts
Selective reporting (reporting bias)	Low risk	None reported
Other bias	High risk	Small sample size, underpowered study, short follow-up period (six months)

Gavrilova 2009

Methods	Type of study: randomised controlled trial Date of study: 2000-2004 Geographical location: Russia (Moscow)
Participants	Type of disability: mental Condition/impairment: diagnosis of dementia Ethnicity: not reported Mean age (≥ 65) in intervention vs. control: 80.3 vs. 78.5 Gender proportion in intervention vs. control: 70.0% vs. 76.7% female Total number=60 Total number in intervention vs. control: 30 vs. 30 randomised; 25 vs. 28 completed outcome assessments Lost to FU (intervention vs. control): deaths (5 vs. 2) Baseline characteristics: evenly distributed between groups
Interventions	Intervention plus usual medical care (10/66 Caregiver intervention) vs. treatment as usual (usual medical care) Intervention: 10/66 Caregiver Intervention originally developed in India; designed for low- and middle-income country settings. Three modules delivered over 5 weekly 30 minute sessions Control: usual medical care

Outcomes	Clinical status: Neurospsychiatric Inventory (NPI-S and NPI-D) Quality of Life: dementia-specific health-related quality of life (DEMQOL) Use of health resources: mortality Carer outcomes: carer burden (Zarit Burden Scale or ZBS); carer mental health (Self- Reporting Questionnaire 20 or SRQ-20); carer distress (Neuro-psychiatric Inventory- Distress or NPI-D); carer quality of life (WHO Quality of Life questionnaire or WHOQOL-BREF) Assessment: at baseline and 6 months
Notes	Authors' conclusions: DEMOQOL improved in the intervention group and deteriorated in the control group, although the differences were not statistically significant after adjustment for needs of care

Bias	**Authors' judgement**	**Support for judgement**
Random sequence generation (selection bias)	Low risk	Randomisation carried out in London; codes transmitted immediately to Moscow centre by email. Used stratified permuted block method
Allocation concealment (selection bias)	Low risk	Yes, off-site randomisation
Blinding of participants and personnel (performance bias)	Low risk	Single blinded. All participants received medical care as usual in the local Mental Health Research Centre where staff were blinded to randomisation status
Blinding of outcome assessment (detection bias)	Low risk	Baseline assessments were completed prior to randomisation, and all efforts were made to ensure that the interviewer for the six month follow- up assessment was blind to randomisation status
Incomplete outcome data (attrition bias)	Low risk	High rate of follow-up (83% vs. 93%); loss to follow-up due to death (5 vs. 2)
Selective reporting (reporting bias)	Low risk	None reported
Other bias	Unclear risk	ITT analysis limited to those for whom six month outcome assessment was available; study not powered to detect an effect size of 0.43 on DEMQOL (not statistically significant)

Guerra 2011

Methods	Type of study: randomised controlled trial Date of study: 2005-2007 Geographical location: Peru (Lima)
Participants	Type of disability: mental Condition/impairment: diagnosis of dementia Ethnicity: not reported Mean age (≥ 65) in intervention vs. control: 81.7 vs. 82.0 Gender proportion in intervention vs. control: 79.3% vs. 69.0% female Total number=58 Total number in intervention vs. control: 29 vs. 29 randomised; 27 vs. 29 completed outcome assessments Lost to FU (intervention vs. control): deaths (2 vs. 0) Baseline characteristics: stated to be evenly distributed between groups
Interventions	Intervention plus usual medical care (10/66 Caregiver Intervention) vs. treatment as usual (usual medical care) Intervention: 10/66 Caregiver Intervention originally developed in India; designed for low- and middle-income country settings. Three modules delivered over 5 weekly 30 minute sessions Control: usual medical care at local memory clinic
Outcomes	Clinical status: Neuropsychiatric Inventory (NPI-Q) Quality of Life: dementia-specific health related quality of life (DEMQOL) Carer outcomes: carer role strain (Zarit Burden Interview or ZBI); carer psychological morbidity (Self-Reporting Questionnaire 20 or SRQ20); carer distress (Neurosychiatric Inventory or NPI-Q); carer quality of life (WHO Quality of Life questionnaire or WHOQOL-BREF) Assessment: at baseline and 6 months
Notes	Authors' conclusions: the intervention was associated with a statistically significant reduction in caregiver role strain. The effect sizes for the other outcomes were all in the direction of benefit from the intervention

Bias	**Authors' judgement**	**Support for judgement**
Random sequence generation (selection bias)	Low risk	Randomisation carried out in London; codes transmitted immediately to Lima centre by email. Used stratified permuted block method, with blocks of four within two strata of baseline Zarit burden interview scores
Allocation concealment (selection bias)	Low risk	Yes, off-site randomisation
Blinding of participants and personnel (performance bias)	Low risk	Single blinded. All participants received medical care as usual in the local memory clinic where staff were blinded

		to randomisation status
Blinding of outcome assessment (detection bias)	Low risk	Baseline assessments were completed prior to randomisation, and all efforts were made to ensure that the interviewer for the six month follow- up assessment was blind to randomisation status
Incomplete outcome data (attrition bias)	High risk	Incomplete data at baseline and follow-up was high (62% vs. 63%)
Selective reporting (reporting bias)	Unclear risk	Incomplete reporting of outcomes for people with disabilities
Other bias	High risk	ITT analysis limited to those for whom six month outcome assessment was available; Study not powered to detect an effect size of 0.43 on DEMQOL (not statistically significant)

Habibzadeh 2007

Methods	Type of study: controlled before-after study Date of study: not reported Geographical location: Iran (Teheran)
Participants	Type of disability: physical Condition/impairment: diagnosis of stroke (post-acute phase with ability for self-care) Ethnicity: not reported Age range: 45-65 Gender proportion: approximately equal proportion of males and females Total number=60 Total number in intervention vs. control: 30 vs. 30 Lost to FU: none reported
Interventions	Intervention (home based educational intervention in 5 steps) vs. control Intervention: 6-8 educational sessions each lasting for 90 minutes. Physical, psychological and social dimensions of planned self-care practice were taught to patients by nurses through educational sessions Control: details not reported - probably no treatment
Outcomes	Activities: Activities of Daily Living (ADL) Assessment: pre- and post-rehabilitation
Notes	Authors' conclusions: significant difference between treatment and control group on ADL scores during follow-up

Bias	Authors' judgement	Not applicable: non-randomised study (see Table 4)
Random sequence generation (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Allocation concealment (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of participants and personnel (performance bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of outcome assessment (detection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Incomplete outcome data (attrition bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Selective reporting (reporting bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Other bias	Unclear risk	Not applicable: non-randomised study (see Table 4)

Noonill 2007

Methods	Type of study: randomised controlled trial (cluster) Date of study: not reported Geographical location: Thailand (Thasala District)
Participants	Type of disability: physical Condition/impairment: diagnosis of Chronic Obstructive Pulmonary Disorder (COPD) Ethnicity: not reported Mean age in intervention vs. control: 69.98 vs. 70.67 Gender proportion in intervention vs. control: 84.1% vs. 81.4% male Total number=88 Total number in intervention vs. control: 44 vs. 44 Lost to FU: 1 death (control group) Baseline characteristics: no statistical significance difference in baseline characteristics
Interventions	Intervention ("community-care for COPD") vs. control Intervention: a multifaceted intervention, "community-care for COPD" (community-based group education; individualised home-based care and skill training; enhanced psychosocial support by home visits) Control: details not reported - probably no treatment Duration: 3 months
Outcomes	Activities: six-Minute Walk Distance (6MWD); Dyspnea Visual Analog Scale (DVAS); St George's Respiratory Questionnaire (SGRQ) Quality of Life: Patient Satisfaction with Care Questionnaire (PSCQ); Health Related Quality of Life (HRQL) Use of health resources: hospital utilisation (HU); mortality Assessment: at baseline and 12 weeks

Notes	Authors' conclusions: at the end of the 3 months programme, exercise tolerance, dyspnoea, HRQL, satisfaction of care had improved significantly in intervention vs. control group. Amount of hospital utilisation had not significantly reduced. As the follow-up was only for 3 months, this does not allow comment on the ability to sustain the intervention benefit

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Tambons were randomly assigned but details of randomisation not given
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	Unclear risk	Not reported
Blinding of outcome assessment (detection bias)	Unclear risk	Not reported
Incomplete outcome data (attrition bias)	Low risk	One patient died; complete follow-up of 99%
Selective reporting (reporting bias)	Low risk	Not reported
Other bias	Low risk	No other obvious source of bias

Ozdemir 2001

Methods	Type of study: non-randomised controlled trial Date of study: 1996-1999 Geographical location: Turkey (Trakya)
Participants	Type of disability: physical Condition/impairment: diagnosis of stroke Ethnicity: not reported Age range: 43-80 Gender proportion in intervention vs. control: 70% vs. 63% male Total number=60 Total number in intervention vs. control: 30 vs. 30 Lost to FU: none reported
Interventions	Intervention (home-based rehabilitation by family members) vs. treatment as usual (hospital-based rehabilitation) Intervention: family members trained; neuromuscular facilitation techniques could not be done; a team (rehabilitation physician and physiotherapist) regularly visited patients and instructed family caregivers and also provided necessary medical support to the patients Control: patients performed therapeutic exercises and neuromuscular facilitation exercises; physical agents , and ultrasound used when necessary. Regular occupational therapy but no speech therapy. Daily evaluation by a physician. Stroke- related symptoms and complications treated with multidisciplinary approaches

Outcomes	Activities: FIM instrument Clinical status: physical (Ashworth scale; Brunnstrom motor evaluation scale) and cognitive (Mini-Mental State Evaluation or MMSE) Adverse effects: complications Assessment: pre- and post-rehabilitation (64 days); mean FU 60 days
Notes	Authors' conclusions: intense inpatient rehabilitation provided significantly more favourable functional and cognitive outcomes with relatively low complications than did non-intense home-based rehabilitation

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Allocation concealment (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of participants and personnel (performance bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of outcome assessment (detection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Incomplete outcome data (attrition bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Selective reporting (reporting bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Other bias	Unclear risk	Not applicable: non-randomised study (see Table 4)

Ran 2003

Methods	Type of study: randomised controlled trial (cluster; 3 arms) Date of study: 1994 Geographical location: rural China (Sichuan Province)
Participants	Type of disability: mental Condition/impairment: diagnosis of schizophrenia, either recent onset or chronic Ethnicity: not reported Mean age in intervention vs. comparison vs. control: 43.5 vs. 42.4 vs. 44.8 Gender proportion in intervention vs. comparison vs. control: 65.1% vs. 53.4% vs. 62.9% female Total number (intervention vs. comparison vs. control): 357 randomised (132 vs. 110 vs. 115); 347 received intervention (127 vs. 105 vs. 115); 326 with outcome data (126 vs. 103 vs. 97) Lost to FU (intervention vs. comparison vs. control): 1 vs. 2 vs. 0; 31 refused to participate Baseline characteristics: no significant differences between demographics,

	SES, and clinical condition
Interventions	Intervention (drug treatment plus psycho-educational family intervention) vs. other intervention (drug treatment only) vs. no intervention Intervention: family psycho-education once per month for 9 months and drug treatment; multiple family workshops once every 3 months; crisis intervention when necessary Comparison: drug treatment only Control: no intervention Duration: 9 months
Outcomes	Activities: patient's working ability Clinical status: Social Disability Screening Schedule (SDSS); Present State Examination (PSE9) Use of health resources: relapse; compliance; recovery; mortality Carer outcomes: Relatives Investigation Scale; Relatives' Beliefs Scale Assesment: at baseline and 9 months
Notes	Authors' conclusions: treatment compliance in family intervention group significantly higher than in drug treatment and control groups. The relapse rate in family intervention group was less than half that in the drug treatment group and was significantly lower; that in the drug treatment group was significantly lower than that in the control group

Bias	**Authors' judgement**	**Support for judgement**
Random sequence generation (selection bias)	Low risk	A random numbers table achieved block randomisation using townships as units
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	Unclear risk	Difficult to ensure blindness with psychological treatment
Blinding of outcome assessment (detection bias)	Low risk	Assessors blind to study design and demonstrated good inter-rater reliability
Incomplete outcome data (attrition bias)	Low risk	Not ITT; patients with completed outcome (95% vs. 94% vs. 84%)
Selective reporting (reporting bias)	Low risk	None reported
Other bias	Low risk	No other obvious sources of bias

Shin 2009

Methods	Type of study: randomised controlled trial Date of study: 2005-2006 Geographical location: Vietnam (Hue)

Participants	Type of disability: mental Condition/impairment: intellectual impairment Ethnicity: not reported Age range: 3-6 Mean age in intervention vs. control: 4.6 vs. 4.3 Gender proportion in intervention vs. control: 62.5% vs. 57.1% male Total number=37 recruited Total number in intervention vs. control:16 vs. 14 followed-up Lost to FU: died (n=1); age wrong (n=4); 'normal' (n=1); too severe (n=1) Baseline characteristics: no baseline differences between groups in mother's education or family SES
Interventions	Intervention (home-based intervention for parents and children) vs. control Intervention: Parents trained to work with their children through modelling and coaching by teachers during weekly home visits. Control: details not reported - probably no treatment Assessment: at baseline, 6 months, 1 year
Outcomes	Activities: adaptive behaviour and developmental competence (1984 Vineland Adaptive Behavior Scales or VABS)
Notes	Authors' conclusions: both groups of children showed significant improvement in communication and social skills although the group differences were not significant

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Details not reported; stated "randomly assigned" (page 341)
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	Unclear risk	Not reported
Blinding of outcome assessment (detection bias)	Unclear risk	Not reported
Incomplete outcome data (attrition bias)	Unclear risk	Randomised 37, assessed 30 (81%)
Selective reporting (reporting bias)	Unclear risk	Not reported
Other bias	Unclear risk	Small sample size limited power and increase likelihood of type II error

Yu 2009

Methods	Type of study: randomised controlled trial

	Date of study: Oct 2004 - June 2005 Geographical location: China (Shanghai)
Participants	Type of disability: physical Condition/impairment: diagnosis of stroke (less than 18 months previously) Ethnicity: not reported Age range: 40-85 Gender proportion: 53% male Total number=737 Total number in intervention vs. control: 377 vs. 360 Lost to FU: 21
Interventions	Intervention (CBR at home) vs. no intervention Intervention: relatives and caregivers learned simple community rehabilitation techniques during the follow-up and were asked to help the stroke patients to complete functional exercises between follow-up sessions. Rehabilitation groups were followed up 10 times (once a week for one month; once every two weeks during the second and third months; once a month during the fourth and fifth months). The therapists also telephoned the patients to supervise and guide them to complete their functional exercises Control: no intervention Duration: 5 months
Outcomes	Clinical status: Clinical Neurological Function Deficit Scale Use of health resources: mortality Assessment: at baseline and 12 months
Notes	Authors' conclusions: standardised community-based rehabilitation therapy may help stroke patients to improve their neurological function

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Community stratified; the procedure for generating a random sequence was by throwing coins
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	High risk	Unblinded
Blinding of outcome assessment (detection bias)	Low risk	Blinded
Incomplete outcome data (attrition bias)	Unclear risk	13 vs. 8 patients reported as lost to follow-up but outcome missing on 19 vs. 13
Selective reporting (reporting bias)	Unclear risk	None reported
Other bias	Low risk	No other obvious source of bias

Zhang 1994b

Methods	Type of study: randomised controlled trial Date of study: 1998-1999 Geographical location: China (Suzhou)
Participants	Disability: mental Condition/impairment: diagnosis of schizophrenia (first-admission male patients discharged from ward) Ethnicity: not reported Mean age in intervention vs. control: 23.5 vs. 24.1 Gender proportion: 100% male Total number=83 Total number in intervention vs. control: 42 vs. 41 Lost to FU in intervention vs. control: 3 vs. 2 Baseline characteristics: intervention group more likely to be industrial workers; control group more likely to be agricultural workers
Interventions	Intervention (group counselling for families) vs. treatment as usual Intervention: medication obtained via outpatient department (as controls); participated in regular family counselling sessions every three months after initial session. Families that missed any session were followed-up at home Control: patients and family members came to outpatient department at will; not seen by same clinician; examined and given prescription. No regular appointments or FU Duration: 18 months
Outcomes	Clinical status: Brief Psychiatric Rating Scale (BPRS); Global Assessment Scale (GAS) Use of health resources: medication compliance; hospital readmission Assessment: at baseline then every three months for 18 months
Notes	Authors' conclusions: results support the efficacy of family intervention

