The value of the service offered by the community rehabilitation worker

Lessons from a review

R Binken and F Miller, students in Occupational Therapy at the time the research was conducted**

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ABSTRACT

This study was undertaken to assess the value of the Community Rehabilitation Workers (CRWs) to the people living in the rural community. Although CBR is no longer delivered through the services of CRWs the results of this evaluation were thought to be valuable in providing some lessons that would help in the implementation of an outreach service delivered by profession specific assistants. Both qualitative and quantitative methods were incorporated in the research design and analysis, all of which contributed to a judgment of the value of the CRWS' service.

The CRWs played a role in formulating the qualitative questions that were asked at a workshop. Resulting from this a questionnaire was compiled which provided information on the components of Community Based Rehabilitation delivered by the CRWs as per the definition given by the World Health Organisation (WHO) as well as information about the value of the service. In addition the CRWs' time and client's statistic sheets for a specified nine month time period were collected and analysed. The researchers compared their findings to a previous evaluation of the CBR programme.

The data collected provided information on the coverage i.e. the number and types of clients seen, the efficiency of the service through an analysis of the time usage, the effectiveness through an analysis of the resources to which clients had been referred as well as the perceptions of the CRWs regarding the value of the work that they were doing. Relevance was ascertained by looking at the activities that were engaged in during the work as well as through the interviews.

It was concluded that the CRWs provide a valuable service to the rural community in terms of the number of clients and the range of diagnoses they treat, assisting their clients to gain access to various resources, and through their use of appropriate activities and techniques for treatment and in their interaction with the community. They also felt that they offered a valuable service to the people with a disability in the villages that they served.

Key words: Community Based Rehabilitation, evaluation, community rehabilitation workers, service value

Introduction

In spite of the existence of various policy guidelines for the implementation of Primary Health Care[1] and Rehabilitation[2] there still seems to be a paucity of rehabilitation personnel working within the various communities in South Africa. A study by Misbach[3] found that although the national norm for a therapist working in the rehabilitation services is 1:30 000 of the population and the aim is to reach a ratio of 1:15 000[2], the ratio within the Metropole Health District of the Western Cape was 1:139 189 and this is in an urban area! What then will be the ratio within the more rural areas of the country? It seems, therefore, that rehabilitation regardless of whether it complies with a social or a medical model is simply not available to a large number of South Africans. The National Rehabilitation Policy has identified this as a problem stating that the "rehabilitation services in South Africa are largely underdeveloped and quite inaccessible to most members of the population especially to those who live in remote rural areas"[2:3].

At various times in the history of rehabilitation service delivery, Community Based Rehabilitation (CBR) as it was proposed by the World Health Organisation (WHO) more than 25 years ago, has been advanced as the solution to this problem. The WHO continues to advocate for CBR services[4]. Support for CBR is also given by

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the World Federation of Occupational Therapists[5] and the World Confederation for Physical Therapy[6] which view the role of the therapists as one of offering support and training to community workers. Both organisations, however, identified a need for a stronger focus on the CBR practices and primary health care. The document "Rehabilitation for all. National Rehabilitation Policy"[2] also provides support in the form of policy.

"The Primary health Care Package for South Africa – a set of norms and standards"[7] states that access to rehabilitative services for people with disabilities should be appropriate and acceptable. This document also proposes that the person responsible for rehabilitation at the community level should be the Therapy Assistant (Community) with support from therapists. This type of worker was originally referred to as a Community Rehabilitation Worker (CRW). The CRWs were given basic rehabilitation skills which cut across the professions of occupational therapy, physiotherapy, and speech and hearing therapy and also included community development. With the aim of providing access to rehabilitation for people with a disability, the CRWs were trained to deliver a service within the communities of SA with a specific focus on those communities which had little access to it. This paper is an account of an evaluation of aspects of this CBR service. However, in 2004 a decision was made by the Department of Health and the relevant Professional Boards to train only profession specific therapy assistants such as Occupational Therapy and Physiotherapy assistants consequently Community Rehabilitation Workers or Therapy Assistants (Community) are no longer trained. Why then should there be an interest in the outcomes of an evaluation of a service delivered by a type of health worker that no longer exists?

If we return to the ratio of therapists to population mentioned above it is clear that the rehabilitation needs of the people in the country can not be met. The profession specific assistants are now expected to provide the services at community level and the questions are: firstly, will they be able to offer comprehensive Community Based Rehabilitation (CBR) through a largely outreach programme and secondly, will they be able to reach the large numbers that do not receive a service at all? Lack of consensus about the best way to deliver CBR poses a serious limitation on the use of this strategy for rehabilitation[8]. Evaluations of service delivery, including this one, should assist in determining areas of practice that may need specific attention if profession specific assistants are to be used to deliver CBR and to help resolve some of the consensus issues.

