

EFFECTIVENESS OF AVAILABLE REHABILITATIVE SERVICES FOR PHYSICAL HANDICAPPED PEOPLE AT A LOCALITY IN PESHAWAR, PAKISTAN

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ABSTRACT

Objective: Rehabilitation helps to restore normal health, functioning, and well-being but doesn't reverse the damage caused by trauma or disease. Rehabilitation is more helpful and shows better results if started early in disability. This study aimed to check the effectiveness of available rehabilitation services provided for physically handicapped people at Umeedabad Peshawar.

Materials and Methods: A descriptive cross-sectional study was conducted from March 21 to July 21. A convenient non-probability sample of 64 patients was taken from both inpatients and outpatients of a rehabilitative center at Umeedabad Peshawar, a locality near Peshawar, Pakistan. Data were collected by questionnaire and analyzed by using SPSS version 23.

Results: A total of 64 patients participated in the study, of which 85.9 % were males and 14.1% were females. 62.5% of the patients were experiencing improvement in their health after availing of rehabilitative services in the center, and 37.5% said that their health has improved to some extent. A total of 62.5% of patients lived independently after joining the center, another 34.4% lived independently to some extent, and 3.1% still needed the help of others to perform their daily activities. Most of the patients responded positively, with 71.9% considering the quality of services as excellent and 28.1% considering it as good. 79.9% of the patients responded that they attend the follow-up sessions regularly, 17.2% of the patients sometimes miss the session and 3.1% of patients did not answer. Most of the patients had a positive inclination towards the use of therapy, 73.4% of patients considered that therapy was best while 26.6% considered assistive technology as another option.

Conclusion: It was concluded that the services provided in the center are effective and patients were satisfied with the services and showed visible improvement in their health and livelihood.

Keywords: Effectiveness, Rehabilitative services, physically handicapped,

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INTRODUCTION

Rehabilitation is defined as a set of measures that help individuals who are physically handicapped or disabled to achieve and maintain proper functioning in interaction with their environment. ¹ While according to the International classification of impairments, disabilities, and handicaps define handicapped as an impairment or disability that limits or prevents the fulfillment of one or several roles regarded as normal, depending on age, sex,

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and social and cultural factors.² Rehabilitation is the care needed when a person is experiencing or is likely to experience limitations in everyday functioning due to aging or a health condition, including chronic diseases or disorders, injuries, or trauma. ³ Rehabilitation actually aids to restore the individual the optimal health, functioning, and well-being but doesn't undo or reverse the damage caused by trauma or disease. ⁴ Rehabilitation is more effective and has better outcomes if it is started early in disability. ^{5,6} The outcome of rehabilitative services is more helpful and improves the functioning of handicapped individuals. ⁷ The outcome can also be measured by a change in usage of resources e.g. decrease in time duration needed per week for the support. ⁸ The UN General Assembly has created a standard rule on equalization of opportunity for persons with disability. These rules are Rule 1 (awareness raising),

Rule 2 (medical care), Rule 3 (rehabilitation), and Rule 4 (support services a precondition for equal participation).⁹ For a better outcome, we need an integrated approach. An integrated approach means a team of physicians, specially trained therapists, and nurse as well as psychologists, nutritionists, psychiatrists, physical therapists, occupational therapists, and speech therapists. The integrated team starts rehabilitation by discussing the goal with the patient and their family. The goal is helping to improve the patient's physical and communication abilities while developing skills for any permanent disabilities.¹⁰

MATERIALS AND METHODS

This was a descriptive cross-sectional study conducted during the period of March 21 to July 21, 2021. A convenient non-probability sample of 64 patients with a physical disability was taken using the WHO formula from both inpatient and outpatient of the rehabilitative center at Umeedabad Peshawar. After taking the informed consent data was collected by using a questionnaire, formulated by the researchers. All the questions in the questionnaire were asked and fill in accordingly after obtaining their consent. Data was analyzed by the SPSS-23 software and presented in form of table bars and pie charts.

RESULT

A total of 64 patients participated in this survey of which 85.9% are male and 14.1% are female. The age distribution is given in Table-1. Among 64 participants, on average 48 (71.9%) of participants told that the quality of service in the center was excellent while 18 (28.1%) described the quality of services as good (figure 1). Regarding the level of improvement in the participant's health after joining the rehabilitative center, 40 (62.5%) of participants showed improvement in their health while 24 (37.5%) showed improvement in their health to a certain extent (Figure 2).

Among the 64 participants on average, 40 (62.5%) participants lived independently after joining the center, and 22(34.4%) participants lived independently to a certain extent. After joining the center 2 (3.1%) participants remained dependent on others to do their daily activities (Figure 3). While 51 (79.9%) regularly attended follow-up sessions during therapy and 11 (17.2%) sometime attended the follow up sessions and 2 (3.1%) did not do follow up sessions (Figure 4). Most of the patient had positive inclination toward the use of therapy. 73.4% of patients con-

sidered that therapy was best in the center while 26.6% considered assistive technology is an alternative option (Figure-5).