Bias	**Authors' judgement**	**Support for judgement**
Random sequence generation (selection bias)	Unclear risk	No details reported; only "randomised" stated (page 97)
Allocation concealment (selection bias)	Unclear risk	Not reported
Blinding of participants and personnel (performance bias)	Unclear risk	Not reported
Blinding of outcome assessment (detection bias)	Low risk	Evaluations were done by two physicians blinded to treatment status of patient. But difficult to maintain blind assessment in long term
Incomplete outcome data (attrition bias)	High risk	39/83 (47%) patients completed trial

Selective reporting (reporting bias)	Unclear risk	None reported
Other bias	Unclear risk	Only male patients so cannot be generalised. As hospital readmission can be affected by many factors other than severity, better to have used relapse as primary endpoint

Zhang 1998

Methods	Type of study: non-randomised controlled trial Date of study: not reported Geographical location: China (Shanghai)
Participants	Disability: mental Condition/Impairment: diagnosis of schizophrenia Ethnicity: not reported Age range: 16-59 mean 43.64 v 44.29 Gender proportion in intervention vs. control: 55.4% vs 60.1% male Total number=409 completed programme (number enrolled not known) Total number in intervention vs. control: 251 v 158 Lost to FU: not reported Baseline characteristics: at baseline, no significant differences in groups in terms of socio-demographic characteristics
Interventions	Intervention (psychosocial education programme for families plus treatment as usual) vs. treatment as usual Intervention: families given the psychosocial education programme in addition to the routine community mental health service. Lectures plus group discussion sessions for 20-40 relatives during the 3 year period. Intervention delivered by trained psychiatrists or nurses. Groups of 20-40 relatives in intervention group received education programme over 3 years Control: received routine services only All patients who met enrolment criteria were divided into two groups in the ratio 2 to 1 (intervention to control). Duration: 3 years
Outcomes	Clinical status: questionnaire on severity of illness; Psychiatric Disability Assessment Schedule (DAS) Use of health resources: readmission; relapse; at work Carer outcomes: Family Burden Interview Schedule (FIS); quiz on knowledge about mental illness; General Health Questionnaire 28 (GHQ-28) Assessment: at enrolment, 1 year, 2 years, 3 years
Notes	Authors' conclusions: at the end of year 3, patients in the intervention group had a lower rate of relapse, higher rate of regular work and better social functioning than those in the control group. The carers also benefited

Bias	Authors' judgement	Support for judgement
Random sequence generation (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Allocation concealment (selection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of participants and personnel (performance bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Blinding of outcome assessment (detection bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Incomplete outcome data (attrition bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Selective reporting (reporting bias)	Unclear risk	Not applicable: non-randomised study (see Table 4)
Other bias	Unclear risk	Not applicable: non-randomised study (see Table 4)

9.2 CHARACTERISTICS OF EXCLUDED STUDIES

Acharya 2012

Reason for exclusion	Not controlled study

Altin Ertekin 2009

Reason for exclusion	Not CBR: Specialist home visits organised and followed through by clinical department

Baltussen 2009

Reason for exclusion	Not CBR

Berman 1984

Reason for exclusion	Not CBR

Biggeri 2012

Reason for exclusion	Not controlled study: Cross-sectional study

Bravo 2006

Reason for exclusion	Not controlled study: description of the concept of CBR

Breen 2007

Reason for exclusion	Not controlled study

Caglar 2005

Reason for exclusion	Not CBR: physiotherapy exercise in hospital set up for Parkinsons Disease

Chaipinyo 2009

Reason for exclusion	Not CBR effect, comparison between two methods

Chiu 1997

Reason for exclusion	Not LMICs: Set in Taiwan

Congdon 2011

Reason for exclusion	Not CBR intervention: education for spectacle use in a school setting

Das 2006

Reason for exclusion	Not CBR intervention: education programme for care givers

Dolan 1995

Reason for exclusion	Not controlled study: survey of disabilities

Finkenflugel 1991

Reason for exclusion	Not CBR: impact of basic service reforms on carers

Gandi 2010

Reason for exclusion	Not controlled study: survey of mental health problems and residual issues following treatment of mental illness

Goldbart 2001

Reason for exclusion	Not CBR: comparison of parent involvement service with control in a out-patient setting

Grossman 2010

Reason for exclusion	Not controlled study: descriptive report of CBR in Guyana

Guo 2010

Reason for exclusion	Not CBR: institution-based intervention

Gutierrez-Maldonado 2009

Reason for exclusion	Not CBR: institution-based intervention

Hai 1993

Reason for exclusion	Not controlled study: report on CBR programme

Hamblin 2006

Reason for exclusion	Not controlled study: report of an action research

Huang 2010

Reason for exclusion	Not controlled study: costing of stroke care

Javadpour 2009

Reason for exclusion	Not controlled study

Javed 1993

Reason for exclusion	Not controlled study: report of a leprosy eradication programme in India

Jitapukal 1998

Reason for exclusion	Not control group: training guidelines and evaluation of CBR

Kanungpairn 2007

Reason for exclusion	Not CBR: pilot symptom management programme institution-based

Kulhara 2009

Reason for exclusion	Not CBR: outpatient setting institution-based

Kuptniratsaikul 2002

Reason for exclusion	Not CBR: study to assess the impact of exercise; no disability

Lara-Muñoz 2010

Reason for exclusion	Not CBR

Latimer 2008

Reason for exclusion	Not CBR: school-based programme

Luo 1994

Reason for exclusion	Not CBR: factory-based

Makharadze 2010

Reason for exclusion	Not CBR: comparing people with disabilities using community-based day care centres with those that do not

Maneesakorn 2007

Reason for exclusion	Not CBR: institution-based

McConachie 2002

Reason for exclusion	Not CBR: intervention was an outreach programme

Methapatara 2011

Reason for exclusion	Not CBR: institution-based

Narayan 1990

Reason for exclusion	Not controlled study: publication defining a model for CBR in mental health

O'Toole 1988

Reason for exclusion	Not controlled study: descriptive report of CBR in Guyana

O'Toole 1990

Reason for exclusion	Not controlled study: CBR project report

O'Toole 1991

Reason for exclusion	Not controlled study: descriptive report of CBR in Guyana

O'Toole 1994

Reason for exclusion	Not controlled study: descriptive report of CBR in Guyana

Ojha 1993

Reason for exclusion	Not controlled study: a before-after evaluation of an awareness campaign

Olusanya 2009

Reason for exclusion	Not CBR: early hearing detention programme taking place in health centres

Oupra 2010

Reason for exclusion	Not CBR: training of carers for stroke patients in hospitals

Pai 1983

Reason for exclusion	Not CBR: specialist home visits organised and followed through by clinical department

Pan 2011

Reason for exclusion	Not CBR: intervention not in community

Pati 2011

Reason for exclusion	Not controlled study: pilot study to study level of education

Patra 2011

Reason for exclusion	Not CBR: hospital-based study of psychosocial intervention versus treatment as usual

Pavão 2011

Reason for exclusion	Not CBR: intervention not community-based

Penny 2007

Reason for exclusion	Not controlled study: report on service delivered

Perón 2004

Reason for exclusion	Not controlled study: project description only

Petersen 2012

Reason for exclusion	Not CBR: proposal and evidence for task shifting

Powell 1989

Reason for exclusion	Not disability: child development study

Qutteina 2009

Reason for exclusion	Not controlled study: report of CBR activities in Palestine

Rana 2008

Reason for exclusion	Not CBR

Rana 2010

Reason for exclusion	Not CBR

Rao 1993

Reason for exclusion	Not controlled study: survey report

Rawiworrakul 2007

Reason for exclusion	Not CBR

Russell 1999

Reason for exclusion	Not CBR: trial of efficacy of interactive group psycho-education on measures of parental attitude towards intellectual disability

Sahebalzamani 2009

Reason for exclusion	Not CBR: training in institution

Sepulveda Jara 1994

Reason for exclusion	Not CBR: intervention not community-based

Srinivasa Murthy 2005

Reason for exclusion	Not controlled study: outreach clinic setting

Sritipsukho 2010

Reason for exclusion	Not CBR: cost-effectiveness analysis of home rehabilitation programs for Thai stroke patients

Sotter 1996

Reason for exclusion	Not controlled study: report

Suwanwela 2002

Reason for exclusion	Not CBR: comparison of two periods of hospitalisation

Tariah 2010

Reason for exclusion	Not CBR: comparison of two modalities of therapy for stroke

Thorburn 1992

Reason for exclusion	Not controlled study

Unger 2006

Reason for exclusion	Not CBR: school-based programme

Uys 1994

Reason for exclusion	Not CBR: institution-based intervention of psychosocial training and living skills

Uys 1997

Reason for exclusion	Not CBR: descriptive report on vocational rehabilitation

Valencia 2007

Reason for exclusion	Not CBR: outpatient-based intervention

WHO 1996

Reason for exclusion	Not controlled study: conference proceedings report

Wortmann 2011

Reason for exclusion	Not CBR: report on a tool

Xiang 2006

Reason for exclusion	Not CBR: outpatient-based intervention

Xiang 2007

Reason for exclusion	Not CBR: comparison of two methods of therapy delivered in an institution

Xiong 1994

Reason for exclusion	Not CBR: institution-based family education and training

Zavradashvili 2010

Reason for exclusion	Not CBR: multidisciplinary intervention outcome evaluation

Zhang 1993

Reason for exclusion	Not CBR: community-based carer training

Zhang 1994a

Reason for exclusion	Not CBR: work based

9.3 CHARACTERISTICS OF STUDIES AWAITING CLASSIFICATION

Al Wazna 1999

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: not able to be retrieved

Anonymous 2009

Methods	

Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Calis 2004

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Turkish

Chen 2006

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Contreras Briceño 1991

Methods	
Participants	

Interventions	
Outcomes	
Notes	To be assessed: not able to be retrieved

Cui 2009

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Feng 2002

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Feng 2003

Methods	
Participants	
Interventions	

Outcomes	
Notes	To be assessed: in Chinese

Filatov 1980

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Russian

He 2005

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Hong 1997

Methods	
Participants	
Interventions	
Outcomes	

Notes	To be assessed: in Chinese

Hu 2006

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Huang 2003

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Huang 2004

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Jara Atencia 1997

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: not able to be retrieved

Li 2007

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Liu 2003

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Murphy 2008

Methods	

Participants	
Interventions	
Outcomes	
Notes	To be assessed: not able to be retrieved

Qi 2009

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Saren 2003

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Shen 1985

Methods	
Participants	

Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Sun 2005

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Tan 2005

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Tran Trong 2005

Methods	
Participants	
Interventions	

Outcomes	
Notes	To be assessed: in Vietnamese

U 2011

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Wang 2010a

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Wang 1993

Methods	
Participants	
Interventions	
Outcomes	

Notes	To be assessed: in Chinese

Wang 2008

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Wang 2010b

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Wang 2011

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Xu 2003

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Yu 1983

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Yu 2008

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Zhang 2003

Methods	

Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Zhang 2011

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

Zhang 2008

Methods	
Participants	
Interventions	
Outcomes	
Notes	To be assessed: in Chinese

9.4 CHARACTERISTICS OF ONGOING STUDIES

Carney 2012

Study name	Home-Care Intervention for Pediatric Traumatic Brain Injury in Argentina: Process and Methods for a Mulit-Center Randomized Controlled Trial
Methods	Randomised controlled trial (single blind) Argentina, multi-centre
Participants	Child with moderate to severe traumatic brain injury
Interventions	Intervention: Home Care consisting of (1) Caregivers' Manual containing information about caring for injured child after discharge and (2) interaction with a Community Resource Coordinator Control: standard care
Outcomes	At 6 months: post-trauma • lower mortality • better functional outcomes
Staring date	July 2011
Contact information	Oregon Health & Science University, Porland, Oregon, USA
Notes	From Focus Group Meetings, conclude that pos-discharge support is considered by families to be the most important intervention

Chatterjee 2011

Study name	Collaborative community-based are for people and their families living with schizophrenia in India: protocol for a randomised controlled trial
Methods	Randomised controlled trial (parallel groups) India, multi-site
Participants	Primary diagnosis of ICD10-DCR schizophrenia Duration of illness at least 12 months Aged 16 - 60 Total number=282 (2:1 ratio intervention: control)

Interventions	FBC+CCBC versus FBC Intervention: community-base care (CCBC) including treatments delivered in three phases Control: family-based care (FBC) which is the care usually provided by mental health practitioners for persons with schizophrenia and their families
Outcomes	At 12 months Primary outcomes • reduction in severity of symptoms of schizophrenia using the Positive and Negative Syndrome Scale (PANSS) • change in disability using the Indian Disability Evaluation and Assessment Scale (IDEA Secondary outcomes • adherence to medication • willingness to discuss mental illness • Quality adjusted Life Years (QALY)
Staring date	Not reported
Contact information	Sudipto Chatterjee (sudipto_dr@yahoo.com.au)
Notes	Collaborative community-based are for people and their families living with schizophrenia in India: protocol for a randomised controlled trial

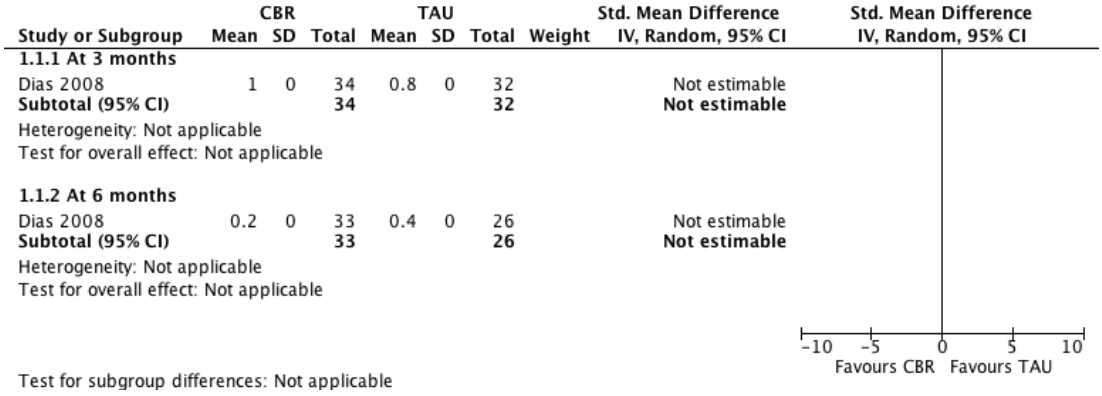
Wallander 2010

Study name	Brain Research to Ameliorate Impaired Neurodevelopment: Home-based Intervention Trial (BRAIN-HIT)
Methods	Randomised controlled trial (block-randomised; randomisation assignment in sealed envelopes) Ratio of 1:2 birth asphyxia versus no complications India, Pakistan, Zambia
Participants	• children with mild to moderate birth asphyxia; resuscitated at birth with normal/stage I-II Ellis scale in first week of life (n=174)

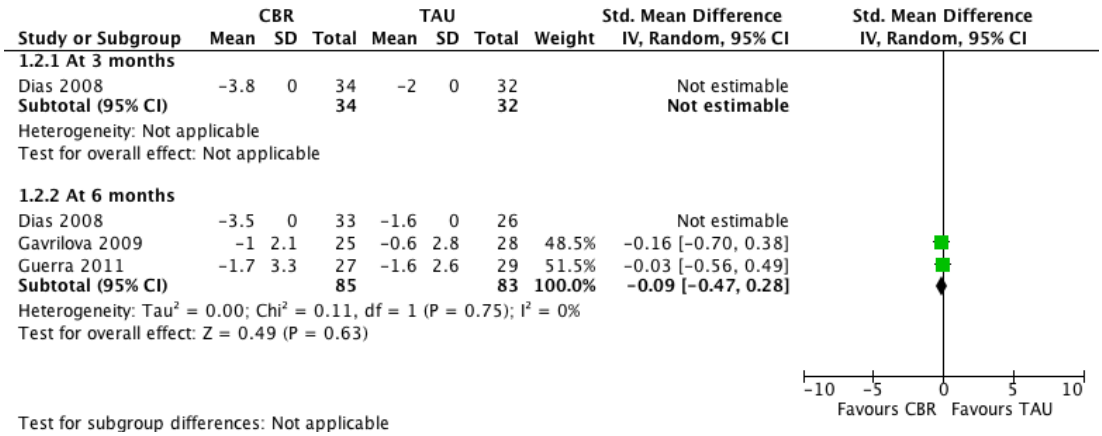
	• children without perinatal complications (n=257)
Interventions	Intervention: home-based Early Developmental Intervention (EDI) plus health and safety counselling (HSC) in both children with birth asphyxia and children without control: HSC alone
Outcomes	At 12, 24, 36 months • effects on cognitive, social-emotional, motor development • determine whether intervention results development in children with birth asphyxia being distinguishable from children without birth asphyxia • examine whether effects of EDI are moderated by child/parent/family characteristics cost-effectiveness Instruments • Bayley Scales of Infant Development (BSID) • Ages & Stages Questionnaire (ASQ) • Ages & Stages Questionnaire: social-emotional (ASQ:SE) • Parent Attitudes and Knowledge Inventory
Staring date	Not reported
Contact information	Jan Wallander (jwallander@ucmerced.edu)
Notes	Brain Research to Ameliorate Impaired Neurodevelopment: Home-based Intervention Trial (BRAIN-HIT)

