ISSN 0970-9274 ONLINE: ISSN 2456-6608
J Hum Ecol, 47(2): 147-154 (2014)
DOI: 10.31901/24566608.2014/47.2.05

Needs Assessment of a Disability Rehabilitation Centre in a Sub-District of Ratchaburi Province in Thailand

Somchai Viripiromgool[1], Surapa Ksarntikul[2], Kriengsak Thamma-apipol[1], Kawinnarat Suthisukhon[1] and Karl Peltzer[1,3]

[1]ASEAN Institute for Health Development, Mahidol University, Salaya, Phutthamonthon 73170, Thailand
[2] Ratchaburi home for mentality disabled children, Muang District, Ratchaburi Province 70000, Department of Social Development and Welfare, Ministry of Social Development and Human Security, Thailand
[3]Department of Psychology, University of the Free State, Bloemfontein 9300, South Africa and HIV/AIDS, STIs and TB (HAST), Human Sciences Research Council, Private Bag X41, Pretoria 0001, South Africa

KEYWORDS Community-based Rehabilitation. Action Research. Needs Assessment. Disabled Persons. Community Leaders

ABSTRACT The paper aims is to carry out the needs assessment, and to come up with a suitable model for the establishment of a rehabilitation centre for the disabled in the community in one sub-district in Thailand.
In the first stage survey data was collected from 380 participants, which include 110 families with a disabled person and 270 families without a disabled person using proportional sampling method in the households of the 11 study villages. In addition, qualitative data were collected using focus group discussions from 57 community leaders. Results indicate that when having problems with their disability, most of them consult the district hospital (43.6%), followed by family self-care and other (traditional practitioners). According to the responses from the surveyed community members (both disabled and not disabled) the role of government was found to be critical in establishing a community-based rehabilitation centre (CRC) for people with disabilities. However, the community participation in planning and sustaining of such a CRC was also seen as vital. The CRC was seen to provide a variety of services including home visits and visits by a physical therapist. Most felt that the CRC should be integrated into existing structures such as the district community hall, although some also felt it could be on its own. Based on the survey results of the needs of the community it was suggested to set up a disability rehabilitation centre and the development of specific community-based model for the rehabilitation of disabled persons in one sub-district.

INTRODUCTION

"Disability is the umbrella term for impairments, activity limitations and participation restrictions, referring to the negative aspects of the interaction between an individual (with a health condition) and that individual contextual factors (environmental and personal factors)" (WHO 2011: 3). In Thailand 2.9 percent of the population has a disability (WHO 2011). Persons with disabilities face widespread barriers in accessing services in health care (including rehabilitation), education, transport and employment (WHO 2012). Sunsern et al. (2012) found in a study exploring Thai community support for disabled people that disabled people were perceived as a low class in the society because of their living limitation, low level of education, unemployment, very low income and participation restrictions in life situations. In the North of Thailand, the most accessible services to the disabled were health promotion and physical rehabilitation; however, continuing physical rehabilitation services were available for less than half. Most disabled people were dependent on the state welfare system (Wanaratwichit et al. 2008). Community-based rehabilitation (CBR) should be promoted to facilitate access for disabled people to existing services (WHO 2011) and CBR as a strategy can address the needs of persons with disabilities within their communities (WHO, ILO, UNESCO, IDDC 2010).

"The strategy of CBR promotes community leadership and the full participation of persons with disabilities and their organizations. Further, it promotes multi-sectoral collaboration to support community needs and activities, and collaboration between all groups that can contribute to meeting its goals. CBR focuses on enhancing the quality of life for persons with disabilities (PWD) and their families, meeting basic needs and ensuring inclusion and participation to empower PWD to access and benefit from education, employment and health, and to have

meaningful social roles and responsibilities and to be treated as equal members of society." (WHO, ILO, UNESCO, IDDC 2010: 2). 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 (Riewpaiboon et al. 1999; Riewpaiboon 2000). Cheausuwantavee (2005: 51) notes about the current situation about community-based rehabilitation in Thailand "that most of the rehabilitation projects in the Thai community were outreach services. The evolution of concepts of CBR in Thailand is an ongoing process. Most persons with disabilities participated as members and consumers rather than planners and managers of projects. Lack of budgets and external sources of donors were still critical issues for CBR continuation. There are a diversity of rehabilitation services, particularly medical, educational, vocational and social rehabilitation. The positive aspects of CBR, include promoting positive attitudes of society and community towards people with disabilities, while the problems of CBR where lack of community concern and financial support or donors."

