

## PROPOSED PILOT COMMUNITY-BASED PHYSICAL THERAPY REHABILITATION CENTER IN BINAN CITY, LAGUNA, PHILIPPINES

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### ABSTRACT

Community Based Rehabilitation (CBR) is a strategy developed by the World Health Organization to provide quality of care and enhance the lives of persons with disabilities (PWDs). The roles of physical therapists in CBR programs include the diagnosis, treatment, and management of PWD's as well as education, administration, and leadership. The present research focused on the development of a proposed pilot community-based physical therapy rehabilitation center in Biñan City, Laguna. Specifically, this study sought to answer the following questions: What is the current status of physical therapy rehabilitation of patients in Biñan City, Laguna? What are the problems encountered by the patients in availing physical therapy rehabilitation services in Biñan City, Laguna? Is there a significant relationship between the current status of physical therapy rehabilitation of patients and the problems they encountered in availing the physical therapy rehabilitation services in Biñan City, Laguna? What community-based physical therapy rehabilitation center can be proposed in Biñan City, Laguna? A descriptive-correlational research design with a cross-sectional survey was implemented, using a researcher-made 40-item questionnaire. The sample size was 548 physical therapy patients drawn from the target population. The problems perceived by the respondents in availing physical therapy rehabilitation services did not appear to be dependent on the current status of physical therapy rehabilitation, violating the theoretical framework. Four factors based on analysis of the questionnaire responses that identify the needs of the community with respect to physical therapy rehabilitation, without experiencing problems, include more physical resources and accessibility; more human resources; more financial resources; and an information campaign to improve community awareness. The future directions of the CBR center in Biñan City, Laguna must take into account a wide range of local physical, socioeconomic, cultural, and political factors. An action plan is outlined, covering the objectives, activities and strategies, involved persons, budget and resources, space, community awareness, and expected outcomes of the proposed CBR center.

**Keywords:** Community-Based Rehabilitation, Physical Therapy, Descriptive-correlational, Persons with Disability, Cross-sectional.

### INTRODUCTION

Community Based Rehabilitation (CBR) is a strategy developed by the World Health Organization with the goal of providing quality of care and enhancing the lives of persons with disabilities (PWDs) within their own communities, particularly in low resource settings. CBR programs help to provide equal opportunities and social inclusion for all PWD's and to combat

their cycle of poverty and disability, particularly in low- and middle-income countries such as the Philippines (World Confederation for Physical Therapy; 2016; World Health Organization, 2019; 2020). The current overall policy is to facilitate the empowerment the functional status of PWDs, especially in low-resource settings. CBR embraces a diversity of programs emphasizing the utilization of local available resources, to implement improved quality of care for PWD's at the community level, through the combined efforts of PWD's and their families, in collaboration with relevant governmental, non-government, healthcare, and educational institutions, as well as vocational, social, and other services. CBR helps to integrate PWD's into mainstream life by assisting them to meet their physical, social, employment, educational, economic, and other needs (Bowers et al., 2015; Mason et al., 2017; 2019). The contributions of physical therapists to CBR vary, depending on the community's circumstances.

The roles of physical therapists in CBR programs include not only the diagnosis and treatment of PWDs recovering from surgical treatments, amputations, spinal injuries, stroke, cancer, arthritis, scoliosis, as well as other musculo-skeletal disorders or moving impairments, such as cerebral palsy, epilepsy, poliomyelitis and muscular dystrophy (Parra et al., 2017). Physical therapists need a high degree of flexibility and a wide range of skills to contribute to CBR. The diverse roles of physiotherapists in CBR include: providing physical therapy examination/assessment, evaluation, diagnosis, prognosis/plan and treatments aimed at enhancing movement and function; educating and transferring selected skills to other staff, carers, and community members; providing consultation advice, support and supervision to other health, education and social care/service personnel; providing policy advice to government, non-governmental organizations, and disabled people's organizations (World Confederation for Physical Therapy, 2020). Consequently, the roles of physical therapists in CBR programs not only include the diagnosis, treatment, and management of PWD's. Their roles also include education, administration, and leadership.