10 Figures

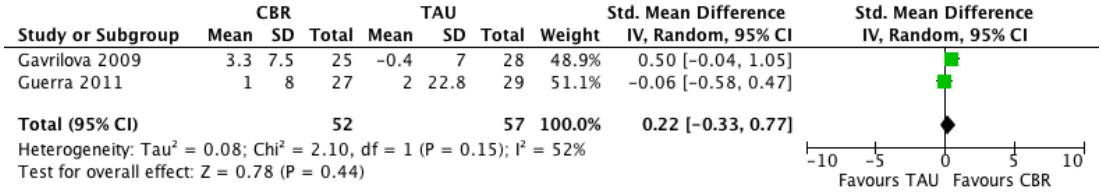
10.1.1 Figure 5: Analysis 1.1: Users (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome1 Activities with Everyday Abilities Scale for India (EASI). [higher scores indicate worse levels of functional impairment]



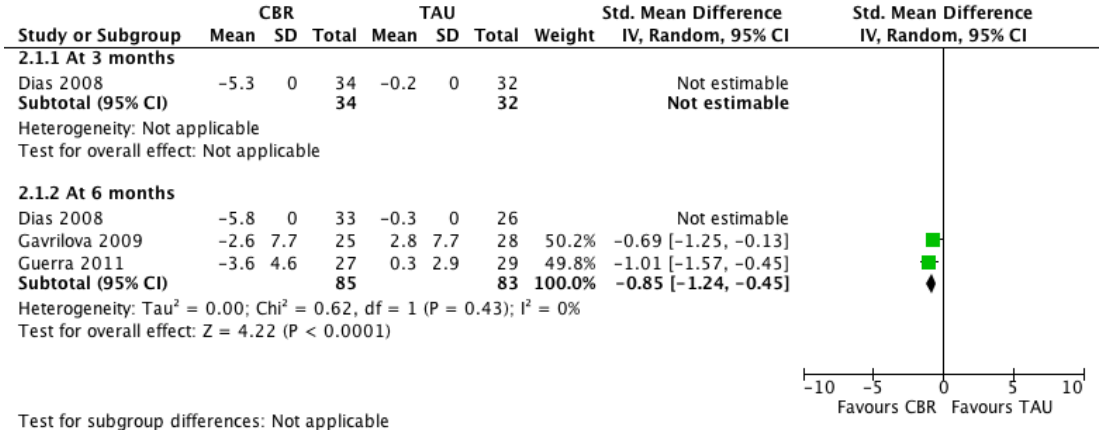
10.1.2 Figure 6: Analysis 1.2: Users (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 2 Clinical status with Neuro-Psychiatric Inventory (NPI-Q severity) [lower scores indicate better clinical status]



10.1.3 Figure 7: Analysis 1.3: Users (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 3 with dementia-specific health-related quality of life (DEMQOL).



10.1.4 Figure 8: Analysis 2.1: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 1 Carer burden with Zarit Burden Scale (ZBS). [lower scores indicate lower levels of burden]



10.1.5 Figure 9: Analysis 2.2: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 2 Carer distress with Neuro-Psychiatric Inventory (NPIQ-D). [lower scores indicate better clinical status]

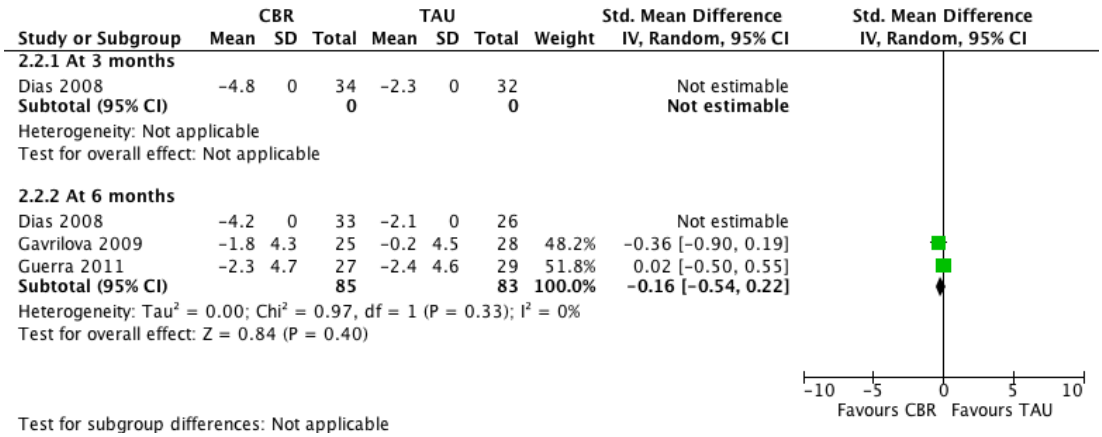
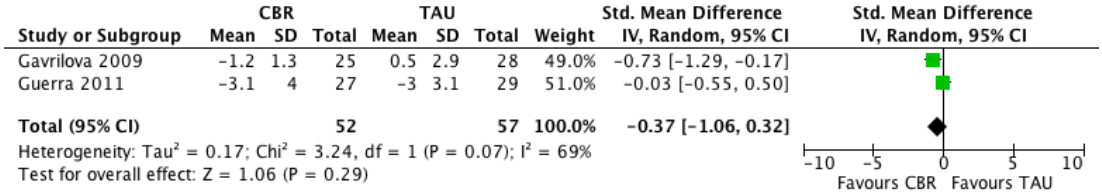
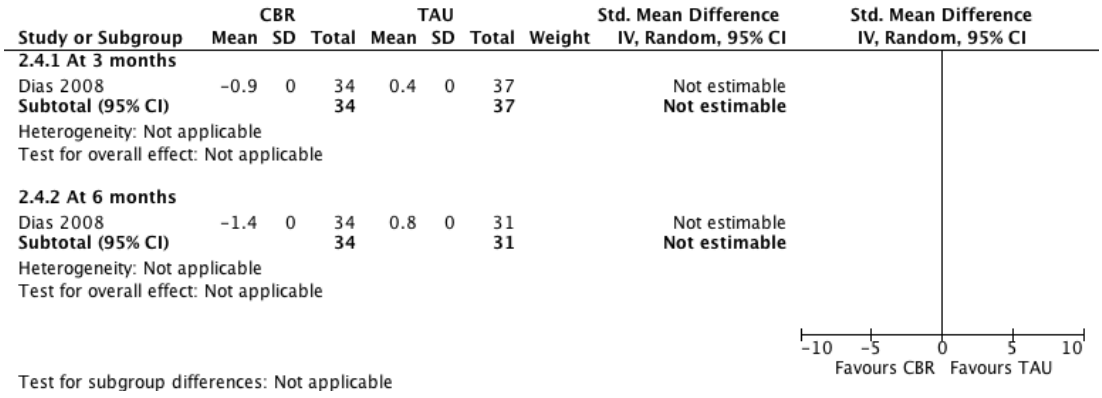


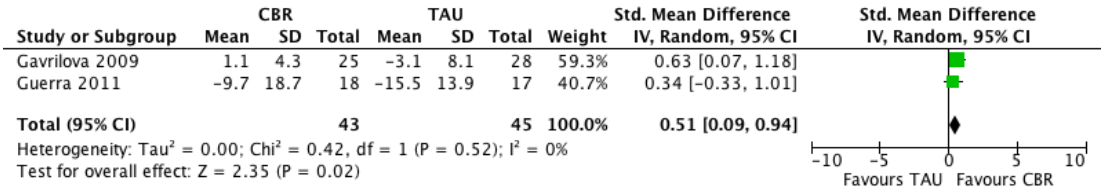
Figure 10: Analysis 2.3: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 3 Carer psychological morbidity with Self-Reporting Questionnaire 20 (SRQ-20). [higher scores indicate higher levels of morbidity]



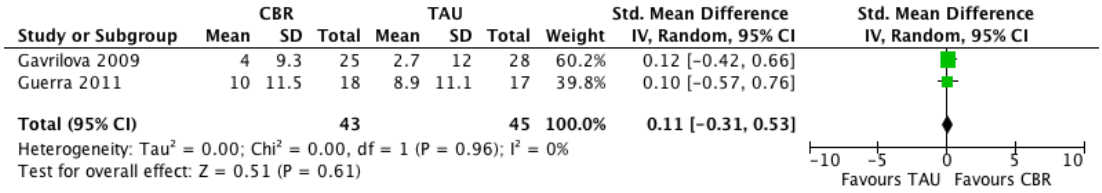
10.1.6 Figure 11: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 4 Carer psychological morbidity with General Health Questionnaire (GHQ). [higher scores indicate higher levels of psychological morbidity]



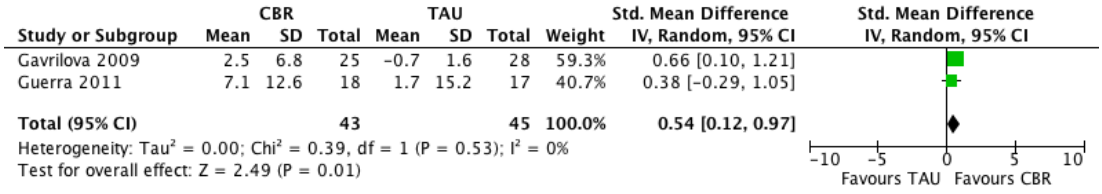
10.1.7 Figure 12: Analysis 2.5: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 5 Carer quality of life with WHO Quality of Life questionnaire (WHOQOL-BREF, physical).



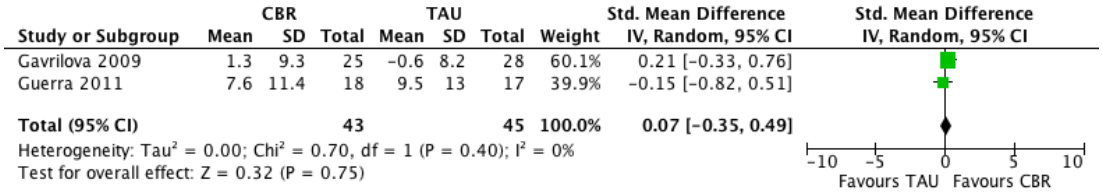
10.1.8 Figure 13: Analysis 2.6: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 6 Carer quality of life with WHO Quality of Life questionnaire (WHOQOL-BREF, psychological).



10.1.9 Figure 14: Analysis 2.7: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 7 Carer quality of life with WHO Quality of Life questionnaire (WHOQOL-BREF, social).



10.1.10 Figure 15: Analysis 2.8: Carers (dementia): Community-based rehabilitation (CBR) vs. treatment as usual (TAU), Outcome 8 Carer quality of life with WHO Quality of Life questionnaire (WHOQOL-BREF, environment).



11 Appendices

11.1 LIST OF LONG-TERM PHYSICAL OR MENTAL HEALTH CONDITIONS, AND ASSOCIATED IMPAIRMENTS, THAT MAY RESULTS IN DISABILITY

Due to the lack of a recognised list of long-term physical or mental health conditions associated with disability, authors and experts were consulted and such a list was created and reported here below. Where possible, impairments and conditions were classified after the International Classification of Disease 10th Revision (WHO2010b).

Types of conditions	Conditions
Long-term physical conditions	There is a wide range of musculoskeletal and/or neurological conditions that may result in impairments associated with disability including: cerebral palsy epilepsy spina bifida muscular dystrophy polio arthritis osteogenesis imperfecta congenital malformation of the limbs some acquired brain injuries some orthopaedic conditions (including amputation)
Long-term sensory impairments	Visual impairment including blindness (binocular or monocular) (H54)* Conductive and sensorineural hearing loss (H90)*
Long-term mental health conditions	Schizophrenia, schizotypal and delusional disorders (F20-29)* Organic, including symptomatic, mental disorders (includes dementia) (F00-09)* Alzheimer's disease (G30)*
Long-term intellectual impairments	Mental retardation (F70-79)* Disorders of psychological development (F80-89)* Down's syndrome (Q90)*

*Note: *Categories and codes from the International Classification of Disease 10th Revision (WHO2010b).*

11.2 LIST OF LOW- AND MIDDLE-INCOME COUNTRIES

Low- and middle-income countries will be defined using the World Bank Atlas method (WorldBank2012).

Income group	Country	
Low-income countries	Afghanistan	Kyrgyz Republic
	Bangladesh	Liberia
	Benin	Madagascar
	Burkina Faso	Malawi
	Burundi	Mali
	Cambodia	Mozambique
	Central African Republic	Myanmar
	Chad	Nepal
	Comoros	Niger
	Congo, Dem. Rep	Rwanda
	Eritrea	Sierra Leone
	Ethiopia	Somalia
	Gambia, The	Tajikistan
	Guinea	Tanzania
	Guinea-Bisau	Togo
	Haiti	Uganda
	Kenya	Zimbabwe
	Korea, Dem Rep	
Lower middle-income countries	Angola	Mongolia
	Armenia	Morocco
	Belize	Nicaragua
	Bhutan	Nigeria
	Bolivia	Pakistan
	Cameroon	Papua New Guinea
	Cape Verde	Paraguay
	Congo, Rep.	Philippines
	Côte d'Ivoire	Samoa
	Djibouti	São Tomé and Principe
	Egypt, Arab Rep.	Senegal
	El Salvador	Solomon Islands
	Fiji	Sri Lanka
	Georgia	Sudan
	Ghana	Swaziland
	Guatemala	Syrian Arab Republic
	Guyana	Timor-Leste
	Honduras	Tonga
	Indonesia	Turkmenistan
	India	Tuvalu
	Iraq	Ukraine
	Kiribati	Uzbekistan
	Kosovo	Vanuatu
	Lao PDR	Vietnam
	Lesotho	West Bank and Gaza
	Marshall Islands	Yemen, Rep.
	Mauritania	Zambia
	Micronesia, Fed. Sts.	
	Moldova	

Income group	Country	
Upper middle-income countries	Albania	Lithuania
	Algeria	Macedonia, FYR
	American Samoa	Malaysia
	Antigua and Barbuda	Maldives
	Argentina	Mauritius
	Azerbaijan	Mayotte
	Belarus	Mexico
	Bosnia and Herzegovina	Montenegro
	Botswana	Namibia
	Brazil	Palau
	Bulgaria	Panama
	Chile	Peru
	China	Romania
	Colombia	Russian Federation
	Costa Rica	Serbia
	Cuba	Seychelles
	Dominica	South Africa
	Dominican Republic	St. Kitts and Nevis
	Ecuador	St. Lucia
	Gabon	St. Vincent and the Grenadines
	Grenada	Suriname
	Iran, Islamic Rep.	Thailand
	Jamaica	Tunisia
	Jordan	Turkey
	Kazakhstan	Uruguay
	Latvia	Venezuela, RB
	Lebanon	
	Libya	

11.3 SEARCH STRATEGIES

MEDLINE (OvidSP) 1946 to July Week 3 2012 (Searched 27 July 2012)

1. (Community-based rehabilitation or Community based rehabilitation or CBR).sh,ti,ab.
2. (Communit* adj5 (rehabilitat* or health care or healthcare or health service* or health nursing* or health visitor* or health network* or care network* or counsel* or foster home* or foster care* or home care* or homecare or domiciliary care* or preventive health or health education or health promotion or self-help device* or assistive device*)).sh,ti,ab.
3. (Communit* adj5 inclusi* adj5 (education or school* or preschool* or high-school* or environment* or curricul*)).sh,ti,ab.
4. (Communit* adj5 (vocational training or apprenticeship* or employment placement service* or support network* or self-employ* or social service* or social work*)).sh,ti,ab.
5. (Communit* adj5 (personal assistance or personal assistant* or individual support* or disabled people* organization* or disabled people* organisation*)).sh,ti,ab.
6. (Communit* adj5 (empower* or awareness campaign* or self-advocacy or self-help group* or support group* or women group* or political group* or development group*)).sh,ti,ab.
7. (Communit* adj5 inclusi* adj5 (health or education or hous* or social or justice or empower*)).sh,ti,ab.
8. (rehabilitat* adj5 (home based or home-based)).sh,ti,ab.
9. (exp Rehabilitation/ or exp Rehabilitation Centers/ or ((exp Community Health Services/ or exp Social Work/ or exp Self-Help Groups/) and rehabilitat*.sh,ti,ab.)) and communit*.sh,ti,ab.
10. exp Home Care/ and rehabilitat*.sh,ti,ab.
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. (Physical* adj5 (impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
13. (Cerebral pals* or Spina bifida or Muscular dystroph* or Arthriti* or Osteogenesis imperfecta or Musculoskeletal abnormalit* or Musculo-skeletal abnormalit* or Muscular abnormalit* or Skeletal abnormalit* or Limb abnormalit* or Brain injur* or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or Cerebrovascular accident*).sh,ti,ab.
14. exp Cerebral palsy/ or exp Spina Bifida Cystica/ or exp Spina Bifida Occulta/ or exp Muscular dystrophies/ or exp Arthritis/ or exp Osteogenesis Imperfecta/ or exp Musculoskeletal Abnormalities/ or exp Brain Injuries/ or exp Amputation/ or exp Clubfoot/ or exp Poliomyelitis/ or exp Paraplegia/ or exp Hemiplegia/ or exp Stroke/
15. ((Hearing or Acoustic or Ear*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
16. ((Visual* or Vision or Eye*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
17. (Deaf* or Blind*).sh,ti,ab.
18. exp Hearing Loss/ or exp Vision, Low/ or exp Deafness/ or exp Blindness/
19. (Schizophreni* or Psychos* or Psychotic Disorder* or Schizoaffective Disorder* or Schizophreniform Disorder* or Dementia* or Alzheimer*).sh,ti,ab.
20. exp "schizophrenia and disorders with psychotic features"/ or exp Dementia/ or exp Alzheimer disease/
21. ((Intellectual* or Mental* or Psychological* or Developmental) adj5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)).sh,ti,ab.

