

Community-Based Rehabilitation Enhances the Functioning of General Disability Service Centres in Khon Kaen Province, Thailand

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ABSTRACT

Purpose: To identify factors that promote the functioning of general disability service centres in utilizing local resources and community participation.

Method: This study selected representatives from 13 general disability service centres in Khon Kaen province, Thailand. These representatives were sourced from local governmental organizations, disability organizations, and hospitals, totalling 63 participants. They included local government, community representatives, persons with disabilities, and caregivers. Data was collected through document analysis, in-depth interviews, and focus group discussions.

Results: The study found 7 factors related to the operation of general disability service centres that incorporate the concepts and practices of CBR. These factors are 1) Project manager or person in charge of the general disability service centres. 2) The proportion of community representatives in the management committee. 3) Networking within and outside the community. 4) Effective utilization of local resources. 5) Development of vocational knowledge and skills. 6) Efficient database management. 7) Public relations and communication with society.

Conclusions: General disability service centres can emerge and operate based on the community's efforts to rehabilitate the abilities of persons with disabilities. Community engagement is crucial in utilizing local resources to enhance the effectiveness of these centres. Therefore, policies and guidelines supporting factors related to this should be established to improve the operational efficiency of general disability service centres.

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INTRODUCTION

At the present, the global population is approximately 7.7 billion persons (United Nations, 2023), with over 1 billion persons being persons with disabilities, which is roughly 15% of the total population. The World Health Organization predicts that the number of persons with disabilities will increase to 2 billion persons by the year 2050 (World Health Organization [WHO], 2023). This is due to the aging society and a rapid increase in chronic diseases. The prevalence of disability is higher in developing countries and living under difficult circumstances. Especially about the disadvantages on the social and economic dimensions that are caused by many barriers such as inaccessible physical environments and transportation, the unavailability of assistive devices and technologies, non-adapted means of communication, gaps in service delivery, and discriminatory prejudice and stigma in society (World Bank, 2023).

The World Health Organization (WHO) suggested that low-and middle-income countries (LMIC) use community-based rehabilitation (CBR) to assist persons with disabilities in accessing rehabilitation services. This is because CBR is an approach that emphasizes community involvement and providing services in the local area (Thomas M and Thomas MJ, 2003). CBR is a strategy within community development that aims for the rehabilitation, equalization of opportunities, and inclusion of persons with disabilities, it has broadened its scope from a mere strategy for access to health and rehabilitation services to include medical, education, livelihood, social inclusivity and empowerment (WHO, 2010). It's called CBR matrix that has five dimensions.

Many LMICs, including Thailand, use this strategy to improve the quality of life for persons with disabilities because it can be a cost-effective and sustainable approach to disability services (Iemmi et al, 2015). Additionally, CBR is applied in conjunction with the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD) and aims to stimulate the participation of people with disabilities in society. It focuses on promoting the inclusion of community stakeholders, with particular emphasis on the active involvement of people with disabilities right from the beginning of the implementation process. However, the success of these operations still depends on and needs to be adapted to the specific context of each community (Wickenden et al, 2012).

The process of implementing CBR is a cyclic and comprehensive approach that aligns with and connects various activities within the global framework of the World Health Organization. It has distinctive features designed to be suitable for the context of the community, requiring skills in applying CBR concepts in operations and assessing the needs and conditions within that specific community. CBR opens opportunities for people with disabilities, their families, community members, and various organizations, both within and outside the community, to participate in all stages of the operation. This involves integrating the work of all projects that occur, promoting and supporting traditional community practices to strengthen and gain acceptance within the community (WHO, 2004).

The CBR program operates through several stages, with a primary focus on community participation and mobilization of local resources for optimal benefits. The program aims to encourage community members to acquire knowledge and skills in rehabilitating individuals with disabilities. Particularly, it emphasizes stimulating the involvement of people with disabilities in the rehabilitation process, promoting their active participation (Kuipers et al., 2001). Therefore, the CBR program has played a foundational role in the development of persons with disabilities, fostering the enhancement of community capabilities, and elevating the quality of life for individuals with disabilities (Mannan and Turnbull, 2007).

Three decades have elapsed since Thai society adopted the concept of CBR to enhance the quality of life for persons with disabilities. This has led to the widespread implementation of CBR projects across all regions of Thailand, particularly in remote and rural areas where persons with disabilities may have limited access to various services. Several literature reviews have attempted to address the effectiveness and impact of CBR (Wanaratwichit et al 2015). This has become a significant driving force for persons with disabilities and the community as a whole, helping persons with disabilities to regain their capabilities. The outcomes of implementing CBR for persons with disabilities, their families, and communities result in changes and enhanced potential (Cheausuwantavee, 2005), which are fundamental to community development in supporting more effective disability policy initiatives, which serves as one avenue for policies aimed at promoting increased accessibility for persons with disabilities to service systems.

