CBR ACTION RESEARCH - CURRENT STATUS AND FUTURE TRENDS

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ABSTRACT

Research activity in community based rehabilitation (CBR) has been limited and fragmented. This is in part due to the fact that the concept of CBR grew out of a pressing need to alter and improve the social conditions of people with disabilities, primarily in developing countries, rural and remote, isolated communities. These people live in situations where centralised health, social and employment services will never meet their needs. The success of CBR has seen this community based model of service provision grow and extend to countries and communities all over the world, its relevance extending from developing to developed countries, and from rural to urban communities. The concept has proved dynamic and flexible and over a period of several decades a large body of literature has emerged, initially descriptive, but increasingly analytical. In keeping with its social imperative, early resaearch has focused on summative evaluation, frequently required by funding sources, and using a predominantly quantitative research methodology. The importance of this research is obvious, but its limitations have led to questioning of alternative - and additional approaches - in order that a wider range of questions and issues may be addressed. A strong argument is emerging for research to reflect social relevance and to be conducted in a manner which facilitates processes and outcomes which are empowering for the participants. There is a further argument supporting the involvement of participants in setting the research issues and choosing the processes. The need for exploratory and descriptive research requires a qualitative methodology, grounded in the experience and processes of the participants in CBR activities. The result of this approach will be practical action research, which has the capacity to address the sets of practices which provide solutions to practical problems through pragmatic strategic and self-reflective processes. The chapter addresses these complementary approaches, reviews the current research in the CBR literature and current practice, and recommends suggestions for improving the knowledge base, acknowledging that effective research in CBR must be issue driven and oriented towards the achievement of positive social change.

1. INTRODUCTION

Experience in Community Based Rehabilitation (CBR) theory and practice suggests that the place and role of research within CBR appears to be somewhat unclear and, in some cases, quite problematic. This chapter explores some of the reasons why this is the case, and goes on to propose a research framework which may sit more comfortably within CBR. Some key aspects of CBR which might influence and inform the choice of a research framework have been described, and an Action Research framework suggested as the most appropriate research methodology. An introductory description of Action Research, its strengths, limitations and possible applications, is also provided and suggestions made of ways in which the soundness of Action Research can be ensured . Some examples of the application of Action Research in CBR have been provided.

It is by now clearly established that while there is a substantial amount written about Community Based Rehabilitation, mostly comprising opinion, description and subjective analysis, there is actually very little published formal CBR research. Similarly, there is little published about appropriate research methods for CBR. A number of authors have lamented this fact and suggested key topics to which research energies in CBR might be focussed, from policy and organisational issues (Peat, 1998), and the role of women, to the efficacy of CBR interventions and the roles of CBR workers (Wirz, 1996).

2. WHY HAS THE ISSUE OF RESEARCH BEEN A PROBLEM FOR CBR?

CBR has yet to establish a strong research foundation and tradition. There are a number of reasons why a strong research basis has not emerged in CBR, despite the fact that this approach is now well into its third decade. The most significant reason is that during its initial establishment phase CBR was not concerned with research, and it was only when it had become an accepted and robust service delivery model that the issue of research was raised. Many of the reasons for this can be attributed to (a) the particular nature of CBR, and (b) the particular nature of traditional research frameworks. These points are expanded below.

(a) CBR has not been an ideally suitable context for traditional research frameworks

Historically, CBR has primarily focussed on service delivery, not research. The major emphasis within CBR projects has been the provision of services to people with disabilities where none were available. Under such an emphasis, research may have been seen as a threat to precious resources needed for service implementation, or may not have been seen as an issue at all.

CBR may be characterised as being both highly pragmatic and strongly ideological in nature (Kuipers, 1998). From a research perspective, neither of these aspects has been conducive to developing a strong research agenda. At the pragmatic level, CBR is, in essence, a practical response to the needs of people with disabilities. This emphasis on practice rather than theory, enquiry and analysis has not led to the establishment of a strong research base. Similarly, the ideological commitment and enthusiasm that is often associated with CBR has contributed to its extraordinary spread, but has not resulted in the establishment of a strong research base (Miles, 1989). Ideological enthusiasm may not be conducive to fostering the critical analysis and dispassionate approach that characterises many forms of research.