22. ((communication or language or speech or learning) adj5 disorder*).sh,ti,ab.
23. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or Trisomy 21).sh,ti,ab.
24. exp Intellectual disability/ or exp Developmental Disabilities/ or exp Child Development Disorders, Pervasive/ or exp Communication Disorders/
25. ((Disable* or Disabilit* or Handicapped) adj5 (person* or people)).sh,ti,ab.
26. exp Disabled persons/
27. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26
28. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or Upper Volta or Burundi or Urundi or Cambodia or Republic of Kampuchea or Cameroon or Cameroons or Cape Verde or Central African Republic or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or Obock or French Somaliland or Dominica or Dominican Republic or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Georgia or Ghana or Gold Coast or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or Republic of Korea or North Korea or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or Kyrgyz Republic or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or Marshall Islands or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or Papua New Guinea or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or Russian Federation or USSR or Soviet Union or Union of Soviet Socialist Republics or Rwanda or Ruanda-Urundi or Samoa or Samoan Islands or Sao Tome or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or Sierra Leone or Solomon Islands or Somalia or South Africa or Sri Lanka or Ceylon or Saint Kitts or St Kitts or Saint Christopher Island or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or Syrian Arab Republic or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or East Timor or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or New Hebrides or Venezuela or Vietnam or Viet Nam or West Bank or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia).sh,ti,ab,cp.
29. (Africa or Asia or Caribbean or West Indies or Latin America or Central America or South America).sh,ti,ab.
30. exp Africa South of the Sahara/ or exp Asia, Central/ or exp Asia, Southeastern/ or exp Asia, Western/ or exp Latin America/ or exp Caribbean Region/ or exp Central America/ or exp South America/
31. ((Developing or Low-income or low income or Middle-income or Middle income or (Low and middle income) or (Low- and middle-income) or Less-Developed or Less Developed or Least Developed or Under Developed or underdeveloped or Third-World) adj5 (countr* or nation* or world or econom*)).sh,ti,ab.
32. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or LAMI countr* or third world).sh,ti,ab.

33. (Transitional countr* or Transitional econom* or Transition countr* or Transition econom*).sh,ti,ab.
34. exp Developing countries/
35. 28 or 29 or 30 or 31 or 32 or 33 or 34
36. 11 and 27 and 35
37. limit 36 to yr="1976 -Current"

AIM (AFRO)-IMEMR (EMRO)-IMSEAR (SEARO)-LILACS (AMRO/PAHO)-WPRIM (WPRO)-WHOLIS (KMS) (Global Health Library) (Searched 27 July 2012)

(Community-based rehabilitation) or (Community based rehabilitation) or CBR or (rehabilitat* and communit*) or (rehabilitati* and ((home-based) or (home based)))

CAB Abstracts (OvidSP) 1973 to 2012 Week 29 (Searched 29 July 2012)

1. (Community-based rehabilitation or Community based rehabilitation or CBR).sh,ti,ab.
2. (Communit* adj5 (rehabilitat* or health care or healthcare or health service* or health nursing* or health visitor* or health network* or care network* or counsel* or foster home* or foster care* or home care* or homecare or domiciliary care* or preventive health or health education or health promotion or self-help device* or assistive device*)).sh,ti,ab.
3. (Communit* adj5 inclusi* adj5 (education or school* or preschool* or high-school* or environment* or curricul*)).sh,ti,ab.
4. (Communit* adj5 (vocational training or apprenticeship* or employment placement service* or support network* or self-employ* or social service* or social work*)).sh,ti,ab.
5. (Communit* adj5 (personal assistance or personal assistant* or individual support* or disabled people* organization* or disabled people* organisation*)).sh,ti,ab.
6. (Communit* adj5 (empower* or awareness campaign* or self-advocacy or self-help group* or support group* or women group* or political group* or development group*)).sh,ti,ab.
7. (Communit* adj5 inclusi* adj5 (health or education or hous* or social or justice or empower*)).sh,ti,ab.
8. (rehabilitat* adj5 (home based or home-based)).sh,ti,ab.
9. (exp rehabilitation/ or ((exp community health services/ or exp public services/ or exp social services/ or exp self help/) and rehabilitat*.sh,ti,ab.)) and communit*.sh,ti,ab.
10. exp home care/ and rehabilitat*.sh,ti,ab.
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. (Physical* adj5 (impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
13. (Cerebral pals* or Spina bifida or Muscular dystroph* or Arthriti* or Osteogenesis imperfecta or Musculoskeletal abnormalit* or Musculo-skeletal abnormalit* or Muscular abnormalit* or Skeletal abnormalit* or Limb abnormalit* or Brain injur* or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or Cerebrovascular accident*).sh,ti,ab.
14. exp cerebral palsy/ or exp spina bifida/ or exp muscular dystrophy/ or exp arthritis/ or exp osteogenesis Imperfecta/ or exp musculoskeletal anomalies/ or exp amputation/ or exp poliomyelitis/ or exp paralysis/ or exp stroke/
15. ((Hearing or Acoustic or Ear*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.

16. ((Visual* or Vision or Eye*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
17. (Deaf* or Blind*).sh,ti,ab.
18. exp hearing impairment/ or exp vision disorders/ or exp deafness/ or exp blindness/
19. (Schizophreni* or Psychos* or Psychotic Disorder* or Schizoaffective Disorder* or Schizophreniform Disorder* or Dementia* or Alzheimer*).sh,ti,ab.
20. exp schizophrenia/ or exp psychoses/ or exp dementia/
21. exp Alzheimer's disease/
22. ((Intellectual* or Mental* or Psychological* or Developmental) adj5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)).sh,ti,ab.
23. ((communication or language or speech or learning) adj5 disorder*).sh,ti,ab.
24. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or Trisomy 21).sh,ti,ab.
25. exp mental retardation/ or exp learning disabilities/ or exp pervasive child development disorders/
26. exp Down's syndrome/
27. ((Disable* or Disabilit* or Handicapped) adj5 (person* or people)).sh,ti,ab.
28. exp people with disabilities/ or exp disabilities/
29. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28
30. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or Upper Volta or Burundi or Urundi or Cambodia or Republic of Kampuchea or Cameroon or Cameroons or Cape Verde or Central African Republic or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or Obock or French Somaliland or Dominica or Dominican Republic or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Georgia or Ghana or Gold Coast or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or Republic of Korea or North Korea or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or Kyrgyz Republic or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or Marshall Islands or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or Papua New Guinea or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or Russian Federation or USSR or Soviet Union or Union of Soviet Socialist Republics or Rwanda or Ruanda-Urundi or Samoa or Samoan Islands or Sao Tome or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or Sierra Leone or Solomon Islands or Somalia or South Africa or Sri Lanka or Ceylon or Saint Kitts or St Kitts or Saint Christopher Island or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or Syrian Arab Republic or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or East Timor or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or New Hebrides or Venezuela

or Vietnam or Viet Nam or West Bank or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia).sh,ti,ab,cp.
31. (Africa or Asia or Caribbean or West Indies or Latin America or Central America or South America).sh,ti,ab.
32. exp Africa South of the Sahara/ or exp Central Asia/ or exp South Asia/ or exp South East Asia/ or exp West Asia/ or exp Latin America/ or exp Caribbean/ or exp Central America/ or exp South America/
33. ((Developing or Low-income or low income or Middle-income or Middle income or (Low and middle income) or (Low- and middle-income) or Less-Developed or Less Developed or Least Developed or Under Developed or underdeveloped or Third-World) adj5 (countr* or nation* or world or econom*)).sh,ti,ab.
34. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or LAMI countr* or third world).sh,ti,ab.
35. (Transitional countr* or Transitional econom* or Transition countr* or Transition econom*).sh,ti,ab.
36. exp Developing Countries/
37. 30 or 31 or 32 or 33 or 34 or 35 or 36
38. 11 and 29 and 37
39. limit 38 to yr="1976 -Current"

CINHAL Plus (EBSCO) (Searched 29 July 2012)

S1. ((Community-based rehabilitation) or (Community based rehabilitation) or CBR)

S2. (Communit* N5 (rehabilitat* or (health care) or healthcare or (health service*) or (health nursing*) or (health visitor*) or (health network*) or (care network*) or counsel* or (foster home*) or (foster care*) or (home care*) or homecare or (domiciliary care*) or (preventive health) or (health education) or (health promotion) or (self-help device*) or (assistive device*)))

S3. (Communit* N5 inclusi* N5 (education or school* or preschool* or high-school* or environment* or curricul*))

S4. (Communit* N5 ((vocational training) or apprenticeship* or (employment placement service*) or (support network*) or self-employ* or (social service*) or (social work*)))

S5. (Communit* N5 ((personal assistance) or (personal assistant*) or (individual support*) or (disabled people* organization*) or (disabled people* organisation*)))

S6. (Communit* N5 (empower* or (awareness campaign*) or self-advocacy or (self-help group*) or (support group*) or (women group*) or (political group*) or (development group*)))

S7. (Communit* N5 inclusi* N5 (health or education or hous* or social or justice or empower*))

S8. (rehabilitat* N5 ((home based) or home-based))

S9. (MH "Rehabilitation, Community-Based") OR (((MH "Rehabilitation+") OR (MH "Rehabilitation Centers+") OR (MH "Rehabilitation of Hearing Impaired+") OR (MH "Rehabilitation of Vision Impaired+") OR (MH "Rehabilitation, Speech and Language+") OR (MH "Rehabilitation, Vocational+")) and communit*)

S10. ((((MH "Community Health Centers") OR (MH "Community Health Services+") OR (MH "Social Work+") OR (MH "Support Groups")) and rehabilitat*) and communit*)

S11. (MH "Home Rehabilitation+")

S12. S1 or S2 or S3 or S4 or S5 or S6 or S7 or S8 or S9 or S10 or S11

S13. (Physical* N5 (impair* or deficienc* or disable* or disabili* or handicap*))

S14. ((Cerebral pals*) or (Spina bifida) or (Muscular dystroph*) or Arthriti* or (Osteogenesis imperfect) or (Musculoskeletal abnormalit*) or (Musculo-skeletal abnormalit*) or (Muscular abnormalit*) or (Skeletal abnormalit*) or (Limb abnormalit*) or (Brain injur*) or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or (Cerebrovascular accident*))

S15. (MH "Cerebral Palsy") OR (MH "Spina Bifida") OR (MH "Muscular Dystrophy+") OR (MH "Arthritis+") OR (MH "Osteogenesis Imperfecta") OR (MH "Musculoskeletal Abnormalities+") OR (MH "Brain Injuries+") OR (MH "Amputation+") OR (MH "Clubfoot") OR (MH "Poliomyelitis+") OR (MH "Paraplegia+") OR (MH "Hemiplegia") OR (MH "Stroke")

S16. ((Hearing or Acoustic or Ear*) N5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))

S17. ((Visual* or Vision or Eye*) N5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))

S18. (Deaf* or Blind*)

S19. (MH "Hearing Loss, Partial+") OR (MH "Vision, Subnormal") OR (MH "Deafness+") OR (MH "Blindness+")

S20. (Schizophreni* or Psychos* or (Psychotic Disorder*) or (Schizoaffective Disorder*) or (Schizophreniform Disorder*) or Dementia* or Alzheimer*)

S21. (MH "Psychotic Disorders+") OR (MH "Dementia+") OR (MH "Alzheimer's Disease")

S22. ((Intellectual* or Mental* or Psychological* or Developmental) N5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*))

S23. ((communication or language or speech or learning) N5 disorder*)

S24. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or (Trisomy 21))

S25. (MH "Mental Retardation+") OR (MH "Developmental Disabilities") OR (MH "Child Development Disorders, Pervasive+") OR (MH "Communicative Disorders+") OR (MH "Down Syndrome")

S26. ((Disable* or Disabilit* or Handicapped) N5 (person* or people))

S27. (MH "Disabled+")

S28. S13 or S14 or S15 or S16 or S17 or S18 or S19 or S20 or S21 or S22 or S23 or

S24 or S25 or S26 or S27

S29. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or (Upper Volta) or Burundi or Urundi or Cambodia or (Republic of Kampuchea) or Cameroon or Cameroons or (Cape Verde) or (Central African Republic) or Chad or Chile or China or Colombia or Comoros or (Comoro Islands) or Comores or Congo or DRC or Zaire or (Costa Rica) or (Cote d'Ivoire) or (Ivory Coast) or Cuba or Djibouti or Obock or (French Somaliland) or Dominica or (Dominican Republic) or Ecuador or Egypt or (United Arab Republic) or (El Salvador) or Eritrea or Ethiopia or Fiji or Gabon or (Gabonese Republic) or Gambia or Georgia or Ghana or (Gold Coast) or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or (Republic of Korea) or (North Korea) or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or (Kyrgyz Republic) or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or (Malagasy Republic) or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or (Marshall Islands) or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or (Papua New Guinea) or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or (Russian Federation) or USSR or (Soviet Union) or (Union of Soviet Socialist Republics) or Rwanda or Ruanda-Urundi or Samoa or (Samoan Islands) or (Sao Tome) or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or (Sierra Leone) or (Solomon Islands) or Somalia or (South Africa) or (Sri Lanka) or Ceylon or (Saint Kitts) or (St Kitts) or (Saint Christopher Island) or Nevis or (Saint Lucia) or (St Lucia) or (Saint Vincent) or (St Vincent) or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or (Syrian Arab Republic) or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or (East Timor) or Togo or (Togolese Republic) or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or (New Hebrides) or Venezuela or Vietnam or (Viet Nam) or (West Bank) or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia)

S30. (Africa or Asia or Caribbean or (West Indies) or (Latin America) or (Central America) or (South America))

S31. (MH "Africa South of the Sahara+") OR (MH "Asia, Central+") OR (MH "Asia, Southeastern+") OR (MH "Asia, Western+") OR (MH "Latin America") OR (MH "Central America") OR (MH "South America") OR (MH "West Indies")

S32. ((Developing or Low-income or (low income) or Middle-income or (Middle income) or (Low and middle income) or (Low- and middle-income) or Less-Developed or (Less Developed) or (Least Developed) or (Under Developed) or underdeveloped or Third-World) N5 (countr* or nation* or world or econom*))

S33. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or (LAMI countr*) or (third world))

S34. ((Transitional countr*) or (Transitional econom*) or (Transition countr*) or

(Transition econom*))

S35. (MH "Developing Countries")

S36. S29 or S29 or S30 or S31 or S32 or S33 or S34 or S35

S37. S12 and S28 and S36

S38. S37 Limiters - Published Date from: 19760101-20121231

Cochrane Database of Systematic Reviews-CENTRAL (Cochrane Central Register of Controlled Trials)-DARE (Database of Abstracts of Reviews of Effects)-HTA (Health Technology Assessment Database)-NHSEED (NHS Economic Evaluation Database) (The Cochrane Library) (Searched 29 July 2012)