The service system that helps improve access for persons with disabilities is called Disability Service Centre (DSCs), established under the Empowerment of Persons with Disabilities Act, B.E. 2550 (2007). To enable persons with disabilities to access medical services, education, social assistance, professional development,

and empowerment, assistance for individuals with disabilities is crucial. This includes improving living environments, and employment opportunities, and facilitating access to loans without interest. (The Empowerment of Persons with Disabilities Act, 2007), There are two types of disability service centres: general DSCs and provincial DSCs. Provincial DSCs are established as units within the Office of Social Development and Human Security in each province. They are responsible for gathering information and supporting the operations of general DSCs. General DSCs can be established on several organizations that are located at the district or sub-district level, such as local government organizations, non-governmental organizations (NGOs) or disabled' s organizations, and community hospitals. General DSCs are responsible for providing services to persons with disabilities in specialized areas where the organization has expertise or specific competence (Yokoyama, 2021).

The status of DSCs, is found that there are provincial DSCs in all 77 provinces nationwide. Additionally, there have been established a total of 3,328 general DSCs: 333 disability organizations or non-government organizations and about 2,995 local government agencies/government organizations. The functioning of general DSCs are to provide information and news about rights and benefits, advocate for the rights of persons with disabilities, offer assistance, coordinate referrals, and perform other duties as assigned by the provincial DSCs. The organizational structure involves a working committee comprised of staff from the organization and representatives from the community. Services are organized based on the mission, which depends on the capabilities and expertise of each specific general DSC. Therefore, these general DSCs, established by various organizations, undertake diverse operations based on the context and role of the founding organization (Kampempool P., et al., 2022).

The studies have shown that these centres have not been able to operate effectively in all areas. Many face budget constraints, staffing issues, and a lack of service standards hindering their ability to function efficiently. Despite these challenges, some organizations or agencies dedicated to persons with disabilities have successfully established rehabilitation centres that operate effectively (Indeesri N, 2021). There is relatively little research on DSCs in Thailand, as they have only recently been established. Some studies have examined the operation of DSCs about the CBR framework, but these studies have only focused on specific aspects of CBR, such as the social or medical dimensions (Cheausuwantavee, 2005; Yokoyama, 2021).

Disability service centres are a way to improve access to services for persons with disabilities, and their effectiveness is enhanced through community involvement. This community-based approach is the foundation of disability work in the area. This study focuses on examining the operations of general disability service centres that employ the community-based approach to promote the rehabilitation of persons with disabilities and enhance the overall functioning of these service centres. Therefore, this study uses the CBR framework, which has been implemented in Thailand for many years, particularly in rural and remote areas, to examine the operation of DSCs. This framework emphasizes community participation and is partly based on the work of CBR. To date, no studies have used this framework to examine DSCs in Thailand.

METHOD

This research is a qualitative study aimed at studying the functioning of disability services centres that utilize local resources and community support. The study is a case study design that focuses on community-based disability service centres established by local government, disability organizations, and hospitals in Khon Kaen province, Thailand. There are a total of thirteen such centres. This research has been approved by the Ethics Committee for Human Research under the reference number HE643147.

Key informants

The main sources of information, or key informants, for this research, are individuals who are directly involved in the operation of the general disability service centres and those who have a stake in their operations. The researcher used a purposive sampling technique to select key informants who were willing to provide information, had effective communication skills, possessed relevant knowledge and understanding, and were clear on the topics under study. There were a total of 63 key informants, including 7 groups of stakeholders 1) a chairman of the province DSCs 2) 8 chairmen of the general DSCs 3) 22 committee who are community health volunteers, medical personnel, community leader, disability organization leader, persons with disabilities, and caregiver 4) 11 community developer or secretary of the general DSCs 5) 11 persons with disabilities who come to use the service 6) 4 caregiver who come to use the service 7) 5 external network. Data collection took place from August 2021 to April 2023.

Research methods and tools

In this study, the researcher was a crucial tool for data collection. The research methods used include documentary study: this involved reviewing documents such as project reports, project documentation, committee appointment orders, and other relevant persons with disabilities. In-depth interviews: the researcher conducted in-depth interviews with key informants on 17 questions including the general DSCs, external context, and CBR issue. Participatory observation: the researcher actively observed the activities of the general disability service centres to gain a better understanding of their operations. Focus group discussion for an interested issue involving 13 participants took approximately 3 hours. The attendees included an organizational leader, community development specialist, public health officers, volunteers, community representatives, persons with disabilities, and caregivers.

Data analysis

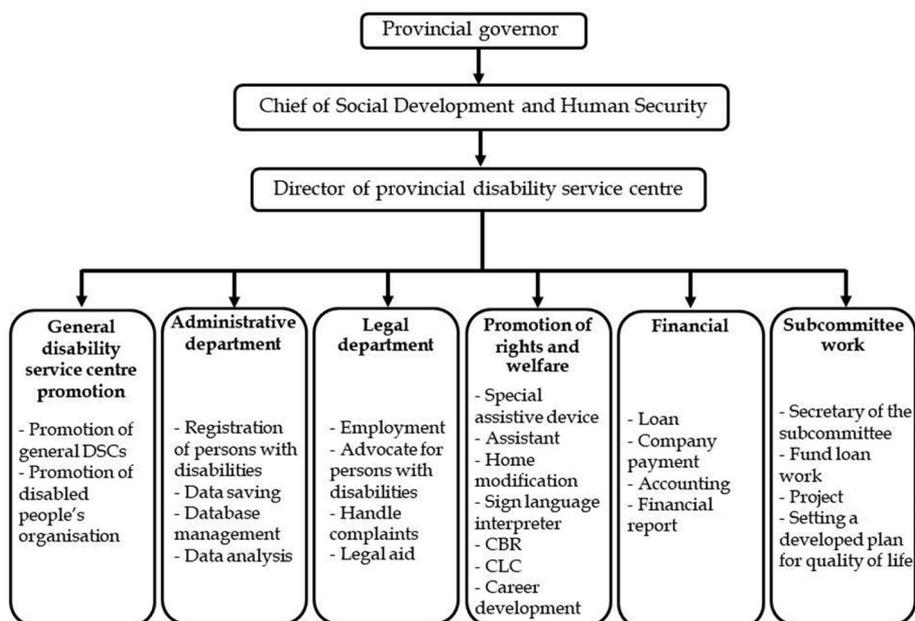
Content analysis was used to analyse the data collected. The data was organized into main- and subtopics based on the research objectives. Data triangulation was employed to ensure the accuracy and completeness of the information obtained.