WHO defines Community based rehabilitation as "a strategy within community development for the rehabilitation, equalisation of opportunities and social inclusion of all people with disabilities. CBR is implemented through the combined efforts of people with disabilities themselves, their families, organisations and communities, and the relevant health, education, vocational and social and other services"[4]. This strategy has been identified as the "how" of service delivery in SA[2] and formed the basis for the training of the CRWs by the Community Rehabilitation Research and Education Programme (CORRE), a programme developed in an attempt to provide CBR at the community level. In this model CRWs worked within government services becoming the catalyst for CBR in rural communities.

Previous evaluations of CBR programmes can also contribute to future developments in South Africa. It has been pointed out that some early CBR projects such as those in Jamaica, Pakistan and Yemen might have failed mainly because of the lack of recognition of the depth and mechanism of community participation[9]. Pupulin[8] identified the lack of government planning and support as a major factor in the slow development of all rehabilitation services. The WHO included "national level support through policies, co-ordination and resource allocation[4:9]" as one of the essential elements of CBR. Other obstacles to the development of rehabilitation services include low priority in comparison to health issues which pose life threatening situations, lack of understanding of the concept of CBR[10], lack of rehabilitation personnnel and lack of funds.

Lagerkvist, cited in Helander[11], undertook an evaluation of two CBR programmes (one in Zimbabwe and one in the Phillipines) and concluded that CBR is highly effective for disabled people who were being assisted at home. This was confirmed by Miles[12] who estimated that 80% of rehabilitation needs can be met at the community level.

Dolan et al[13, 14] undertook an evaluation of the CBR delivered by the first group of CRWs trained in the CORRE Programme, part of which was an analysis of worker time usage and whether or not their clients were satisfied with the service offered. They concluded from client interviews, that the impact of the CRWs had been significant in changing peoples lives but that aspects such as extending the service to other areas and use of time should be examined. One of the aims of the current study was to identify areas of success and concern and to compare the results, when possible, with the Dolan *et al* studies to determine if these identified areas of concern had changed.

What is necessary, according to Cornielje[15], are vigorous evaluations of present CBR programmes. This requires development of performance indicators and criteria for evaluation to show evidence of success. Only if specific criteria are met such as efficiency, sustainability, coverage and impact of a programme[15] as well as particular trends and gaps in service delivery[16] can CBR be expected to be adopted as a national strategy in the field of rehabilitation in South Africa[13]. Dolan *et al*[13] also felt that an important way to assess coverage was whether or not the CRWs' caseloads reflected the prevalence of specific disabilities in the community being served. An additional part of any evaluation should be whether or not the training of the personnel has been adequate in providing the skills needed for the job. A further important aspect in the context of the CORRE programme was to evaluate whether the components of CBR were being implemented in the service offered. The value of a service i.e. the "worth, merit or desirability" of a service is the sum of all the above measures but also relates to the "feelings" that people have about a service and its contribution to the health of the community. These "feelings" can be from both the client perspective and the service deliverer perspective.

Research should not overlook the critical social aspects of programme delivery such as the motivation of both workers and clients, the clients' acceptance of the service and the changed attitudes within families and the community[17]. Clients' feelings of increased hope, improved relationships with others and self-satisfaction are also important in assessing the value of a programme[18].

According to Feuerstein[19] an evaluation of a project should be as participatory as possible. This approach encourages the development of critical awareness and thinking among the participants[14] and was implemented in this study.

Study Aims

1. To assess the value of the CRWs to the rural community by evaluating:
   - ❖ The coverage of the different diagnoses and the number of clients seen.
   - ❖ The efficiency of their work through calculating the proportion of time spent doing different activities (for example individual treatment, groups and in professional development) and to compare this with the results of the Dolan et al studies[13,14] to ascertain if the situation with the new group of CRWs had changed.
   - ❖ The relevance of their work through examining the activities that they use in treatment.
   - ❖ Whether the different activities covered the components of CBR given in the definition and thereby determining whether the requirements of a CBR programme were being met.
   - ❖ The CRWs' perceptions of the value of the service they were rendering.
2. To make the research participatory through involvement of the subjects in the research process.
3. To identify some areas that will serve as lessons while implementing a service delivered through profession specific assistants.

Research Methods

To try to overcome some of the weaknesses of using only one method, several methods of evaluation were used i.e. a combination of the qualitative, descriptive and analytical approaches[20].

The evaluation was planned to be as participatory as possible and a workshop to plan the aspects to be evaluated was part of the methodology used.

Population and Sample Population

Of the sixteen CRWs who qualified in the second group of students in the CORRE programme, twelve who worked in the Limpopo Province were selected by stratified sampling for this research project, the inclusion criteria being that they were all CRWs who qualified in May 1995, and at the time the research was being conducted, worked in the rural communities of the Limpopo Province. The project was discussed with the supervisors of the CRWs and CBR programme co-ordinators in each district who then contacted their respective CRWs to ask if they would be prepared to participate in the project. All twelve of the CRWs who formed this group responded positively and therefore constituted the study population. Out of this group the following constituted the study sample:

1. 9 CRWs who attended the workshop and interviews (2 failed to attend due to transport problems and one was ill.
2. 10 CRWs who submitted their records which were analysed (two did not submit data), constituted the study sample.