The nature of the questions with which CBR seems to grapple, are not ones that fit easily into traditional research agendas. By and large it would seem that CBR is not overly concerned with narrow clinical rehabilitation questions, but with broader issues pertaining to models of service delivery, community participation, empowerment and the improvement of social conditions for people with disabilities. The level of enquiry of these broader social issues is, of necessity, exploratory rather than experimental. Such exploration and conceptualisation typically does not fit well into traditional reductionistic research frameworks.

Another reason for the poor fit between CBR and traditional research frameworks is that CBR is an evolving entity. Unfortunately, the evolving nature of CBR, while recognised by some authors, has not been clearly conceptualised and described (Kuipers, 1998, Price, 1998). We suggest that since CBR is evolving, the limitations and the strengths of newly emergent forms of CBR have yet

to be clearly explored. Traditional research frameworks do not cope well with nebulous evolving entities. Similarly the evolution in CBR means that a CBR research method has yet to be widely debated and accepted. Boyce's contribution in this area should be acknowledged (Boyce, 1997).

Finally, the emphasis within CBR on service level questions, may have led to a blurring of the distinction between research and evaluation. In instances where the research problems relate to service and structural questions, some assume that service evaluation will suffice as research. Unfortunately this has some negative consequences because, in many instances, evaluation:

•   is driven by questions very different from those addressed by research,

•   is rarely exploratory in nature,

•   may reflect the priorities of funders, government departments or managers,

•   tends to be highly quantitative,

•   is often only conducted summatively at the end of a programme period

•   may overemphasise the measurement of outcome rather than process.

While we believe that research and evaluation can actually integrate well (Quinn & Kuipers, 1999), we also believe that the substituting of evaluation as research has not served CBR well.

In summary then, the nature and history of CBR indicates that a potential research framework should accommodate the practical, service-oriented nature of CBR. Research needs to be grounded in the experience and processes of the participants in CBR activities. CBR is basically a social and community intervention. Consequently, a research method should be employed which responds less to basic psycho-medical needs, and more towards relational, community, and socially oriented needs of people with disabilities. A potential research framework for CBR should accommodate its evolving nature, should recognise that CBR is in itself a learning process, and should support and capitalise upon these aspects. Finally, a potential research framework should accommodate CBR's strong social imperative and recognise the empowerment aspects of CBR practice.

(b) Traditional research frameworks have not been ideally suited to CBR

An overview of research literature in the area of rehabilitation illustrates that the majority of published research is quantitative and experimental in orientation. By this it is meant that the majority of research within the area of rehabilitation depends on setting up of formal experiments, often in structured settings, in which a particular intervention is compared with another or no intervention, and in which success is determined by comparison against predetermined levels through statistical analysis. While it is conceded that this is a very important way of ensuring certainty and developing a body of evidence in the field of rehabilitation, it is suggested that this approach has not been highly appropriate for the current stage of the development of CBR.

Traditional quantitative research tends to focus on minute aspects of rehabilitation interventions, or else upon large group effects. In order to isolate interventions down to a level at which they can be compared or experimented upon, researchers need to remove extraneous factors and focus on

small increments of service. Again, while it is agreed that this may be appropriate in some situations, for the current realities of CBR practice, this 'microscope' approach to research may have been seen as undesirable and an unaffordable luxury.

There is a prevailing view that in order to conduct good rehabilitation research within the traditional framework, the researcher requires considerable technical, research design and statistical proficiency, or at least access to experts who hold these skills. It may be argued that to some extent, this arises from the mystique created by researchers and is not necessarily required. Despite this, we believe that the advanced level of technical expertise necessitated by traditional research designs may have scared CBR workers away from doing research.

In a similar vein, it may be suggested that the prevailing research framework in rehabilitation is highly rationalistic and closely aligned with Western logic and processes of deduction. This experimental, reductionistic approach to knowledge may be quite foreign to many from non-western cultures, and may therefore have been ignored by CBR practitioners in developing countries. Traditional research approaches may also have appeared impractical for workers in the field (Walker, 1993). The apparent distinction between practical service realities and the research mindset may have led CBR practitioners to view the pursuit of research as somewhat remote.

The subject matter of traditional research and the types of methods used may also have been seen as inappropriate for the key issues confronting CBR. Traditional research methods tend to falter in community settings. They may fail to accommodate important social factors such as the importance of 'connectedness' between people, and the place of social and community processes (Price, 1990; Riger, 1993). As such they may not have been seen as a high priority for CBR workers. Similarly, traditional research methods offer limited control to participants (Barlow & Harrison, 1996). In an environment in which empowerment is increasingly seen as central to CBR, the use of such methods may not have been seen as conducive to maximising empowerment.