RESULTS

Context of provincial disability service centre

Provincial disability service centre is managed in a way that aligns with the mission of the provincial social development and human security office. This is because they already provide comprehensive services to persons with disabilities following the policies of the disability service centres. They also coordinate with local government organizations, organizations for persons with disabilities, and government agencies. They have a broad management structure, and each division has specialized staff responsible for specific tasks due to the need for specialized expertise. The provincial disability service centre director, who is a career civil servant, is responsible for coordinating and implementing policies. The various divisions are assigned tasks according to their mission and operate under the governor of the province and the provincial social development and human security office, which is the agency directly responsible for persons with disabilities. (see Figure 1.)

Figure 1. Organizational structure of the provincial disability service centre



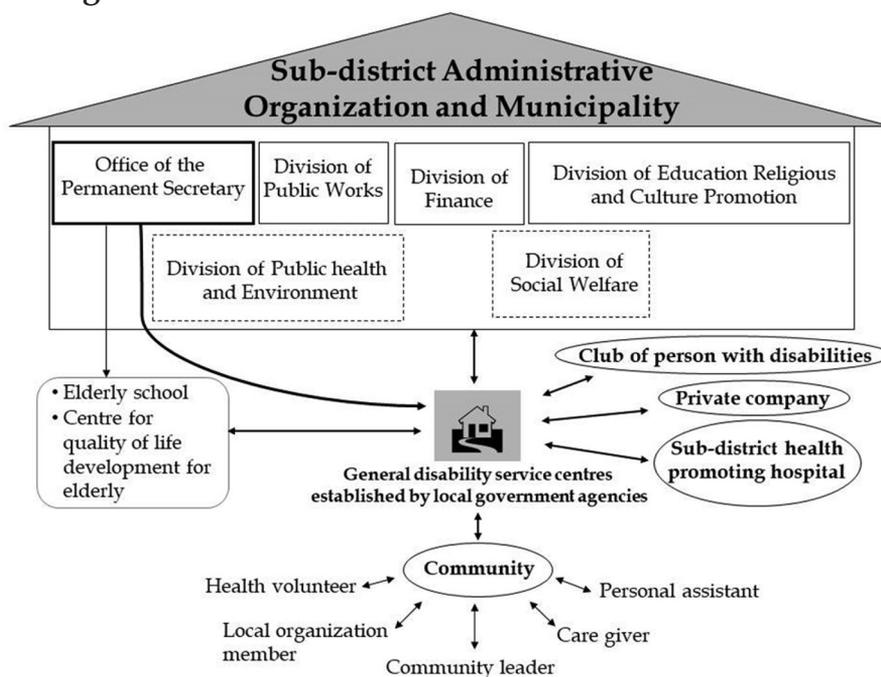
The general disability service centre in Khon Kaen province

Khon Kaen province comprises 26 districts, 198 sub-districts, 2,331 villages, and 389 communities. There are 225 local government organizations, including 1 provincial administrative organization, and 75 municipalities (1 city municipality, 6 town municipalities, and 68 sub-district municipalities), as well as 149 sub-district administrative organizations. Under the Ministry of Public Health, there are 26 hospitals, consisting of 1 central hospital, 2 general hospitals, and 23 community hospitals. There are 8 organizations for persons with disabilities certified under standards as of the year 2021. There are 85 general disabled service centres established, including 64 by local government organizations, 8 by disabled persons organizations, 5 by hospitals, and 8 by state agencies.

General disability service centres can be operated by local governments, disabled people's organizations, and government agencies. If it is a local government or government agency, it can apply to be established as a general disability service centres. However, if it is a disabled people's organization, it must be certified as a standard organization according to the criteria of the Department of Empowerment of Persons with Disabilities before it can apply to be established as a general disability service centres. Therefore, this study is divided into 3 groups as follows:

Firstly, the general disability service centres established by local government agencies, such as municipalities and sub-district administrative organizations, are state-level organizations that are closest to the communities, following the decentralization of governance. These agencies work according to the duties of the state and aim to provide public services to meet the community's needs with a focus on community participation. Therefore, the establishment of general disability service centres is another public service provided by these agencies to the community. These centres have a committee structure consisting of state officials, community representatives, and persons with disabilities who participate in the operations of the general disability service centres. (see Figure 2.) The local government organization provides care for persons with disabilities within each area. There are approximately 300-500 individuals with disabilities in each general disabled service centre, encompassing all types of disabilities.