Table 1: Age and Gender distribution of participants

		Gender of participant		Total
		Male	Female	
Age of participant	1-18	10	1	11
	19-40	31	5	36
	41-60	13	3	16
	60 above	1	0	1
Total		55	9	64

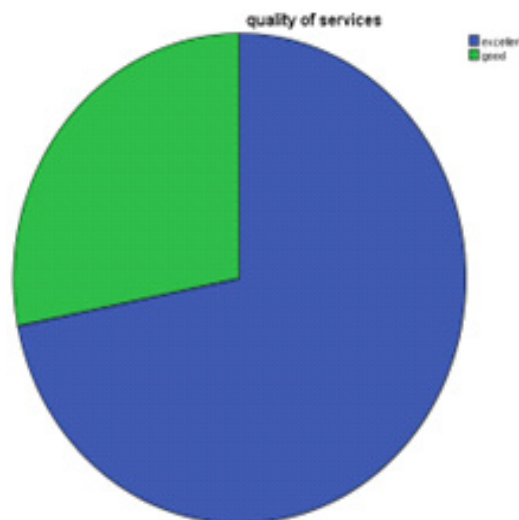


Fig 1: Quality of services

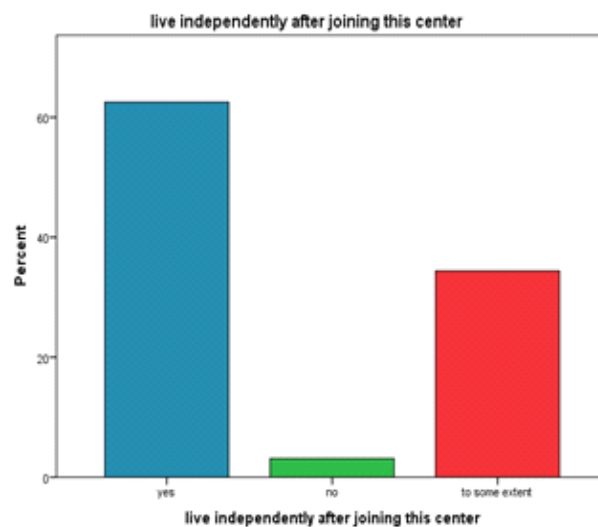


Fig 2: Percent participants living independently after joining the center

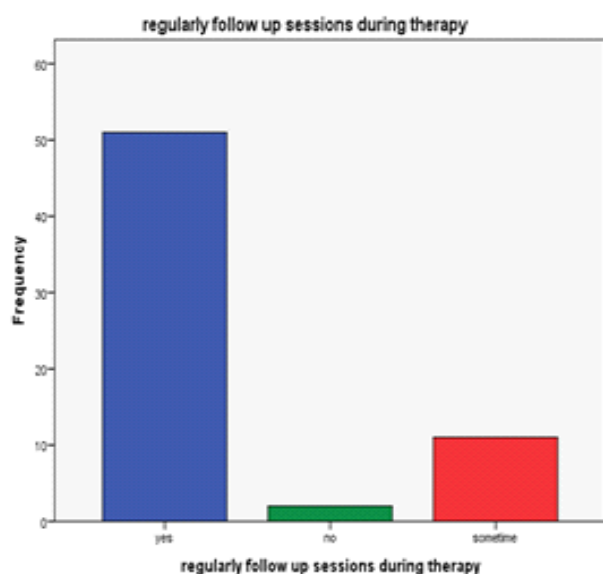


Fig 3: Regularly follow-up sessions

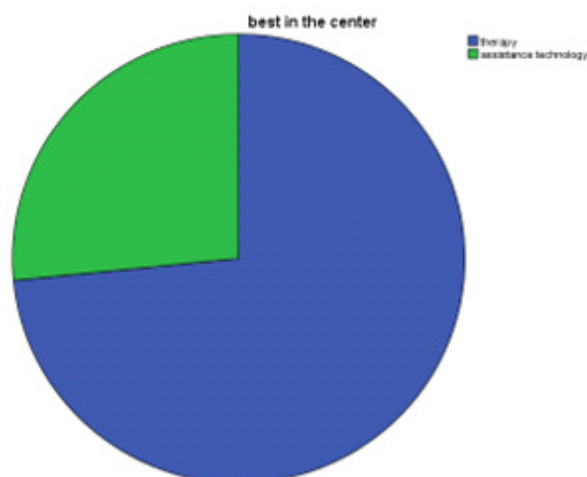


Fig 4: Best options in the rehabilitation center based on the choice of the participants

DISCUSSION

Rehabilitation defines a set of measures that help individuals who are physically handicapped or disabled to achieve and maintain proper functioning in interaction with their environment. Rehabilitation helps to restore optimal health, functioning, and wellbeing but doesn't reverse the damage caused by the disease. Rehabilitative services are mainly subdivided into rehabilitative medicine, therapy, and assistive technology. Therapy includes training, exercises and compensatory strategies, education, support and counseling, modification to the environment, and provision of resources. Assistive technology contains powerful tools that are used to increase independence and improve participation. According to a census, Paki-

stan is having a 3.2 million people with any disability which make up 1.5 percent of the total population.¹¹ In Pakistan availability of rehabilitative medicine is a major concern. There is a deficiency in rehabilitation centers and the required staff.

