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The Case of a Cambodian man with Disabilities who Received Rehabilitative Education Support (Dohsa-hou) and Realized Social Participation

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ABSTRACT

This study presents a case of a Cambodian person with physical disabilities who was able to attain social participation through the practice of rehabilitation and education. This case will be considered a valuable case model to develop an understanding of the practice of rehabilitation and education and its necessity for people with disabilities; a belief not yet widespread in Cambodia. The rehabilitation and educational method developed in Japan called Dohsa-hou (translated to "movement therapy") was implemented for a client who had been confined to his home due to a disability in his limbs. Dohsa-hou's primary goal is to improve the client's physical movements and to develop the client's ability to control their movements. Through this method, the client in this case improved his standing and walking movements and developed positive communication skills with others. As a result of the growth and improvement, the client was able to obtain a job in the community and earn a living.

Keywords

Cambodia, *Dohsa-hou* / Movement therapy, Physical disability, Social participation.

Introduction

When Cambodia signed the International Convention on the Rights of Persons with Disabilities in 2012, it declared its policy development to build a society where persons with disabilities can fully participate [1]. However, there are a limited number of professionals in Cambodia who focus on the education or welfare of persons with disabilities, and the domestic educational curriculum in this area for this professional development is not yet well-developed [1]. Under these circumstances, the provision of knowledge from other countries regarding how to support persons with disabilities in education and welfare is considered important, and research indicates such local needs [1,2].

A Japanese organization called the Specified Nonprofit Corporation Developmental Support System for Mind and Body (DSSMB) exhibits one example of the provision of support for people with disabilities in Cambodia. This organization has been providing rehabilitation support for children at the National Borei for Infant and Children, a residential facility for the disabled in the Cambodian capital city of Phnom Penh [4]. Specifically, the organization has continued to use a technique for rehabilitation and psychological care for people with disabilities developed in Japan, known as "*Dohsa-hou*" (literally translated to "movement therapy") in order to provide support and interventions for children

and to provide training to local facility staff. *Dohsa-hou* approaches the movement difficulties of persons with physical disabilities in order to expand the person's access to daily living skills. The practice is also used to promote the client's emotional stability, communication skills, and mental health, through the growth of the psychological aspects associated with movement activities in the process of movement skills being developed [5]. The DSSMB has been conducting *Dohsa-hou* therapy for more than 20 years, and has successfully trained local facility staff to become experts in the method [4], as well as achieving rehabilitation and educational results for the children in the facility. The facility staff who have grown to become experts in the movement method have been certified as *Dohsa-hou* supervisors by the Japanese academic organization in recognition of their many years of experience in the practice of the method. After the Japanese supporters returned, the facility staff who had obtained the certification began to set up and manage their own opportunities to practice *Dohsa-hou.* The above case is one of the few cases in which rehabilitation support techniques provided from other countries have taken root in Cambodia.

Another organization called Kansai Society of Clinical Dohsalogy (KSCD), an academic organization developing and researching *Dohsa-hou* based in the southern-central region of Japan (Kansai), has also practiced *Dohsa-hou* in Cambodia. KSCD has been working in Siem Reap Province, Cambodia, for more than ten years. KSCD has held annual workshops at the Siem Reap Provincial Hospital, where people with physical disabilities living in the community come and practice *Dohsa-hou*. The participation modality is different from the above-mentioned DSSMB's practice in which clients did not have to commute. One of the advantages of a longitudinal study and commuting modality is that client's improvement in social life can be observed. Through more than ten years of intervention, various improvements clients have made have been reported. In one specific case, a client with disabilities who was confined to his home was able to participate more actively in the society. This successful case is believed to be an essential model in Cambodia which is putting an emphasis on the development of education and welfare for persons with disabilities. This research introduces the successful case report supported by KSCD and analyzes the factors contributing to its success.

Case Summary

Modality of *Dohsa-hou* Workshop by KSCD

Five to ten Japanese practitioners who specialized in *Dohsa-hou* visited Cambodia and practiced *Dohsa-hou* in Siem Reap Provincial Hospital, Cambodia, with Cambodian learners. These learners were mainly local medical providers. Clients were outpatients with physical disabilities staying at Siem Reap Provincial Hospital. The interventions lasted four days, with two 60 minutes sessions in the morning. Case conferences were held in the afternoon among practitioners. The workshop was held annually in August (Picture 1,2).