Figure 2. The general disability service centres are established by local government agencies.



Note: the dotted line means available in some place

Secondly, the general disability service centres established by disability organizations initiate groupings of persons with disabilities or caregivers to come

together to aid themselves through shared experiences of common issues. They utilize a social model concept, promoting and supporting persons with disabilities to live inclusively within society with dignity, forming strong and recognized groups. These disability organizations acknowledged as capable disability entities, are capable of providing various services to persons with disabilities through their role as general disability service centres. This study investigates the general disability service centres established by two disability organizations: the Christian Foundation for the Blind in Thailand is an organization with internal units distributed throughout the country. Providing services to approximately 30 persons with disabilities. The Khon Kaen Autism Parent Association has a network collaborating with private sector entities, representing parents of persons with disabilities in nearby provinces. Providing services to 468 persons with disabilities in the network.

Finally, the general disability service centres established by community hospitals begins with the medical staff of the hospital working on disability-related issues at the community level, collaborating with persons with disabilities and the community. This creates a broader perspective on disabilities beyond just the medical dimension, forming a foundation for a more inclusive view. Providing services to 300 persons with disabilities in areas where some individuals may reside within the area covered by the general disabled service centres established by the local government organization, enabling them to receive services from both entities.

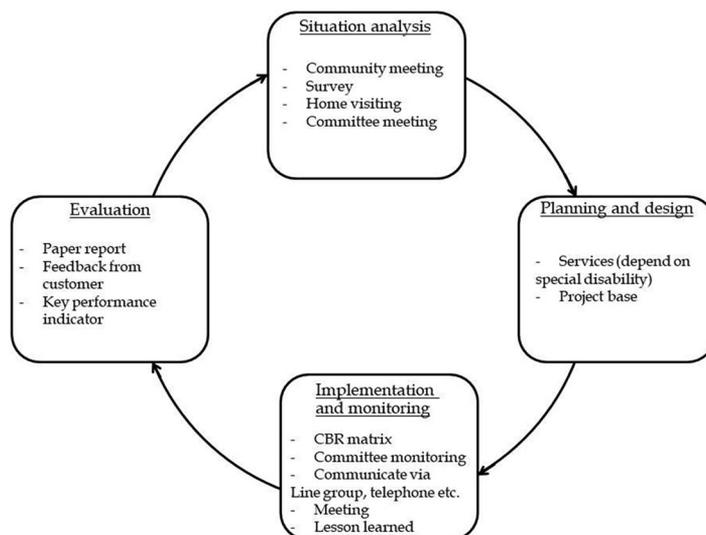
CBR implementation for disability service centres

Thailand has adopted the CBR concept to improve the quality of life for persons with disabilities, including community development. This is done through CBR projects in various parts of the country. These projects include pilot projects, project area expansion, and the dissemination of the CBR concept to disability practitioners in all sectors. Since the establishment of CBR-related curricula in universities, training courses, study tours, and the formation of CBR organizations, CBR implementation in Thailand has expanded to cover all areas, especially remote areas. This has enabled persons with disabilities to receive rehabilitation in physical, mental, educational, social, and living dimensions, as well as empowerment (the CBR matrix).

The visible results are the increasing number of groups and organizations of persons with disabilities. These organizations play a crucial role in driving

important laws and policies for persons with disabilities. This has led to the upgrading of organizations of persons with disabilities to have standards and better disability service systems through the establishment of disability service centres. The CBR process is being used in the operation of these centres as it is a process that helps respond to the problems of persons with disabilities according to the context and integrates the work of stakeholders. (see Figure 3.)

Figure 3. Implementing community-based rehabilitation at a disability service centre.



The operation of disability service centres can be explained according to the CBR process. It begins with a situational analysis by surveying data on the problems and needs of persons with disabilities in the area. This is followed by meetings or community forums to reflect on the problems and home visits to persons with disabilities. The information gathered is then used to design and plan the implementation of projects and services by the centre's defined mission. This leads to the provision of services that cover all dimensions of the CBR matrix. The implementation is monitored by a committee through various communication channels, including follow-up meetings and work debriefings. As for evaluation, reports and evaluations are prepared by the set goals.

The findings represent factors that promote the functioning of general disability service centres in utilizing local resources and community participation. There are 7 factors as follows:

Project managers of the general disability service centres

Managers of general disability service centres, who are primarily appointed as committee members and secretaries of the committee, have the following roles and responsibilities:

- Develop project plans for approval consideration by the provincial general disability service promotion and quality of life improvement committee, including reporting on annual progress.
- Organize committee meetings approximately 3-4 times per year.
- Supervise and monitor the provision of services to persons with disabilities and projects to ensure they align with the approved plans.
- Build and maintain partnerships both within and outside the community.
- Encourage and promote the involvement of relevant stakeholders in the centre's operations, such as maintaining communication channels through online groups, holding agenda-driven meetings, and facilitating constant dialogue among committee members due to their shared presence in the same community.
- Allocate and manage resources for operations, including budgetary, and other resources in community.
- Enhance the community's capacity to address the issues of persons with disabilities.
- Create interest in the community regarding the problems faced by persons with disabilities and advocate for them to be integrated into the local development agenda. This can involve submitting proposals or issues discussed during committee meetings for inclusion in the plans of local administrative organizations, such as using the budget of sub-district administrative organizations to improve accessibility to the homes of persons with disabilities, implementing projects to enhance the capabilities of persons with disabilities, and increasing the knowledge of persons with disabilities about their rights and benefits. It involves pushing the issues related to persons with disabilities to become part of the mainstream development agenda and making local administrative organizations jointly responsible for addressing issues in their areas. As stated by the community developer in the interview

“We also strive to promote the formation of groups among persons with disabilities, who will engage in various activities. One such initiative is group cultivation of mushrooms, for which we have received funding from social development programs aimed at promoting inclusion. We endeavour to encourage their participation in groups as much as possible. We intend to establish a club or association for persons with disabilities in the area. Although we haven’t taken action yet, we have laid out plans to involve them by forming a club in the community.”

