

Assessing Quality of Life and Mental Wellbeing of Patients Post-Physical Rehabilitation in UAE.

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Abstract:

Quality of life and mental wellbeing are crucial aspects of overall health, often overlooked in the context of physical rehabilitation. The aim of this study is to assess the impact of physical rehabilitation on the quality of life and mental well-being of patients who have completed rehabilitation programs. Descriptive cross-sectional survey was conducted on 60 patients who have successfully completed physical rehabilitation program to assess the quality of life and mental wellbeing. Tools used included the SF-36 questionnaire and the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS). The findings of the study suggest a significant number of participants showed improvements in physical and emotional wellbeing post-rehabilitation. There was a notable correlation between quality of life and mental wellbeing among the participants. Various demographic factors like age, gender, and educational level did not show a significant association with QoL and mental wellbeing outcomes.

The study highlights the importance of addressing both physical and psychological aspects of rehabilitation to improve the overall quality of life for patients. A holistic approach to patient care that includes mental health support can lead to better long-term outcomes.

Date of Submission: 01-07-2024

Date of Acceptance: 12-07-2024

I. Introduction:

Quality of life and mental wellbeing are essential facets of overall health, often overlooked in the context of physical rehabilitation. For patients who have undergone the arduous journey of recovering from physical injuries, surgeries, or chronic conditions, the impact on their quality of life and mental wellbeing is profound. The ability to resume daily activities, engage in work, maintain social relationships, and experience emotional balance plays a pivotal role in their recovery process.

Studies have shown that a substantial number of patients who have completed physical rehabilitation continue to grapple with emotional and psychological issues. According to the National Institute of Mental Health, individuals who experience physical disabilities are at a significantly higher risk of developing mental health disorders such as depression and anxiety. In addition, reduced mobility, pain, and the adjustment to a changed lifestyle can further exacerbate these issues.

Moreover, the quality of life can be compromised by persistent physical limitations and challenges in daily living. A study published in the Journal of Physical Medicine and Rehabilitation found that a large percentage of post-rehabilitation patients report a diminished sense of self-esteem, social isolation, and difficulties in finding meaningful employment or participating in recreational activities. These factors, combined with the psychological toll of their physical conditions, underscore the need for a comprehensive approach to post-rehabilitation care.

Assessing the quality of life and mental wellbeing of patients' post-physical rehabilitation goes beyond just evaluating physical improvements. It delves into the psychological and emotional aspects of a patient's recovery journey. By considering factors such as social and emotional support, coping mechanisms, and overall mental health, healthcare professionals can gain a more comprehensive understanding of the patient's overall wellbeing.

This assessment also plays a vital role in identifying any lingering psychological effects of impairments or disabilities post-rehabilitation. It helps in recognizing the potential long-term impact on a patient's quality of life, allowing for the development of targeted interventions to address these specific challenges. In the study by Fleming et al in 2013, a comprehensive framework (the International Classification of Functioning [ICF]) is used to assess QOL in two samples of adults with disabilities receiving educational and vocational services. The relationship between difficulty with work and daily living activities with QOL was compared with a more complex assessment based on the ICF framework, including other life areas such as social relationships and inclusion and

environmental factors. Results indicated that the additional information provided by the ICF model substantially increases the prediction of QOL relative to the more traditional VR measures. Within-groups analysis provided more information specific to each sample.

Moreover, understanding the patient's mental wellbeing post-rehabilitation is fundamental in creating a holistic and patient-centered approach to healthcare. By acknowledging the psychological and emotional aspects of recovery, healthcare professionals can ensure that patients receive the necessary support to enhance their overall quality of life. This can ultimately lead to more personalized and effective treatment strategies, contributing to improved long-term outcomes for patients' post-physical rehabilitation. Assessing the quality of life and mental wellbeing of patients' post-physical rehabilitation is crucial in understanding the overall impact of rehabilitation on patients' well-being. It allows healthcare professionals to identify areas of improvement and tailor interventions to address the specific needs of each patient.

This study aims to shed light on the importance of addressing not only the physical aspects of recovery but also the emotional and psychological dimensions to ensure a more holistic approach to rehabilitation and a better quality of life for these individuals.

Research Problem:

A Cross-sectional, Descriptive study on Quality of Life and Mental Wellbeing of Patients Post-Physical Rehabilitation in Specialized Rehabilitation Hospital, UAE.