Description of the client in the case report

Client A: Client A participated in the workshop four times. He was a male in his twenties when he first participated in the workshop. A Japanese practitioner became Client A's trainer all four times. The trainer was in their twenties at the beginning of the training, and in their thirties in the last year of practice.

Client A had orchitis at a young age and developed encephalitis from high fever. This illness damaged his brain resulting in intellectual disabilities. Although client A had no difficulty in daily communication or motion in daily living, he was oppressed by his family and faced abuse from his uncle. He became socially withdrawn and stopped speaking spontaneously. Client A's posture and movement also physically exhibited his nervousness. Client A had never received a professional rehabilitative education or psychological support before participating in the workshop. Client A almost never left his house and reported low social activity. He had lost his father, and his mother was financially supporting Client A. He and his family lived in extreme poverty.

From Client A's physical and psychological assessment intake, he was noted to have a curvature on his upper body and it was hard for him to sit cross-legged. While in a standing posture, his upper body was twisted to the left up front. His left shoulder was also lifted with tension and his neck was tilted toward the right. His pelvis was twisted to the left of his upper body, and his muscle around the hip joint had some notable tension towards his inner thigh. His body weight was placed more on his right foot, rendering his whole body unstable. To reduce this instability, Client A appeared to put more force on his left shoulder and left shoulder, creating tension, as mentioned. His movements were stiff and labored. Client A's mother held his hand while he was walking. While walking, the Client was often gloomy, looking down and largely avoiding eye contact. While Client A responded to his mother's words minimally, he did not respond to the Japanese or Cambodian practitioner. During the sessions, Client A stated short sentences such as "*my body hurts.*

From A's history and assessment, it was concluded that Client A developed nervousness from his oppressive and abusive family history and had shut down from the external world. These experiences led to difficulties in social communication along with difficulties in physical posture and movement. In addition to this psychological background, Client A displayed intellectual disability caused by encephalitis in his childhood. This illness may have affected his brain function causing difficulty with social and motor activity. Client A's diagnosis of intellectual disability was limited as his medical record was not found. However, it was probable that there were correlations between his posture, movement, features of communication, and neurodevelopmental disability. Considering the probability of neurodevelopment disability, treatment plans needed to include not only the provision of psychological care but experiential learning of communication, posture, and movement.

Client A's treatment plan included practicing movement tasks that aimed to resolve his postural and movement problems and improve his ability to control his own movements. In conjunction with working on movement tasks, Client A worked to establish

collaborative communication with a supportive third other, the therapist, and to experience the process of learning. Experiential learning was thought to be helpful to build confidence and for Client A to reduce his interpersonal tension and reluctance to interact with society.

Movement tasks assigned to A

The primary movement tasks assigned to A in the past five workshops were as follows in the order they were tackled:

1: Shoulder lifting task (Figure 1): A task of lifting shoulders one by one, as if putting a shoulder closer to the ear while being careful not to tilt the neck or to move the arm or elbow up.

2: Arm lifting task (Figure 2): A task of raising straightened arms straight up vertically one by one, making sure not to tilt the upper body, arch the back, or veer from the movement track.

3: Forward bending in the cross-legged sitting position task (Figure 3): A task of bending the upper body forward while moving the pelvis forward. The back should be straight without curling, the pelvis should be gradually moved forward while the upper body is simultaneously leaned forward gradually without bouncing.

4: Core building task in the cross-legged sitting position (Figure 4): A task of forming a straight back while sitting. From the position of task three, the client forms the straight spine position and gradually moves the upper body to a vertical position, making sure not to curl the back or lean the pelvis backward.

5: Standing up task from chair sitting position (Figure 5): A task to stand up from sitting in a chair. The client leans the upper body forward and slides the knees forward as to have the body weight placed equally on both feet. The client must make sure not to forcibly stand up or use a hand without putting all the weight on both feet.

6. Weight shifting task (Figure 6): A task to put the body weight from one foot to the other by leaning the whole body right and left. The knees should be bent and the center of gravity should be kept low for stability. The shifting movement should not be led by the head.