#1. ((Community-based rehabilitation) or (Community based rehabilitation) or CBR):ti,ab,kw
#2. (Communit* N/5 (rehabilitat* or (health care) or healthcare or (health service*) or (health nursing*) or (health visitor*) or (health network*) or (care network*) or counsel* or (foster home*) or (foster care*) or (home care*) or homecare or (domiciliary care*) or (preventive health) or (health education) or (health promotion) or (self-help device*) or (assistive device*))):ti,ab,kw
#3. (Communit* N/5 inclusi* N/5 ((education) or (school*) or (preschool*) or (high-school*) or (environment*) or (curricul*))):ti,ab,kw
#4. ((Communit* N/5 "vocational training") OR (Communit* N/5 (apprenticeship* or (employment placement service*) or (support network*) or self-employ* or (social service*) or (social work*)))):ti,ab,kw
#5. ((Communit* N/5 "personal assistance") OR (Communit* N/5 "personal assistant*") OR (Communit* N/5 "individual support*") OR (Communit* N/5 "disabled people* organization*") OR (Communit* N/5 "disabled people* organisation*")):ti,ab,kw
#6. (Communit* N/5 (empower* or (awareness campaign*) or self-advocacy or (self-help group*) or (support group*) or (women group*) or (political group*) or (development group*))):ti,ab,kw
#7. (Communit* N/5 inclusi* N/5 (health or education or hous* or social or justice or empower*)):ti,ab,kw
#8. ((rehabilitat* N/5 "home based") OR (rehabilitat* N/5 home-based)):ti,ab,kw
#9. MeSH descriptor Rehabilitation explode all trees
#10. MeSH descriptor Rehabilitation Centers explode all trees
#11. MeSH descriptor Rehabilitation of Hearing Impaired explode all trees
#12. MeSH descriptor Rehabilitation of Speech and Language Disorders explode all trees
#13. MeSH descriptor Rehabilitation, Vocational explode all trees
#14. MeSH descriptor Community Health Services explode all trees
#15. MeSH descriptor Self-Help Groups explode all trees
#16. MeSH descriptor Social Work explode all trees
#17. MeSH descriptor Home Care Services explode all trees
#18. (#1 OR #2 OR #3 OR #4 OR #5 OR #6 OR #7 OR #8 OR #9 OR #10 OR #11 OR #12 OR #13 OR #14 OR #15 OR #16 OR #17)

#19. (Physical* N/5 (impair* or deficienc* or disable* or disabili* or handicap*)):ti,ab,kw
#20. ((Cerebral pals*) or (Spina bifida) or (Muscular dystroph*) or Arthriti* or (Osteogenesis imperfecta) or (Musculoskeletal abnormalit*) or (Musculo-skeletal abnormalit*) or (Muscular abnormalit*) or (Skeletal abnormalit*) or (Limb abnormalit*) or (Brain injur*) or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or (Cerebrovascular accident*)):ti,ab,kw
#21. ((Hearing or Acoustic or Ear*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)):ti,ab,kw
#22. ((Visual* or Vision or Eye*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)):ti,ab,kw
#23. (Deaf* or Blind*):ti,ab,kw
#24. (Schizophreni* or Psychos* or (Psychotic Disorder*) or (Schizoaffective Disorder*) or (Schizophreniform Disorder*) or Dementia* or Alzheimer*):ti,ab,kw
#25. ((Intellectual* or Mental* or Psychological* or Developmental) N/5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)):ti,ab,kw
#26. ((communication or language or speech or learning) N/5 disorder*):ti,ab,kw
#27. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or (Trisomy 21)):ti,ab,kw
#28. ((Disable* or Disabilit* or Handicapped) N/5 (person* or people)):ti,ab,kw
#29. MeSH descriptor Cerebral Palsy explode all trees
#30. MeSH descriptor Spina Bifida Cystica explode all trees
#31. MeSH descriptor Spina Bifida Occulta explode all trees
#32. MeSH descriptor Muscular Dystrophies explode all trees
#33. MeSH descriptor Arthritis explode all trees
#34. MeSH descriptor Osteogenesis Imperfecta explode all trees
#35. MeSH descriptor Musculoskeletal Abnormalities explode all trees
#36. MeSH descriptor Brain Injuries explode all trees
#37. MeSH descriptor Amputation explode all trees
#38. MeSH descriptor Clubfoot explode all trees
#39. MeSH descriptor Poliomyelitis explode all trees
#40. MeSH descriptor Paraplegia explode all trees
#41. MeSH descriptor Hemiplegia explode all trees
#42. MeSH descriptor Stroke explode all trees
#43. MeSH descriptor Hearing Loss explode all trees
#44. MeSH descriptor Vision, Low explode all trees
#45. MeSH descriptor Deafness explode all trees
#46. MeSH descriptor Blindness explode all trees
#47. MeSH descriptor Schizophrenia and Disorders with Psychotic Features explode all trees
#48. MeSH descriptor Dementia explode all trees
#49. MeSH descriptor Alzheimer Disease explode all trees
#50. MeSH descriptor Developmental Disabilities explode all trees
#51. MeSH descriptor Child Development Disorders, Pervasive explode all trees
#52. MeSH descriptor Communication Disorders explode all trees
#53. MeSH descriptor Down Syndrome explode all trees
#54. MeSH descriptor Disabled Persons explode all trees
#55. (#19 OR #20 OR #21 OR #22 OR #23 OR #24 OR #25 OR #26 OR #27 OR #28 OR #29 OR #30 OR #31 OR #32 OR #33 OR #34 OR #35 OR #36 OR #37 OR #38 OR #39 OR #40 OR #41 OR #42 OR #43 OR #44 OR #45 OR #46 OR #47 OR #48 OR #49 OR #50 OR #51 OR #52 OR #53 OR #54)
#56. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or

(Upper Volta) or Burundi or Urundi or Cambodia or (Republic of Kampuchea) or Cameroon or Cameroons or (Cape Verde) or (Central African Republic) or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or (Costa Rica) or (Cote d'Ivoire) or (Ivory Coast) or Cuba or Djibouti or Obock or (French Somaliland) or Dominica or (Dominican Republic) or Ecuador or Egypt or (United Arab Republic) or (El Salvador) or Eritrea or Ethiopia or Fiji or Gabon or (Gabonese Republic) or Gambia or Georgia or Ghana or (Gold Coast) or Grenada or Guatemala or Guinea or Guinea-Bisau):ti,ab,kw

#57. (Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or (Republic of Korea) or (North Korea) or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or (Kyrgyz Republic) or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or (Malagasy Republic) or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or (Marshall Islands) or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine):ti,ab,kw

#58. (Panama or (Papua New Guinea) or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or (Russian Federation) or USSR or (Soviet Union) or (Union of Soviet Socialist Republics) or Rwanda or Ruanda-Urundi or Samoa or (Samoan Islands) or (Sao Tome) or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or (Sierra Leone) or (Solomon Islands) or Somalia or (South Africa) or (Sri Lanka) or Ceylon or (Saint Kitts) or (St Kitts) or (Saint Christopher Island) or Nevis or (Saint Lucia) or (St Lucia) or (Saint Vincent) or (St Vincent) or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or (Syrian Arab Republic) or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or (East Timor) or Togo or (Togolese Republic) or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or (New Hebrides) or Venezuela or Vietnam or (Viet Nam) or (West Bank) or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia):ti,ab,kw

#59. (Africa or Asia or Caribbean or (West Indies) or (Latin America) or (Central America) or (South America)):ti,ab,kw

#60. ((Developing or Low-income or (low income) or Middle-income or (Middle income) or (Low and middle income) or (Low- and middle-income) or Less-Developed or (Less Developed) or (Least Developed) or (Under Developed) or underdeveloped or Third-World) N/5 (countr* or nation* or world or econom*)):ti,ab,kw

#61. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or (LAMI countr*) or (third world)):ti,ab,kw

#62. ((Transitional countr*) or (Transitional econom*) or (Transition countr*) or (Transition econom*)):ti,ab,kw

#63. MeSH descriptor Africa South of the Sahara explode all trees

#64. MeSH descriptor Africa, Central explode all trees

#65. MeSH descriptor Africa, Eastern explode all trees

#66. MeSH descriptor Africa, Southern explode all trees

#67. MeSH descriptor Africa, Western explode all trees

#68. MeSH descriptor Asia, Central explode all trees

#69. MeSH descriptor Asia, Southeastern explode all trees

#70. MeSH descriptor Asia, Western explode all trees

#71. MeSH descriptor Latin America explode all trees

#72. MeSH descriptor Central America explode all trees

#73. MeSH descriptor South America explode all trees

#74. MeSH descriptor Caribbean Region explode all trees

#75. MeSH descriptor Developing Countries explode all trees
#76. (#56 OR #57 OR #58 OR #59 OR #60 OR #61 OR #62 OR #63 OR #64 OR #65 OR #66 OR #67 OR #68 OR #69 OR #70 OR #71 OR #72 OR #73 OR #74 OR #75)
#77. (#18 AND #55 AND #76)

EconLit (OvidSP) 1961 to June 2012 (29 July 2012)

1. (Community-based rehabilitation or Community based rehabilitation or CBR).sh,ti,ab.
2. (Communit* adj5 (rehabilitat* or health care or healthcare or health service* or health nursing* or health visitor* or health network* or care network* or counsel* or foster home* or foster care* or home care* or homecare or domiciliary care* or preventive health or health education or health promotion or self-help device* or assistive device*)).sh,ti,ab.
3. (Communit* adj5 inclusi* adj5 (education or school* or preschool* or high-school* or environment* or curricul*)).sh,ti,ab.
4. (Communit* adj5 (vocational training or apprenticeship* or employment placement service* or support network* or self-employ* or social service* or social work*)).sh,ti,ab.
5. (Communit* adj5 (personal assistance or personal assistant* or individual support* or disabled people* organization* or disabled people* organisation*)).sh,ti,ab.
6. (Communit* adj5 (empower* or awareness campaign* or self-advocacy or self-help group* or support group* or women group* or political group* or development group*)).sh,ti,ab.
7. (Communit* adj5 inclusi* adj5 (health or education or hous* or social or justice or empower*)).sh,ti,ab.
8. (rehabilitat* adj5 (home based or home-based)).sh,ti,ab.
9. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8
10. (Physical* adj5 (impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
11. (Cerebral pals* or Spina bifida or Muscular dystroph* or Arthriti* or Osteogenesis imperfecta or Musculoskeletal abnormalit* or Musculo-skeletal abnormalit* or Muscular abnormalit* or Skeletal abnormalit* or Limb abnormalit* or Brain injur* or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or Cerebrovascular accident*).sh,ti,ab.
12. ((Hearing or Acoustic or Ear*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
13. ((Visual* or Vision or Eye*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
14. (Deaf* or Blind*).sh,ti,ab.
15. (Schizophreni* or Psychos* or Psychotic Disorder* or Schizoaffective Disorder* or Schizophreniform Disorder* or Dementia* or Alzheimer*).sh,ti,ab.
16. ((Intellectual* or Mental* or Psychological* or Developmental) adj5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)).sh,ti,ab.
17. ((communication or language or speech or learning) adj5 disorder*).sh,ti,ab.
18. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or Trisomy 21).sh,ti,ab.
19. ((Disable* or Disabilit* or Handicapped) adj5 (person* or people)).sh,ti,ab.
20. 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19
21. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-

Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or Upper Volta or Burundi or Urundi or Cambodia or Republic of Kampuchea or Cameroon or Cameroons or Cape Verde or Central African Republic or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or Obock or French Somaliland or Dominica or Dominican Republic or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Georgia or Ghana or Gold Coast or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or Republic of Korea or North Korea or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or Kyrgyz Republic or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or Marshall Islands or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or Papua New Guinea or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or Russian Federation or USSR or Soviet Union or Union of Soviet Socialist Republics or Rwanda or Ruanda-Urundi or Samoa or Samoan Islands or Sao Tome or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or Sierra Leone or Solomon Islands or Somalia or South Africa or Sri Lanka or Ceylon or Saint Kitts or St Kitts or Saint Christopher Island or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or Syrian Arab Republic or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or East Timor or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or New Hebrides or Venezuela or Vietnam or Viet Nam or West Bank or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia).sh,ti,ab,ct.

22. (Africa or Asia or Caribbean or West Indies or Latin America or Central America or South America).sh,ti,ab.
23. ((Developing or Low-income or low income or Middle-income or Middle income or (Low and middle income) or (Low- and middle-income) or Less-Developed or Less Developed or Least Developed or Under Developed or underdeveloped or Third-World) adj5 (countr* or nation* or world or econom*)).sh,ti,ab.
24. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or LAMI countr* or third world).sh,ti,ab.
25. (Transitional countr* or Transitional econom* or Transition countr* or Transition econom*).sh,ti,ab.
26. 21 or 22 or 23 or 24 or 25
27. 9 and 20 and 26
28. limit 27 to yr="1976 -Current"

EMBASE (OvidSP) 1974 to 2012 Week 29 (Searched 27 July 2012)

1. (Community-based rehabilitation or Community based rehabilitation or CBR).sh,ti,ab.
2. (Communit* adj5 (rehabilitat* or health care or healthcare or health service* or health nursing* or health visitor* or health network* or care network* or counsel* or foster home* or foster care* or home care* or homecare or

domiciliary care* or preventive health or health education or health promotion or self-help device* or assistive device*)).sh,ti,ab.
3. (Communit* adj5 inclusi* adj5 (education or school* or preschool* or high-school* or environment* or curricul*)).sh,ti,ab.
4. (Communit* adj5 (vocational training or apprenticeship* or employment placement service* or support network* or self-employ* or social service* or social work*)).sh,ti,ab.
5. (Communit* adj5 (personal assistance or personal assistant* or individual support* or disabled people* organization* or disabled people* organisation*)).sh,ti,ab.
6. (Communit* adj5 (empower* or awareness campaign* or self-advocacy or self-help group* or support group* or women group* or political group* or development group*)).sh,ti,ab.
7. (Communit* adj5 inclusi* adj5 (health or education or hous* or social or justice or empower*)).sh,ti,ab.
8. (rehabilitat* adj5 (home based or home-based)).sh,ti,ab.
9. exp community based rehabilitation/ or ((exp rehabilitation/ or exp rehabilitation center/ or ((exp community health services/ or exp social work/ or exp self help/) and rehabilitat*.sh,ti,ab.)) and communit*.sh,ti,ab.)
10. exp home rehabilitation/ or (exp home care/ and rehabilitat*.sh,ti,ab.)
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. (Physical* adj5 (impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
13. (Cerebral pals* or Spina bifida or Muscular dystroph* or Arthriti* or Osteogenesis imperfecta or Musculoskeletal abnormalit* or Musculo-skeletal abnormalit* or Muscular abnormalit* or Skeletal abnormalit* or Limb abnormalit* or Brain injur* or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or Cerebrovascular accident*).sh,ti,ab.
14. exp cerebral palsy/ or exp spina bifida/ or exp muscular dystrophy/ or exp arthritis/ or exp osteogenesis imperfecta/ or exp musculoskeletal system malformations/ or exp brain injury/ or exp amputation/ or exp clubfoot/ or exp poliomyelitis/ or exp paraplegia/ or exp hemiplegia/ or exp stroke/
15. ((Hearing or Acoustic or Ear*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
16. ((Visual* or Vision or Eye*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
17. (Deaf* or Blind*).sh,ti,ab.
18. exp hearing loss/ or exp abnormal vision/ or exp hearing impairment/ or exp visual impairment/
19. (Schizophreni* or Psychos* or Psychotic Disorder* or Schizoaffective Disorder* or Schizophreniform Disorder* or Dementia* or Alzheimer*).sh,ti,ab.
20. exp schizophrenia/ or exp psychosis/ or exp dementia/ or exp Alzheimer disease/
21. ((Intellectual* or Mental* or Psychological* or Developmental) adj5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)).sh,ti,ab.
22. ((communication or language or speech or learning) adj5 disorder*).sh,ti,ab.
23. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or Trisomy 21).sh,ti,ab.
24. exp intellectual impairment/ or exp developmental disorder/ or exp communication disorder/ or exp autism/ or exp Down syndrome/
25. ((Disable* or Disabilit* or Handicapped) adj5 (person* or people)).sh,ti,ab.
26. exp disabled person/ or exp disability/
27. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26
28. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia

or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or Upper Volta or Burundi or Urundi or Cambodia or Republic of Kampuchea or Cameroon or Cameroons or Cape Verde or Central African Republic or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or Obock or French Somaliland or Dominica or Dominican Republic or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Georgia or Ghana or Gold Coast or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or Republic of Korea or North Korea or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or Kyrgyz Republic or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or Marshall Islands or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or Papua New Guinea or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or Russian Federation or USSR or Soviet Union or Union of Soviet Socialist Republics or Rwanda or Ruanda-Urundi or Samoa or Samoan Islands or Sao Tome or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or Sierra Leone or Solomon Islands or Somalia or South Africa or Sri Lanka or Ceylon or Saint Kitts or St Kitts or Saint Christopher Island or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or Syrian Arab Republic or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or East Timor or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or New Hebrides or Venezuela or Vietnam or Viet Nam or West Bank or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia).sh,ti,ab,cp.