The aim of our research was to determine the effectiveness of available rehabilitation services at a Rehabilitation center in Umeedabad Peshawar. A total of 64 patients were interviewed. Most of the patients responded positively, with 71.9 percent considering the quality of services as excellent and 28.1 percent considering it as good. There were no patients who had a negative response. When previous studies are compared with this, these are great numbers. A study was conducted to know about the quality of rehabilitative services in Karnataka state, India.

It was shown that around 50 percent of the disabled received some kind of medical or surgical services but other rehabilitative services were poor.¹² Most of the patients were dissatisfied with the quality of rehabilitative services. Most of the patients in our study had a positive inclination toward the use of therapy. Two-thirds of the patients considered that therapy was best in the center while 1/4th considered assistive technology as best. Many researchers conducted around the globe have shown the efficacy of therapy in improving the health of the handicapped. A study was carried out in Quebec, Canada to disclose the impact of therapy on recovery during rehabilitation in patients with Traumatic spinal cord injury.¹³

It was shown that increasing therapy intensity by 50 and 100 percent resulted in average motor Functional Independence Measure efficiency gain ranging between 0.04 – 0.07 and 0.1 – 0.17, respectively across injury groups. The research showed that increasing the intensity of therapy had a positive impact on the recovery of the patients during rehabilitation. During our research, we found out that 62.5 percent of the patients were experiencing improvement in health after availing of the rehabilitative services at the center. 37.5 percent replied that their health had improved to some extent. These are very good numbers that show the effectiveness of this rehabilitation center. A similar study was carried out in the Paraplegic Center Hayatabad to assess the quality of life in spinal cord injury patients undergoing rehabilitation.¹⁴

Half of the patients were satisfied with their health status. The majority of others either reported low capacity to work and inability to get around. Many others were

taking medicine for pain management. Some reported low energy levels and dissatisfaction with their sleep. In our research, 62.5 percent of the patients replied that they could now live independently after joining the center. Only 3.1 percent of the patients had a negative answer to living independently. This shows the effect of rehabilitative services on the functioning of individuals in society. A study was carried out in a paraplegic center in Peshawar to study the effect of physical rehabilitation in persons with post-traumatic spinal cord injuries.¹⁵

The result of the study indicated that the outcome in terms of functional recovery was significantly improved. The parameters of functional recovery included mobility in bed, transfers from bed to wheelchair, indoor and outdoor motilities, and transfer from wheelchair were significantly improved. Feeding, bathing, dressing, and grooming were also significantly improved. In our study, 79.7 percent of the patients responded that they attended regular follow-up sessions. These are satisfactory figures indicating that most of the participants are satisfied with the services provided to them and they are effective. Other results are not as promising.

Another research was conducted to study the awareness and utilization of rehabilitation services among physically disabled people of the rural population of a district of Uttar Pradesh, India.¹⁶ Among the study participants, 65.8% of participants with locomotor disabilities discontinued the treatment. Unawareness was the major reason for discontinuing rehabilitation services. Financial problems, negligence, and noncooperation from family members constituted the other reasons.

The study results could have been more authentic but due to time constraints, a smaller number of patients were included. Limited availability of resources and time factors were other factors that limited the validity of the results.

CONCLUSION

It was concluded that the services provided in the center are effective and people were satisfied with services and showed improvement in their health and disability. Further research should be conducted to know about the mental health of the patients in the same institution to further explore the patients. As the said institution lies in the periphery of Peshawar therefore research should be conducted to find the degree of accessibility to the patients.

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AUTHOR'S CONTRIBUTION

Following authors have made substantial contributions to the manuscript as under

Nasir F: Concept, planning, study design, study conduction, critical review, analysis, manuscript writing.

Safi MA: Critical review, discussion, interpretation, manuscript writing, study conduction.

Ullah E: Analysis, critical review, study conduction.

Khan AA: Critical Review, study conduction, interpretation.

Rehan M: Study design, study conduction.

Qazi SA: Study design, study conduction.

Wadood A: Critical review, discussion.

Ahmad S: Planning, Study conduction, analysis

Alix N: Study design, study conduction.

Ayub R: Study conduction, critical review.

Authors agree to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved.



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