Department of Social Development and Welfare in Thailand started rehabilitation centres for the disabled in the community as a pilot programme in the year 2006. The goal is to create 11 centres across the country to ensure that the centres provide services for people with disabilities as part of the community and to provide people with disabilities access to basic services from the government (Ministry of Social Development and Human Security 2009). In Thailand the government and private organizations in various areas of the sub-district administration have been developing models for the rehabilitation of people with disabilities in the community to increase acceptability and participatory project management (Working Group meeting of the Asia-Pacific 2009). Often little effort is put into determining a need before community-based rehabilitation programmes are established (Byford et al. 2003). Due to this reason, the Orphanage aphasia and intelligence centre, Ratchaburi Province, ASEAN Institute for Health Development, Mahidol University, and the sub-district Administration in Khlong Ta Khot, Ratchaburi Province, planned to develop a model for the establishment of a rehabilitation centre for the disabled in the community.

The importance of community-based rehabilitation for people with disability is increasingly evident, yet it is not known whether such services can be materialised in countries with limited community resources such as Thailand (Mohd Nordin et al. 2014; Tuakli-Wosornu and Haig 2014). In this paper, the perception of community members, disabled persons, community leaders and stakeholders towards disability rehabilitation services in the community have been assessed. Views from users, stakeholders and providers are important in ensuring whatever strategies developed for disabled persons are feasible and acceptable (Mohd Nordin et al. 2014; Thanathiti et al. 2012). The research approach chosen in this study is both emancipatory and demand-led by facilitating active participation of both demand-side and supply-side entities providing real opportunities for political and administrative buy-in and implementation (Kachaje et al. 2014).

The objectives of the study were: 1) to conduct a needs assessment of the disabled in the community, and 2) to develop a suitable model in the establishment of a rehabilitation centre for the disabled in the community in one sub-district in Thailand.

METHODS

This study used an action research approach (Sankara et al. 2001) aimed at developing a model to fit the needs of today's society in the community. The cycle uses using operational research (Action Research Spiral) for planning the sustainability of a Community Rehabilitation Centre (CRC) in the study community, the sub-district Khlong Ta Khot, Photaram District, Ratchaburi Province, Thailand. The sub-district Khlong Ta Khot consists of eleven villages, with a total population of 11446 (Tambon Administration Office 2010). In the first stage survey data was collected from 380 participants (110 for families with a disabled person and 270 for families without a disabled person) chosen using proportional sampling method in the households of the 11 study villages. In addition, qualitative data were collected using focus group discussions from 57 community leaders, including ten from families with a disabled person. The survey questionnaire (Department of Development and Welfare 2012) covered the following sections: 1) demographic information (9 items), for example,

"*what is your age?*", 2) disability related data (10 items), for example, "*Where do you/persons with disability in your family go for specific services concerning their disability?"* and 3) questions on the development of a disabled rehabilitation centre in the community (19 items), for example, "*In order to make the CRC sustainable in the community, the public should be involved from the beginning*."

Guiding questions for the focus group interviews covered areas of disability rehabilitation in terms of knowledge, service model, attitudes, needs and geography. The questions were: 1.What is the situation of the disabled person in your community (number, sex, children and elderly, etc., type of disability, cause of disability), 2. How about the health service in this Tambon? Can you access that service or not? 3. Who should be responsible for caring of the disabled persons, and in the past who was responsible for that? 4. Where is the suitable area for a Disability Rehabilitation Centre? How to prepare it? 5. Do you think that the budget for maintenance of this centre should come from which sources? 6. What activities should be done apart from the rehabilitation of the disabled persons? 7. What are the factors of the Disability Rehabilitation Centre that make it successful and sustainable?

In the second stage, the results from the survey and focus group discussions were presented to the community meeting. At this stage, the disabled people in the community and stakeholders had the opportunity to recognize the results and provide feedback for planning the work and sustainability of the CRC.

Using a mixed methods research approach (survey and focus groups) the study provides "strengths that offset the weaknesses of both quantitative and qualitative research" (Creswell 2009).