29. (Africa or Asia or Caribbean or West Indies or Latin America or Central America or South America).sh,ti,ab.
30. exp Africa south of the Sahara/ or exp South Asia/ or exp Southeast Asia/ or exp central america/ or exp south america/
31. ((Developing or Low-income or low income or Middle-income or Middle income or (Low and middle income) or (Low- and middle-income) or Less-Developed or Less Developed or Least Developed or Under Developed or underdeveloped or Third-World) adj5 (countr* or nation* or world or econom*)).sh,ti,ab.
32. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or LAMI countr* or third world).sh,ti,ab.
33. (Transitional countr* or Transitional econom* or Transition countr* or Transition econom*).sh,ti,ab.
34. exp developing country/
35. 28 or 29 or 30 or 31 or 32 or 33 or 34
36. 11 and 27 and 35
37. limit 36 to yr="1976 -Current"

ERIC (ProQuest) 1966-current (Searched 29 July 2012)

1. ((Community-based rehabilitation) or (Community based rehabilitation) or CBR)
2. (Communit* N/5 (rehabilitat* or (health care) or healthcare or (health service*) or (health nursing*) or (health visitor*) or (health network*) or (care network*) or counsel* or (foster home*) or (foster care*) or (home care*) or homecare or (domiciliary care*) or (preventive health) or (health education) or (health promotion) or (self-help device*) or (assistive device*)))
3. (Communit* N/5 inclusi* N/5 ((education) or (school*) or (preschool*) or (high-school*) or (environment*) or (curricul*)))
4. ((Communit* N/5 "vocational training") OR (Communit* N/5 (apprenticeship* or (employment placement service*) or (support network*) or self-employ* or (social service*) or (social work*))))
5. ((Communit* N/5 “personal assistance”) OR (Communit* N/5 “personal assistant*”) OR (Communit* N/5 “individual support*”) OR (Communit* N/5 “disabled people* organization*”) OR (Communit* N/5 “disabled people* organisation*”))
6. (Communit* N/5 (empower* or (awareness campaign*) or self-advocacy or (self-help group*) or (support group*) or (women group*) or (political group*) or (development group*)))
7. (Communit* N/5 inclusi* N/5 (health or education or hous* or social or justice or empower*))
8. ((rehabilitat* N/5 “home based”) OR (rehabilitat* N/5 home-based))
9. ((SU.EXACT("Rehabilitation") or SU.EXACT("Rehabilitation Programs") or ((SU.EXACT("Self Help Programs") OR SU.EXACT("Community Services") or SU.EXACT("Social Work")) and rehabilitat*) and communit*))
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. (Physical* N/5 (impair* or deficienc* or disable* or disabili* or handicap*))
12. ((Cerebral pals*) or (Spina bifida) or (Muscular dystroph*) or Arthriti* or (Osteogenesis imperfecta) or (Musculoskeletal abnormalit*) or (Musculo-skeletal abnormalit*) or (Muscular abnormalit*) or (Skeletal abnormalit*) or (Limb abnormalit*) or (Brain injur*) or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or (Cerebrovascular accident*))
13. SU.EXACT("Cerebral Palsy") OR SU.EXACT("Congenital Impairments") OR SU.EXACT("Head Injuries") OR SU.EXACT("Physical Disabilities") OR SU.EXACT("Neurological Impairments")
14. ((Hearing or Acoustic or Ear*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))
15. ((Visual* or Vision or Eye*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))
16. (Deaf* or Blind*)
17. SU.EXACT("Blindness") OR SU.EXACT("Deafness") OR SU.EXACT("Deaf Blind")
18. (Schizophreni* or Psychos* or (Psychotic Disorder*) or (Schizoaffective Disorder*) or (Schizophreniform Disorder*) or Dementia* or Alzheimer*)
19. (SU.EXACT("Psychosis") OR SU.EXACT("Dementia"))
20. ((Intellectual* or Mental* or Psychological* or Developmental) N/5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*))
21. ((communication or language or speech or learning) N/5 disorder*)
22. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or (Trisomy 21))
23. (SU.EXACT("Learning disabilities") OR SU.EXACT("Pervasive Developmental Disorders") OR SU.EXACT("Down Syndrome"))
24. ((Disable* or Disabilit* or Handicapped) N/5 (person* or people))
25. SU.EXACT("Disabilities")
26. 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25
27. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or

Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or (Upper Volta) or Burundi or Urundi or Cambodia or (Republic of Kampuchea) or Cameroon or Cameroons or (Cape Verde) or (Central African Republic) or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or (Costa Rica) or (Cote d'Ivoire) or (Ivory Coast) or Cuba or Djibouti or Obock or (French Somaliland) or Dominica or (Dominican Republic) or Ecuador or Egypt or (United Arab Republic) or (El Salvador) or Eritrea or Ethiopia or Fiji or Gabon or (Gabonese Republic) or Gambia or Georgia or Ghana or (Gold Coast) or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or (Republic of Korea) or (North Korea) or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or (Kyrgyz Republic) or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or (Malagasy Republic) or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or (Marshall Islands) or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or (Papua New Guinea) or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or (Russian Federation) or USSR or (Soviet Union) or (Union of Soviet Socialist Republics) or Rwanda or Ruanda-Urundi or Samoa or (Samoan Islands) or (Sao Tome) or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or (Sierra Leone) or (Solomon Islands) or Somalia or (South Africa) or (Sri Lanka) or Ceylon or (Saint Kitts) or (St Kitts) or (Saint Christopher Island) or Nevis or (Saint Lucia) or (St Lucia) or (Saint Vincent) or (St Vincent) or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or (Syrian Arab Republic) or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or (East Timor) or Togo or (Togolese Republic) or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or (New Hebrides) or Venezuela or Vietnam or (Viet Nam) or (West Bank) or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia)

28. (Africa or Asia or Caribbean or (West Indies) or (Latin America) or (Central America) or (South America))
29. ((Developing or Low-income or (low income) or Middle-income or (Middle income) or (Low and middle income) or (Low- and middle-income) or Less-Developed or (Less Developed) or (Least Developed) or (Under Developed) or underdeveloped or Third-World) N/5 (countr* or nation* or world or econom*))
30. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or (LAMI countr*) or (third world))
31. ((Transitional countr*) or (Transitional econom*) or (Transition countr*) or (Transition econom*))
32. SU.EXACT("Developing Nations")
33. 27 or 28 or 29 or 30 or 31 or 32
34. 10 and 26 and 33
35. S34 Limited by: Date: After 01 January 1976

Global Health (OvidSP) 1910 to July 2012 (Searched 29 July 2012)

1. (Community-based rehabilitation or Community based rehabilitation or CBR).sh,ti,ab.
2. (Communit* adj5 (rehabilitat* or health care or healthcare or health service* or health nursing* or health visitor* or health network* or care network* or counsel* or foster home* or foster care* or home care* or homecare or domiciliary care* or preventive health or health education or health promotion or self-help device* or assistive device*)).sh,ti,ab.
3. (Communit* adj5 inclusi* adj5 (education or school* or preschool* or high-school* or environment* or curricul*)).sh,ti,ab.
4. (Communit* adj5 (vocational training or apprenticeship* or employment placement service* or support network* or self-employ* or social service* or social work*)).sh,ti,ab.
5. (Communit* adj5 (personal assistance or personal assistant* or individual support* or disabled people* organization* or disabled people* organisation*)).sh,ti,ab.
6. (Communit* adj5 (empower* or awareness campaign* or self-advocacy or self-help group* or support group* or women group* or political group* or development group*)).sh,ti,ab.
7. (Communit* adj5 inclusi* adj5 (health or education or hous* or social or justice or empower*)).sh,ti,ab.
8. (rehabilitat* adj5 (home based or home-based)).sh,ti,ab.
9. (exp rehabilitation/ or ((exp community health services/ or exp social services/ or exp community development/) and rehabilitat*.sh,ti,ab.)) and communit*.sh,ti,ab.
10. exp home care/ and rehabilitat*.sh,ti,ab.
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. (Physical* adj5 (impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
13. (Cerebral pals* or Spina bifida or Muscular dystroph* or Arthriti* or Osteogenesis imperfecta or Musculoskeletal abnormalit* or Musculo-skeletal abnormalit* or Muscular abnormalit* or Skeletal abnormalit* or Limb abnormalit* or Brain injur* or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or Cerebrovascular accident*).sh,ti,ab.
14. exp cerebral palsy/ or exp spina bifida/ or exp muscular dystrophy/ or exp arthritis/ or exp osteogenesis Imperfecta/ or exp musculoskeletal anomalies/ or exp amputation/ or exp poliomyelitis/ or exp paraplegia/ or exp stroke/
15. ((Hearing or Acoustic or Ear*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
16. ((Visual* or Vision or Eye*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
17. (Deaf* or Blind*).sh,ti,ab.
18. exp hearing impairment/ or exp deafness/ or exp blindness/
19. (Schizophreni* or Psychos* or Psychotic Disorder* or Schizoaffective Disorder* or Schizophreniform Disorder* or Dementia* or Alzheimer*).sh,ti,ab.
20. exp schizophrenia/ or exp psychoses/ or exp dementia/ or exp Alzheimer's disease/
21. ((Intellectual* or Mental* or Psychological* or Developmental) adj5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)).sh,ti,ab.
22. ((communication or language or speech or learning) adj5 disorder*).sh,ti,ab.
23. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or Trisomy 21).sh,ti,ab.
24. exp mental retardation/ or exp pervasive child development disorders/ or exp Down's syndrome/
25. ((Disable* or Disabilit* or Handicapped) adj5 (person* or people)).sh,ti,ab.
26. exp disabilities/ or exp people with disabilities/ or exp people with physical disabilities/ or exp people with hearing impairment/ or exp people with visual

impairment/ or exp people with speech impairment/ or exp people with mental disabilities/

27. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26
28. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or Upper Volta or Burundi or Urundi or Cambodia or Republic of Kampuchea or Cameroon or Cameroons or Cape Verde or Central African Republic or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or Obock or French Somaliland or Dominica or Dominican Republic or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Georgia or Ghana or Gold Coast or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or Republic of Korea or North Korea or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or Kyrgyz Republic or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or Marshall Islands or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or Papua New Guinea or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or Russian Federation or USSR or Soviet Union or Union of Soviet Socialist Republics or Rwanda or Ruanda-Urundi or Samoa or Samoan Islands or Sao Tome or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or Sierra Leone or Solomon Islands or Somalia or South Africa or Sri Lanka or Ceylon or Saint Kitts or St Kitts or Saint Christopher Island or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or Syrian Arab Republic or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or East Timor or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or New Hebrides or Venezuela or Vietnam or Viet Nam or West Bank or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia).sh,ti,ab,cp.
29. (Africa or Asia or Caribbean or West Indies or Latin America or Central America or South America).sh,ti,ab.
30. exp Africa South of Sahara/ or exp Central Asia/ or exp South East Asia/ or exp West Asia/ or exp Latin America/ or exp Caribbean/ or exp Central America/ or exp South America/
31. ((Developing or Low-income or low income or Middle-income or Middle income or (Low and middle income) or (Low- and middle-income) or Less-Developed or Less Developed or Least Developed or Under Developed or underdeveloped or Third-World) adj5 (countr* or nation* or world or econom*)).sh,ti,ab.
32. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or LAMI countr* or third world).sh,ti,ab.
33. (Transitional countr* or Transitional econom* or Transition countr* or Transition econom*).sh,ti,ab.
34. exp Developing Countries/
35. 28 or 29 or 30 or 31 or 32 or 33 or 34

36. 11 and 27 and 35
37. limit 36 to yr="1976 -Current"

IBSS (International Bibliography of the Social Sciences) (ProQuest) 1951-current
(Searched 29 July 2012)

1. ((Community-based rehabilitation) or (Community based rehabilitation) or CBR)
2. (Communit* N/5 (rehabilitat* or (health care) or healthcare or (health service*) or (health nursing*) or (health visitor*) or (health network*) or (care network*) or counsel* or (foster home*) or (foster care*) or (home care*) or homecare or (domiciliary care*) or (preventive health) or (health education) or (health promotion) or (self-help device*) or (assistive device*)))
3. (Communit* N/5 inclusi* N/5 ((education) or (school*) or (preschool*) or (high-school*) or (environment*) or (curricul*)))
4. ((Communit* N/5 "vocational training") OR (Communit* N/5 (apprenticeship* or (employment placement service*) or (support network*) or self-employ* or (social service*) or (social work*))))
5. ((Communit* N/5 “personal assistance”) OR (Communit* N/5 “personal assistant*”) OR (Communit* N/5 “individual support*”) OR (Communit* N/5 “disabled people* organization*”) OR (Communit* N/5 “disabled people* organisation*”))
6. (Communit* N/5 (empower* or (awareness campaign*) or self-advocacy or (self-help group*) or (support group*) or (women group*) or (political group*) or (development group*)))
7. (Communit* N/5 inclusi* N/5 (health or education or hous* or social or justice or empower*))
8. ((rehabilitat* N/5 “home based”) OR (rehabilitat* N/5 home-based))
9. ((SU.EXACT("Disabled rehabilitation") or SU.EXACT("Vocational rehabilitation") or SU.EXACT("Social rehabilitation") or (SU.EXACT("Self-help") or SU.EXACT("Community services") or SU.EXACT("Community care") or SU.EXACT("Social work")) and rehabilitat*) and communit*)
10. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9
11. (Physical* N/5 (impair* or deficienc* or disable* or disabili* or handicap*))
12. ((Cerebral pals*) or (Spina bifida) or (Muscular dystroph*) or Arthriti* or (Osteogenesis imperfecta) or (Musculoskeletal abnormalit*) or (Musculo-skeletal abnormalit*) or (Muscular abnormalit*) or (Skeletal abnormalit*) or (Limb abnormalit*) or (Brain injur*) or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or (Cerebrovascular accident*))
13. ((Hearing or Acoustic or Ear*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))
14. ((Visual* or Vision or Eye*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))
15. (Deaf* or Blind*)
16. SU.EXACT("Blindness") OR SU.EXACT("Deafness")
17. (Schizophreni* or Psychos* or (Psychotic Disorder*) or (Schizoaffective Disorder*) or (Schizophreniform Disorder*) or Dementia* or Alzheimer*)
18. SU.EXACT("Alzheimer's disease") OR SU.EXACT("Schizophrenia") OR SU.EXACT("Psychoses")
19. ((Intellectual* or Mental* or Psychological* or Developmental) N/5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*))
20. ((communication or language or speech or learning) N/5 disorder*)
21. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or (Trisomy 21))
22. SU.EXACT("Learning disabilities") OR SU.EXACT("Down's syndrome")
23. ((Disable* or Disabilit* or Handicapped) N/5 (person* or people))

24. SU.EXACT("Disabled persons") OR SU.EXACT("Disability")
25. 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24
26. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or (Upper Volta) or Burundi or Urundi or Cambodia or (Republic of Kampuchea) or Cameroon or Cameroons or (Cape Verde) or (Central African Republic) or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or (Costa Rica) or (Cote d'Ivoire) or (Ivory Coast) or Cuba or Djibouti or Obock or (French Somaliland) or Dominica or (Dominican Republic) or Ecuador or Egypt or (United Arab Republic) or (El Salvador) or Eritrea or Ethiopia or Fiji or Gabon or (Gabonese Republic) or Gambia or Georgia or Ghana or (Gold Coast) or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or (Republic of Korea) or (North Korea) or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or (Kyrgyz Republic) or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or (Malagasy Republic) or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or (Marshall Islands) or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or (Papua New Guinea) or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or (Russian Federation) or USSR or (Soviet Union) or (Union of Soviet Socialist Republics) or Rwanda or Ruanda-Urundi or Samoa or (Samoan Islands) or (Sao Tome) or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or (Sierra Leone) or (Solomon Islands) or Somalia or (South Africa) or (Sri Lanka) or Ceylon or (Saint Kitts) or (St Kitts) or (Saint Christopher Island) or Nevis or (Saint Lucia) or (St Lucia) or (Saint Vincent) or (St Vincent) or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or (Syrian Arab Republic) or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or (East Timor) or Togo or (Togolese Republic) or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or (New Hebrides) or Venezuela or Vietnam or (Viet Nam) or (West Bank) or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia)
27. (Africa or Asia or Caribbean or (West Indies) or (Latin America) or (Central America) or (South America))
28. SU.EXACT("West Africa") OR SU.EXACT("Southern Africa") OR SU.EXACT("Sub-Saharan Africa") OR SU.EXACT("South Africa") OR SU.EXACT("Central Africa") OR SU.EXACT("East Africa") OR SU.EXACT("Southeast Asia") OR SU.EXACT("Central Asia") OR SU.EXACT("South America") OR SU.EXACT("Caribbean") OR SU.EXACT("Latin America") OR SU.EXACT("Central America")
29. ((Developing or Low-income or (low income) or Middle-income or (Middle income) or (Low and middle income) or (Low- and middle-income) or Less-Developed or (Less Developed) or (Least Developed) or (Under Developed) or underdeveloped or Third-World) N/5 (countr* or nation* or world or econom*))
30. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or (LAMI countr*) or (third world))
31. ((Transitional countr*) or (Transitional econom*) or (Transition countr*) or (Transition econom*))