One of the main reasons for implementing more physical therapy CBR centers in the Philippines is the very high prevalence of disability in the population. The results of the National Disability Prevalence Survey (Philippine Statistics Authority, 2019) showed that, in 2016, around 12% of Filipinos aged 15 years and older experienced severe disability, while 23% percent experienced mild disability. Due to the expense of modern healthcare practices in the Philippines, some Filipinos still depend on traditional healing practices, such as *hilot* (massage). They prefer to call upon the services of a *manghihilot* for the relief of the aches, pains, and discomfort associated with their disabilities (DeGuzman, 2016; Fajardo & Pansacola, 2017). The above-mentioned general information serves to highlight the challenges facing the development of physical therapy CBR centers in the Philippines, which are relevant to this study, the development of the proposed physical therapy CBR center in Binan City, Laguna.

The other main reason for this study is the apparent lack of compliance with government guidelines for the promotion of CBR in the Philippines (Alampay et al., 2018) and the serious deficiencies in performance of existing rehabilitation services for PWDs in the Philippines (Hodge, 2017). Many barriers prevent access to CBR programs by PWDs in the Philippines, including the lack of trained personnel and equipment, the lack of referral services, the low priority given to CBR by LGUs, the difficulties of gaining cooperation from PWDs, and misunderstandings about the roles of physical therapists. (Marella et al. 2016; Periquot, 2017). There are clearly a lot of current challenges to the implementation of CBR in the Philippines in the context of physical therapy, particularly with regard to the limited availability of resources, finances, and participation (Trinidad et al., 2020). The present research focused on the development of a proposed community-based physical therapy rehabilitation center in Binan

City, Laguna. As of now, Binan City does not have a community based physical therapy rehabilitation center serving physical therapy patients. The district has a Rural Health Unit (RHU), which has assigned a small room where citizens of Binan can receive physical therapy services free of charge. The center is accepting only limited number of patients due to the size of the room and availability of the volunteer Physical Therapists provided by the UPH-DJGTMU to serve its Physical Therapy students doing their internships. On the other hand, RHU's are supported by the Philippine government to serve impoverished citizens with free medical care. However, an increase in poverty has left RHU's struggling to meet the demands of their patients. More local doctors and nurses are required to serve as volunteers in RHU's to supply basic medical care (World Health Organization, 2018). However, Binan City cannot continue to depend on the RHU's to meet the physical therapy demands of the needed community residents in the twenty-four (24) barangays.

The study focused on the proposed pilot community-based physical therapy rehabilitation center in Binan City, Laguna. Specifically, this study sought to answer the following questions:

1. What is the current status of physical therapy rehabilitation of patients in Binan City, Laguna?
2. What are the problems encountered by the patients in availing physical therapy rehabilitation services in Binan City, Laguna?
3. Is there a significant relationship between the current status of physical therapy rehabilitation of patients and the problems they encountered in availing the physical therapy rehabilitation services in Binan City, Laguna?
4. What community-based physical therapy rehabilitation center can be proposed in Binan City, Laguna?

The null hypothesis was tested using the conventional .05 level of statistical significance:  $H_0$  – There is no significant relationship between the current status of physical therapy rehabilitation of patients and the problems they encountered in availing the physical therapy rehabilitation services in Binan City, Laguna.

## METHODS

This study used a descriptive-correlational research design with a cross-sectional survey. The primary source of data was a validated researcher-made questionnaire consisting of two parts. The first part contained 20 items to measure the current status of the physical therapy rehabilitation of patients in the City of Binan Laguna. The second part contained 20 items to measure the problems perceived by the patients in availing the physical therapy rehabilitation services in the City of Binan Laguna. The responses to each item were measured using a 4-point Likert scale where 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree. A purposive sampling technique was used to draw a representative sample of respondents from the target population of patients needing physiotherapy services. The inclusion criteria were: the patient had consulted a doctor in the RHU's of Binan City, Laguna for about one year and those patients who are needing physical therapy services, extracted from the Barangay health unit records. The sample size was 548 physical therapy patients. Participation was voluntary and no participant was excluded on the basis of their gender, age, race, or socio-economic status.

The researcher sought permission to conduct the survey from the RHU's of the Binan City, Laguna. After the approval of the request, the questionnaires were administered to the physical therapy patients of the 24 barangays through the assistance of BHW's in Binan City. The accomplished questionnaires were retrieved through the same channel as it was distributed. The responses of the respondents were tallied, tabulated, computed, analyzed and interpreted in the

context of the statement of the problem and hypotheses of the study. The weighted means of the item scores were compared to address the first two research questions. Pearson's  $r$  coefficient was estimated to test the null hypothesis.