Data Analysis

Quantitative data from the questionnaires were entered manually into International Business Machines Cooperation (IBM) Statistical Package for the Social Sciences (SPSS). The verification process included double data entry of all questionnaires and its fields, doing programmed range checks by computer to identify outlying values, checking for missing values, and checking for inconsistencies in the data. The data were converted to and analysed (descriptive statistics, percent, mean and standard deviation) using IBM-SPSS for Windows software application programme version 19.0.

Audio tapes of the focus group interviews were transcribed verbatim by research assistants. The three authors read the transcripts from the five focus group interviews independently and developed a coding frame for the analysis. Initial categories for the analysis were drawn from the interview guides (Carey 1994), and themes and patterns emerged after reviewing the data within and across respondent groups (Charmaz 1990). Transcripts were reviewed by co-investigators and a preliminary list of codes was developed and subsequently refined. Data was coded and reviewed, major trends and crosscutting themes were identified and issues for further exploration were prioritized for final analysis.

RESULTS

Sample Characteristics

The sample included 100 families with a disabled family member and 270 families without a disabled family member from eleven villages. About half of the participants were more than 60 years old. Families without a disabled family member had a higher mean family income (6050 Thai Bath) than those families with a disabled family member (2655 Baht) (see Table 1).

In almost one in three cases (27.3%) people with disabilities belonged to disabled organization or association. When having problems with their disability, they mostly consult the district hospital (43.6%), followed by family self-care and other (traditional practitioners). Most disabled persons (84.5%) had not learnt a profession, only 7.1 percent would want to pursue a career, almost all (96.4%) had never received any specific training, and a large number (82.7%) had been receiving a state disability allowance (see Table 2).

Establishing a Community Rehabilitation Centre for the Disabled in the Study District

According to the responses from the surveyed community members (both disabled and not disabled) the role of government was found to be critical in establishing a CRC for people with disabilities. However, the community participation in planning and sustaining of such a

Table 1: Sample characteristics (N=380)

Variables	*Disabled population (n=100)*		*Normal population (n=270)*	
	N	*%*	*N*	*%*
Sex	110	100.0	270	100.0
Male	58	52.7	62	23.0
Female	52	47.3	208	77.0
Age				
≤20 yrs.-	7	6.4	1	0.4
21-30 yrs.	7	6.4	19	7.0
31-40 yrs.	12	10.9	31	11.5
41-50 yrs.	14	12.7	35	13.0
51-60 yrs.	14	12.7	53	19.6
> 60 yrs.	56	50.9	131	48.5
Education				
None	26	23.6	16	5.9
Primary	67	60.9	159	58.9
Secondary	9	8.2	56	20.7
Diploma/	6	5.5	21	7.8
Bachelor degree or more	2	1.8	18	6.7
Marital Status				
Single	42	38.2	44	16.3
Married	48	43	170	63.0
Widowed	18	16.4	44	16.3
Separated	2	1.8	12	4.4
Occupation				
No work	84	76.4	126	46.7
Farmers	6	5.5	22	8.1
Trade/Business	11	10.0	44	16.3
Government/State enterprise	1	0.9	7	2.6
Employees Government	6	5.5	57	21.1
Pension	2	1.8	14	5.2
	M	SD	M	SD
Number of family members	4.4	2.4	4.1	2.2
Monthly income in Thai Baht	2655	2167	6050	3223

CRC was also seen as vital. The CRC was seen to provide a variety of services including home visitation and visitation of a physical therapist. Most felt that the CRC should be integrated into existing structures such as the district community hall, although some also felt it could be on its own (see Table 3).

Focus Group Discussions with Community Leaders and Other Key Informants in the Community

The result of the qualitative study revealed that community care for the disabled in the study district included self-care, encouragement and generosity of family, community, housing materials and equipment, education, the provision of information and counselling on health issues including the home visits, providing allowances, free medical care, a support budget for transportation and a budget for establishment of a CRC. Guidelines for setting up the activities of the CRC included 1) Physical activities such as exercise, physical therapy and massage, massage therapy using local knowledge, 2) Psychological activities such as recreation and meditation, 3) Economic activities such as the provision of housing materials and skills training including in marketing products, and 4) Social activities such as social gatherings and learning exchange between the disabled and the relationship between families and the disabled.