(In-depth interview with Community Developer, January 27, 2023)

The proportion of community representatives in the structure of the operations committee

Opening opportunities for individuals with vested interests to be part of the operations committee results in a proportional representation of the committee from community representatives. From the study, it was found that the operations committee of the general Disability Services Centres is partly composed of internal staff within the local government organization, and the other part comprises individuals with vested interests from the community who serve as committee members. This includes representatives of persons with disabilities, caregivers of persons with disabilities, community health volunteers, village chiefs, village leaders, municipal members/local administrative organization members, and representatives from local agencies. Community development workers, along with agency staff, collaborate to select committee members from the community, considering their roles and experience in working with persons with disabilities, together with the local government organization. The community representatives are invited to join the Operations Committee through formal letters or invitations to participate in the inaugural committee meeting, where roles, responsibilities, and positions within the committee are established. Due to the guidelines of the general disability services centres established by the local government organization, the committee is chaired by the local mayor or head of the local administrative organization. The majority of community representatives hold committee positions, with community development workers serving as the committee secretary, playing a key role in coordinating activities.

“The committee primarily consists of executives from the local administrative organization (LAO), and villagers or representatives of persons with disabilities are also invited to participate through public relations. They are informed about

the benefits that general disability service centres will provide to persons with disabilities. Those who participate may possess knowledge, understanding of academic work, drive to engage in tasks, and be volunteers because sometimes there may not be allowances or compensation provided."

(In-depth interview with Community Developer, August 04, 2022)

Volunteerism in public health within communities is a crucial mechanism for the operation of general disability service centres distributed across all areas. Each volunteer oversees 10-15 households in the vicinity. They provide medical care dimensionally alongside public health agencies. These volunteers receive basic training in providing initial assistance regarding health. Some volunteers selected by relevant agencies undergo specialized or advanced training in caring for disabled individuals regarding health, rights, and other necessary assistance. Training is conducted based on certified courses from state agencies such as long-term care (LTC), care assistants, caregiver, etc. Trained volunteers can work alongside officials to serve disabled individuals and may be selected by the community to join the operational committees of general disability service centres to coordinate, and relay information between disabled individuals and centres, and participate in designing, planning, and monitoring the centres' operations.

"I'm a volunteer and have basic knowledge coming from the village health volunteers. I attended training sessions and studied. I noticed there was no one to take care of us, so we stepped in to help. I received training from the Disabled Association of Thailand in Nonthaburi province. They saw me work with public health officials and suggested to training. The training lasted about 180 hours, covering everything. I attended because I wanted to learn, and gain experience, and ended up becoming involved in this field regularly."

(In-depth interview with care assistant, January 11, 2022)

Working in Collaboration with Internal and External Community Networks

General disability service centres collaborate with both internal and external community networks to enhance the effectiveness of their operations. This collaboration involves coordination, seeking cooperation, and requesting support from these networks. Such networks are considered social capital, which contributes to the success of the organization by fostering positive relationships among staff within the organization and linking and coordinating the work of external networks.

The network between General Disability Service Centres

General disability service centres collaborate by participating in a network of general disability service centres and provincial disability service centres. These networks serve as channels for communication and coordination between the general disability service centres, allowing them to share information and knowledge about each centre's capabilities and strengths. If a person with disabilities requires specialized services, this network ensures that collaboration and cooperation can be established effectively.

“Various hospitals, when persons are sick or disabled in our area, they go to use the services. Then he has a problem He will coordinate back to us to help in various areas as well. Sometimes there is no car to go home. Like this, please contact me. Can Sila take Grandma home for me? We arrange for a rescue vehicle or any available vehicle. Pick up and send home like this. Some people live alone. If you don't have family, you'll pick them up and take them home.”

(In-depth interview with Community Developer, January 11, 2022)

Communication between general disability service centres is not limited to within provinces but also involves coordinating services between centres across provinces. This is because all disability service centres depend on the Department of Empowerment of Persons with Disabilities, a national-level organization. Therefore, there are uniform guidelines for monitoring and supervision. Each disability service centre reports data on the number of disabled individuals, services provided, project activities, and annual budgets. Additionally, meetings are held to exchange information between the disability service centres.

External Community Networks

General disability service centres collaborate with external community networks, including governmental organizations like the Provincial Office of Social Development and Human Security, the Centres for the Rehabilitation and Occupation of Disabled Persons, and Special Education Zones in nine provinces. This collaboration typically starts with individuals with disabilities in the area expressing their needs in education, occupation, and rehabilitation. This information is then used to refer individuals to relevant agencies and organizations.