In summary, a brief look at traditional research methods indicates a number of points of departure for the field of CBR. In order to draw conclusions from this contrast, it might be concluded that a potential research framework for CBR should allow a 'macro' as well as a 'micro' focus. It should be practical, integrated with service delivery and, to the greatest extent possible, seek to demystify the research process. It should also be relevant to community and social issues and, where possible, facilitate desired outcomes and the empowerment of people with disabilities.

As the field of CBR moves from an initial establishment phase to a second consolidation phase it may require a more systematic approach in order to harness what has already been learned, and to translate it into action. Research need no longer be seen as a threat to precious resources and energies, but may be viewed as a necessary part of activity which will help harness and deliver more effective processes and outcomes in continuing implementation. A major challenge which the CBR community now faces is to identify and implement an appropriate research methodology. It is suggested that Action Research might fulfil this role.

3. ACTION RESEARCH: A SUGGESTED ALTERNATIVE

Action research is an approach for fostering collective action in a social setting within a research framework. Action research is not new, nor is it a highly technical approach. It is, however, a

logical way of systematically integrating practice with research. The key principles are change and understanding - action and research. Central to the Action Research approach, is the belief that our action, and changes in our action, will be enhanced by research; and likewise, that research will be enhanced by integrating it into practice. This integration is achieved through a cyclic or spiral process in which action and critical reflection alternate (Dick, 1999).

A core principle of Action Research is that action and research can *both* be enhanced by participation. This means involving people at the action level, by providing information on their action and in planning the changes that are indicated, and at the research level by ensuring that key stakeholders are involved in conducting, analysing and interpreting the research. The Action Research approach is highly conducive to people investigating their own issues, formulating their own accounts of these issues and devising plans to deal with the identified problems (Stringer, 1996).

To expand on the point above, Action Research may be seen as action which is "intentionally researched and modified, leading to the next stage of action which is then intentionally examined" (Wadsworth 1997 p.78) and so on, as part of the research process itself. Action Research can be thought of as following a cycle or spiral of action, reflection, questioning, exploring, drawing conclusions, evaluating options and planning further action. The spiral goes upward towards improvement. In more formal terms this cycle may be described as enquiry, intervention, evaluation (Hart & Bond, 1995) or think, act, look (Stringer, 1996). Fundamentally, Action Research comprises a simple, yet powerful cyclic framework for inquiry (see Figure 1).

FIGURE 1 HERE

CBR practitioners will be familiar with the basic approach, though they may not call it Action Research. Action Research mirrors the typical logic that is used by health and disability workers as they solve problems and respond to people's needs (Hart & Bond, 1995). Concepts of assessing need, developing a rehabilitation response and reviewing progress will be quite familiar to CBR practitioners. A difference is that as this cyclic process is moved from the individual service level to a larger scale, it requires more disciplined co-operation of many stakeholders, clear and consistent documentation and careful planning and follow-up. The issue of documentation is particularly important. Where clear and detailed documentation is not kept, the capacity to replicate is lost, and with it the possibility of learning systematically from previous experience.

As may be evident, Action Research departs somewhat from some of the core notions of conventional research. First, the notion that research should start with a hypothesis and end with a conclusion is seen by Action Researchers as an unrealistic removal of the research process out of the real world. Action Researchers hold that research results will be most useful when they arise from a repeated incremental cycle. Second, the notion that conclusions should be put to a test and judged according to a particular criterion, is seen as somewhat inappropriate. Action Researchers recognise the values context of research and see that judgements regarding the value of an outcome or conclusion are best made by the participants who will be most affected by it.

4. WHY IS ACTION RESEARCH APPROPRIATE?

There are a number of aspects of Action Research which make it particularly appropriate as a research framework for CBR. Some of these attributes of CBR are outlined below.

- *Action Research is participatory.* One of the key indicators of the suitability of Action Research to CBR is its inherent participatory nature. While the degree of participation may vary across Action Research projects, the active involvement of people who are directly affected by the research outcomes and processes is fundamental to Action Research.

Action Research prescribes process, not a particular methodological design or strategy. An important part of the Action Research process is the participation of key stakeholders in all aspects of research. These may include people with disabilities, community members, other service providers, Government and non-government organisations, community groups and many others. In the same way that CBR challenges the myth of the independent, all-knowing professional, so Action Research challenges the myth of the independent researcher. It recognises that research is value driven and based on experience, and suggests that the best locus for these is the values and experience of those who will be most affected by the research. The involvement of people with disabilities in setting the research agenda or significant aspects of it should lead to more relevant and meaningful research. (Ramcharan, 1997).