"The other important thing is that the disabled people need to participate in a lot of physical activities, exercise and massage. The centre should have specialists who are experienced in consulting and advising." (Disabled female, 55 years)

"This activity other than the activity in the rehabilitation centre is to hold social gatherings, meetings, once or twice a month for the disabled and teach or introduce some possible careers for handicapped. The activities should also include marketing products, meditation and Dharma activities." (Disabled male, 35 years)

The study found that the factors of success in the operation of the CRC included the following: 1) A deep understanding and caring attitude of the community, the participation of disabled volunteers and counselling, 2) A budget that is supported by government agencies and the community, 3) Management to provide impressive services. Tracking the rehabilitation and treatment of disabled people, including activities suitable for the disabled and family members, 4) Material support such as equipment for physical therapy that are innovative and modern and also supportive media, 5) Participation to create a partnership between the Hospital Tambon Health Promotion Hospital, village health volunteer, disabled relatives and villagers, and 6) Communication must be thorough, pointing out the benefits and incentives for the disabled and people receiving services at the CRC. Moreover, it would be important to make the disabled and people in the community feel that this CRC would belong to the community and was managed by the community itself.

Table 2: Characteristics of disability or disabled family member

	N	*%*
The cause of disability		
1. Inborn	12	10.9
2. By accident	24	21.8
3. By natural disaster	0	0
4. By the illness	513	46.4
5. Other	3	2.7
Where do you/persons with disability in your family go for specific services concerning their disability		
State hospital	48	43.6
Private hospitals	3	2.7
Rehabilitation of disabled persons organizations	1	0.9
Health centre	2	1.8
At home, self-care	28	25.5
Other (traditional doctor)	17	15.5
People with disabilities in your family belong to a disabled organization or association	30	27.3
To what extent are people in the community caring for people with disability?		
Pay much attention	22	20.0
Pay moderate attention	60	54.5
Pay no attention	28	25.5
The person / persons with disabilities in the family have a…		
Name registration	110	100.0
ID card	108	98.2
Card / identity as disabled	105	95.5
Allowance for the disabled list	93	84.5
Current child / disabled family occupation or not		
No occupation	93	84.5
Occupation	17	15.4
Have you ever received training?	4	3.6
What would you like to pursue as a career?		
Sale of lottery, playing music, craft, farmer, government employee, massage	9	7.1
Nothing because there is no need	60	54.5
Did not respond	41	37.3
Have you ever received any help from the state?-		
Free medical care	86	78.2
Bursary	1	0.9
Emergency housing assistance	4	3.6
Allowance elderly	48	43.6
Disability allowance	91	82.7
Goods. Consumer / household	7	6.4
Equipment for the disabled	9	8.2

"It is important for the community to have an understanding and generous support to people with disabilities." (Disabled female, 32 years)

"The budget for the care of the disabled in the community centre should come from the local administration of the village (sub district)." (Disabled female, 32 years)

"In order for the creation of this centre is to be successful in terms of the administration, the disabled should use health services for free." (Administrator, Female, 35 years)

"The staff at the disability centre should have services mind, good communication, polite and willing to provide services." (Disabled female, 31 years)

"Caring for the disabled community should be the duty of the village health volunteers that can easily visit the area and visit at home. Other than this, it should be responsibility of family members, Senior Citizens Club, a private local organization. The District Administrative office should support transport services." (Disabled female, 56 years)

"The direction of care in the future should be the responsibility of a neighbour, the temple and the community." (Chairman of the Elderly Khlong Ta Khot, 84 years)

Certain problems were also voiced. There could be restrictions on the establishment of the CRC because of the lack of leader or innova-

Table 3: Attitudes towards a community rehabilitation centre in the study sub-district from people with disabilities and the general public