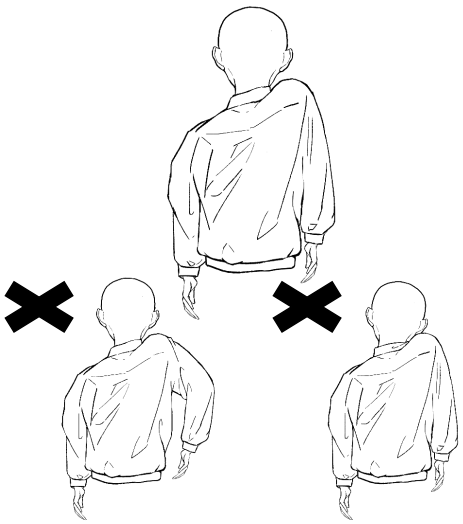

Fig 1

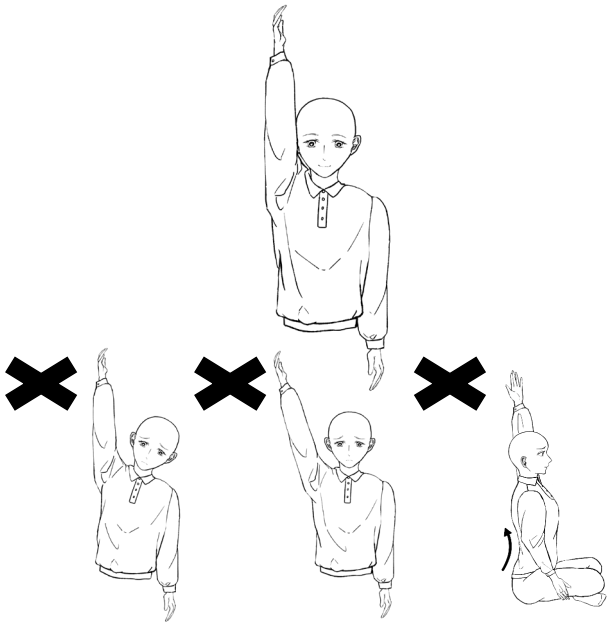

Fig 2

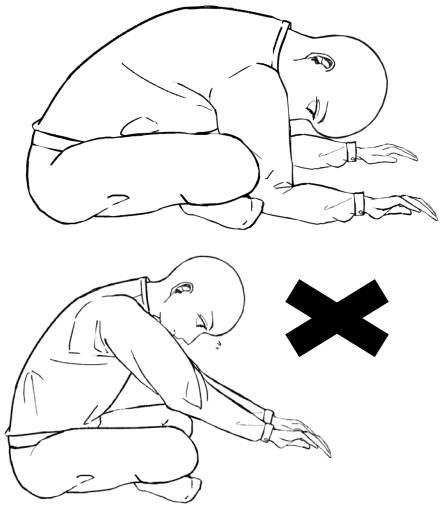

Fig 3

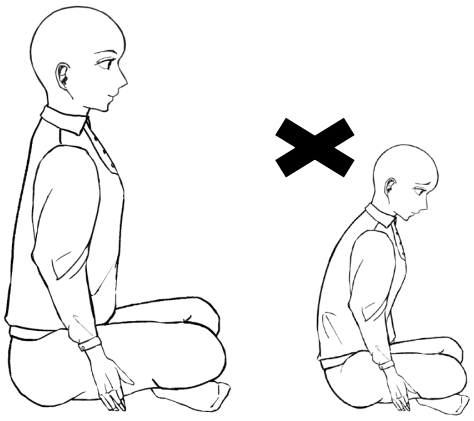

Fig 4

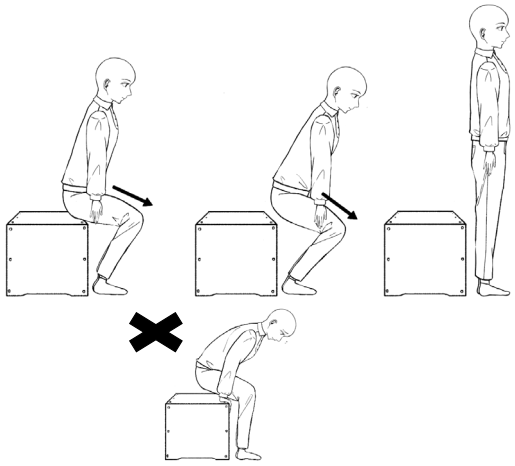

Fig 5

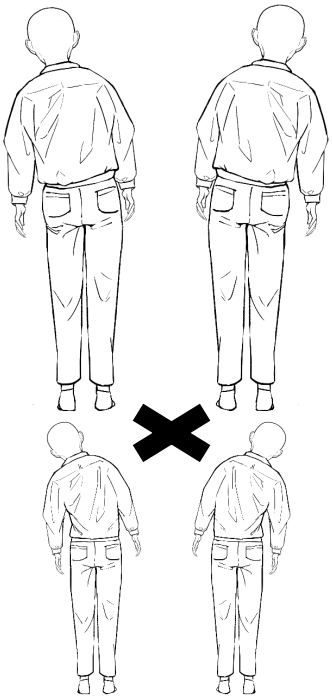

Fig 6

A's approach to movement tasks during each workshop

Client A complained of pain in his left shoulder during most of the workshops he participated in. His pain was caused by chronic muscle tension around his shoulder, and this was aligned with his unbalanced sitting and standing position and walking movements. It was likely that the pain was also exacerbated by the nervousness and tension. The therapist adopted a shoulder lifting task in order to reduce pain and increase mobility in his shoulder (Figure 1). The therapist and Client A practiced arm raising tasks (Figure 2) to increase the rotational mobility of his shoulder joints. Through these two tasks during the first workshop, Client A increased the targeted shoulder's mobility, released the chronic tensions around the joints, and experienced a reduction of pain in comparison to the baseline. It was also reported that Client A obtained an opportunity to learn and achieve self-control. In situations he found difficult to move in, he paused his movement and relieved the tensions by himself then resumed the movement on his own.

In the second and third workshops, Task 3, the forward bending task in the cross-legged sitting position (Figure 3) was performed to improve A's chronic tension around his hip joints. This task aimed to increase the mobility of a clients' hip joint. Next, for the purpose of improving Client A's curvature on his upper back, the core building task (Figure 4) was performed in the sitting cross-legged position. This task leads to the acquisition of a stable sitting position with a less prominent center of gravity sway, with the upper body held along the core. During task 3, stiffness around the hip joint was evident in Client A, sometimes causing pain in the thigh and groin area. The therapist instructed A to stop the movement when it was painful