- *Action Research is a suitable approach for a service-oriented context.* The practical, service delivery focused nature of CBR requires a research approach that is consistent with the practical realities of CBR programmes. The 'Action' component of Action Research ensures that the research is grounded in practice. The cyclic nature of the approach ensures that the benefits and insights flowing from the research return to the practice context.

- *Action research is appropriate where the goals of the research are problem solving and improvement.* In essence, CBR may be seen to be integrally concerned with problem solving and improvement. At the individual level and at the community and societal levels, CBR seeks greater development. Consequently the suitability of Action Research is self evident.

- *The cyclic nature of Action Research accommodates service-generated questions.* In applied settings where research is not the 'core business' of the exercise, research questions are rarely as neatly defined as in pure research settings. Many pure researchers believe that such lack of definition compromises the clarity and benefit of research. The cyclic process of Action Research however, consisting of cycles of action and reflection, allows for a continual refining of research questions and strategies. This gives practitioners the opportunity to refine their skills and methodologies as they clarify their questions, to the point where the research is of optimal benefit.

- *Action Research can accommodate the evolving nature of CBR.* As noted earlier, CBR is not a consistent entity, it varies across contexts, client groups, communities, and geographical regions and across time. Indeed, the success of CBR to date may be partly attributed to its adaptability to various situations and places. An Action Research approach, which follows *principles* for research rather than methodological or technical *strategies* that must be employed, is best suited to such a diverse and changing context. Given its cyclic and iterative nature, Action Research is likely to be the only approach that has application across the diversity of CBR contexts and across the constantly evolving conceptualisation of CBR.

- *Action Research is well suited to 'big picture' research agendas.* Given the nature of the focus of CBR, the questions generated to date tend not to be only about small aspects of treatments, assessments and interventions, but also about broad questions concerning services and service development, and the impact of services as a whole. As a socially oriented approach, which is primarily used in large group and social contexts, Action Research is well suited to such research agendas.

- *Action Research is relevant to community contexts.* Researchers who work in community rather than clinical settings emphasise that these distinctive settings require particular approaches if they are to be accurately researched (Thorburn, 1996; O'Toole, 1995). Typically, research conducted in community settings should be (a) iterative, (b) broadly participatory and (c) practical and socially oriented. Action Research fulfils these criteria.

- *Action Research is consistent with the CBR commitment to demystification.* As noted earlier, there is an inherent commitment within CBR to making rehabilitation information and techniques available and accessible to community members. Action Research is one of the few research frameworks which is consistent with this commitment. Many proponents of Action Research go to considerable lengths to make the language and processes of Action Research understandable to community members. The participatory nature of CBR also ensures that community members hold power over how research is conducted, with whom and how it is disseminated.

- *Action Research accommodates an empowerment framework.* Increasingly, CBR has recognised empowerment as a key objective. CBR authors increasingly stress the importance of promoting empowerment in all aspects of practice (Helander, 1993; Williams, 1995). As indicated above, the commitment to participation in Action Research promotes a situation where the principle of empowerment is central to research.

- *Action Research is compatible with programme evaluation.* As reflected in CBR literature (Jonsson, 1994; Peat, 1997; McConkey, 1995), the purpose of evaluation is to ensure the development and improvement of projects and, by implication, CBR in general. Action Research, with its practical and service based orientation, is quite consistent with this service requirement. An action research agenda will likely involve a step-by-step description of any CBR initiative, the rationale, context, scale, resources, format, content, length and style of training, and will link them in specific terms to the problems encountered and the outcomes. Such detailed analysis of factors affecting a project is an important component of programme evaluation.

- *Action Research is 'community relevant'.* Clearly one of the overriding concerns that should influence the CBR researchers in their choice of methodology is the relevance of this approach to communities. It has been recognised that CBR research should seek to utilise the scarce resources of the community in an optimal manner (Hanumantha-Rao et al, 1993), and build the level of care within the community (Helander, 1993). In our opinion, the participatory and contextually responsive approach used in Action Research would contribute to these ends. Action research agendas tend to be issue driven and oriented towards social change (Ward, 1993). They are ideally conducted in an empowering manner.