Statement	*Agree*		*Neutral*		*Disagree*	
	n	*%*	*n*	*%*	*n*	*%*
1. A Community Rehabilitation Center (CRC) for the disabled should be established in Tambon Khlong Ta Khot district.	256	94.8	10	3.7	4	1.5
2. A good place for the CRC is within existing structures such as the district community hall.	256	94.8	8	3.0	6	2.2
3. The CRC should have a place on its own.	132	48.9	16	5.9	122	45.2
4. In order to make the CRC sustainable in the community, the public should be involved from the beginning.	259	95.9	8	3.0	3	1.1
5. The CRC should offer frequent activities for people with disabilities.	254	94.1	11	4.1	5	1.9
6. The state should support resources for operations for the CRC.	262	97.0	6	2.2	2	0.7
7. The CRC should be available to everyone equally and consistently.	267	98.9	2	0.7	1	0.4
8. The CRC should have the tools and materials for complete rehabilitation.	262	97.0	8	3.0	0	0
9. The CRC should have a physical therapist visiting at least once a month.	256	94.8	5	1.9	9	3.3
10. The CRC should offer health checks such as blood pressure.	265	98.1	5	1.9	0	0
11. The CRC should have the knowledge about healthy food available and provide information.	263	97.4	7	2.6	0	0
12. The CRC staff should also be a proactive and provide services at your home, in case the disabled cannot get to the centre by themselves.	261	96.7	8	3.0	1	0.4
11. The CRC is an asset to the community which needs to be maintained by the community.	258	95.6	10	3.7	2	0.7
12. The CRC should be a function of the state, not the people.	113	41.9	14	5.2	143	53.0

tor who sees the usefulness of the disabled, care giver has no time to take care of the disabled person receiving services at the center and the disabled have no one to take care them so, it is not available for the disabled to receive the service at the centre.

"The problems of the disabled is that the community leaders do not realize the importance of services for disabled people, have no initiative to help them, no one taking care or responsible for the disabled. Because family members have their own work and other responsibilities, which causing them stress and burden to also take care of other family members; so they cannot take the disabled person to receive rehabilitation services at the centre." (Disabled female, 53 years)

"The problem is that the disabled are unattended, no one accompanies them or takes them to rehab rehabilitation centre, because some people cannot help themselves." (Social worker, female, 30 years)

"People in the community still think that having a disabled person in the family is a burden. This is a gap between the disabled and the normal and disabled relatives themselves" (Administrator, female, 28 years).

DISCUSSION

The study found that disabled persons are low in educational attainment, lack job training and accessibility to services at the community level. These findings conform to other studies in Thailand (Bualar 2014; Ministry of Information and Communication Technology 2012; Thianthai 2014).

Based on the findings, it is suggested that the development of the CRC include: 1) the cooperation between the sub-district administration, the temple, the public welfare for disabled and the villagers 2) support in various fields such as materials cover all the villages and remuneration of the staff of the center, 3) an understanding with community leaders and the community to realize the importance of the disabled and handicapped and 4) Organized activities such as exploring the various needs of the disabled and health promotion activities for the disabled. The study also found a need for a high degree

of flexibility, wide range of skills to contribute to CRC. For example, Visiting physical therapists with a client-centred community-oriented education programme (Nualnetr 2009). Further, according to Kumar and Bhat (2012), few aspects of management of community based rehabilitation will need to be incorporated in the implementation of a CBR project.

Depending on the type of disability, for some stroke patients the community-based rehabilitation may be the most cost-effective model of care, on the other hand for other patients inpatient rehabilitation may be the more cost-effective method to provide rehabilitation (Brusco et al. 2014). It is proposed that there is a need for further research on the most cost-effective combination of rehabilitation services for specific types of disabilities (Brusco et al. 2014).

The suggestions for further research include exploring the problem and the real needs of the disabled persons and studying the community environment that is conducive to the welfare of the disabled. Kuipers et al. (2003) have proposed a participatory rural appraisal framework to foster the participation and decision-making of community projects such as community based rehabilitation of disabled persons. The impact of community rehabilitation services of this study should be assessed in a research design that allows the attribution of changes in client-centred outcomes of interventions (Patel et al. 2013).

CONCLUSION

To infer, based on the needs assessment in the community, a specific community-based model for the rehabilitation of disabled persons in one sub-district was developed in Thailand.

RECOMMENDATIONS

The recommendations include the development of community-based model for the rehabilitation of disabled persons in one sub-district. The following components should be kept in mind while implementing: Management, Budget and Community Participation. *Management:* The village health volunteers and elderly volunteers in 11villages should take care and hold responsible for the CRC. The local government should support the transportation or travel expenses for disabled persons who visit CRC for continuous evaluation. *Budget:* With regard to budget, especially the local government and the villagers should support the CRC. The government should support the equipment used for exercise and rehabilitation such as a weighing machine, drinking water tank, and a height scale, et al. *Participation:* Community participation needs to be created in the volunteer group, volunteer health workers, elderly volunteers and sub-district Administration Office. Further, they are to cooperate and participate in developing CRC within their community.

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