## RESULTS AND DISCUSSION

**Table 1. Current Status of Physical Therapy Rehabilitation of the Respondents**

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. The role of physical therapists in dealing with different musculoskeletal, neurologic, and pediatric conditions are known by community residents in Binan City.	2.36	Disagree	1
2. The government of Binan City provides health promotion services and activities for people with disabilities in the community.	2.24	Disagree	2
3. The Binan City government has programs to improve the rates of recovery of disabled people in the community through physical therapy rehabilitation.	2.23	Disagree	3
4. The city government contributes toward the physical therapy rehabilitation for patients with disabilities in the community in Binan City.	2.14	Disagree	4
5. There is an established community center dealing with the concerns of physical therapy patients in Binan City.	2.12	Disagree	5
6. Physical therapy rehabilitation for patients with disabilities are available in Binan City.	2.11	Disagree	6
7. The local government officials improve the quality of life of people with disabilities in the community by providing physical therapy rehabilitation services.	2.09	Disagree	7
8. The City of Binan provide medical and restorative services for people with disabilities in the community.	2.08	Disagree	8
9. The physical therapy services are known by the community residents in Binan City.	2.04	Disagree	10
10. There is available physical therapy rehabilitation center in Binan City.	2.04	Disagree	10
11. The officials of the City of Binan has allocated budget intended for the physical therapy rehabilitation programs and services for the community residents of Binan City.	2.04	Disagree	10
12. The barangay health workers provide information on the physical therapy rehabilitation programs of Binan City.	2.03	Disagree	12
13. There is an established physical therapy rehabilitation programs in the community.	2.03	Disagree	12

14. There is an available doctor in the RHU's to attend to the needs of physical therapy patients.	2.01	Disagree	14
15. The Barangay contributes toward the physical therapy rehabilitation of patients in Binan City.	1.99	Disagree	15
16. The city has its own physical therapy rehabilitation program leader.	1.98	Disagree	16
17. The Binan City government has programs to decrease the rates of mortality of disabled people in the community through physical therapy rehabilitation.	1.97	Disagree	17
18. Physical therapy rehabilitation for patients with disabilities in the community are provided in Binan City.	1.96	Disagree	18
19. Physical Therapists in Binan City are visible in the community.	1.95	Disagree	19
20. A family member has already received physical therapy rehabilitation in Binan City.	1.80	Disagree	20

The mean scores for the 20 items in table 1 ranged from 1.80 to 2.36, with an overall mean score of 2.06 on a scale from 1 = strongly disagree to 4 = strongly agree. The responses demonstrated negative attitudes toward the current status of physical therapy rehabilitation in Binan. The greatest areas of concern, based on the items with the lowest scores, were the perceptions that the Barangay did not contribute to the physical therapy rehabilitation of patients; the city did not have its own physical therapy rehabilitation program leader nor to have programs that decrease the rates of mortality of disabled people; that physical therapy rehabilitation for PWDs in the community was not provided, that physical therapists were not visible in the community, and that no family members had received physical therapy rehabilitation. This finding was consistent with previous studies in demonstrating an apparent lack of compliance with official guidelines to support CBR in the Philippines, such as the Republican Act 10070 which aimed to ensure that policies, programs, and services to promote the rehabilitation of PWD's were implemented at the local government level (Alampay et al., 2018).

**Table 2. Problems Encountered by the Respondents in Availing Physical Therapy Rehabilitation Services**

Indicators	Weighted Mean	Verbal Interpretation	Rank
1. The local government units provide assistance to the underprivileged community residents for the physical therapy rehabilitation in Binan City.	2.27	Disagree	1
2. The citizens of Binan City have positive attitudes toward availing physical therapy rehabilitation services.	2.21	Disagree	2
3. The physical therapy center has enough space to accommodate the physical therapy	2.19	Disagree	3

