PHYSICAL THERAPY ROLES IN COMMUNITY-BASED REHABILITATION: A CASE STUDY IN RURAL AREAS OF NORTH EASTERN THAILAND

Nomjit Nualnetr*

ABSTRACT

This action research aimed to explore how physical therapists could enhance the quality of life for persons with disabilities via a community-based rehabilitation (CBR) strategy. The study was conducted in two rural sub-districts in northeastern Thailand. In each sub-district, several group meetings were arranged for persons with disabilities and their families, and various community members. Participants were encouraged to discuss their perception of problems of the current rehabilitation services for persons with disabilities. Strategies to manage all problems were collaboratively identified and were implemented in order of priority according to the importance of the problem. The outputs of CBR were evaluated by interviews and observation. The findings revealed that physical therapists had numerous roles in CBR, depending on the community's circumstances. They need a high degree of flexibility and a wide range of skills to contribute to CBR. The preparation of such physical therapists requires development of a more client-centered community-oriented education programme.

INTRODUCTION

The incidence of persons with disabilities in Thailand, has been estimated at 8.9% of the total population (1). Most of them are living in rural areas, facing problems such as poverty and discrimination, and are left behind in the development process. The conventional approach for the rehabilitation of persons with disabilities includes the provision of financial support and essential elements for them directly. Such an approach focuses on the recovery of body functions and frequently relies on professionals and institutions. It has been suggested that institution-based rehabilitation is helping no more than 2% of those in need (2). In the 1970s and the early 1980s, community-based rehabilitation (CBR) emerged as an alternative

strategy to deal with disability issues (3). It was promoted by the world bodies as an approach that was suitable for developing countries with limited resources, to provide wider coverage of services (4,5,6). CBR is a strategy within community development for the rehabilitation, equalisation of opportunities and social integration of all people with disabilities. It is implemented through the combined efforts of disabled persons themselves, their families and communities, networking with the appropriate health, education, vocational and social services (7). These circumstances challenge health personnel including physical therapists to apply CBR strategy for upgrading quality of life for persons with disabilities.

Thailand is one of the countries to adopt CBR as a means of delivering effective rehabilitation to persons with disabilities. CBR has been operating in Thailand since 1983, under the responsibility of physicians, nurses, and non-government organisations (8,9). However, the CBR programme managed by physical therapists has been limited. As lecturers in a physical therapy school, the researchers conducted this study to explore how physical therapists could enhance the quality of life for persons with disabilities through the CBR strategy.

METHOD

An action research was conducted between May 2002 and February 2004 in two rural sub-districts, namely sub-districts A and B, in northeastern Thailand. They were selected as study areas due to the large numbers of persons with disabilities and the convenience of the researchers reaching the areas within an hour. There was a community hospital in each study area but a physical therapist was available only in the sub-district B's hospital. The study was divided into three phases: education, empowerment, and implementation.

Phase 1 Education phase: In each sub-district, the researchers established rapport and initiated observations to assess the community context. Several group meetings were organised for persons with disabilities and their families, members of sub-district administrative organizations, community leaders (e.g. sub-district headman, monks), representatives of various community groups (e.g. the elderly, women, and adolescents groups), and local civil servants. The purposes of the meetings were to introduce the CBR strategy as well as the study's details and objectives, and to mobilise communities in sharing their experiences on issues regarding persons with disabilities. Finally, a core organisation that would be the leader of the CBR programme in each sub-district was identified.

Phase 2 Empowerment phase: The core organisation of the CBR programme in each study area was facilitated to arrange group meetings among persons with disabilities and their families, sub-district administrative organisation's members, community leaders, representatives of various community groups, local civil servants, and other relevant sectors. The researchers created an atmosphere for open dialogues and reflection during the meetings. An analysis of the persons with disabilities' current situation was collaboratively discussed among the participants. They were encouraged to discuss problems as well as barriers and limitations of the current rehabilitation services for persons with disabilities. The problems were prioritised, then strategies and action plans to manage such problems were established by the participants.

Phase 3 Implementation phase: The participants implemented their action plans in order of priority, according to the problems' perceived importance. The researchers regularly visited each study area to observe and record its activities, to encourage the core organisation and the participants to keep processing the programme, and to offer any necessary advice and help. The core organisation regularly arranged group meetings among the participants to evaluate the programme, and to review and modify the action plans.