5. HOW CAN WE ENSURE THAT ACTION RESEARCH IS SOUND?

Ensuring that research is 'sound', appropriately rigorous, reliable and valid, should be a major concern for all researchers. In Action Research this concern is equally critical. However it is achieved in different ways from traditional quantitative research. Within Action Research and many qualitative research methodologies, the requirement for sound, trustworthy and rigorous research is met procedurally rather than statistically.

In Action Research, the quality and rigour of the research is ensured through three major means (see Dick, 1999):

1. Through careful and considered use and documentation of the Action Research cycles. The more an issue has been researched in multiple and different cycles, over time and circumstances, the greater the level of confidence that the findings are accurate.

2. Through an attitude or posture in which researchers test their assumptions and findings by vigorously seeking out disconfirming evidence in as many ways and from as many sources as practicable. The more an attempt has been made to disconfirm specific findings, and to test them out, the greater the degree of confidence that they are an accurate reflection of reality.

3. Through ensuring high levels of participation of key stakeholders such as community members, people with disabilities, family members. The more it has been ensured that key stakeholders have genuinely participated in the research, the greater the degree of confidence that the findings of the research accurately assess and reflect the issues of greatest importance to those most affected.

As Dick (1999) points out, in Action Research soundness can be achieved through:

*   using multiple cycles of enquiry, so that later cycles can test the results of the earlier ones;

*   combining data collection and interpretation within each cycle, so that interpretations as well as data can be challenged in later cycles;

*   using different methods of data interpretation in successive cycles;

*   involving different participants and information sources at different points;

*   carrying out two or more independent action research studies on similar topics;

*   giving different questions which pursue equivalent information to the same informant or group

*   asking questions which yield overlapping information;

*   using different researchers at different times and including participants as co-researchers;

*   involving a variety of participants, and creating a climate in which they are encouraged to challenge the researcher's ideas;

*   using the available literature as a further source of evidence;

- monitoring the achievement of planned changes; each change is a test of the assumptions and plans that led to it.

Consequently there are no set criteria or formal tests of 'soundness' and Action Researchers tend to avoid terms like reliability and validity. In preference to these terms when evaluating the soundness of Action Research in CBR the following concepts are suggested:

Confirmability   How well was the research conducted and documented so that similar findings could be achieved by different researchers?

Transferability   How thoroughly did the researchers use diverse data sources and approaches in their cycles to ensure that the findings might be relevant to other contexts?

Consistency   How carefully did the researchers conduct the study and involve all relevant participants to ensure that the findings are an authentic portrayal of reality in that context?

Essentially, the posture which the researcher must adopt is one in which she or he assumes at all times that the data, the interpretations, the participants and the methods used are all informative, but insufficient. The only way to ensure that the findings arising from these insufficient points are sound is to continually test and retest them.

6. TO WHAT SORT OF RESEARCH QUESTIONS CAN ACTION RESEARCH BE APPLIED?

An Action Research logic and framework can be applied to a wide variety of issues, and has, in fact, been applied in many CBR contexts. As was stated earlier, there is active debate about the development of appropriate research models for CBR, exemplified in the recent work of Boyce (1997), who proposed an integrated model, capable of addressing the needs of descriptive, comparative, predictive and evaluative research purposes. At its simplest, this will involve the documentation of any CBR initiative, a step-by-step description detailing the rationale, context, scale, resources, format, content and length of training, outcomes, and problems encountered. This type of research is exemplified in the recent work of O'Toole and McConkey (1995) in Guyana. Comparative research facilitates the identification of specific factors that may act as catalysts for change, and enables these factors to be assessed for applicability to other settings. Findings from any descriptive studies can be assessed in a similar manner to determine their possible relevance and utility in other contexts and settings. This research would be relevant to the identification of factors which give rise to leadership of people with disabilities in community activities, so that other communities may promote this outcome. Other areas of applicability would include the identification of strategies for promoting community awareness and positive attitude change, length and content of training of CBR workers, strategies to promote work opportunities for people with disabilities in their local community, strategies to promote social integration in specific community activities, strategies for promoting inclusive education in community schools, strategies for promoting training skills in parents of young children with disabilities to facilitate the development of their children. It can be clearly seen that descriptive and comparative Action Research can be applied to any facet of CBR development and activity. Repeated replication will facilitate predictive capability. Many of these aspects are demonstrated in CBR activities that have taken place in Bangladesh,

(CDD, 1998, Khan, 1997, Khan & Bari, 1997), Vietnam (Jones, 1998), Guyana, O'Toole & McConkey, 1995), the Phillippines (Campos, 1995), Jamaica (Bean & Thorburn, 1995), India (Balasundaram, 1995, Vatsa, 1997), Cook Islands (Price, 1996).

