

Original Research Article

Survey on the role of physiotherapy in alcohol addiction recovery programme: a practitioner's perspective

Prajakta Yashwant Patil*, Kiran Jeswani

PES Modern College of Physiotherapy, Pune, Maharashtra, India

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*Correspondence:

Dr. Prajakta Yashwant Patil,

E-mail: prajaktapatil2182001@gmail.com

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ABSTRACT

Background: Alcohol use disorder (AUD) is a chronic condition characterized by a compulsive pattern of alcohol consumption that adversely affects physical, psychological, and social well-being. Physiotherapy has increasingly been recognized as a supportive intervention that may facilitate physical rehabilitation and improve mental health during recovery. Although conventional treatment primarily involves medical, psychological, and behavioural therapies, the contribution of physiotherapy to alcohol addiction recovery remains underexplored.

Methods: A cross-sectional observational study was conducted among physiotherapists practising in and around Pune, Maharashtra, India. The study consisted of two phases: questionnaire development and questionnaire validation. A total of 273 physiotherapists participated. Content validity of the questionnaire was assessed using a five-point Likert scale, and the content validity index (CVI) was calculated.

Results: The questionnaire demonstrated satisfactory content validity, with an average scale-level content validity index (S-CVI/Ave) of 0.85 and a universal agreement index (S-CVI/UA) of 0.10. Most respondents (95.1%) agreed that physiotherapy plays a significant role in alcohol addiction recovery programmes by improving physical health, emotional well-being, treatment adherence, and overall recovery outcomes.

Conclusions: The findings suggest that physiotherapy is perceived as an important supportive component of alcohol addiction recovery programmes. Greater integration of physiotherapy into multidisciplinary addiction rehabilitation may enhance patient outcomes and quality of life.

Keywords: Alcohol addiction, Alcohol use disorder, Physiotherapy, Questionnaire validation, Recovery programme, Rehabilitation

INTRODUCTION

Alcohol Use Disorder (AUD), commonly referred to as alcoholism, is a chronic disorder characterized by an impaired ability to control alcohol consumption despite its harmful physical, psychological, and social consequences.¹ According to the World Health Organization (WHO), approximately 2.3 billion people consumed alcohol worldwide in 2016, and the harmful use of alcohol accounted for nearly 3 million deaths during the same year.² These statistics highlight the

substantial global public health burden associated with alcohol consumption.

Individuals with alcohol addiction frequently exhibit reduced levels of physical activity, poor cardiovascular fitness, and musculoskeletal degeneration.¹⁰ Chronic alcohol consumption has also been associated with reduced cerebral blood flow, brain atrophy, and neuronal cell loss, which may contribute to impaired cognitive function.¹⁰

A broader approach to the management of Alcohol Use Disorder has been advocated by behavioural health professionals, emphasizing overall health and wellness as essential components of the recovery process.¹ The attitude of physiotherapists towards addiction plays an important role in addressing both the physical impairments associated with alcohol dependence and the rehabilitation process.⁹ Physiotherapy rehabilitation has been recognized as a valuable lifestyle intervention that may facilitate both physical and psychological recovery in individuals with AUD.² Previous studies have demonstrated that regular physical exercise is associated with improvements in physical fitness, anxiety, depression, and overall well-being.⁵ Furthermore, exercise has been shown to enhance both physical and mental health outcomes among individuals recovering from alcohol addiction.^{3,9} Conventional treatment approaches for alcohol addiction primarily include medical, psychological, and behavioural therapies.^{3,7} However, the role of physiotherapy in alcohol addiction rehabilitation remains relatively underexplored, and its full therapeutic potential has not yet been adequately established.^{3,4,10,12} Higher relapse rates, particularly among individuals with coexisting physical and psychological comorbidities, indicate the need for adjunctive therapies and long-term lifestyle interventions to support sustained abstinence.^{4,6,8,9} Since recovery from alcohol addiction requires a multidisciplinary approach, the integration of physiotherapy into rehabilitation programmes may improve physical functioning, psychological well-being, treatment adherence, and overall quality of life.^{4,5} Nevertheless, only limited research has evaluated the role of physiotherapy in alcohol addiction recovery.

Therefore, the present study was undertaken to address this knowledge gap by developing and validating a questionnaire to evaluate physiotherapists' perspectives on the role of physiotherapy in alcohol addiction recovery programmes.

METHODS

Study design

A cross-sectional observational study was conducted to assess physiotherapists' perspectives on the role of physiotherapy in alcohol addiction recovery programmes. The study was carried out among practicing physiotherapists in and around Pune, Maharashtra, India. Ethical approval was obtained from the research and ethics committee of PES Modern College of Physiotherapy before commencement of the study.

Study population

The study population comprised registered physiotherapists practicing in hospitals, rehabilitation centres, private clinics, and other healthcare settings.

Both male and female physiotherapists were eligible to participate.

Study duration

The study was conducted over a period of 6 months from, April 2025 - October 2025.

Inclusion criteria

Registered physiotherapists practicing in and around Pune. Physiotherapists willing to participate in the study.

Exclusion criteria

Incomplete questionnaire responses. Physiotherapists who did not provide informed consent.