32. SU.EXACT("Developing countries")
33. 26 or 27 or 28 or 29 or 30 or 31 or 32
34. 10 and 25 and 33
35. S34 Limited by: Date: After 01 January 1976

PAIS International (ProQuest) (Searched 27 July 2012)

1. ((Community-based rehabilitation) or (Community based rehabilitation) or CBR)
2. (Communit* N/5 (rehabilitat* or (health care) or healthcare or (health service*) or (health nursing*) or (health visitor*) or (health network*) or (care network*) or counsel* or (foster home*) or (foster care*) or (home care*) or homecare or (domiciliary care*) or (preventive health) or (health education) or (health promotion) or (self-help device*) or (assistive device*)))
3. (Communit* N/5 inclusi* N/5 ((education) or (school*) or (preschool*) or (high-school*) or (environment*) or (curricul*)))
4. ((Communit* N/5 "vocational training") OR (Communit* N/5 (apprenticeship* or (employment placement service*) or (support network*) or self-employ* or (social service*) or (social work*))))
5. ((Communit* N/5 “personal assistance”) OR (Communit* N/5 “personal assistant*”) OR (Communit* N/5 “individual support*”) OR (Communit* N/5 “disabled people* organization*”) OR (Communit* N/5 “disabled people* organisation*”))
6. (Communit* N/5 (empower* or (awareness campaign*) or self-advocacy or (self-help group*) or (support group*) or (women group*) or (political group*) or (development group*)))
7. (Communit* N/5 inclusi* N/5 (health or education or hous* or social or justice or empower*))
8. ((rehabilitat* N/5 “home based”) OR (rehabilitat* N/5 home-based))
9. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8
10. (Physical* N/5 (impair* or deficienc* or disable* or disabili* or handicap*))
11. ((Cerebral pals*) or (Spina bifida) or (Muscular dystroph*) or Arthriti* or (Osteogenesis imperfecta) or (Musculoskeletal abnormalit*) or (Musculo-skeletal abnormalit*) or (Muscular abnormalit*) or (Skeletal abnormalit*) or (Limb abnormalit*) or (Brain injur*) or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or (Cerebrovascular accident*))
12. ((Hearing or Acoustic or Ear*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))
13. ((Visual* or Vision or Eye*) N/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*))
14. (Deaf* or Blind*)
15. (Schizophreni* or Psychos* or (Psychotic Disorder*) or (Schizoaffective Disorder*) or (Schizophreniform Disorder*) or Dementia* or Alzheimer*)
16. ((Intellectual* or Mental* or Psychological* or Developmental) N/5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*))
17. ((communication or language or speech or learning) N/5 disorder*)
18. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or (Trisomy 21))
19. ((Disable* or Disabilit* or Handicapped) N/5 (person* or people))
20. 10 or 11 or 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19
21. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or (Upper Volta) or Burundi or Urundi or Cambodia or (Republic of Kampuchea) or

Cameroon or Cameroons or (Cape Verde) or (Central African Republic) or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or (Costa Rica) or (Cote d'Ivoire) or (Ivory Coast) or Cuba or Djibouti or Obock or (French Somaliland) or Dominica or (Dominican Republic) or Ecuador or Egypt or (United Arab Republic) or (El Salvador) or Eritrea or Ethiopia or Fiji or Gabon or (Gabonese Republic) or Gambia or Georgia or Ghana or (Gold Coast) or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or (Republic of Korea) or (North Korea) or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or (Kyrgyz Republic) or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or (Malagasy Republic) or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or (Marshall Islands) or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or (Papua New Guinea) or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or (Russian Federation) or USSR or (Soviet Union) or (Union of Soviet Socialist Republics) or Rwanda or Ruanda-Urundi or Samoa or (Samoan Islands) or (Sao Tome) or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or (Sierra Leone) or (Solomon Islands) or Somalia or (South Africa) or (Sri Lanka) or Ceylon or (Saint Kitts) or (St Kitts) or (Saint Christopher Island) or Nevis or (Saint Lucia) or (St Lucia) or (Saint Vincent) or (St Vincent) or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or (Syrian Arab Republic) or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or (East Timor) or Togo or (Togolese Republic) or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or (New Hebrides) or Venezuela or Vietnam or (Viet Nam) or (West Bank) or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia)

22. (Africa or Asia or Caribbean or (West Indies) or (Latin America) or (Central America) or (South America))
23. ((Developing or Low-income or (low income) or Middle-income or (Middle income) or (Low and middle income) or (Low- and middle-income) or Less-Developed or (Less Developed) or (Least Developed) or (Under Developed) or underdeveloped or Third-World) N/5 (countr* or nation* or world or econom*))
24. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or (LAMI countr*) or (third world))
25. ((Transitional countr*) or (Transitional econom*) or (Transition countr*) or (Transition econom*))
26. 21 or 22 or 23 or 24 or 25
27. 9 and 20 and 26
28. S27 Limited by: Date: After 01 January 1976

PsycINFO (OvidSP) 1806 to July Week 4 2012 (Searched 27 July 2012)

1. (Community-based rehabilitation or Community based rehabilitation or CBR).sh,ti,ab.
2. (Communit* adj5 (rehabilitat* or health care or healthcare or health service* or health nursing* or health visitor* or health network* or care network* or counsel* or foster home* or foster care* or home care* or homecare or

domiciliary care* or preventive health or health education or health promotion or self-help device* or assistive device*)).sh,ti,ab.
3. (Communit* adj5 inclusi* adj5 (education or school* or preschool* or high-school* or environment* or curricul*)).sh,ti,ab.
4. (Communit* adj5 (vocational training or apprenticeship* or employment placement service* or support network* or self-employ* or social service* or social work*)).sh,ti,ab.
5. (Communit* adj5 (personal assistance or personal assistant* or individual support* or disabled people* organization* or disabled people* organisation*)).sh,ti,ab.
6. (Communit* adj5 (empower* or awareness campaign* or self-advocacy or self-help group* or support group* or women group* or political group* or development group*)).sh,ti,ab.
7. (Communit* adj5 inclusi* adj5 (health or education or hous* or social or justice or empower*)).sh,ti,ab.
8. (rehabilitat* adj5 (home based or home-based)).sh,ti,ab.
9. (exp Rehabilitation/ or exp Rehabilitation Centers/ or ((exp community services/ or exp social casework/ or exp support groups/ or exp self help techniques/) and rehabilitat*.sh,ti,ab.)) and communit*.sh,ti,ab.
10. exp Home Care/ and rehabilitat*.sh,ti,ab.
11. 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10
12. (Physical* adj5 (impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
13. (Cerebral pals* or Spina bifida or Muscular dystroph* or Arthriti* or Osteogenesis imperfecta or Musculoskeletal abnormalit* or Musculo-skeletal abnormalit* or Muscular abnormalit* or Skeletal abnormalit* or Limb abnormalit* or Brain injur* or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or Cerebrovascular accident*).sh,ti,ab.
14. exp Cerebral palsy/ or exp Spina Bifida/ or exp Muscular Dystrophy/ or exp Arthritis/ or exp Musculoskeletal Disorders/ or exp Traumatic Brain Injury/ or exp Amputation/ or exp Poliomyelitis/ or exp Paraplegia/ or exp Hemiplegia/ or exp Cerebrovascular Accidents/
15. ((Hearing or Acoustic or Ear*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
16. ((Visual* or Vision or Eye*) adj5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)).sh,ti,ab.
17. (Deaf* or Blind*).sh,ti,ab.
18. exp hearing disorders/ or exp vision disorders/ or exp deaf/ or exp blind/
19. (Schizophreni* or Psychos* or Psychotic Disorder* or Schizoaffective Disorder* or Schizophreniform Disorder* or Dementia* or Alzheimer*).sh,ti,ab.
20. exp Schizophrenia/ or exp psychosis/ or exp Dementia/ or exp Alzheimers Disease/
21. ((Intellectual* or Mental* or Psychological* or Developmental) adj5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)).sh,ti,ab.
22. ((communication or language or speech or learning) adj5 disorder*).sh,ti,ab.
23. (Autis* or Dyslexi* or Down* Syndrome or Mongolism or Trisomy 21).sh,ti,ab.
24. exp Intellectual Development Disorder/ or exp Developmental Disabilities/ or exp Communication Disorders/ or exp Pervasive Developmental Disorders/
25. exp Down's Syndrome/
26. ((Disable* or Disabilit* or Handicapped) adj5 (person* or people)).sh,ti,ab.
27. exp Disabilities/
28. 12 or 13 or 14 or 15 or 16 or 17 or 18 or 19 or 20 or 21 or 22 or 23 or 24 or 25 or 26 or 27
29. (Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia

or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or Upper Volta or Burundi or Urundi or Cambodia or Republic of Kampuchea or Cameroon or Cameroons or Cape Verde or Central African Republic or Chad or Chile or China or Colombia or Comoros or Comoro Islands or Comores or Congo or DRC or Zaire or Costa Rica or Cote d'Ivoire or Ivory Coast or Cuba or Djibouti or Obock or French Somaliland or Dominica or Dominican Republic or Ecuador or Egypt or United Arab Republic or El Salvador or Eritrea or Ethiopia or Fiji or Gabon or Gabonese Republic or Gambia or Georgia or Ghana or Gold Coast or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or Republic of Korea or North Korea or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or Kyrgyz Republic or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or Marshall Islands or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or Papua New Guinea or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or Russian Federation or USSR or Soviet Union or Union of Soviet Socialist Republics or Rwanda or Ruanda-Urundi or Samoa or Samoan Islands or Sao Tome or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or Sierra Leone or Solomon Islands or Somalia or South Africa or Sri Lanka or Ceylon or Saint Kitts or St Kitts or Saint Christopher Island or Nevis or Saint Lucia or St Lucia or Saint Vincent or St Vincent or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or Syrian Arab Republic or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or East Timor or Togo or Togolese Republic or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or New Hebrides or Venezuela or Vietnam or Viet Nam or West Bank or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia).sh,ti,ab,lo.

30. (Africa or Asia or Caribbean or West Indies or Latin America or Central America or South America).sh,ti,ab.
31. ((Developing or Low-income or low income or Middle-income or Middle income or (Low and middle income) or (Low- and middle-income) or Less-Developed or Less Developed or Least Developed or Under Developed or underdeveloped or Third-World) adj5 (countr* or nation* or world or econom*)).sh,ti,ab.
32. (LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or LAMI countr* or third world).sh,ti,ab.
33. (Transitional countr* or Transitional econom* or Transition countr* or Transition econom*).sh,ti,ab.
34. exp Developing Countries/
35. 29 or 30 or 31 or 32 or 33 or 34
36. 11 and 28 and 35
37. limit 36 to yr="1976 -Current"

The Campbell Collaboration Library of Systematic Reviews (The Campbell Library) (Searched 29 July 2012)

Community-based rehabilitation in all text or Community based rehabilitation in all text or CBR in all text or rehabilitat* in all text and communit* in all text or rehabilitati* in all text and home-based in all text or home based in all text

Web of Science (Web of Knowledge TS) (Searched 29 July 2012)

#1. TS=("Community-based rehabilitation" or "Community based rehabilitation" or CBR)
#2. TS=((Communit* NEAR/5 (rehabilitat* or "health care" or healthcare or "health service*" or "health nursing*" or "health visitor*" or "health network*" or "care network*" or counsel* or "foster home*" or "foster care*" or "home care*" or homecare or "domiciliary care*" or "preventive health" or "health education" or "health promotion" or "self-help device*" or "assistive device*")))
#3. TS=((Communit* NEAR/5 inclusi* NEAR/5 (education or school* or preschool* or high-school* or environment* or curricul*)))
#4. TS=((Communit* NEAR/5 ("vocational training" or apprenticeship* or "employment placement service*" or "support network*" or self-employ* or "social service*" or "social work*")))
#5. TS=((Communit* NEAR/5 ("personal assistance" or "personal assistant*" or "individual support*" or "disabled people* organization*" or "disabled people* organisation*")))
#6. TS=((Communit* NEAR/5 (empower* or "awareness campaign*" or self-advocacy or "self-help group*" or "support group*" or "women group*" or "political group*" or "development group*")))
#7. TS=((Communit* NEAR/5 inclusi* NEAR/5 (health or education or hous* or social or justice or empower*)))
#8. TS=((rehabilitat* NEAR/5 ("home based" or home-based)))
#9. #1 or #2 or #3 or #4 or #5 or #6 or #7 or #8
#10. TS=((Physical* NEAR/5 (impair* or deficienc* or disable* or disabili* or handicap*)))
#11. TS=(("Cerebral pals*" or "Spina bifida" or "Muscular dystroph*" or Arthriti* or "Osteogenesis imperfect" or "Musculoskeletal abnormalit*" or "Musculo-skeletal abnormalit*" or "Muscular abnormalit*" or "Skeletal abnormalit*" or "Limb abnormalit*" or "Brain injur*" or Amputation* or Clubfoot or Poliomyeliti* or Paraplegi* or Paralys* or Paralyz* or Hemiplegi* or Stroke* or "Cerebrovascular accident*"))
#12. TS=(((Hearing or Acoustic or Ear*) NEAR/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)))
#13. TS=(((Visual* or Vision or Eye*) NEAR/5 (loss* or impair* or deficienc* or disable* or disabili* or handicap*)))
#14. TS=((Deaf* or Blind*))
#15. TS=((Schizophreni* or Psychos* or "Psychotic Disorder*" or "Schizoaffective Disorder*" or "Schizophreniform Disorder*" or Dementia* or Alzheimer*))
#16. TS=(((Intellectual* or Mental* or Psychological* or Developmental) NEAR/5 (impair* or retard* or deficienc* or disable* or disabili* or handicap* or ill*)))
#17. TS=(((communication or language or speech or learning) NEAR/5 disorder*))
#18. TS=((Autis* or Dyslexi* or "Down* Syndrome" or Mongolism or "Trisomy 21"))
#19. TS=(((Disable* or Disabilit* or Handicapped) NEAR/5 (person* or people)))
#20. #10 or #11 or #12 or #13 or #14 or #15 or #16 or #17 or #18 or #19
#21. TS=((Afghanistan or Albania or Algeria or American Samoa or Angola or Antigua or Barbuda or Argentina or Armenia or Azerbaijan or Bangladesh or Belarus or Byelarus or Byelorussia or Belorussia or Belize or Benin or Bhutan or Bolivia or Bosnia or Herzegovina or Hercegovina or Bosnia-Herzegovina or Bosnia-Hercegovina or Botswana or Brazil or Brasil or Bulgaria or Burkina or "Upper Volta" or Burundi or Urundi or Cambodia or "Republic of Kampuchea"

or Cameroon or Cameroons or “Cape Verde” or “Central African Republic” or Chad or Chile or China or Colombia or Comoros or “Comoro Islands” or Comores or Congo or DRC or Zaire or “Costa Rica” or “Cote d'Ivoire” or “Ivory Coast” or Cuba or Djibouti or Obock or “French Somaliland” or Dominica or “Dominican Republic” or Ecuador or Egypt or “United Arab Republic” or “El Salvador” or Eritrea or Ethiopia or Fiji or Gabon or “Gabonese Republic” or Gambia or Georgia or Ghana or “Gold Coast” or Grenada or Guatemala or Guinea or Guinea-Bisau or Guiana or Guyana or Haiti or Honduras or India or Indonesia or Iran or Iraq or Jamaica or Jordan or Kazakhstan or Kenya or Kiribati or “Republic of Korea” or “North Korea” or DPRK or Kosovo or Kyrgyzstan or Kirghizstan or Kirgizstan or Kirghizia or Kirgizia or Kyrgyz or Kirghiz or “Kyrgyz Republic” or Lao or Laos or Latvia or Lebanon or Lesotho or Basutoland or Liberia or Libya or Lithuania or Macedonia or Madagascar or Malagasy Republic or Malawi or Nyasaland or Malaysia or Malaya or Malay or Maldives or Mali or “Marshall Islands” or Mauritania or Mauritius or Mayotte or Mexico or Micronesia or Moldova or Moldovia or Mongolia or Montenegro or Morocco or Mozambique or Myanmar or Burma or Namibia or Nepal or Nicaragua or Niger or Nigeria or Pakistan or Palau or Palestine or Panama or “Papua New Guinea” or Paraguay or Peru or Philippines or Romania or Rumania or Roumania or Russia or “Russian Federation” or USSR or “Soviet Union” or “Union of Soviet Socialist Republics” or Rwanda or Ruanda-Urundi or Samoa or “Samoan Islands” or “Sao Tome” or Principe or Senegal or Serbia or Montenegro or Yugoslavia or Seychelles or “Sierra Leone” or “Solomon Islands” or Somalia or “South Africa” or “Sri Lanka” or Ceylon or “Saint Kitts” or “St Kitts” or “Saint Christopher Island” or Nevis or “Saint Lucia” or “St Lucia” or “Saint Vincent” or “St Vincent” or Grenadines or Sudan or Suriname or Surinam or Swaziland or Syria or “Syrian Arab Republic” or Tajikistan or Tadzhikistan or Tadjikistan or Tanzania or Thailand or Timor-Leste or “East Timor” or Togo or “Togolese Republic” or Tonga or Tunisia or Turkey or Turkmenistan or Turkmenia or Tuvalu or Uganda or Ukraine or Uruguay or Uzbekistan or Vanuatu or “New Hebrides” or Venezuela or Vietnam or “Viet Nam” or “West Bank” or Gaza or Yemen or Zambia or Zimbabwe or Rhodesia))