Questionnaire construction and interviews

A date was arranged to meet the subjects at an accessible hospital. At the meeting the purpose of the study, the need for studies of this nature and the benefits that could accrue as a result were outlined. The interview schedule was also discussed and modified reflecting the subjects' suggestions on the best way of assessing their thoughts on their value to the rural communities that they serve. The questionnaire consisted of some closed questions requiring a choice of "usually, sometimes or never" and other more open ended questions. Once the questionnaire was constructed, the CRWS were individually interviewed using the questionnaire as a guide.

Signed consent was obtained from all participants and each CRW was assigned a number, used throughout to maintain confidentiality. No findings have been attributed to individuals. All the interviews were taped and transcribed for purposes of analysis. (They were conducted in English as all the subjects spoke English).

The CRW records

Discussions were also held with the CRWs on the way to collect and interpret the data from their records.

The specific measurement techniques and methods of data analyses used to meet each objective are described in detail below (see *Table I*):

Table I: Summary of research

Aspect evaluated	Study
Coverage	The number of clients treated by the subjects in the 9 months period.
	Diagnoses of clients treated
Efficiency	The proportion of time spent doing different activities
Effectiveness	The resources to which the subjects referred their clients
	Interviews – Subjects' perception of their work
Relevance	Diagnoses covered, activities undertaken
Worth	The subjects' perceptions of the value of the work that they are doing
Participation in research	Participants participation in drawing up process and questionnaire

An indication of **coverage** was evaluated by:

1. Analysing the number of clients treated by the subjects in the period May 1995 – January 1996 (ie over a period of 9 months):

Measurement Techniques: The CRWs' monthly client and activity record sheets were collected and analysed. All clients seen by the 10 CRWs over the 9 month time period were listed and the number of months each client received treatment was recorded.
Data analysis: The number of new clients, on average, seen by each CRW was calculated. An analysis of variance was undertaken to determine the differences between each CRW. The Kolmogoro-Smirnov Two Sample Test was used to compare the results found in this study with those obtained by Dolan *et al*[13]. The raw data from the Dolan *et al*[13, 14] studies were available for comparison purposes.

2. Examining the diagnoses of the clients treated:

Measurement Technique: The CRWs' time allocation sheets, patient record sheets, and an interview question provided this information.
Data Analysis: A table was drawn up listing the diagnoses of each client being seen by each CRW. The different diagnoses of the clients were analysed to determine the percentages of each category of diagnosis.

An indication of **Efficiency** was evaluated by:

3. Analysing the proportion of time spent doing different activities:

Measurement technique: A spread sheet was drawn up combining the contents of the CRWs' time allocation sheets for all the months collected.
Data Analysis: For each category of activity the mean and the standard deviation as well as the percentage of work-time that it occupied were calculated.

The **Effectiveness** was examined through:

4. Listing the resources to which the subjects referred their clients:

Measurement Technique: Interview question.
Data Analysis: A list of resources used was drawn up from the responses of the CRWs, to enable identification of those most frequently used. This determined the extent of intersectorial collaboration.

5. Obtaining the subjects' perceptions of the value of the work that they were doing:

Measurement Technique: Interview questions - both prepared and originating from the workshop.
Data Analysis: The responses were analysed. Some of the responses were grouped.

The **Relevance** was ascertained by looking at:

6. The activities the subjects used in their treatment of clients:

Measurement Technique: Interview question.
Data Analysis: Responses were recorded and similar responses aggregated in an attempt to indicate the pattern of responses.

All the activities that the CRWs engaged in as part of their work were linked to the components of CBR as per the definition given in order to determine whether the service fulfilled the requirement of a CBR programme.

The project received ethical clearance from the University of the Witwatersrand and from the Ethics Committee, Limpopo Department of Health.

Limitations of the study

The assessment of value or worth was from the perspective of the CRWs only . No evaluation of each client's opinion was undertaken. This aspect was evaluated in the Dolan *et al* study. In addition only the records kept by the CRWs in the form of provincial time sheets were evaluated. The review of the case history of each client which

could have documented individual client change, was not carried out. Thus only the numbers of clients being seen and the type of intervention were obtained in this study.

Unfortunately, some of the records of the ten CRWs for the nine month period under review had to be discarded. The researchers found that the record-keeping of the CRWs was not in some instances consistent and accurate and the researchers experienced difficulty in deciphering certain CRWs' handwriting. Of the twelve CRWs that had consented to participate in the study, only nine attended the workshop and interviews. The results of this study are therefore based on a very small sample of CRWs.