needs of patients in the 24 barangays in Binan City.			
4. Binan City community residents are aware of the medical conditions that can be treated by a physical therapist.	2.19	Disagree	3
5. The citizens of Binan City seek the physical therapy programs and services.	2.18	Disagree	5
6. There is an available community-based rehabilitation center in Binan City.	2.18	Disagree	5
7. The barangay officials provide assistance to the underprivileged community residents for the physical therapy rehabilitation in Binan City.	2.18	Disagree	5
8. RHU's doctors are always available to provide free consultations to underprivileged residents that needed medical attention.	2.17	Disagree	99.
9. The physical therapy rehabilitation services of Binan City are free of charge.	2.15	Disagree	10
10. The Binan City government has programs to make people aware of the physical therapy services provided by the center.	2.11	Disagree	11
11. BHW's have readily available information regarding the availability of physical therapy rehabilitation services in Binan City.	2.11	Disagree	11
12. RHU's doctors are always available to provide free consultations to underprivileged residents that needed physical therapy services.	2.09	Disagree	13
13. There is an established community center dealing with the different problems encountered by community residents having disability.	2.08	Disagree	14
14. There are enough specialist healthcare personnel in the rural health units to provide healthcare services to patients in Binan City.	2.07	Disagree	15
15. The physical therapy services of Binan City are always available as per scheduled time.	2.06	Disagree	17
16. Community residents of Binan City has easy access to the physical therapy rehabilitation center.	2.06	Disagree	17
17. Physical Therapy Center has most needed equipment for treating the Patients in Binan City.	2.06	Disagree	17

18. Physical Therapy Center can be reached easily by riding a jeepney.	2.03	Disagree	19
19. The citizens of Binan have encountered problems in availing physical therapy rehabilitation services in Binan City.	2.02	Disagree	20

The mean scores for the 20 items in table 2 ranged from 2.02 to 2.27, with an overall mean score of 2.13 on a scale from 1 = strongly disagree to 4 = strongly agree. The responses demonstrated the many problems perceived by the respondents in availing physical therapy rehabilitation services. The strongest areas of concern, reflected by the lowest mean item scores were the perceptions that the doctors were not always available to provide free consultations; there was not an established community center; there were not enough specialist healthcare personnel; the physical therapy services were not always available; the community did not have easy access to a physical therapy rehabilitation center, the physical therapy center did not have the most needed equipment, and the center could not be reached by riding a jeepney. This finding consistent with previous studies concerning the barriers to availing physical therapy rehabilitation services in the Philippines (e.g., Hodge, 2017; Marella et al. 2016; Periquet; 2017; Trinidad et al., 2020).

**Table 3. Relationship between the Current Status of Physical Therapy Rehabilitation and the Problems Encountered by the Respondents in Availing of Physical Therapy Rehabilitation Services**

Variables	Pearson's r	p-value	Decision	Interpretation
Current Status of Physical Therapy Rehabilitation and Problems Encountered in Availing Physical Therapy Rehabilitation Services	.051 (negligible)	.254	Null hypothesis is no rejected	No significant correlation

Table 3 presents the results of correlation analysis to test the null hypothesis that there is no significant relationship between the current status of physical therapy rehabilitation of patients and the problems they encountered in availing the physical therapy rehabilitation services in Binan City. This null hypothesis was not rejected, indicated by the non-significant ( $p > .05$ ) value of Pearson's  $r = .051$  ( $p = .254$ ). This finding was not consistent with the Donabedian model (Ayanian et al., 2016). or the Health Belief Model which assume that the perceived barriers to healthcare are related to the perceived benefits of healthcare facilities (Glanz et al., 2015).

### **Proposed Community-Based Physical Therapy Rehabilitation Center in Biñan City, Laguna, Philippines**

**Table 4. Four Factors that Identify the Needs of the Community**

Item	Needs of the Community	Factor
3.	There needs to be an available doctor in the RHU's to attend to the needs of physical therapy patients.	Physical resources and accessibility
5.	A family member has already needed to received physical therapy rehabilitation in Biñan City.	Physical resources and accessibility
6.	Physical therapy rehabilitation for patients with disabilities need to be available in Biñan City.	Physical resources and accessibility