#22. TS=((Africa or Asia or Caribbean or “West Indies” or “Latin America” or “Central America” or “South America”))
#23. TS=(((Developing or Low-income or “low income” or Middle-income or “Middle income” or “Low and middle income” or “Low- and middle-income” or Less-Developed or “Less Developed” or “Least Developed” or “Under Developed” or underdeveloped or Third-World) NEAR/5 (countr* or nation* or world or econom*)))
#24. TS=((LIC or LICs or MIC or MICs or LMIC or LMICs or LAMIC or LAMICs or “LAMI countr*” or “third world”))
#25. TS=((“Transitional countr*” or “Transitional econom*” or “Transition countr*” or “Transition econom*”))
#26. #21 or #22 or #23 or #24 or #25
#27. #9 and #20 and #26
#28. #27 limit to *Timespan=1976-2012*

11.4 LIST OF RELEVANT WEBSITES

Websites
3ie (International Initiative for Impact Evaluation)*
AbleData*
ADB (Asian Development Bank)
AFD (Agence Française de Développement)
AfDB (African Development Bank)
AIFO (Italian Association Amici di Raoul Follereau)
APHRC (African Population and Health Research Center)
AusAID (Australian Government Overseas Aid Program)
BasicNeeds
CBM
CDB (Caribbean Development Bank)
CIDA (Canadian International Development Agency)
CIRRIE (Centre for International Rehabilitation Research Information & Exchange)*
COOPITA (Cooperazione Italiana allo Sviluppo)
DFID (UK Department for International Development)
DPI (Disabled Peoples' International)
EADI (European Association of Development Research and Training Institutes)
EBRD (European Bank for Reconstruction and Development)
EDF (European Disability Forum)
ELDIS
EPPI-Centre*
EuropeAid (European Commission Cooperation Office)
FIRAH (Foundation of Applied Disability Research)
GPDD (Global Partnership on Disability and Development)
GTZ (Deutsche Gesellschaftfür Technische Zusammenarbeit - German Technical Cooperation)
Handicap international
Hellen Keller International
IDA (International Disability Alliance)
IDB (Inter-American Development Bank)
IDDC (International Disability and Development Consortium)
Irish Aid
Japan International Cooperation Agency (JICA)
Leonard Chesire Disability*
Motivation
NORAD (Norwegian Agency for Development Cooperation)
PAHO (Pan American Health Organisation)
REHABDATADatabase (National Rehabilitation Information Center)*
Sangath
SDC (Swiss Agency for Development and Cooperation)
SIDA (Swedish International Development Cooperation Agency)
Sightsavers
Source (International Online Resource Centre on Disability and Inclusion)*
UCL Centre for International Health & Development
UNDP (United Nations Development Programme)
UNFPA (United Nations Population Fund)
UNHCR (United Nations High Commissioner for Refugees)
UNICEF (United Nations Children's Fund)
USAID (United States Agency for International Development)
WB (World Bank)
WHO (World Health Organization)

Note: *Websites with embedded databases and libraries that will be searched manually.

11.5 EFFECTIVE PUBLIC HEALTH PRACTICE PROJECT (EPHPP) QUALITY ASSESSMENT TOOL FOR QUANTITATIVE STUDIE: ASSESSMENT TOOL

COMPONENT RATINGS

A) SELECTION BIAS

(Q1) Are the individuals selected to participate in the study likely to be representative of the target population?

1 Very likely

2 Somewhat likely

3 Not likely

4 Can't tell

(Q2) What percentage of selected individuals agreed to participate?

1 80 - 100% agreement

2 60 – 79% agreement

3 less than 60% agreement

4 Not applicable

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not applicable

B) STUDY DESIGN

Indicate the study design

1 Randomized controlled trial 2 Controlled clinical trial

3 Cohort analytic (two group pre + post) 4 Case-control

5 Cohort (one group pre + post (before and after)) 6 Interrupted time series

7 Other specify _____

8 Can't tell

Was the study described as randomized? If NO, go to Component C.

No Yes

If Yes, was the method of randomization described? (See dictionary)

No Yes

If Yes, was the method appropriate? (See dictionary)

No Yes

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not applicable

C) CONFOUNDERS

(Q1) Were there important differences between groups prior to the intervention?

1 Yes

2 No

3 Can't tell

The following are examples of confounders:

1 Race

2Sex

3 Marital status/family

4 Age

5 SES (income or class)

6 Education

7 Health status

8 Pre-intervention score on outcome measure

(Q2) If yes, indicate the percentage of relevant confounders that were controlled (either in the design (e.g. stratification, matching) or analysis)?

1 80 – 100% (most)

2 60 – 79% (some)

3 Less than 60% (few or none)

4 Can't Tell

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not applicable

D) BLINDING

(Q1) Was (were) the outcome assessor(s) aware of the intervention or exposure status of participants?

1 Yes

2 No

3 Can't tell

(Q2) Were the study participants aware of the research question?

1 Yes

2 No

3 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not applicable

E) DATA COLLECTION METHODS

(Q1) Were data collection tools shown to be valid?

1 Yes

2 No

3 Can't tell

(Q2) Were data collection tools shown to be reliable?

1 Yes

2 No

3 Can't tell

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not applicable

F) WITHDRAWALS AND DROP-OUTS

(Q1) Were withdrawals and drop-outs reported in terms of numbers and/or reasons per group?

1 Yes

2 No

3 Can't tell

4 Not Applicable (ie one time surveys or interviews)

(Q2) Indicate the percentage of participants completing the study. (If the percentage differs by groups, record the lowest).

1 80 -100%

2 60 - 79%

3 less than 60%

4 Can't tell

5 Not Applicable (ie Retrospective case-control)

RATE THIS SECTION	STRONG	MODERATE	WEAK	
See dictionary	1	2	3	Not applicable

G) INTERVENTION INTEGRITY

(Q1) What percentage of participants received the allocated intervention or exposure of interest?

1 80 -100%

2 60 - 79%

3 less than 60%

4 Can't tell

(Q2) Was the consistency of the intervention measured?

1 Yes

2 No

3 Can't tell

(Q3) Is it likely that subjects received an unintended intervention (contamination or co-intervention) that may influence the results?

1 Yes

2 No

3 Can't tell

H) ANALYSES

(Q1) Indicate the unit of allocation (circle one)

Community organization/institution practice/office individual

(Q2) Indicate the unit of analysis (circle one)

Community organization/institution practice/office individual

(Q3) Are the statistical methods appropriate for the study design?

1 Yes

2 No

3 Can't tell

(Q4) Is the analysis performed by intervention allocation status (i.e. intention to treat) rather than the actual intervention received?

1 Yes

2 No

3 Can't tell

GLOBAL RATING

Please transcribe the information from the gray boxes on pages 1-4 onto this page. See dictionary on how to rate this section.

COMPONENT	RATING			
SELECTION BIAS	STRONG	MODERATE	WEAK	
	1	2	3	Not applicable
STUDY DESIGN	STRONG	MODERATE	WEAK	
	1	2	3	Not applicable
CONFOUNDERS	STRONG	MODERATE	WEAK	
	1	2	3	Not applicable
BLINDING	STRONG	MODERATE	WEAK	
	1	2	3	Not applicable
DATA COLLECTION METHOD	STRONG	MODERATE	WEAK	
	1	2	3	Not applicable
WITHDRAWALS AND DROPOUTS	STRONG	MODERATE	WEAK	
	1	2	3	Not applicable

GLOBAL RATING FOR THIS PAPER (circle one):

1 STRONG (no WEAK ratings)

2 MODERATE (one WEAK rating)

3 WEAK (two or more WEAK ratings)

With both reviewers discussing the ratings:

Is there a discrepancy between the two reviewers with respect to the component (A-F) ratings?

No Yes

If yes, indicate the reason for the discrepancy

1 Oversight

2 Differences in interpretation of criteria

3 Differences in interpretation of study

Final decision of both reviewers (circle one):

1 STRONG

2 MODERATE

3 WEAK

11.6 EFFECTIVE PUBLIC HEALTH PRACTICE PROJECT (EPHPP) QUALITY ASSESSMENT TOOL FOR QUANTITATIVE STUDIES: DICTIONARY

For each of the six components A – F, use the following descriptions as a roadmap.

A) SELECTION BIAS

Strong: The selected individuals are very likely to be representative of the target population (Q1 is 1) and there is greater than 80% participation (Q2 is 1).

Moderate: The selected individuals are at least somewhat likely to be representative of the target population (Q1 is 1 or 2); and there is 60 - 79% participation (Q2 is 2). 'Moderate' may also be assigned if Q1 is 1 or 2 and Q2 is 5 (can't tell).

Weak: The selected individuals are not likely to be representative of the target population (Q1 is 3); or there is less than 60% participation (Q2 is 3) or selection is not described (Q1 is 4); and the level of participation is not described (Q2 is 5).

B) DESIGN

Strong: will be assigned to those articles that described RCTs and CCTs.

Moderate: will be assigned to those that described a cohort analytic study, a case control study, a cohort design, or an interrupted time series.

Weak: will be assigned to those that used any other method or did not state the method used.

C) CONFOUNDERS

Strong: will be assigned to those articles that controlled for at least 80% of relevant confounders (Q1 is 2); or (Q2 is 1).

Moderate: will be given to those studies that controlled for 60 – 79% of relevant confounders (Q1 is 1) and (Q2 is 2).

Weak: will be assigned when less than 60% of relevant confounders were controlled (Q1 is 1) and (Q2 is 3) or control of confounders was not described (Q1 is 3) and (Q2 is 4).

D) BLINDING

Strong: The outcome assessor is not aware of the intervention status of participants (Q1 is 2); and the study participants are not aware of the research question (Q2 is 2).

Moderate: The outcome assessor is not aware of the intervention status of participants (Q1 is 2); or the study participants are not aware of the research question (Q2 is 2); or blinding is not described (Q1 is 3 and Q2 is 3).

Weak: The outcome assessor is aware of the intervention status of participants (Q1 is 1); and the study participants are aware of the research question (Q2 is 1).

E) DATA COLLECTION METHODS

Strong: The data collection tools have been shown to be valid (Q1 is 1); and the data collection tools have been shown to be reliable (Q2 is 1).

Moderate: The data collection tools have been shown to be valid (Q1 is 1); and the data collection tools have not been shown to be reliable (Q2 is 2) or reliability is not described (Q2 is 3).

Weak: The data collection tools have not been shown to be valid (Q1 is 2) or both reliability and validity are not described (Q1 is 3 and Q2 is 3).

F) WITHDRAWALS AND DROP-OUTS - a rating of:

Strong: will be assigned when the follow-up rate is 80% or greater (Q2 is 1).

Moderate: will be assigned when the follow-up rate is 60 – 79% (Q2 is 2) OR Q2 is 5 (N/A).

Weak: will be assigned when a follow-up rate is less than 60% (Q2 is 3) or if the withdrawals and drop-outs were not described (Q2 is 4).

11.7 LITERATURE REVIEWS INCLUDED

Anders, S.L. (2003). Improving community-based care for the treatment of schizophrenia. Lessons from native Africa. Psychiatric Rehabilitation Journal, 27(1), 51-58.

Appropriate Health Resources and Technologies Action Group (AHRTAG). (1996). Essential CBR information resources. London, United Kingdom: Appropriate Health Resources and Technologies Action Group (AHRTAG).

Boggs, D. (2008). What is the effectiveness of community based rehabilitation in improving the well-being of adults with physical disabilities in Sub-Saharan Africa? Policy recommendations for international non-government organizations. London, United Kingdom: London School of Hygiene and Tropical Medicine.

Dias, A., & Patel, V. (2009). Closing the treatment gap for dementia in India. Indian Journal of Psychiatry, 51(5), S93-97.

Finkenflugel, H., Wolffers, I., & Huijsman, R. (2005). The evidence base for community-based rehabilitation: a literature review. International Journal of Rehabilitation Research, 28(3), 187-201.

Kuipers, P., Wirz, S, & Hartley, S. (2008). Systematic synthesis of community-based rehabilitation (CBR) project evaluation reports for evidence-based policy. A proof-of-concept study. BMC International Health and Human Rights, 8, 3.

Mannan, H., & Turnbull, A.P. (2007). A review of community based rehabilitation evaluations: quality of life as an outcome measure for future evaluations. Asia Pacific Disability Rehabilitation Journal, 18(1), 29-45.

Mitchell, R. (1999). The research base of community-based rehabilitation. Disability and Rehabilitation, 21(10-11), 459-468.

Nabergoi, M., & Bottinelli, M.M. (2006). Disability, poverty and their approaches: review of community based rehabilitation strategy (CBR). [Spanish]. Anuario de investigationes Facultad de Psicología, Universitad de Buenos Aires, 14(1), 159-165.

Robertson, J., Emerson, E., & Hatton, C. (2009). The efficacy of community based rehabilitation for children with or at significant risk of intellectual disabilities in low and middle income countries : a review. Lancaster, United Kingdom: Centre for Disability Research (CeDR). Available at http://eprints.lancs.ac.uk/27957/1/CeDR_2009-4_CBR_for_Children_with_ID_in_LAMI_Countries.pdf (accessed on 19 July 2014).

Robertson, J., Emerson, E., Hatton, C., & Yasamy, M. (2012). Efficacy of community-based rehabilitation for children with or at significant risk of intellectual disabilities in low- and middle-income countries: A review. Journal of Applied Research in Intellectual Disabilities, 25(2), 143-154.

Ross, D.H. (1988). Educating Handicapped Young People in Eastern and Southern Africa in 1981-83. Paris, France: United Nations Educational, Scientific and Cultural Organization.

Sharma, M. (2007). Community participation in community-based rehabilitation programmes. Asia Pacific Disability Rehabilitation Journal, 18(2), 146-157.

UNESCO. (1993). Making it happen. Examples of good practice in special needs education & community-based programmes. Paris, France: United Nations Educational, Scientific and Cultural Organization (UNESCO). Available at http://www.unesco.org/education/pdf/281_74.pdf (accessed on 19 July 2014).

Vanneste, G. (2000). Current status of CBR in Africa: a review. Asia Pacific Disability Rehabilitation Journal, 1, 127-135.

Velema, J.P., Ebenso, B., & Fuzikawa, P.L. (2008). Evidence for the effectiveness of rehabilitation-in-the-community programmes. Leprosy Review, 79(1), 65-82.

Wiley-Exley, E. (2007). Evaluations of community mental health care in low- and middle-income countries: a 10-year review of the literature. Social Science & Medicine, 64(6), 1231-1241.

Williams, M., & Thompson, S. (2011). The Use of Community-Based Interventions in Reducing Morbidity from the Psychological Impact of Conflict-Related Trauma Among Refugee Populations: A Systematic Review of the Literature. Journal of Immigrant & Minority Health, 13(4), 780-794.

WHO. (1981). Disability prevention and rehabilitation. World Health Organization Technical Report Series 668. Geneva, Switzerland: World Health Organization. Available at http://whqlibdoc.who.int/trs/WHO_TRS_668.pdf (accessed on 19 July 2014).

WHO, United Nations Educational, Scientific and Cultural Organization, International Labour Organization, & International Disability Development Consortium. (2010). Community-based rehabilitation: CBR guidelines. Geneva, Switzerland: World Health Organization. Available at http://www.who.int/disabilities/cbr/guidelines/en/ (accessed on 19 July 2014).

Zambone, A.M., & Suarez, S.C. (2010). What We Can Learn from Developing Countries: The Community Based Rehabilitation Model. Reprinted from Rural Special Education Quarterly, Volume 15(3) Fall, 1996. Rural Special Education Quarterly, 29(3), 29-34.