Results

Record Review

The time sheets and treatment record sheets kept by 10 CRWs over a period of 9 months were used for the review. A total of 64 time sheets were analysed instead of the expected 90 monthly record sheets due to the already mentioned problems with the record keeping.

Lesson:
The type of record sheets used should be simple and easy to complete to ensure their accuracy.

1. Coverage

Number of clients seen

It must be noted that the "total number of clients" i.e. 1421 in *Table II* is the sum of patients seen per month per CRW over nine months. This means that the same patients may feature from month to month. The minimum and maximum number of patients seen per month i.e. the range for each CRW in their nine months of service is seen in the table. Where the minimum value is zero, these CRWs were on leave for that month. Dolan *et al*[13] found that a total of 383 clients had been seen by 8 CRWs over a period of 18 months i.e. a mean of 47.86 over a longer period of time.

Table II: Number of clients seen in the time period under investigation

CRW	Total No of Clients	Range over the time	Mean No of Clients per month	SD
1	92	0-13	10.22	4.15
2	185	10-26	20.56	4.10
3	159	13-23	17.67	3.0
4	201	19-27	22.33	2.55
5	232	7-45	25.78	12.10
6	138	0-23	15.33	6.9
7	217	17-32	24.11	5.4
10	197	18-29	21.89	3.89
Total	**1421**		**19.74**	**5.10**

The mean number of clients seen per month was 19.74 with a range of 10.22 to 25.78 and a SD of 5.10. The factors contributing to this variation may be the length of time spent with each client, the time spent traveling to the clients or the individual worker ways of working.

An analysis of variance was carried out to compare each CRW to the mean total per month. The differences between the CRWs for the mean number of clients seen per month was $p<0.0001$, indicating a significant difference between the CRWs. Further analysis indicated that CRW 1 is seeing a significantly smaller number of clients per month than the other CRWs.

Lesson:
Future monitoring of services should include an analysis of the reasons for differences in staff performance so that services can be improved.

New Clients added to the list per month

The minimum and maximum number of new clients added to the list per month over the nine month time period i.e. the range for each CRW in their nine months of work is shown in *Table III*. The mean number of new clients per month was 6.42. Two of the CRWs were on leave for one out of the nine months, thus, their minimum values are zero. It should be noted that a further two CRWs did not obtain any new clients during one working month.

Table III: The number of new clients seen by each CRW per month

CRW	New Clients Seen	Range	Mean No. of New Clients per Month	SD
1	22	0-12	2.44	3.75
2	69	1-20	7.67	5.87
3	61	2-16	6.78	4.87
4	38	0-27	4.22	8.61
5	122	1-40	13.56	13.39
6	38	0-16	4.22	5.14
7	66	1-29	7.33	8.65
10	46	0-29	5.11	9.08
Total	**462**		**6.42**	**3.40**

In relation to the number of new clients being seen per month, there is no significant difference between the CRWs ($p = 0.1436$).

In the Dolan *et al* study[13] the mean number of new clients seen per month was 3.75. As the raw data were available from the Dolan *et al* study a comparison was made using the Kolmogorov-Smirnov Two Sample Test to evaluate whether there were significant differences between the two studies with respect to the number of new clients being seen. Although not statistically significant, there is a remarkable 71% increase in new clients in this study when compared to the Dolan *et al* study. This increase is of interest when assessing the value of the CRWs to the rural community and may indicate that the results of the previous study had an impact on the ability of this group of CRWs to improve the coverage.

Lesson:
1) *Monthly statistics of clients seen must distinguish between the number of new clients as well as those brought forward from previous months.*
2) *The number of clients being seen each month will only give useful information if the data are collected over a longer period of time and eventually provide an indication of a norm for client visits. The results of this study provide some data with which future comparisons can be made.*

Diagnoses of the clients seen by the CRWs

Table IV on page 14 shows the diagnoses expressed as a percentage of the total number of new diagnoses of the clients seen by the sample of CRWs who submitted their monthly patient statistic sheets. A total of 462 new patients were seen by the CRWs collectively and this amounted to 477 diagnoses as some of the clients had multiple diagnoses.

The percentage of each diagnosis can again be compared to the study by Dolan *et al*[13]. Both studies show that clients with the diagnosis of mental retardation and those with a learning difficulties form the highest percentage of diagnoses being seen, while arthritis is the lowest percentage. This similarity may be a reflection of the prevalence of these disabilities in the community. However, prevalence data for the area in which the first study was conducted showed that "moving problems" had the highest prevalence rate. It seems therefore that the CRWs are dealing with people in need rather than the predominant type of disability. There were no prevalence data available for the area in which the group under evaluation worked.