and asked him to relax the muscle tension in the area where the pain occurred. After it was confirmed that A's pain was reduced, the therapist instructed A to continue the movement. Client. A accepted the therapist's instructions and worked on the task, and his range of motion of the hip joint increased. In task 4, Client A worked on postural formation to straighten the back from the pelvis to the tip of the head. Client A was able to straighten his own back muscles, put pressure on the abdominal area, and hold a straight posture to get up. Client A's initial pelvic torsion and right-side curvature posture improved, and he was able to sit in a cross-legged sitting position by himself.

In the third to fourth sessions of the workshop tasks 5 (Standing up from a chair-sitting position) (Figure 5) and task 6 (center of gravity transfer in a standing position) (Figure 6) were conducted. Tasks 5 and 6 are basic movements for postural transformation and transfer movements. Client A's goals through these tasks were to acquire smoother hip joint movement and develop a posture to feel gravity without unnecessary muscle tension. During task 5, Client A's sole did not touch the floor. His center of gravity swayed greatly while standing up, and unnecessary force was applied to his entire body out of a fear of falling over.

The therapist first worked with Client A to help him remember the sensation of touching the floor by placing her entire sole onto the floor while sitting in a chair. Next, the therapist had A lean his upper body forward and move his knees forward at the same time, so that Client A's entire body weight was placed on the sole of his foot. After practicing with the therapist's instructions, Client A was able to support his body in a stable manner with his entire body weight on the sole of his foot. Subsequently, he achieved the movement of standing up while stepping on the floor with his whole sole on the ground, and the same unnecessary force that he had initially placed onto his entire body was no longer applied. Client A was able to stand up and sit in a chair smoothly and in a stable manner.