The outputs of CBR programme in each study area were obtained by observation, field-note record and informal interview, and were evaluated in a qualitative manner. The researchers gradually withdrew from the study areas when it was considered that the communities could manage the programmes independently.

RESULTS

The results of the study in each sub-district are shown in Table 1. Besides the sub-district administrative organisation's members, community leaders, representatives of various community groups and local civil servants, 34 and 23 persons with disabilities participated in the study in sub-districts A and B, respectively. Most of them were persons with physical impairment. It was discovered that poverty was the main problem of persons with disabilities.

The core organisations of CBR programmes in sub-districts A and B were the sub-district administrative organisation and the community hospital, respectively. A number of CBR

outputs for persons with disabilities, especially in the form of psycho-social services, were observed (Table 1).

Table 1. Results in each study area

Items	Sub-district A	Sub-district B
Core organization being responsible for the CBR programme	Sub-district Administrative Organisation	Community hospital
Numbers of persons with disabilities participating in the study	34 (17 physical impairments,7 visual impairments, 10 cerebral palsy and others)	23 (12 physical impairments, 11 cerebral palsy)
Main problems of persons with disabilities	1) Poverty and unemployment 2) Lack of social acceptance 3) Aggressive behavior	1) Poverty 2) Lack of persons with disabilities' identification card 3) Lack of physical rehabilitation
Strategies to manage PWDs' problems*	1) Providing income-generation opportunity 2) Promoting positive attitudes among community members towards persons with disabilities to improve social acceptance	1) Providing income-generation opportunity 2) Formulating a guide-line for registering persons with disabilities 3) Providing home-based physical rehabilitation services

* Strategies to manage persons with disabilities' problems were prioritised according to the problems' importance.

Table 1. Results in each study area (Cont.)

Items	Sub-district A	Sub-district B
Outputs	1) Two career training projects for persons with disabilities and their families were conducted including Thai massage and native chicken farming. 2) A CBR committee at sub-district level was established. Representatives in the committee included persons with disabilities, relatives, sub-district administrative organisation's members, community leaders, and local civil servants. 3) A programme of quality of life upgrading for persons with disabilities was included in the sub-district administrative organisation's action plans. 4) An annual event of sport activity among persons with disabilities and community members was set up.5) About one-third of persons with disabilities had their own incomes from massage and farming jobs.	1) A persons with disabilities was provided a loan by the sub-district administrative organisation to earn a living. 2) Six persons with disabilities were registered for identification cards. 3) Fifteen persons with disabilities were provided home-based physical rehabilitation by village volunteers.

DISCUSSION

The impact of CBR on the quality of life of persons with disabilities could be promoting positive attitudes of society towards persons with disabilities, understanding and providing effective services, establishing a rehabilitation network in the community, ensuring accessibility of information particularly human rights, laws and policies regarding persons with disabilities, and providing emotional support for persons with disabilities and their families (10). This challenges physical therapists who have an important role in health promotion, disease prevention, and functional rehabilitation for population of all ages (11) to apply CBR for enhancing the quality of life for persons with disabilities. Recognising the need to support CBR and the development of the profession, the World Confederation for Physical Therapy (WCPT) has approved a Position Statement on CBR at the 15th General Meeting of WCPT in 2003 (12).

It is important for physical therapists to understand that rehabilitation in the context of CBR, focusses on the needs of individuals and the wider population and extends beyond a purely medical interpretation. Through empowering persons with disabilities to be active participants and decision-makers in CBR, physical therapists and other allied health professionals have acknowledged that persons with disabilities are not passive recipients of perceived professional wisdom, knowledge and skills. According to the CBR concept (7), it seems that the community participation is an important driving force to ensure the success of a CBR programme. Therefore, to improve the quality of life for persons with disabilities through the CBR strategy, the researchers suggest that physical therapists should initially play a role as programme facilitators rather than programme leaders. The community should decide on a CBR programme leader on their own. Action plans to solve the persons with disabilities' problems should be collaboratively established by the community. Whilst the programme progresses, physical therapists may however, undertake other roles such as expert resources or skill trainers, depending on the community's demand.