Krefting[17] stated that not all the people with a disability, particularly those who are mentally ill, are being reached as other

Table IV: Diagnoses seen by the CRWs in the course of their work

Diagnoses Seen – this study	%		Diagnoses seen – Dolan, Concha and Nyathi study	%
MR and Learning Disabilities	19.4	1	MR and Learning Disabilities	18.39
Mental Illness	18.03	2	Cerebral Palsy	16.6
Other	17.19	3	Mental Illness	16.09
Blindness & Poor vision	7.97	4	Stroke	11.49
Stroke	7.34	5	Blindness and poor vision	9.19
Cerebral Palsy	7.34	6	Amputation	7.47
Epilepsy	4.4	7	Spinal Disorder	4.02
Polio	3.77	8	Epilepsy	4.02
Unknown	3.77	9	Hearing Difficulties	3.44
Hearing Difficulties	3.13	10	Communication Difficulties	2.87
Spinal disorder	2.94	11	Polio	2.87
Amputation	2.52	12	Arthritis	1.14
Communication Difficulties	1.47	13	Other – Albanism, Heart disease, Club feet	2.29
Arthritis	0.63	14		
TOTAL	**100**		**TOTAL**	**100**

types of disabilities are targeted because they are more visible or easier to treat.

Our study reveals a high percentage of clients with mental illness being seen in comparison to clients with other diagnoses and is second only to that of learning problems and mental retardation. This may be indicative of effective training which has sensitised the CRWs and equipped them with the knowledge to overcome their fears of mental illness.

Lesson:

1. *Comparing the number of clients in the community who have a disability with the number that have been seen by the CRW needs to be done to ensure coverage. However the needs of the community must take precedence (as it did in this group of CRWs) over the prevalence.*
2. *Use of the WHO screening tool for locating people in the community who have a disability is a useful tool for obtaining the relevant information on the numbers and types of disability*[21].

Efficiency

Proportion of time spent doing different activities

The total number of time units (15 minutes equaled one unit) per category of activity per month, and the mean per category, were calculated and converted to hours. From this the percentage of total work time for each category of activity was determined. (See *Table V*)

Adding the percentages of time spent on all activities in the broad grouping of direct client contact which included individual treatment, group intervention, making devices, clinic visits and screening or assessment, the total value is 34,36%. Although not included in this percentage, the time spent on supervision ie 1.69% could be added as presumably clients are seen during this time. There is a difference of 9,52% of the total work time between this and the next category of activity in descending order of time consumed, i.e traveling time which is 24.84%. The group investigated by Dolan *et al*[13] was found to spend 27.74% of the time on direct patient contact and 28.95% of the time traveling. There is therefore some improvement in the amount of time spent in individual client contact between this group and the previous group evaluated.

A large proportion of work time, almost one quarter, is spent travelling. This probably reduces the amount of time the CRWs can spend with their clients as travel is usually in the form of walking or taking a taxi as the villages which the CRWs serve are on the whole far apart.

Table V: Proportion of time spent performing various activities

Activities	Range of Units	Mean hrs/month	SD	%Time
Direct Client Contact				
Individual Treatment	20-390	49.21	21.96	31.31
Group Rx	0-45	1.11	2.48	0.7
Screening / Assess	0-29	0.71	1.72	0.45
Making devices	0-60	1.83	3.43	1.16
Clinic visit	0-36	1.16	1.97	0.74
TOTAL				**34.36**
Traveling Time	0-328	39.04	19.43	**24.84**
Staff contact/supervision	0-64	2.66	3.65	1.69
Planning & preparation	0-130	10.71	7.49	6.81
Community Education	0-64	1.92	3.41	1.22
Student education	0-64	0.91	2.45	0.58
Administration				
Administration	0-300	22.72	15.09	14.46
Staff meetings	0-64	2.9	3.84	1.84
Community meetings	0-289	11.46	12.92	7.29
Other	0-121	10.02	10.66	6.37
TOTAL				**29.96**
Staff development	0-64	0.79	2.95	0.5
TOTAL		**157.15**		

Dolan *et al*[13] felt that the use of so much of the CRWs' time on travelling was a serious obstacle to the cost effective delivery of CBR as it had a major impact on the time available for direct client contact. It is therefore positive that although the amount of time spent in this category in our study is still significant, that client contact now occupies the greater percentage of their time. However, traveling is part of the job in community work as clients are seen in their homes. Two hours per day spent traveling may be realistic for the delivery of community based service but still needs to be examined with the aim of reducing it. However if travel time is spent in the productive engagement of taxi drivers and community members around disability issues this may be time worth spending. The question is whether this amount of time traveling per CRW who is based in the community is more cost effective than an outreach programme from the local hospital which will involve large amounts of expensive travel in which no contact is made with community members?

A large amount of time (29.96%) was also spent on administration and meetings which again reduces the time available for individual client intervention and community education.

The time spent per month in community education by the first group of CRWs was 2.71 hours and for the second group 1.92 hours[13]. This decrease in time is of concern, as Finkenflugel & Wolffers[22] described how rehabilitation workers are no longer only providers of hands on therapy, but need to be educators, planners, and trainers. However, the time allocated to community meetings (7.29%) could also indicate time spent in education and adds substantially to the community education category of their work. The time spent at community meetings in the Dolan *et al* study was 9.38%.