7.	Physical therapy rehabilitation for patients with disabilities in the community need to be provided in Biñan City.	Physical resources and accessibility
9.	There is available physical therapy rehabilitation center in Biñan City.	Physical resources and accessibility
12.	There needs to be an established community center dealing with the concerns of physical therapy patients in Biñan City.	Physical resources and accessibility
13.	There is a need for an established physical therapy rehabilitation programs in the community.	Physical resources and accessibility
15.	The Biñan City government has programs to improve the rates of recovery of disabled people in the community through physical therapy rehabilitation.	Physical resources and accessibility
18.	The City of Biñan need to provide medical and restorative services for people with disabilities in the community.	Physical resources and accessibility
2.	Physical Therapists in Biñan City need to be visible in the community.	Human resources
11.	The city has its own physical therapy rehabilitation program leader.	Human resources
19.	The local government officials need to improve the quality of life of people with disabilities in the community by providing physical therapy rehabilitation services.	Human resources
10.	The city government needs to contribute toward the physical therapy rehabilitation for patients with disabilities in the community in Biñan City.	Financial resources
14.	The Barangay needs to contribute toward the physical therapy rehabilitation of patients in Biñan City.	Financial resources
17.	The officials of the City of Biñan need to allocate a budget intended for the physical therapy rehabilitation programs and services for the community residents of Biñan City.	Financial resources
1.	The role of physical therapists in dealing with different musculoskeletal, neurologic, and pediatric conditions need to be known by community residents in Biñan City.	Information campaign
4.	The barangay health workers need to provide information on the physical therapy rehabilitation programs of Biñan City.	Information campaign
8.	The physical therapy services need to be known by the community residents in Biñan City.	Information campaign
16.	The Biñan City government needs programs to decrease the rates of mortality of disabled people in the community through physical therapy rehabilitation.	Information campaign



20.	The government of Biñan City need to provide health promotion services and activities for people with disabilities in the community.	Information campaign
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Table 4 presents a clustering of the indicators into four factors based on the questionnaire responses in Table 1. In the context of physical therapy rehabilitation, the four factors that identify the needs of the community, are expressed in terms of the need for more physical resources and accessibility (questions 3,5,6,7,9,12,13,15,16,18); the need to have more human resources (questions 2,11,19); the need for more financial resources (questions 10, 14, 17, 18) and the need for an information campaign (questions 1, 4, 8, and 20).

**Table 5. Four Factors that Identify the Needs to Experience No Problems**

Item	Needs	Factor
2.	The citizens of Biñan City need to seek the physical therapy programs and services.	Physical resources and accessibility
5.	There is no need to encounter problems in availing physical therapy rehabilitation services in Biñan City.	Physical resources and accessibility
6.	There is a need for an available community-based rehabilitation center in Biñan City.	Physical resources and accessibility
7.	The physical therapy services of Biñan City need always to be available as per scheduled time.	Physical resources and accessibility
8.	Community residents of Biñan City need to have easy access to the physical therapy rehabilitation center.	Physical resources and accessibility
9.	Physical Therapy Center needs to be reached easily by riding a jeepney.	Physical resources and accessibility
10.	The physical therapy center needs to have enough space to accommodate the physical therapy needs of patients in the 24 barangays in Biñan City.	Physical resources and accessibility
11.	There needs to be an established community center dealing with the different problems encountered by community residents having disability.	Physical resources and accessibility
16.	The physical therapy center needs enough space to accommodate the physical therapy needs of patients in the 24 barangays in Biñan City.	Physical resources and accessibility
3.	There need to be enough specialist healthcare personnel in the rural health units to provide healthcare services to patients in Biñan City.	Human resources
4.	RHU's doctors need always to be available to provide free consultations to underprivileged residents that needed medical attention.	Human resources
14.	RHU's doctors need always to be available to provide free consultations to underprivileged residents that needed medical attention.	Human resources
12.	The physical therapy rehabilitation services of Biñan City need to be free of charge.	Financial resources

19.	The barangay officials need to assistance to the underprivileged community residents for the physical therapy rehabilitation in Biñan City	Financial resources
20.	The local government units need to provide assistance to the underprivileged community residents for the physical therapy rehabilitation in Biñan City.	Financial resources
1.	There needs to be positive attitude in availing Physical Therapy rehabilitation services by the citizens of Biñan.	Information campaign
13.	The Biñan City government needs to have programs to make people aware of the physical therapy services provided by the center.	Information campaign
15.	The community residents need to have full awareness on the role of physical therapist in treating medical conditions in Biñan City.	Information campaign
18.	Biñan City community residents need to be aware of the medical conditions that can be treated by a physical therapist.	Information campaign

Table 5 presents a clustering of the indicators into four factors based on the questionnaire responses in Table 2. The four factors that identify the needs of the community not to have problems availing physical therapy services with respect to physical resources and accessibility (2,5,6,7,8,9,10,11,16,17); human resources (3,4,14); financial resources (12, 19, 20) and an information campaign (1, 13, 15, and 18). Based on the indicators with the highest ranks (i.e., the top five ranked indicators in Table 2).