Objectives of Study:

1. Assess the overall quality of life (QoL) of patients who have completed physical rehabilitation programs.
2. Evaluate the mental Wellbeing in patients following physical rehabilitation.
3. Associate the QoL and mental health outcomes with selected demographic data.
4. Correlate Quality of life and Mental Wellbeing of the selected patients

II. Materials and Methods:

Quantitative, Cross-Sectional, Descriptive study design was adopted in this study. 60 patients who have successfully completed their Physical Rehabilitation Program in the selected hospital and who satisfy the inclusion criteria. The SF-36 Questionnaire was used to evaluate the perceived quality of life in the areas of physical and mental health. The SF-36 includes eight subscales: physical functioning, role limitations due to physical health problems, role limitations due to emotional problems, social functioning, general mental health (psychological distress and psychological well-being), bodily pain, vitality (energy/fatigue), and general health perception. The Short Warwick-Edinburgh Mental Wellbeing Scales (SWEMWBS) was used to measure the mental wellbeing of the selected samples. The study was proceeded after obtaining approval from Institutional Research Board and Medical Director of the specialized rehabilitation centre. Informed consent was taken from all the participants. Confidentiality and Anonymity of the respondents was always maintained.

Data Analysis:

Baseline demographic data of all sample participants was collected and tabulated. The majority of the participants were aged between 41-50 years (46.7%), indicating a higher utilization of rehabilitation services by middle-aged individuals. Educational levels varied, with the majority holding a Master's degree (30.0%), followed by Bachelor's degree holders (26.7%). Employment status showed a significant portion of the participants were employed (83.3%), and the gender distribution was predominantly male (86.7%). Most participants attended rehabilitation for more than 10 months (78.3%).

Table 1: Description of General Health of the Participants (n=60)

General Health	Number (n)	Percentage (%)
In general, would you say your health is		
Poor	3	5.0
Fair	16	26.7
Good	19	31.7
Very Good	12	20.0
Excellent	10	16.7
Compared to one year ago, how would you rate your health in general now?		
Much Worse than one year ago	3	5.0
Somewhat worse now than one year ago	13	21.7
About the same	16	26.7
Somewhat better now than one year ago	25	41.7
Much better now than one year ago	3	5.0

Findings of the study suggest that the participants had limitations to activities, such as running, lifting heavy objects, participating in strenuous sports - 53.35 % had little limitations, majority (36.7%) did not have limitation at all in moderate activities such as moving a table, pushing a vacuum cleaner, bowling or playing golf. 45% of samples had little limitations in lifting or carrying groceries whereas 61.7% had lot of limitations in climbing several flights of stairs. 51.7% had little limitations in climbing one flight of stairs where 45% had little limitations in bending, kneeling or stooping. Majority (51.7%) had little limitations in walking more than a mile, 45% had lot of limitations in walking several blocks, 51.7% had no limitations at all in walking one block. Majority (78%) had no limitations at all in bathing or dressing yourself.