Evaluative research can be seen as the measure of maturity of the CBR approach, and enables both positive and negative outcomes to be turned into constructive guidance for future CBR activities. Early purely quantitative and objective evaluation procedures have given way to procedures where objective and subjective information, qualitative and quantitative data, are considered equally necessary and informative. The evaluation tool developed by the United Nations Development Program, 'OMAR in Rehabilitation: A Guide on Operations Monitoring and Analysis of Results' (Jonssen, 1994) emphasises both reliability and validity of measures, but is concerned too with reflecting the focus on individual disabled people, the process of change, and the means by which it is achieved in communities where CBR activities are being introduced or implemented. Perceptions and attitudes are considered as important as the numbers of people receiving services, and assessment of relevance of activity to the needs of people, both with and without disabilities, is of key importance, as is the assessment of the impact of the programme on the whole community.

Even in large scale traditional and quantitative evaluative studies, such as was carried out by the ILO in Ghana after the introduction of a national CBR programme (Rehabilitation International, 1998), case study components of the findings reflected Action Research methodology, and documented the achievement of personal independence and the capacity to contribute to the family in a variety of ways for people who had previously been dependent. The key facilitating factor in achieving this outcome was identified as the disability awareness creation activities and subsequent attitude change, both in the people with disabilities, their families, and in the broader community. Findings such as these are eminently replicable, across a variety of cultural contexts, thus illustrating the value of detailed documentation and building a comparative data base. A call for a methodology for evaluation of CBR programmes in the Indian context details many aspects which mandate an Action Research approach. Some of these include the extent of sensitisation and empowerment of the community, the extent of community involvement, the extent of replicability of the project, the resultant shift from charity to opportunity, from segregation to integration, from dependence to contribution, from indifference to self-confidence. (Punani, 1998).

Perhaps the most complex, ambitious and potentially far-reaching Action Research project conducted so far in the area of disability in community development is the social policy change-agency research undertaken by the Partnerships in Community Living Project initiated in Nicaragua in 1993 and resulting in the Managua Declaration (CILPEDIM et.al. 1996, Roeher Institute, 1997). The purpose of this research was to develop an achievable vision of community development based on a human rights perspective, by means of providing research based information on both the barriers to human rights and the necessary steps to achieve social change. Outcomes from this initiative have been varied and have resulted in changes to medical training which now focus on viewing children with disabilities as part of the normal range of diversity in development as opposed to viewing them as 'abnormal'. Programmes in harmony with this approach include Projimo's Skills Training and Work Programme, where disabled young persons teach unemployed village youth useful skills from coffin making to building children's wheelchairs, (HealthWrights, 1998) and Los Chavalitos, a farm school established for orphaned and homeless street children from Managua, developing environmental conservation and co-operative self-reliance. (HealthWrights, 1999).

Detailed documentation of CBR developments in the communities and countries which participated will provide an important data base of the effectiveness of this type of approach to achieving positive social change.

7. THE ROLE OF THE RESEARCHER IN ACTION RESEARCH IN CBR

Recent attempts to conceptualise the nature and process of CBR have addressed the role of the 'scientist' or researcher (Tjandrakusuma, 1977, UN ESCAP, 1997) in a way that was not evident in earlier definitions (WHO, 1994). Outlining the challenges for CBR in the 21st Century in the Asia Pacific region, Tjandrakusuma separates the roles of the managers, the technical skill specialists and the scientists. The task of the latter is to conduct research which will improve both the strategy and techniques of CBR implementation, a similar role to that envisaged by UN ESCAP for social scientists.

In many instances the role of researcher has been filled by experts connected with donor organisations, ideally with a resultant transfer of skills to local project co-ordinators. In many other instances the role of researcher has not been filled at all, with the resultant loss of important information and opportunities to learn from past activities. The Action Research framework necessitates the inclusion of research activity in all aspects of planning and implementation, to be undertaken by all participants in the CBR process, if research is to feed into improved practice and innovative procedures.