In task 6, which involved alternately shifting the center of gravity between the left and right legs, as in 5, Client A worked with the tension in his shoulders and hands, fearing that he might fall over. Since it is important to move the center of gravity to the left and

right with an awareness of moving the hips to the left and right, the therapist placed his hand on the side of A's waist to improve awareness of the movement. Client A learned how to apply force to move his hips while receiving instructions from the therapist, and was able to move his hips more smoothly. Simultaneously, Client A reduced the muscle tension in his shoulders and hands in preparation for a fall. As a result of these efforts, Client A's standing posture became more stable than previously seen in the assessment. In addition, his center of gravity shift became smoother which led to smoother walking movements.

Client A changes through participation in four workshops

Client A worked on the aforementioned movement issues over the course of the four workshops and achieved improvement in movement. As the workshops were held only once a year, there were only a total of eight sessions over four days during four years to approach and address Client A's issues. Due to the timelines, recurrence of problems occurred, including repeated shoulder pain and unstable sitting and standing positions during subsequent sessions. Despite the limited opportunity to participate, changes in Client A's approach to movement tasks, communication with others, and improvement in movement and attitudes were observed.

Client A showed a stronger understanding of how to tackle each movement task, and he was able to follow the therapist's instructions better in each session. In the beginning, he often interpreted the therapist's instructions and moved his body on his own, but as the sessions progressed, he became more receptive to the therapist's instructions and matched his movements with the timing of the therapist. When he was able to complete a movement task in cooperation with the therapist, he would give the therapist a thumbs up and celebrate the achievement together. Client A also began to give feedback to the therapist about his own body sensations and began to tell the therapist not only about the pain but also about the tension associated with the movements and the difficulty in relaxing.

Improvements were also seen outside of the workshop as well. During the first participation, Client A was led to the venue by his mother, but after the second participation, He led his mother to the venue and he was able to walk up and down the stairs independently. He surprised the therapist, who had not seen him in a year, as he showed up neatly dressed and while leading his mother. After the fourth session, Client A reported that he had started a job, surprising the therapist. Client A and his mother started walking the streets and working to collect garbage to earn money several months prior to his fourth workshop.

Client A's psychological improvements seemed to be reflected in his movement. At the beginning of his participation, he was confined to his home and lacked confidence. After the third workshop, he laughed frequently, conversed more easily, and spent time standing up away from his mother during breaks, showing a more active and fulfilling life than his initial entry into the workshop.

Discussion

A social and communicative motivation fostered by a supportive relationship

Client A had experienced hurt and fear in his relationships with his peers since childhood partly due to his own disability. Before the intervention, his social skills and willingness to communicate in interpersonal situations appeared to be hindered. However, through repeated participation in the *Dohsa-hou* workshop, his behavior gradually changed and he began to actively communicate with the therapist. This change may have been influenced by the relationship between Client A and the therapist, in which Client A recognized the therapist as a person who had provided opportunities to develop and grow his own abilities and offered support for such development. The establishment of this relationship increased A's latent desire for self-expression, which had previously been suppressed, and activated his desire to express his own feelings and take on new challenges, centering on the accomplishment of tasks.

In terms of the relationship between Client A and the therapist, there existed an experiential process in which Client A worked to realize the movement task in cooperation with the therapist, mediated by the movement task. With these movement tasks, Client A was able to work on his goals mainly through his own self-effort, interacting with the therapist as an equal footing or a teammate, rather than positioning himself as an object to receive one-way support from the therapist. This experience of task realization through cooperation, and the accompanying emotional experiences of accomplishment and joy, may have helped Client A to develop confidence and enjoyment in interpersonal relationships, leading to positive social and communicative attitudes.

The above points may have functioned in the formation of Client A's positive attitude toward social participation, along with the growth of his behavioral aspects, which will be discussed in the succeeding section.