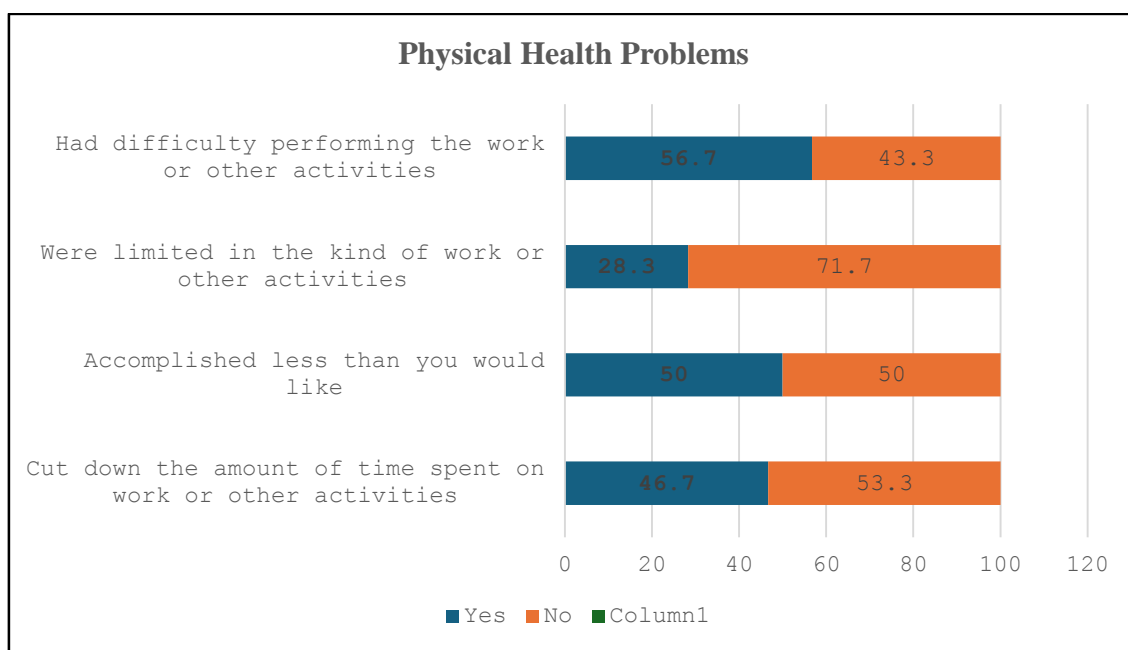


Figure 1: Bar diagram describing the Physical Health Problems among the Participants.

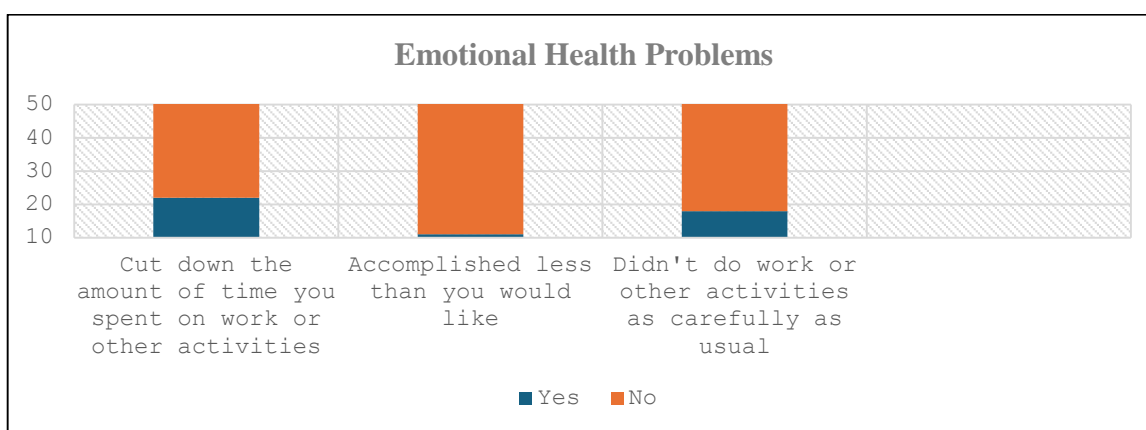


Figure 2: Bar Diagram representing Emotional Health Problems of Post-Rehabilitation Patients

The study findings also describe the Energy and Emotions of 60 participants, in which majority 26.7% had a good bit of the time for the question did you feel full of pep, 33.3% feel most of the time nervous and 30% feel that nothing can cheer them up, 36.7% felt calm and peaceful whereas the same proportion had lot of energy. Majority of the samples have felt downhearted and blue. 30% of participants felt worn out and 26.7% felt tired. One-fourth of the samples felt they are happy in their personality.

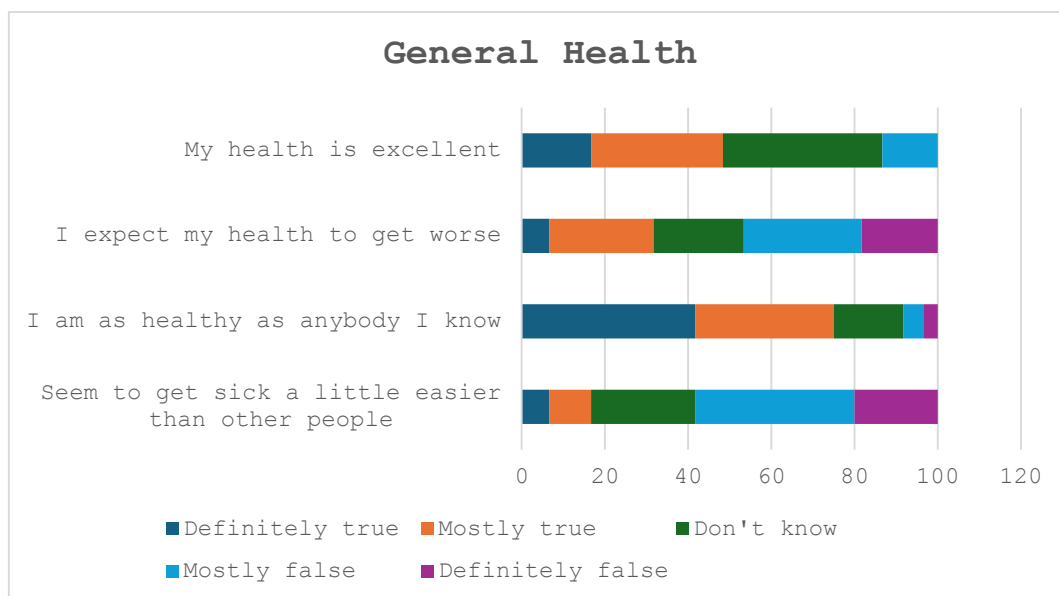


Figure 3: Bar Diagram representing General Health among Participants

Description of Short Warwick-Edinburgh Mental Wellbeing Scales (SWEMWBS) to measure the mental wellbeing of the post-rehabilitation patients.