**Table 6. Action Plan**

Objectives	The objectives of the community-based rehabilitation center in Biñan City, Laguna is to serve the needs of the local community for physical therapy, especially the impoverished community residents.
Activities and Strategies	To develop and strengthen the community-based rehabilitation program in Biñan City, Laguna; to promote CBR as an effective approach for community-based development involving persons with disability in the Philippines; to meet the basic needs and enhance the quality of life and promote the empowerment of persons with disability, and their families.
Involved persons	The organizational chart in Figure 2 outlines the involved persons and their duties and responsibilities are described below

Budget and resources	<p>There are many current challenges to the implementation of community based physical therapy in the Philippines, particularly with regard to the limited availability of financial resources (Trinidad et al., 2020). Local government unit officials will be encouraged to identify the sources of funds in order help develop and manage the pilot CBR physical therapy center in Biñan City. Coordination to Philhealth for the inclusion of physical therapy services is one of the conditions to be covered in the benefits of the members. A review of the literature and online sources indicated that no financial models have been published to define the costs of physical therapy treatment provided within community-based rehabilitation services in the Philippines. Community based physical therapists are not trained to calculate the costs of doing their job, much less formulating a budget. Finding the right level of detail to predict the cost of operating a community based physical therapy center is very difficult to achieve. In the absence of empirical data, it is not justified to make inaccurate speculations. Johnson et al. (2015) suggested that the components of the budget of a physical rehabilitation center should include: personnel expenses (e.g., reimbursement of staff); physical therapy tools (e.g., treatment tables and exercise equipment) for patients with a variety of different needs; office equipment and supplies (e.g., computer, internet); cleaning equipment and supplies, and other operating expenses (e.g., buildings, repairs, maintenance, and utilities). Insufficient data are currently available to define the exact funding and budget for the proposed community-based physical therapy rehabilitation center in Biñan city, Laguna. The exact details need to be discussed in the future with officials in the LGU's of Biñan City and the Provincial Government of Laguna before a definite financial model and budget can be proposed.</p>
Community awareness	<p>It is essential raise awareness in the community about the capacity of the pilot CBR program. Communication of information is required to ensure the participation of patients, people with disabilities, and the community. The center will distribute information including leaflets and posters aimed at persons with disabilities and their families about possible CBR activities and to ensure that they are kept well informed. The PDAO Officer should be responsible to ensure that the programs and services implemented by the community-based physical therapy rehabilitation center can be accessed and enjoyed by the community residents who are needing physical therapy services. The PDAO Officer should be encouraged to take a more active role in facilitating the participation of PWD's and provide them necessary support to access the services at the CBR center.</p>
Expected outcomes	<p>Through the financial contributions and efforts of all stakeholders, the center will help to serve the community and its patients with the highest quality of care. The team of staff who operate the center will make a difference to improve the quality of lives of the patients. Ultimately the involvement of all participants at the CBR center will include a shared vision, perceived solidarity, and an acknowledgement of the experience of being valued and heard.</p>

Table 6 outlines an action plan with respect to objectives, activities and strategies, involved persons, budget and resources, space, community awareness, and expected outcomes. The four factors based on analysis of the questionnaire responses that identify the needs of the community with respect to physical therapy rehabilitation, without experiencing problems, include more physical resources and accessibility; more human resources; more financial resources; and an information campaign to improve community awareness. These four factors, when considered collectively, provide a justification for implementing the proposed pilot community based physical therapy rehabilitation center for the benefit of the citizens of Biñan City, Laguna.

## SUMMARY OF FINDINGS

The perceived current status of physical therapy rehabilitation for the citizens of Biñan City is not ideal. This conclusion is consistent with the previous studies in demonstrating an apparent lack of compliance with official guidelines to support CBR in the Philippines. Based on the findings pertaining to the current status of community-based physical therapy rehabilitation of patients in Binan City, Laguna, there is really a need to have a community based physical therapy rehabilitation. The findings of this study as to the problems encountered by the respondents in availing the physical therapy rehabilitation services is consistent with the previous studies concerning the barriers to availing physical therapy rehabilitation services in the Philippines. These barriers include the lack of trained personnel and equipment, the lack of referral services, the low priority given to CBR by LGU's, the difficulties of gaining cooperation from PWD's, misunderstandings about the roles of physical therapists, and the serious deficiencies in the performance of existing rehabilitation services for PWD's. The findings reflected the current challenges to the implementation of CBR in the Philippines in the context of physical therapy, particularly with regard to the limited availability of resources, finances, and participation.