According to the CRWs they have been successfully engaged in a range of community education programmes (see equalisation of opportunities).

Lesson:

Travel and administration are two activities which should be carefully monitored in any type of community service as the efficiency of a service is in large part dependent on good use of time. In addition the time allocated to meetings should be investigated to determine the exact nature of the interaction between the community worker and other attendees.

Interviews:

As planned the interviews of the 9 CRWs were taped and transcribed. For the purpose of this article, the topics covered in the interviews will be described and linked to the components of CBR as per the definition i.e. rehabilitation, equalisation of opportunities, social integration and carried out through the combined efforts of all concerned and with appropriate referral[4].

3. Effectiveness

Rehabilitation - Making the difference

The definition of CBR states that it is implemented through the *combined efforts* of disabled people themselves, their families and communities[4]. All the CRWs reported that input from the client or family members was incorporated in the planning of the client's treatment programme - a client-centered approach. They also included the caregivers or family members when asked who carried out the treatment programme. They stated that they worked with family members, caregivers, neighbours and clients who had recovered and who offered experiential help. All of the CRWs stated that the treatment programmes were carried out in the clients' homes. This is significant in terms of the affordability of the service as travel to urban institutions is costly and difficult for the clients[13]. Awareness of a client's sense of place also helps tailor intervention methods in a more sensitive way[23]. As one CRW put it, "*The parents or caregivers are the ones who are supposed to select the treatment.... If I select the treatment, they are going to leave that treatment, because I don't know their needs and I don't know their problems"*.

This approach has had an impact on the individual as well as on the family as all the CRWs interviewed felt that their clients were doing things they would never have done without their input. Examples were: independence in activities of daily living, walking following previous contractures, disabled children being able to crawl. *"The first time I visited there she didn't walk, then I tried to do extension of the knee. Now she is walking properly and the family are very happy."*

They also felt that they were making a difference with respect to helping family members to cope better with a disabled member. As one CRW said *"we help to unload the load which the parent is having"*.

Lesson:
The importance of family involvement is demonstrated here. Without this involvement the service could not be effective.

The CRWs mentioned a range of tasks through which they defined their value to the community (see *Table VI*). These tasks range from those that help people to become more independent to those that encourage integration into community activities.

Table VI: Tasks by which CRWs define their value to the Community

Activities
Direct Client Contact
➢ Carrying out rehabilitation in clients homes which overcomes the financial difficulties experienced e.g. getting to hospital
➢ eaching disabled people and their families to make assistive devices for themselves
➢ Promoting independence in disabled people
➢ Encouraging disabled people to manage themselves better in the home and in the community
➢ Educating caregivers to understand the behavior of their disabled family member
➢ Involving families in treatment, thereby teaching them skills
➢ Helping families to use the cheapest possible resources and those that are available in the community.
➢ Encouraging disabled people to start self help groups
➢ Sharing ideas and adopting a client centered approachon deciding on priorities in treatment
Community Education
➢ Integrating disabled people into the community to prevent discrimination
➢ Changing attitudes in the community
➢ Creating jobs and work for disabled people.
➢ Including disabled people in community meetings.
➢ Raising disability awareness and carrying out health promotion
➢ Encouraging disabled people to fight for their rights
➢ Identifying people in the community with disabilities.
➢ Influencing teachers to admit disabled children to their schools.
Intersectorial Collaboration
➢ Working hand in hand with Indunas and traditional healers.
➢ Making referrals in cases where they are unsure of the diagnosis or unable to help.
➢ Promoting networks with other health structures and working as a team.
Other
➢ Understanding the community's beliefs and respecting their cultural norms

Equalisation of opportunities

In promoting the equalisation of opportunities for people with a disability it is important that attitudes toward people with disabilities need to be positive. In this regard community education was an aspect of the CRWs' work which was done in partnership with disabled people themselves.

The people listed as receiving education were: the community at large, care groups, nurses, schools, teachers, youth, family members and the clients themselves. CRWs approached the challenge of changing attitudes in various ways, often focusing on integration. "*We are trying very hard to integrate the disabled in the community, society, at schools, any activities like sports and recreation"* i.e. social integration.

Other topics covered in the education programme were health education, disability awareness, drug and alcohol abuse, child abuse, AIDS, causes and prevention of disability, hygiene and healthy lifestyles.

Although the amount of time spent on community education appears low (a mean of 1.92 hours per month) most CRWs reported a positive change in the attitudes of clients or their respective communities, towards disability and they felt that they had played an important role in bringing about these changes.

Community members also need to be educated about the services the CRWs provide. Six of the CRWs interviewed reported that they were usually approached by clients versus approaching the clients themselves (the other three answered sometimes). This is an important effect of community education and indicates the positive attitude of community members towards the effect of rehabilitation as many requests were based on people having seen positive results in friends and neighbours.