Sample size

The required sample size was calculated using the formula:

$$n = 2(Z_{\alpha} + Z_{\beta})^2 \times \sigma^2 / d^2$$

where Z_{α} represents the probability of a type I error, Z_{β} represents the probability of a Type II error, σ denotes the standard deviation, and d represents the clinically significant effect size. Based on this calculation, a total sample of 273 physiotherapists was included in the study.

Sampling technique

A purposive sampling technique was adopted to recruit eligible participants.

Study procedure

The study was conducted in two phases.

Phase I: questionnaire development

A structured questionnaire was developed after reviewing the available literature to ensure that all relevant aspects of physiotherapy in alcohol addiction recovery were adequately represented.

Phase II: questionnaire validation

The developed questionnaire was evaluated for content validity by ten experienced physiotherapists. Each item was rated using a five-point Likert scale ranging from strongly disagree to strongly agree. Based on the feedback received, necessary modifications were incorporated to improve the clarity and relevance of the questionnaire. The final questionnaire was subsequently converted into a Google form and distributed electronically for data collection.

Statistical analysis

The data was collected through Google forms. The data collected through the survey was analyzed using Google forms, which provided descriptive statistics in the form of frequencies and percentages. Graphical representations such as pie charts and bar graphs were automatically generated to illustrate the distribution of responses. The analysis focused on identifying physiotherapists' perspectives regarding the role of physiotherapy in alcohol addiction recovery programmes. The data was entered into Microsoft excel sheet, tabulated and subjected to statistical analysis. Statistical analysis was calculated by using IBM SPSS software and Gpower was used to calculate sample size.

RESULTS

A total of 273 physiotherapists participated in the study. The content validity of the questionnaire was assessed by 10 expert physiotherapists using a five-point Likert scale. The questionnaire demonstrated good content validity, with a scale-level content validity index based on the average method (S-CVI/Ave) of 0.85 and a universal agreement index (S-CVI/UA) of 0.10.

Table 1: Interpretation of validity.

Question I-CVI	Content validity index
Item 1	0.802
Item 2	0.903
Item 3	0.784
Item 4	0.905
Item 5	0.786
Item 6	0.807
Item 7	0.90
Item 8	0.90
Item 9	1.0018
Item 10	10-0.90

Table 2: Interpretation of question responses percentage wise.

Question No.	Response percentage	
	Yes	No
1	95.10	4.90
2	95.80	4.20
3	90.60	9.40
4	93.10	6.90
5	62.80	37.20
6	94.10	5.90
7	95.50	4.50
8	95.50	4.50
9	16.70	83.30
10	75.30	24.70

The questionnaire consisted of 10 items evaluating physiotherapists' perspectives on the role of

physiotherapy in alcohol addiction recovery programmes. Most respondents (95.1%) agreed that physiotherapy plays a crucial role in the recovery of individuals with alcohol addiction. Similarly, 95.8% believed that physiotherapy improves the overall quality of life of individuals recovering from alcohol addiction.

Questionnaire.
Demographic Information -
a. Age:
b. Gender:
c. Years of experience in physiotherapy:
d. Type of healthcare facility you work in (hospital, private clinic, rehabilitation centre etc.)
1) Do you consider that physiotherapy plays a crucial role in the rehabilitation of patient with alcohol addiction?
☐ Yes
☐ No
2) Do you think that physiotherapy can help improve overall quality of Life for individuals recovering from Alcohol addiction?
☐ Yes
☐ No
3) Do you find that physiotherapy aids in reducing the risk of relapse in alcohol addiction treatment?
☐ Yes
☐ No
4) In your opinion should physiotherapy be integrated as a standard component in addiction treatment programs for alcohol?
☐ Yes
☐ No
5) Do you think that the role of physiotherapy in alcohol addiction rehabilitation is adequately recognized and utilized within treatment programs?
☐ Yes
☐ No
6) Do you find that patient who receive physiotherapy rehabilitation have better engagement and adherence to their overall addiction treatment plan?
☐ Yes
☐ No
7) Do you think that incorporating physiotherapy into a comprehensive addiction program improves overall treatment efficacy?
☐ Yes
☐ No
8) In your experience, does physiotherapy help improve physical health and mental health outcomes in patients recovering from alcohol addiction?
☐ Yes
☐ No
9) Have you ever collaborated with other healthcare professionals in treating patients with alcohol addiction?
☐ Yes
☐ No
10) Have you ever encountered a case where physiotherapy has significantly contributed to the recovery of a patient from alcohol addiction?
☐ Yes
☐ No

Figure 1: Questionnaire.

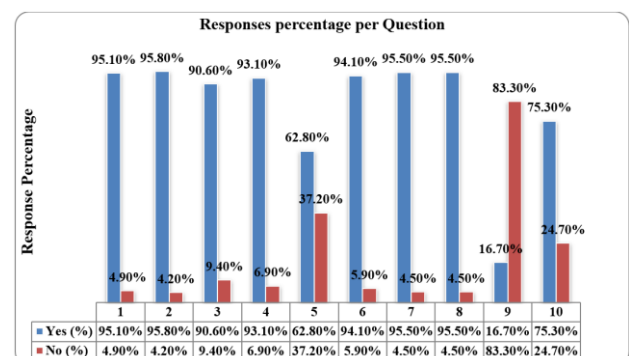


Figure 2: Graphical representation of responses percentages per question.