Growth in A's ability to move and social participation

The most effective approach for addressing Client A's growth difficulties in terms of movement was to improve his posture and movements. As indicated in the assessment information, Client A's posture, which was marked by curvature in his back and a swaying center-of-gravity, affected his walking movements and contributed to the shoulder pain that he mentioned during each session. Through *Dohsa-hou*, the problems were addressed by focusing on three tasks: task 4: core structure building in a cross-legged sitting position (Figure 4), task 5: standing up from a chair sitting position (Figure 5), and task 6: shifting the center of gravity in a standing position (Figure 6). Client A acquired the ability to keep his upper body straight using the muscles around the center of his body and to stand with his weight on the soles of his feet. In addition, the center of gravity shift, related to walking movements, became stable and smooth, making it easier for Client A to step forward. The accumulation of the experience of participating in the four workshops resulted in the growth of A's movement ability to a more stable and expansive manner than in the beginning.

The stability of movement led to a reduction in the burden on the body, and the expansion of movement expanded the capacity to participate in daily activities, which in turn functioned to help A engage in work and realize social participation.

According to Naruse (2014), the developer of the *Dohsa-hou*, movement can be said to be human's act of living, and he states that growth and recovery of movement leads to expansion of activities of daily living [6]. Naruse (2014) also points out the importance of the client's self-effort and experiential process of self-achievement in the process from movement improvement to the expansion of activities of daily living [6]. Specifically, it is important for the clients to experience their self-control over his/her own body through movement tasks, solving movement difficulties, and achieving goal movement. In this case report, A was able to improve his main complaints of shoulder pain and unstable posture holding, as well as improve his walking movements.

The self-resolution and self-accomplishment of his own movement difficulties obtained in the process promoted his motivation for activity, which is thought to have led to independent movement, such as leading his mother to walk and climbing up and down stairs independently.

The results of this case developed from the growth of movement within the session to the eventual improvement of movement in Client A's daily life. Client A expanded the range of activities gradually and took on the challenge of social participation. This indicates that Client A's confidence and willingness to take on the challenge of social participation were nurtured through the growth of movement skills that he had developed in his experiences with *Dohsa-hou*. In addition, A's successful experience was influenced by the accumulation of experiences of supportive interactions with the therapist, as mentioned earlier.

Significance of this case in Cambodian society

As mentioned earlier, Cambodia is working to improve its domestic education and welfare system with the vision of realizing the social participation of people with disabilities. However, in the present, the specific details of this system and the practical environment for its implementation are not yet fully developed. In particular, professional methods and means of implementing education and welfare for people with disabilities are not widespread, and there are only a few case reports of practical results in Cambodia.

In considering these factors, we believe that this case exhibits a very valuable model case in which a person with disabilities living in Cambodia received specialized rehabilitation support and was able to achieve the social participation that the Cambodian government considers important. In this case, we were able to demonstrate the process of a client who had been confined to his home to achieve social participation through self-development through movement. In addition, this case study showed the importance of the presence of a therapist who sees the client's potential for growth and is involved in actualizing this potential, and the importance of opportunities for clients to experience self-effort and self-achievement in their own difficulties. This is an important point common to all rehabilitation support in general, not limited to the subjects with physical disabilities who are the central theme of this case study, or to the methodological means of the movement method. We hope that the necessity of these ideas and practical skills will be better understood and spread in Cambodia and that education and welfare practices in the country will develop.

Acknowledgments

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References

1. Jonsson K. CRPD in Cambodia Effectiveness of Inclusion through Affirmative Action in Employment. LUND UNIVERSITY LIBRARIES. 2019.
2. Harada S. The current state of Cambodian society through the life stories of people with disabilities. Community Caring. 2021; 23: 65-69.
3. Harada S, Sato S, Ueda A. Difficulties in Providing International Support for People with Disabilities in Cambodia. Current Trends in Clinical & Medical Sciences. 2022.
4. Harada S, Nakano K. Practice of Meso-Micro Approach in Cambodian Disability Welfare through Clinical Dohsa-hou Focusing on the Practice in National Borei for Infant and children. Bulletin of the Center for Psychological Counseling. University of Iryo Sousei. 2021; 15: 9-17.
5. Imura O, Velizara C. The Birth and Development of Dohsa-hou. Introduction to Dohsa-hou An Integrated Japanese Body-Mind Therapy. Graduate School of Human Sciences. Osaka University. 2015; 6-18.
6. Naruse G. Development of dohsa therapy How to harmonize and utilize the mind and body. Seishinshobou Tokyo Japan. 2014; 101-103.