Lesson:
Providing adequate community education and its spin off into participation of community members in services will be a challenge for any outreach programme due to the contact with the community at large that must be made for this to occur.

Empowering the client

Education of the community must go hand in hand with the feeling of empowerment in the individual that enables him to participate. The majority of CRWs stated that they usually encouraged people in the disabled community to be more assertive, despite the difficulty they sometimes encounter. "*I'm really encouraging them, they must fight for their rights," "but they still have a problem as people who are disadvantaged who have grown up being stigmatised...saying that they are nothing in the community"*. From this statement it is not clear how successful the partnership has been in the empowerment process.

Lesson:
The empowerment process is difficult to implement as well as to monitor

but is an essential part of CBR and ways must be found to foster and monitor this process. An indicator of the success of the empowerment process could be the number of people with a disability that participate in community activities as a result of the programme.

Referral to Appropriate resources - *Intersectorial Collaboration*

According to the CRWs the strongest expressed client need was related to financial issues: disability grants, income-generation, jobs, learning technical skills, and housing. The researchers understand that the need for financial security is not only a need of the disabled members of the community, but a reflection of the poverty-stricken areas the CRWs are serving.

Another client need which many CRWs expressed was related to daycare or schooling. The expressed need for special schooling was supported by the finding that mental retardation and learning difficulties form the largest percentage of the CRWs' caseload.

However the CRWs reported that client needs such as accessing jobs and housing, were not being met through their intervention. The researchers noted that most of the reasons given for this were external to the CRWs control. For example, lack of cooperation from other Government departments, lack of finance, lack of family support and inaccessibility of buildings. The CRWs have attempted to deal with the latter…"*So I have tried to talk to with community leaders about how they can change them* (the buildings) *so that all people can get access*." It is interesting that this study also identified the effect that the lack of Government cooperation can have on providing CBR services[8].

Lesson:

The success of a programme depends to a large extent on the support given by Government and although policy exists there is still a gap between this and service delivery. A great deal of effort must therefore be put into facilitating greater co-operation with government.

The responses given by the CRWs concur with the literature, in that community based rehabilitation is a complementary service where the objective is to bring professional rehabilitation to a greater number of disabled people, and to refer those in need of more specialised services[14, 22]. All the CRWs interviewed had referred their clients to primary health care services, hospitals for medical, orthopaedic, paediatric consulations, occupational therapy, physiotherapy, speech and hearing therapy. Referrals were also made to social workers, especially for disability grants (identified as a predominant community need). All CRWs interviewed listed "school" as a common resource to which they referred clients. This is indicative of a client centered approach, as schooling was a major need expressed by clients to the CRWs.

In addition some of them (six CRWs) had started community projects (such as groups for parents of children with a disability, making bricks, Making APT articles) and helped their clients access community resources (such as schools, support groups and care groups).

A key benefit derived by clients from the service was the presence of someone to facilitate their access to resources such as assistive devices and equipment and obtaining disability grants[13].

Lesson:

The involvement of people with a disability in community projects is a key component of community integration and future service delivery must examine ways of starting these projects. This is often difficult in an outreach programme where the focus is often on individual intervention.

It is interesting to note that all the components of CBR discussed above were also listed when the CRWs were asked to name the activities that they thought brought value to the clients and the community that they were serving (see *Table VI*).

Other research has identified similar skills as being part of the CRWs work i.e. to manage disability (*carrying out rehabilitation*), help in accessing income generation activities (*accessing jobs and self help groups*), referrals to day care centers (*influencing teachers to admit disabled children to school*) and referral to support groups (*promoting networks*)[24, 25].

Other - Supervision

One motivation for the relatively long training (2 years) was to reduce the day to day supervision of the CRWs, however supervision has been consistently found to improve the performance of health workers especially those who work alone[25] as the CRWs do. Our findings indicate that the CRWs felt that supervision influenced their work and improved their skills. One CRW who was completely without supervision expressed her feelings, "*there's no support, there's no correcting, there's nothing. You are just doing on your own.....".* CRWs have varying opinions regarding the frequency of supervision necessary. Supervision once per month was the perceived optimum, or a variant on this according to the individual CRW's expressed needs.

Lesson:

It is important therefore to stress that rehabilitation assistants in carrying out CBR must be an integral part of the district hospital team and must receive support from this team in the same way that other staff and community workers are supported. Supervision often becomes more difficult but even more important in health systems that are decentralising[25] and care must be taken in the planning phase of the service to provide ongoing supervision and support to assistants.