One way of promoting this outcome is by the formation of Networks, which facilitate the sharing of information, skills and research expertise. The Asia Pacific Disability Rehabilitation Journal has played an important role in this respect, and the documentation by Rehabilitation International of extensive CBR resources and activities illustrates the capacity to benefit by sharing. A Network was formed in Solo, Indonesia, in 1996, at a regional Forum on the development of Human Resource Development in CBR. In 1997 an extended international CBR Action Group Network was formed at a Rehabilitation International Conference in Seoul, South Korea. An example of the benefit of exchange of information under these conditions is illustrated by the adoption of a community mapping procedure to locate local resources by a project for street children in Vietnam, based on procedures that had been developed and used in the establishment of CBR developments in the outer Cook Islands (Price, 1996). The exchange took place as participants described their involvement in CBR activities at the Forum in Solo. The scope for such beneficial outcomes will be magnified as opportunities for exchanges are structured within Network Groups, communication facilitated, and Action Research training and guidelines programmed into the Network activities and proceedings, shared and disseminated.

Some initiatives that could be promoted by Networks of people associated with CBR activities include:

• Creation of a research data base

• Organisation of sessions where research facilitators assist in planning, educating and training less experienced participants in Action Research activity.

• Establish mechanisms for practical assistance and relevant feedback, and a mentoring process

- Develop and encourage the awareness, knowledge and skills that lead to documentation of practices, training content, methods of training, implementation, processes and outcomes.

In this way a research culture can be developed, where the careful documentation of procedures and outcomes can be regularly shared with others, tried in different circumstances, modified, documented and shared again. It will facilitate the recognition that CBR is a global movement, and that all who are engaged in CBR activity are contributing to it, beyond the boundaries of their local context.

Experience from past decades has taught that CBR will never be a 'tidy' concept, neatly defined, but is dynamic and constantly growing and changing in response to both evolving philosophical and ethical frameworks, and the diverse social, political, economic, demographic and physical conditions in which it is being developed. A commitment to a practical action-based research agenda will ensure an expanding body of systematic knowledge, that can inform future practice and perhaps prevent repetition of previous mistakes and lessons already learned. It will provide a source of continual encouragement to people working often in physically isolated situations, but sharing a common commitment to a social change agenda embodying universal acknowledgement of the rights of people with disabilities to full participation and equal opportunity within their communities, within societies that are accepting of diversity and supportive of the empowerment of people with disabilities.

REFERENCES

1. Balasundaram, P. (1995). Fostering Parental Involvement in B. O'Toole & R. McConkey (Eds.) *Innovations in Developing Countries for People with Disabilities.* Chorley, Lancashire, England: Lisieux Hall Publications

2. Bean, G. and Thorburn, M. (1995) Mobilising Parents of Children with Disabilities in Jamaica and the English Speaking Caribbean in B. O'Toole & R. McConkey (Eds.)*Innovations in Developing Countriesfor People with Disabilities.* Chorley, Lancashire, England: Lisieux Hall Publications.

3. Barlow, J., and Harrison, K. (1996). Focusing on empowerment: Facilitating self- help in young people with arthritis through a disability organisation. *Disability and Society, 11,* (4), 539-551.

4. Boyce, W. (1997). The relevance of an Integrated Model for Research in CommunityBased Rehabilitation, *Asia Pacific Disability Rehabilitation Journal, 8(,2),* 27-30.

5. Campos, M. (1995). Developing Livelihoods in B. O'Toole & R. McConkey (Eds.) *Innovations in Developing Countriesfor People with Disabilities.* Chorley, Lancashire, England: Lisieux Hall Publications.

6. CDD (1998). Implementing CBR: Community Approaches to Handicap and Disability (CAHD). Dhaka, Bangladesh: CDD:

6. CILPEDIM, IACI and CACL (1996). Community Based Research : The Managua Declaration. : York, Ontario, Canada: Roeher Institute.

7. Dick, B. (1999). AREOL: Action Research and Evaluation on Line. Intemet instruction course, http://www.seu.edu.au/schools/sawd/areol/areol-home.html.

8. Hanumantha-Rao, P., Venkatesan, S. & Vepuri, V.G.D. (1993). Community-based rehabilitation services for people with disabilities: An experimental study. *International Journal of Rehabilitation Research, 16,* (3), 245-250.

9. Hart, E. & Bond, M. (1995). *Action researchfor health and social care: A guide to practice.* Buckingham: Open University Press.

10. HealthWrights. (1998). Projimo's Skills Training and Work Program. *Newsletter from the Sierra Madre, 39, 1-4.*

11. HealthWrights. (1999. " Los Chovalitos" - A Unique Farm School in Rural *Nicaragua. Newsletterfrom the Sierra Madre, 40,* 1-3.