From this study, it was found that the role of the researchers as physical therapists was different between the CBR programmes of the two study areas. In sub-district A, the researchers mainly acted as the programme facilitators, meanwhile, acting as programme facilitators as well as skill trainers in sub-district B. This difference in finding may be due to a difference in the context of a CBR programme in each sub-district.

In sub-district A, persons with disabilities and community members were facilitated to process the CBR programme by the sub-district administrative organisation. It is well acknowledged that the main policy of a sub-district administrative organisation is to enhance the community members' quality of life and focus on community participation (13). As CBR is a strategy within community development for the rehabilitation, equalisation of opportunities and social integration of all persons with disabilities (7), it is in harmony with the sub-district administrative organisation's policy. This may persuade the sub-district administrative organisation to pay attention to CBR. Because of these reasons, the strategic plans and activities manifested in sub-district A's programme were likely to empower the persons with disabilities and improve their quality of life through social collaboration. The sub-district administrative organisation and community members could conduct the CBR programme on their own with some facilitation of the researchers. From a socio-cultural aspect, it was observed that persons with disabilities in sub-district A increased their distinct decision-making roles during social events.

In contrast, such findings were not obviously observed from sub-district B's CBR programme which was organised by the community hospital's nurses. As health personnel, the nurses were likely to focus on the health aspect. They might not pay much attention to integrate educational, vocational and social rehabilitation for persons with disabilities. Then, the outputs obtained from the sub-district B's programme seemed to deal with persons with disabilities individually, rather than empower them as a whole. A demand for the researchers to take part in the CBR programme as skill trainers was obvious in sub-district B.

Fifteen persons with disabilities in sub-district B, were provided home-based physical rehabilitation by village volunteers under the supervision of the researchers. In spite of being facilitated to play the supervising role, the community hospital's nurses strongly resisted the responsibility because of their lack of skills and knowledge on rehabilitation. Furthermore, although a physical therapist was available in the sub-district B's community hospital, she hardly participated in the programme due to lack of time from her routine work in the hospital. Then, as physical therapists, it was inevitable that the researchers provide skill training for the volunteers. At the end of the study, however, the supervising role for village volunteers was transferred from the researchers to the community hospital's physical therapist.

Based on these findings, it could be claimed that the role of a physical therapist in CBR would be influenced by the status of the programme leader and strategic plans designed by community members. As stated by Bury (2), physical therapists have the potential to play a number of roles in CBR, dependent on local cultural and socio-economic circumstances. Examples of physical therapy roles in CBR may include instigators of CBR services, team leaders and managers, providers of direct care, and advisers to governments and local communities, on establishing CBR programmes (2). There is no one model of CBR that will suit all circumstances. What is required is a needs-based activity developed in response to local circumstances. Therefore, physical therapists need a high degree of flexibility and innovative thinking, and a wide range of management, practice, teaching and research skills, if they are to contribute effectively to CBR (12).

At present, most physical therapists in Thailand are insufficiently aware of social, political, economic, cultural and religious differences influencing the communities and how this impacts on the health of persons with disabilities and their families (14). Preparing physical therapists to work in community settings with local communities, persons with disabilities and their families may require changes to the curriculum or developments of a more client-centered community-oriented education programme. Qualifying education should equip physical therapists to value community work and respect the knowledge and skills of persons with disabilities and communities. It has sought to challenge the profession-centric model of practice to one that creates a more balanced relationship between professionals and clients, through promotion shared decision-making.

Other findings were presented in this study. It was found that the main problem of persons with disabilities was quite similar between the two sub-districts. Poverty, unemployment and lack of social acceptance were common problems for Thai persons with disabilities (15). This was in accord with the findings in other southeast asian countries (4,16). At the end of the study, the majority of persons with disabilities remained jobless, but it seemed that they received more help from neighbourhoods.

During the study, the researchers observed that the community members of each study area participated in the CBR programme at the level of planning and implementation. Participation of persons with disabilities was in terms of contributors, decision-makers and beneficiaries.

However, persons with disabilities who participated as contributors were mainly persons with mild or moderate physical impairment, and others were beneficiaries.

Regarding the success of CBR, sustainability is considered as an indicator. However, this issue was not examined in the current study. A further study should be conducted for follow-up. It has been recommended that the concept of self-help group should be integrated into CBR (9). It is suggested that ownership of the programme be transferred to persons with disabilities, in order to manage their needs and lives. Then, the societal power would be more balanced among all societal members.