Conclusions

The aim of this research was to assess the value of the CRWs to the rural community by evaluating:

1. The coverage of people with a disability as well as the types of disabilities being seen was assessed. The number of clients that were seen in the course of nine months by ten CRWs was 1421, however this number probably duplicates clients. It was impossible to ascertain the number of clients seen in relation to the number of disabled people in Limpopo Province and accordingly the number of people with a disability in the villages serviced. According to the study carried out by the Community Agency for Social Enquiry (CASE)[26] in 1999 the prevalence of disability in the Province was 6.3%. Door to door surveys in which the population served by a community worker, are screened for people with a disability are therefore helpful in ascertaining the needs and extent of a service.
   It is difficult to compare the list of diagnoses seen in this study with the CASE[26] study as different terminology was used. This makes the case for the institution of uniform terminology. The CASE study ascertained that people with a "movement activity" problem was the most common. However clients with the diagnosis of mental retardation and learning difficulties formed the highest percentage in this study. The results of this study could indicate a different prevalence in the areas being served but could also be a reflection of the cases needing the most help. As the CRWs indicated that most of their cases were obtained from community requests it would seem that the later reason could be true. This is a positive indication of the value that the CRW brings to his community and the involvement of the community in the service.
   It is interesting that this group accessed a larger number of new clients in the time period than was the case in the study by Dolan *et al*[13], thus indicating an improvement in coverage.
2. The efficiency of the work of the CRWs was examined through analysing the proportion of time spent doing different activities (for example individual treatment, groups and community education). In this study a total of 34.36% of the CRWs' time was spent on individual client contact, but over half the amount of time (54.8%) was spent traveling, doing administration and attending meetings. Whereas traveling to clients is a necessary part of the job, one must question the amount of time spent doing administration, and "other" activities. In making any service efficient it is worth examining the way that people spend their time and making changes accordingly. This was done with the CRWs trained through the CORRE Programme and some positive changes occurred in the use of time between the two groups evaluated.

3. The relevance and effectiveness of the CRWs' work were determined through examining the activities that the CRWs use in their work and linking these to the components of CBR as given in the definition. It is gratifying to note that most of the components of CBR were implemented from rehabilitation through individual intervention to community education and client empowerment thus enabling the equalisation of opportunities. Intersectorial collaboration through referral to a number of resources was also achieved.
   Obtaining robust results for coverage, efficiency, effectiveness and relevance were not easy as performance indicators had not been developed and put in place when the service began. This makes a strong case for developing these indicators at the start of any new service and carefully collecting the relevant data over time.
4. To make the research participatory through involvement of the subjects in the research process the CRWs were consulted about the methodology used for the study and the questions that should be asked, it seems that this objective was also met.
5. Some areas that will serve as lessons while implementing a service delivered through profession specific assistants were identified. It will also be helpful to examine the essential elements of CBR as stated by WHO[4:9] if a relevant and comprehensive CBR service is to be instituted through an outreach programme delivered by profession specific assistants i.e.

   1. "*National level support through policies, co-ordination and resource allocation*". The CRWS identified problems with obtaining co-operation from different government departments. As already identified this is an area that requires urgent attention as Pupulin[9] also found this to be an area of concern.
   2. "*Recognition of the needs for CBR to be based on a human rights approach*." CBR promotes the right of people with disabilities to have access to all the resources in a community and to enjoy health and well being. It is important therefore that work is done, as was done by this group of CRWs, to integrate people with disabilities into the normal community structures. Poverty is also a rights issue and CBR plays a role in the realisation of rights through equal access to services and opportunities[26]. This group of CRWs was successful in helping some of the people with whom they worked to access self help projects as well as other community services. This aspect of the service will need specific attention in any outreach programme.
   3. "*The willingness of the community to respond to the needs of their members with disabilities*". An indication of the success of this can be gauged by the fact that the CRWs received referrals from the community at large. Obtaining community support for rehabilitation services may be difficult due to obtain in an outreach programme when the community is visited only from time to time.
   4. "*The presence of motivated community workers*". The fact that the CRWs perceived that they added value to their communities was a motivating factor in their work.

In summary it could be said that the community based service that was offered by the CRWs met the requirements for such a service. The advantage, that was identified by them, i.e. that they were familiar with the setting, the community characteristics and language was helpful in offering a meaningful service. However various aspects have to be examined such as the amount of time spent in administration and travel if this service is to be offered by a variety of profession specific workers who are based primarily at hospital or clinic level. These problems would be exacerbated by the location of community workers at district level and the fact that several categories of staff may need to visit the same client to offer a comprehensive service as well as give community education.

The document a "CBR A Strategy for Rehabilitation Equalisation of Opportunities, Poverty reduction and social inclusion of people with disabilities"[4] states that community workers form the core of CBR programmes and suggests that they may be volunteers from the community. This would mean that they are familiar with the setting a factor which the CRWs identified as facilitating their access. The use of community volunteers is worth considering for SA due to the extreme lack of staff that has already been identified.

Overall it is evident that the CRWs perceived the service they provided to be of value to the rural community in which each works. The list of tasks by which they defined their value is extensive, reflects a holistic approach to their clients, and incorporates the elements which define community based rehabilitation. A great amount of education of therapy assistants and service planning will have to take place if service through this cadre of worker is to be as comprehensive as that delivered by the CRW.

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