Table 2: Assessment of Mental Well-Being among the Participants (n=60)

Mental Well Being	None of the Time	Rarely	Some of the time	Often	All of the time
I've been feeling optimistic about the future	4(6.7)	5(8.3)	17(28.3)	14(23.3)	20(33.3)
I've been feeling useful	1(1.7)	6(10.0)	13(21.7)	23(28.3)	17(28.3)
I've been feeling relaxed	2(3.3)	8(13.3)	14(23.3)	19(31.7)	17(28.3)
I've been dealing with problems well	0	5(8.3)	14(23.3)	19(31.7)	22(36.7)
I've been thinking clearly	1(1.7)	2(3.3)	9(15.0)	25(41.7)	23(38.3)
I've been feeling close to other people	5(8.3)	10(16.7)	16(26.7)	12(20.0)	17(28.3)
I've been able to make up my own mind about things	10(16.7)	8(13.3)	17(28.3)	13(21.7)	12(20.0)

The findings also suggested that there is no association among the demographic characteristics like age, gender, educational level, employment status and attendance in rehabilitation. In addition to this, Pearson's correlation between quality of life and mental wellbeing among the participants. It shows that there is a positive correlation between quality of life and mental wellbeing ($r=0.499, p=0.001$).

III. Discussion:

In the present study, in terms of self-rated health, most of the participants described their health as good 19 (31.7%), also a notable improvement was observed with 25(41.7%) in participants who reported their health as somewhat better than one year ago. The SF-36 scores after one year of physical rehabilitation showed significant changes in physical and emotional wellbeing of patients.

The study was conducted on 20 patients admitted for rehabilitation in Department of Neurological Rehabilitation. Most of the components of both physical and mental domains of QOL SF-36 questionnaire showed significant improvement. The physical functioning improved from 25 to 37.5 percentile and significant at 0.02 level and the social functioning improved from 43.75 to 50 percentile. The QOL scores after 6 weeks of discharge did not show significant change except for the emotional well-being.

The study conducted in Shanghai, China to evaluate the health-related quality of life on 1034 subjects using SF-36 questionnaire had similar findings. Internal reliability coefficients were greater than 0.7 in six of the eight SF-36 dimensions, except for social function and mental health. The primary influencing risk factors included diseases, age and frequency of activities.

The present study shows the participants limitations to activities, in the first item vigorous activities, such as running, lifting heavy objects, participating in strenuous sports 53.35 % had little limitations, majority (36.7%) did not have limitation at all in moderate activities such as moving a table, pushing a vacuum cleaner, bowling or playing golf. 45% of samples had little limitations in lifting or carrying groceries whereas 61.7% had lot of limitations in climbing several flights of stairs. 51.7% had little limitations in climbing one flight of stairs where

45% had little limitations in bending, kneeling or stooping. Majority (51.7%) had little limitations in walking more than a mile, 45% had lot of limitations in walking several blocks, 51.7% had no limitations at all in walking one block. Majority (78%) had no limitations at all in bathing or dressing yourself.

The results of the study conducted on 1256 adults with physical disabilities undergoing rehabilitation showed significant increase in total physical activity moderate-intensity to vigorous-intensity physical activity and work/commuting physical activity for all time points compared with baseline data.

In a study conducted in 53 stroke survivors, eight QOL domains of psychological health were scored by interview, and 2 of them (“desire to distend what they can do” or “desire to do rehabilitation”) were associated with the improvement of physical health during the posthospitalization period ($P < .05$ and $P = .08$, respectively).

IV. Conclusion:

It can be concluded that there is a significant relationship between quality of life and mental wellbeing, showing a cumulative effect in the post-physical rehabilitation phase. The SF-36 questionnaire results indicate substantial improvements in physical functioning, with most patients reporting better mobility and reduced pain levels. Specifically, post-rehabilitation therapy is associated with improved physical functioning, decreased pain and greater emotional stability.

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