In conclusion, physical therapists have a number of roles in CBR, depending on the status of the programme leader and socio-economic circumstances. Then, physical therapists need a high degree of flexibility and a wide range of skills to contribute to the CBR programme. Preparing such physical therapists may require development of a more client-centered community-oriented education programme. This study's finding would be of benefit for the curriculum reform to prepare physical therapists for working with local communities, persons with disabilities and their families. It might be applied to persons with disabilities in other areas or countries that have similar situations and contexts.

*Associate Professor
Faculty of Associated Medical Sciences, Khon Kaen University
Khon Kaen 40002, Thailand
Tel: +66 43 202-085,Fax: +66 43 202-085, E-mail: nomjit@kku.ac.th

ACKNOWLEDGEMENT

This study was supported by the Khon Kaen University Research Fund. The author wishes to thank Assistant Professor Anuchar Ninprapan, Mr.Mana Nakham, Mr.Yuthasilp Panpoom and Ms.Lugkana Mator for their help in field work. Special thanks to the areas and communities in which this study was conducted. Sincere appreciation is extended to Ms.Karen Lindqvist and Ms.Joanna MacDougall for help with language.

REFERENCES

1. National Statistical Office. ***People with Disability Survey 2001***. Bangkok: The Office of Prime Minister, 2001.
2. Bury T. ***Primary health care and community based rehabilitation: implications for physical therapy***. Asia Pacific Disability Rehabilitation Journal 2005; 16: 29-61.
3. Thomas M, Thomas MJ. ***A discussion on the shifts and changes in community-based rehabilitation in the last decade***. Neurorehabilitation and Neural Repair 1999; 13: 185-189.
4. Kuno K. ***Community-based rehabilitation in Southeast Asia: case studies from Indonesia and Malaysia***. 1998. http://health.shinshu-u.ac.jp/tateiwa/1990/980800kk.htm. [Accessed March 1, 2001].
5. Lopez JM, Lewis JA, Boldy DP. ***Evaluation of a Philippine community based rehabilitation programme***. Asia Pacific Journal of Public Health 2000; 12: 85-89.
6. Stuelz A. ***Community-based rehabilitation in Lao: comparison of needs and services***. Disability and Rehabilitation 1999; 21: 508-514.
7. United Nations. ***Understanding community-based rehabilitation***. 1998. http://www.dinf.ne.jp/doc/intl/z15/z15011un/z1501101.htm [Accessed March 1, 2001].
8. Riewpaiboon W. ***Evaluation and follow-up of community-based rehabilitation project in Phayao and Chumporn Provinces (1996-1998)***. Bulletin of Medical Rehabilitation 2000; 9: 16-29.
9. Riewpaiboon W, Wattanadilokkul U, Hansasuta S. ***A model of community-based rehabilitation in Thailand***. Bulletin of Medical Rehabilitation 1999; 8: 1-22.
10. Cheausuwantavee T. ***Community based rehabilitation in Thailand: current situation and development***. Asia Pacific Disability Rehabilitation Journal 2005; 16: 51-67.
11. ***Physical Therapy Profession Act***. 2005. http://www.pt.or.th/ poror.html. [Accessed 2007 September 4].
12. World Confederation for Physical Therapy Keynotes Community Based Rehabilitation. ***Changing concepts of CBR 2 – Implications for physical therapists***. http://www.wcpt.org/common/docs/wcpt_keynote_CBR2.pdf. [Accessed 2007 September 12].
13. Jitngern U, Kongsukwiwat K, Wirakul W. ***Synthesis of knowledge on community works***. Bangkok: U-sa Publishers, 2007.
14. Chantaraviroj P, Nualnetr N, Poomsutat P, et al. ***Physical therapy system for Thai people in the next decade (2005-2014)***. Thai J Phys Ther 2007; 29: 56-68.
15. Nualnetr N, Panpoom Y, Punon P, et al. ***Community-based rehabilitation: a case study at Amphur Sriboonruang, Nong Bua Lam-Poo Province.*** J Med Tech Phys Ther 2003; 15: 44-51.
16. Inthirat TRS, Thonglith S. ***Community-based rehabilitation in the Lao People's Democratic Republic***. Disability and Rehabilitation 1999; 21: 469-473.