In terms of private sector networks, there are two main components: private companies and Disabled Persons Organizations (DPOs). Private companies

support the community through social activities such as providing goods or budgeting through the services of general disability service centres. They also hire persons with disabilities to work in public agencies. Some general disability service centres serve as points of coordination and communication for private sector agencies or corporations engaged in social activities, such as offering goods to persons with disabilities, repairing and building homes for them, providing funds for vocational training, and hiring persons with disabilities according to the Corporate Social Responsibility (CSR) law, Article 35. For example, one community developer mentioned,

“We also work with a company which repairs houses for the elderly and persons with disabilities. We cooperate with the Social Security Office. But recently, there has been an impact due to COVID.”

(In-depth interview with community developer, September 29, 2021)

Utilizing Resources in the Community for Maximum Benefit

The utilization of human resources in community operations is considered the most critical asset for driving organizations through the knowledge, skills, expertise, and experience of individuals. This is often referred to as human capital, which plays a significant role in communities, both traditional and urban. The use of human capital tends to be less in urban communities due to the rapid expansion of such communities, leading to a quicker transformation from traditional to urban settings. This transition is a result of the community’s growth, and thus, the accumulation of knowledge and experience of human capital takes less time, making it preferable to employ technology or tools instead.

“We are the community caregivers, and we already have information in our heads, because we visit disabled persons. We have data regarding patients who are bedridden. When the service centres request information, we can respond immediately, and we will thus also be faster in given assistance. Moreover, we collaborate with caregivers and health staff who possess insights and comprehensive data, such as person with muscular disabilities, bedridden patients etc. When we work together, we can share this information among each other which benefits the entire care process.”

(In-depth interview with Village Health Volunteers and community care volunteers, September 16, 2021)

The utilization of human capital in the CBR process involves collecting, using, and exchanging information about persons with disabilities by community representatives. These representatives have responsibilities and work closely with individuals with disabilities, allowing them to gather comprehensive data, such as the number of persons with disabilities, the nature of disabilities, and the living conditions of persons with disabilities within their areas. Additionally, community representatives, as members of the committee, have a role in presenting the issues and requirements of persons with disabilities to general disability service centres. This information is used to develop project plans and initiatives for the benefit of the community.

Development of Knowledge into Vocational Skills

General disability service centres provide specialized services based on the type of disability. Disability organizations are formed by groups of individuals with disabilities or caregivers facing similar challenges. These organizations aim to support each other by sharing expertise on disabilities, skills training, and capacity building to help individuals with disabilities lead fulfilling lives in society. Therefore, disability organizations tailor their services to their specific expertise and capabilities. These organizations possess specialized knowledge in disability-related matters and employ experts in providing services. Furthermore, they continually develop innovations and technologies for the rehabilitation of individuals with disabilities.

The services offered by general disability service centres, established by disability organizations, are tailored to specific disability types. Members or target groups of these service centres typically share the same type of disability. Consequently, the geographical scope of services provided to members may extend to different districts or even provinces, covering the residential areas of individuals with disabilities.

Efficient Database Development

Some general disability service centres have adopted the International Classification of Functioning, Disability, and Health (ICF) to categorize the work-related aspects of disability and health, which is used for analysing the issues faced by individuals with disabilities. In the past, the medical perspective viewed persons with disabilities solely as patients in need of treatment and rehabilitation. However, the contemporary medical viewpoint recognizes the multifaceted

nature of disabilities. The application of the ICF framework has been instrumental in addressing the issues faced by individuals with disabilities. This framework considers not only internal and external factors but also social and environmental determinants that contribute to disabilities. Consequently, addressing medical issues is not limited to treating illnesses but involves addressing problems that are interconnected with various contributing factors. The development of ICF data, which is a hospital's dataset, can be used to design personalized assistance for individuals with disabilities.

Public Relations and Communication with Society

Engaging in public relations and communication with the community allows general disability service centres to receive financial support from society. Disability organizations also receive financial support from the private sector for their establishment. For instance, the Thai Association for the Blind, a non-governmental organization, was established by a blind teacher who donated funds, beds, land, and educational buildings to establish a school for the blind. The operations of non-governmental organizations like the Thai Association for the Blind primarily rely on donations from the private sector.

In the case of parent associations of individuals with disabilities, it is a collaborative effort among parents, most of whom possess financial means and knowledge. They collectively establish organizations in the form of associations and receive substantial support from the private sector. When organizations can establish themselves and maintain their strength, they continue to receive continuous support because donors receive tax benefits, which is one of the factors contributing to the continuous budget allocation for the operations of disability organizations.

DISCUSSION

CBR factors for enhancing the functioning of general disability service centres

Factors related to the operation of general disability service centres with the CBR approach. Found that some factors to improving the efficiency of locally established general disability service centres, working in collaboration with local government organizations and coordinating with external agencies with specialized knowledge to enhance service delivery. Additionally, it is recommended to provide opportunities for stakeholders to participate as

committee members, actively involved in the decision-making process and supervision of general disability service centres.