12. Helander, 1993). *Sharing Opportunities: A Guide to Disabled People's Participation in Sustainable Human Development. :* Geneva:UNDP.

13. Jones. H. (1998). Addressing Attitudes to Disability. A Collection Of Resource Materials. Draft. London: SCF.

14. Jonsson, T. (1994) *OMAR in Rehabilitation.:* New York:UNDP.

15. Khan, N. (1997). Implementing Community-Based Rehabilitation. Paper presented at 1 Ith rehabilitation International Asian and Pacific Regional Conference, Hong Kong, September, 1997.

16. Khan, N. & Bari, N. (1997). Monitoring for Disability Program Planning, Management and Operational Research. Paper presented at Ilth Rehabilitation International Asian and Pacific Regional Conference, Hong Kong, September, 1997.

17. Kuipers, P. (1998). Community Based Rehabilitation (CBR) as Engagement: Context, Parameters and Potential . Unpublished Ph.D. Thesis. Brisbane, Queensland: Griffith University:

18. McConkey R. (1995) Early Intervention in Developing Countries In P. Zinkin & H. McConachie (Eds) *Disabled Children and Developing Countries.* Cambridge:Mac Keith Press.

19. Miles, M. (1989). Information based rehabilitation for third world disability. *Social Science andmedecine, 28,* 207-210.

20. O'Toole, P. (1995). Mobilising Communities in Guyana in B. O'Toole & R. McConkey (Eds.) *Innovations in Developing Countriesfor People with Disabilities.* Chorley, Lancashire, England: Lisieux Hall Publications.

21. O'Toole, B. & McConkey, R. (1995). *Innovations in Developing Countriesfor People with Disabilities.* Chorley, Lancashire, England: Lisieux Hall Publications.

22. Peat, M. (1 *997) Community Based Rehabilitiation. :* Toronto:W.B. Saunders.

23. Price, P. (1996). "Love Thy Neighbour": Establishing Community Based Disability Services on Outer Cook Islands. Paper presented at !8th World Congress of Rehabilitation International, Auckland, New Zealand, 15-20 September, 1996.

24. Price, P. (1998) CBR: Dynamic Concept Requiring Strategy, Research and Vision in Rehabilitation International, *Community Based Rehabilitation: Worldwide Applications. :* New York:Rehabilitation International.

25. Price, R. H. (1990). Whither participation and empowerment? *American Journal of Community Psychology, 18,* (1), 163-167.

26. Punani, B. (1998). Developing a Methodology for Evaluation of CBR Programmes in the Indian Context. *ActionAid Disability News, 9,* (2), 79-80.

27. Quinn, R. & Kuipers, P. (1999). The challenge of integrating research and service delivery: The Acquired Brain Injury Outreach Service (ABIOS) demonstration project. 3rd National Conference on Injury Prevention and Control, Brisbane, Qld.

28. Ramcharan, P. (1997). What Counts for Empowering Research? Paper presented at Roeher Institute International Seminar: Research in Disability and Public Policy, Toronto, August 6th - 9th, 1997.

29. Rehabilitation Intmational (1998). International Disability Video Catalogue. New York:Rehabilitation International.

30. Riger, S. (1994). What's wrong with empowerment? *American Journal of Community Psychology, 21,* (3), 279-292.

31. Roeher Institute (1997). "Policy, Practice and Partnerships: Children are Us". York, Ontario, Canada: Roeher Institute.

32. Stringer, E.T. (1996). Action research: A handbook for practitioners. Thousand Oaks, CA.: Sage.

33. Thorburn, M. (1996). Roles and Relationships of Community-Based Rehabilitation in Jamaica in R. Brown, D. Baine and A. Neufeldt (Eds.) *Beyond Basic Care.* : Toronto: Captus Press.

34. Vatsa, K. (1997). Early Intervention through Community Based Rehabilitation. Paper presented at the 13th Asian Conference on Mental Retardation, Dhaka, Bangladesh, 1521 November, 1997.

35. Wadsworth, Y. (1997). Everyday evaluation on the run (2nd Ed.). St. Leonards, N.S.W.:   Allen & Unwin.

36. Ward, E. J. (1993). *How to research community issues: The grounded community development research method.* Geelong, VIC: Deakin University.

37. Williams, L. (1995). Rights Not Charity in P. Zinkin & H. McConachie (Eds.) *Disabled Children and Developing Countries.* : Cambridge:MacKeith Press.