The current status of physical therapy rehabilitation in Biñan City, Laguna, did not appear to be dependent on the problems encountered by the respondents in availing physical therapy rehabilitation. This lack of correlation may have been spurious, due to several threats to internal validity, including response bias, the violation of the assumptions of parametric statistics, the ecological fallacy, and the obsolescence of the dichotomous decision rule to reject a null hypothesis based on whether a test statistic is significant or not significant at an arbitrary level (e.g.,  $p < .05$ ).

## CONCLUSION

Based on the salient findings of the study, the following conclusions were drawn: the negative attitudes toward the current status of physical therapy rehabilitation in Binan were consistent with the findings of other researchers regarding the many deficiencies of CBR programs in the Philippines, many barriers perceived by the respondents in availing physical therapy rehabilitation services in Binan were consistent with the findings of other researcher regarding the deficiencies of CBR in the Philippines, and the barriers perceived by the respondents in availing physical therapy rehabilitation services in Binan did not appear to be dependent on the current status of physical therapy rehabilitation in the City of Binan, violating the theoretical framework; however, the correlation coefficient may have been spurious. Moreover, the proposed pilot community-based physical therapy rehabilitation should be developed, constructed, and implemented to support people living in Biñan City, Laguna with disabilities in attaining their highest possible level of health. An action plan is proposed, covering the objectives, activities

and strategies, involved persons, budget and resources, space, community awareness, and expected outcomes of the proposed CBR center.

## **FUTURE DIRECTIONS**

The following are the recommendations which are offered for immediate action: Compliance of the LGU to official guidelines to support the development of CBR in the Philippines as stated likewise in Philippine Executive Order Republic Act 10070. LGU officials should be encouraged to identify the sources of funds in order to develop, implement, and help manage the proposed pilot community-based physical therapy rehabilitation center in Biñan City, Laguna and likewise give priority to the development of improved policies, programs, and services for PWD's. Physical therapy coordinators are needed to revisit and revise the educational training materials that will fit with the services needed by the community residents as part of the Physical Therapy clinical internship program. The future directions of the community-based physical therapy rehabilitation center in Biñan must take into account a wide range of local physical, socioeconomic, cultural, and political factors in order to alleviate the barriers to availing physical therapy rehabilitation services in Biñan City, Laguna. The planning and design analysis should focus on policies and practices to ensure that there are enough specialist healthcare personnel to work at the CBR center; that the physical therapy services should always available; that the center is furnished with the most needed facilities and equipment for physical therapy, and that PWD's and their families gain easier access to the center. The guidelines of the World Health Organization should be followed to visualize the development of the CBR center in the form of a management cycle.

Person with Disability Affairs Office (PDAO) in Biñan City should be encouraged to take a more active role in creating more diverse programs utilizing local available resources to implement improved quality of care for PWD's and facilitates their participation and provide them with the necessary support to have them access to the different services implemented by law. The roles of physical therapists in the community-based rehabilitation center in Biñan City should not only include treatment and management of PWD's. Their roles should also include education, administration, and leadership. Future studies should involve collecting research-based evidence to evaluate the development of quality physical therapy practices at the CBR center using a qualitative rather than a quantitative methodology. The qualitative project should ideally involve the thematic analysis of interview transcripts based on the physical therapists' detailed answers to open-ended questions.

The proposed community-based physical therapy rehabilitation center must take into account a wide range of local physical, socioeconomic, cultural, and political factors in order to alleviate the barriers to availing physical therapy rehabilitation services in Biñan City, Laguna. The development of the rehabilitation center should include sharing findings and taking action for the sake of the local community. Ultimately the involvement of all participants at the CBR center should ideally include a shared vision, perceived solidarity, and an acknowledgement of the experience of being valued and heard. Coordination to Philhealth for the inclusion of physical therapy services in the Philhealth Package, as one of the conditions to be covered as member benefits, so that the center could have pay returns, thereby making the facility sustainable. Ultimately, the pilot community-based physical therapy rehabilitation center will be proposed to the Offices of Hon. Marlyn Alonte-Naguiat, Congresswoman, Lone District of Biñan City; local government officials of Biñan City, Laguna; and to the Provincial Government of Laguna for possible funding.

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