CBR concept and principles are a key strategy in international instruments including the Convention on the Rights of Persons with Disabilities (CRPD), under heading 26, which concerns promoting capability and restoring capability, point (b) emphasizes supporting persons with disabilities to participate in and be integral parts of their communities, as well as in all aspects of society. According to the principles of CBR, the operations of general disability service centres focus on inclusive participation, particularly involving people with disabilities. This includes having people with disabilities participate as committee members and play roles in driving the operations of the centre, which is evident in disability service centres established by disability organizations providing services by and for persons with disabilities themselves.

The global organizations recommended CBR workers/stakeholders should be seven sectors including (1) persons with disabilities (2) families of persons with disabilities, (3) community members, (4) governmental organizations at local, regional, and national levels, (5) non-governmental organizations as local, regional, national and international level, (6) professionals related such as medical, educational personnel, social works and others, and (7) business sectors (ILO, UNESCO, WHO, 2004). The coordination of these individuals is crucial for the functioning of CBR. The project manager plays the role of coordinating and fostering mutual understanding among the team members. This ensures that the CBR operations follow a unified direction and work collaboratively to provide assistance and support to one another.

Stimulating and promoting empowerment within communities, including persons with disabilities, is crucial for project managers to foster inclusivity and ensure sustainable operations. As stated by a community developer who serves as the project manager of a disability service centre established by a local government organization, they have endeavoured to promote and lay out guidelines for persons with disabilities to participate in group activities or establish disability clubs in the area. This is aimed at facilitating activities and services tailored to persons with disabilities. Aligned with the transition in the process of CBR in Thailand, which emphasizes the empowerment of persons with disabilities and the principle of “nothing about us without us,” it has promoted the formation of self-help groups and persons with disabilities to become project managers of CBR initiatives themselves. Furthermore, it has transformed CBR

work into community development activities that decentralize power and foster collaboration between local organizations and people with disabilities.

There are studies on factors related to the operation of CBR, which include various factors that support the work of general disability service centres. It can be observed that the newly introduced factors align with the personnel and knowledge management factors, as well as the efficient database development factors. However, the factors related to public relations and communication with society have not been clearly emphasized, as the analysis in this study focuses on the organizational level. In the community-level analysis, it may highlight these factors more clearly. One study in Thailand recommended to innovative training methodology for building up the capacity of staff to work as a team and to become agents of change to set up a strategic plan for delivering CBR interventions in their settings (Tongsiri, 2022).

For example, the establishment of general disability service centres by local government organizations arises from two sectors: 1) State agencies: Local government organizations have provided services for persons with disabilities as part of their responsibilities and functions. This includes the tasks carried out by relevant personnel, meaning local government organizations engaged in disability-related activities, such as providing services for persons with disabilities. 2) Persons with disabilities: They have an awareness of their rights (capability) that enable them to access various services, including participation in disability-related activities within organizations, such as expressing opinions, participating in activities, and monitoring and evaluating outcomes. As stated by the community developer in the interview the committee primarily consists of executives from the local administrative organization, and villagers or representatives of persons with disabilities are also invited to participate through public relations.

From a study through the review of more than 33 research works and expert evaluations, it was found that the need for a CBR workforce for appropriate training, supervision, and motivation considerations within a tiered system, and the need for advocacy and empowerment skills when task-shifting to communities, respectively (Gilmore, 2017). It is consistent with the findings of this study in developing the skills, knowledge, understanding, and abilities of volunteers or individuals in roles managing the operations of general disability service centres.

Therefore, general disability service centres, established by local government organizations need to focus on the development of efficient databases regarding disabled individuals. While the use of data collected from community members may be valuable, it may not be sufficient. Given the diverse characteristics of communities in urban, rural, and semi-urban areas, which affect the data collection process, data from community representatives or community members alone may not fully meet the needs of general disability service centres. Therefore, it is important to prioritize the development of databases for disabled individuals, collected both from community representatives and through effective assessments, especially for centres established by local government organizations.

Analysing the CBR matrix through the operations of general disability service centres, which can cover all 5 dimensions, depends on the service capabilities of each general disability service centre. 1) Health dimension, services can include medical care, rehabilitation, and assistive devices, relying on the work of trained community health volunteers who have undergone skills training in collaboration with local agencies. 2) Education dimension, services mainly involve specialized organizations for disabilities, with expertise in various types of disabilities, networking with strong disability networks. 3) Livelihood dimension, the focus is on promoting and supporting the employment of persons with disabilities, hiring persons with disabilities, and providing financial services, which are the responsibilities of the disability service centres. 4) Social dimension, general disability service centres have limited capacity to respond, mainly providing individual assistance, rather than addressing broader societal issues. 5) Empowerment dimension, the involvement of persons with disabilities in disability organizations, disability networks, and participation in the operation committees of disability service centres enables direct reflection of the problems and needs of persons with disabilities.

CONCLUSION AND LIMITATIONS

The community-based rehabilitation concept is not static and allows for adaptation to respond to the changing dynamics of society, especially in the current era influenced by external factors like technology and global trends, which lead to rapid societal changes. Furthermore, it aligns with democratic principles, making it easier to analyse the operations of general disability service centres established by local government organizations. These centres are typically developed as decentralized entities and thus share a similar approach, allowing for a more

straightforward analysis. This is in contrast to the analysis of service centres established by hospitals, which have a more specialized focus and may operate under the constraints of the organization. Additionally, they may involve medical professionals and specialists, which can lead to limited community engagement.