A large majority of respondents (90.6%) reported that physiotherapy helps reduce the risk of relapse, while 93.1% supported the integration of physiotherapy as a

standard component of alcohol addiction recovery programmes. However, 62.8% believed that the role of physiotherapy in alcohol addiction recovery is not adequately recognized or utilized in current clinical practice.

Most physiotherapists (94.1%) reported that patients receiving physiotherapy demonstrated better treatment engagement and adherence. Furthermore, 95.5% agreed that incorporating physiotherapy into comprehensive addiction recovery programmes improves treatment outcomes, and an equal proportion believed that physiotherapy contributes to improvements in both physical and mental health among individuals recovering from alcohol addiction.

Regarding interdisciplinary practice, 83.3% of respondents reported that they had not collaborated with other healthcare professionals in the management of patients with alcohol addiction. Additionally, 75.3% stated that they had not personally encountered a case in which physiotherapy had significantly contributed to recovery, highlighting the limited clinical exposure of many respondents despite their positive perceptions of physiotherapy's role.

DISCUSSION

The present study aimed to explore the role of physiotherapy in alcohol addiction recovery programmes from the perspective of practicing physiotherapists. The findings revealed that an overwhelming majority (95.1%) of respondents acknowledged physiotherapy as an important component of the rehabilitation of individuals recovering from alcohol addiction. This finding suggests that physiotherapy contributes not only to physical recovery but also to psychological and social well-being throughout the recovery process.

The findings are consistent with previous literature highlighting the beneficial effects of physical activity and exercise-based interventions in addiction recovery. Wang et al and Giesen et al reported that exercise-based interventions enhance treatment adherence, reduce cravings, and improve physical fitness and mood among individuals undergoing recovery. Similarly, Manthou et al and Montón-Martínez et al demonstrated that regular physical activity improves emotional regulation, self-efficacy, and quality of life, all of which are essential for maintaining long-term abstinence. Therefore, the findings of the present study reinforce previous evidence by demonstrating that practicing physiotherapists recognize and value the therapeutic role of physiotherapy within multidisciplinary addiction rehabilitation programmes.^{4,6,8,9,11-14} Physiotherapists working in multidisciplinary rehabilitation settings may have greater opportunities to incorporate therapeutic exercise, pain management strategies, breathing exercises, and relaxation techniques into patient care, which may explain their strong agreement regarding the role of

physiotherapy in alcohol addiction recovery. These findings are consistent with those of Lardier et al, who reported that collaboration between physiotherapists and mental health professionals improves patient engagement and overall treatment outcomes.^{4,5,17}

The present study also highlights that physiotherapy may help address several complications associated with alcohol dependence, including fatigue, muscle weakness, impaired posture, reduced physical fitness, and withdrawal-related stress. Through structured exercise programmes, breathing retraining, relaxation therapy, and postural correction, physiotherapy may facilitate physical rehabilitation while reducing anxiety and enhancing motivation, thereby contributing to relapse prevention. These findings support the multidimensional role of physiotherapy in promoting both physical recovery and psychological well-being among individuals recovering from alcohol dependence.^{10,16}

Despite the positive perceptions of physiotherapy, many respondents reported limited collaboration with multidisciplinary teams and limited direct clinical experience in managing individuals with alcohol addiction. This finding may indicate that physiotherapy remains underutilized within addiction rehabilitation services despite its perceived benefits. Strengthening collaboration among physiotherapists, physicians, psychiatrists, psychologists, and other rehabilitation professionals may facilitate the integration of physiotherapy into comprehensive alcohol addiction recovery programmes.

The present study has certain limitations. The study population was limited to practicing physiotherapists from Pune and nearby regions, which may restrict the generalizability of the findings. Furthermore, the cross-sectional study design does not permit the establishment of causal relationships between physiotherapy interventions and recovery outcomes. Future multicentre studies involving larger and more diverse populations are recommended. In addition, longitudinal and interventional studies should be conducted to evaluate the effectiveness of physiotherapy-based interventions in improving physical function, psychological well-being, treatment adherence, and relapse prevention among individuals with alcohol use disorder. Collaborative research involving physiotherapists, psychologists, psychiatrists, and rehabilitation specialists may further strengthen the evidence supporting the integration of physiotherapy into multidisciplinary addiction rehabilitation programmes.

CONCLUSION

The present study concludes that physiotherapy plays a significant supportive role in alcohol addiction recovery programmes. The majority of physiotherapists (95.1%) recognized the importance of physiotherapy in improving physical health, psychological well-being, treatment

engagement, and overall recovery outcomes. The findings support the integration of physiotherapy into multidisciplinary alcohol addiction rehabilitation programmes as a complementary approach to conventional treatment. Further multicentre and longitudinal studies are recommended to establish the long-term effectiveness of physiotherapy interventions in individuals with alcohol use disorder.

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