Given these constraints, the study utilized in-depth data collection to provide more detailed information, increasing the weight of the findings. It also employed suitable concepts to analyse the development of CBR for the centres, based on the operational practices and collaborative principles that are typical in CBR programs. This allows for a better understanding of how community-based practices are being applied in the general disability service centres, emphasizing collaboration, resource utilization, and community involvement. This approach enables the centres to follow CBR principles effectively.

Furthermore, this study based its analysis on the concept of CBR by studying the operations of general disability service centres. This analysis serves as a practical guideline for enhancing cooperation, increasing community participation, and utilizing local resources – principles that form the core of CBR. By employing these principles, general disability service centres can operate in a manner consistent with CBR practices, ensuring that persons with disabilities receive comprehensive support and care.

The establishment and continuous operation of general disability service centres are attributed to community involvement and grassroots work based on the concept of CBR to enhance the capabilities of persons with disabilities. When disabled persons' organizations or these units are elevated to general disability service centres, there is potential for providing services to persons with disabilities. This study thus summarizes the operational factors in CBR that promote the functioning of general disability service centres, encompassing seven factors related to data management, skills, and knowledge, management, and community involvement to enable stakeholders to collaborate effectively and provide efficient services for persons with disabilities.

The limitation of this study is that it focuses on studying the positive factors of implementing CBR that promote the operation of general disability service centres. This study selected general disability service centres which continuous functions. This limitation excludes the study of negative factors or obstacles that may affect the operation of such centres. Additionally, the study only covers one province, which may have unique contextual differences or specific characteristics of the area.

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REFERENCES

- Cheausuwantavee, T. (2005). Community-based rehabilitation in Thailand: Current situation and development. *Asia Pacific Disability Rehabilitation Journal*, 16(1), 51-67.
- Gilmore, B., et al. (2017). A study of human resource competencies required to implement community rehabilitation in less resourced settings. *Human Resources for Health*, 15(70), DOI 10.1186/s12960-017-0240-1.
- ILO, UNESCO, WHO. (2004). Community-based rehabilitation for and with people with disabilities. Joint position paper. Geneva.
- Kampempool, P. et al., (2022). Annual report 2022 [in Thai]. Bangkok: Department of empowerment of persons with disabilities
- Kuipers, P., Kendall, E., & Hancock, T. (2001). Developing a rural community-based disability service: (I) service framework and implementation strategy. *Aust J Rural Health*, 9(1), 22–28.
- Lemmi, V., Gibson, L., Blanchet, K., Kumar, K.S., Rath, S., Hartley, S., et al. (2015). Community-based rehabilitation for persons with disabilities in low-and middle-income countries: A systematic review, 3ie Systematic Review 18. London: International Initiative for Impact Evaluation (3ie).
- Indeesri, N. (2019). Improving the role and duties of provincial and general disability service centres [in Thai]. <http://dep.go.th/uploads/Docutents/773046a8-ec9e-4a45-b01f-946a5205e58b>. Retrieved 05/06/2023
- Mannan, H., & Turnbull, A.P. (2007). A review of community based rehabilitation evaluations: quality of life as an outcome measure for future evaluations. *Asia Pac*. 18(1): 29–45
- Thomas, M., & Thomas, M.J. (2003). Manual for CBR planners. National Printing Press.
- United Nations. (2023). International Day of Persons with disabilities. <https://www.un.org/en/observances/day-of-persons-with-disabilities>. Retrieved 20/01/2023.
- Wanaratwichit, C., Hills, D., Cruickshank, M., & Newman, B. (2015). A model of home-based care for persons with disabilities: Better practice in rural Thailand. *Asia Pacific Journal of Health Management*, 10(2), 44-51.
- Wickenden, M., Mulligan, D., Fefoame, G.O., & Katende, P. (2012). Stakeholder consultations on community-based rehabilitation guidelines in Ghana and Uganda. *African Journal of Disability* 1(1), doi.org/10.4102/ajod.v1i1.1
- World Bank. (2023). A billion persons experience disabilities worldwide - somewhere's the data? <https://blogs.worldbank.org/opendata/billion-persons-experience-disabilities-worldwide-somewhere-data>. Retrieved 20/01/2023

World Health Organization. (2004). CBR: A Strategy for Rehabilitation, Equalization of Opportunities, Poverty Reduction and Social Inclusion of People with Disabilities. Joint Position Paper. https://www.ilo.org/skills/pubs/WCMS_107938/lang--en/index.htm. Retrieved 05/06/2023

World Health Organization. (2010). Community-based rehabilitation: CBR guidelines. WHO Press.

World Health Organization. (2023). Disability. https://www.who.int/health-topics/disability#tab=tab_1. Retrieved 05/06/2023

The Empowerment of Persons with Disabilities Act, B.E. 2550 In: Thailand, editor. 2007. <http://law.m-society.go.th/law2016/uploads/lawfile/593114244ee36.pdf>. Retrieved 20/01/2023

Tongsiri, S. (2022). Scaling-up community-based rehabilitation programs in rural Thailand: the development of a capacity building program. *BMC Health Services Research*, 22(1), 1070. doi: 10.1186/s12913-022-08458-5.

Yokoyama, A. (2021). Institutional capacities and collaboration with communities of disability service centres in Thailand from the perspective of “Social model of disability”. *Interdisciplinary Research Review*, 16(4), 24–32.