CORRELATION BETWEEN SELF-ESTEEM, LOCUS OF CONTROL, AND QUALITY OF LIFE IN INDIVIDUALS UNDERGOING DRUG ADDICTION REHABILITATION: A CROSS-SECTIONAL STUDY

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ABSTRACT

OBJECTIVES

This study aimed to assess the levels of self-esteem, locus of control, and quality of life in patients attending drug addiction rehabilitation centers. It also sought to explore the relationships between self-esteem, locus of control, and overall quality of life at different stages of treatment. Additionally, the study intended to determine whether self-esteem and locus of control can predict the quality of life in these patients.

METHODOLOGY

A cross-sectional descriptive correlational design with a sample size of 142 participants conducted at rehabilitation centers in Peshawar over six months. Participants were recruited through non-probability convenience sampling. Data was collected through structured interviews using validated questionnaires, including Rotter's Locus of Control Scale, Rosenberg's Self-Esteem Scale, and the Drug User Quality of Life Scale (DUQOL).

RESULTS

Among 141 male participants, 83% had moderate self-esteem and internal control. The mean DUQOL score was 66.48 (SD=7.649). Pearson's correlation showed positive associations between DUQOL and Drug-Related Locus of Control (DR-LOC) (r=0.059) and DR-LOC and self-esteem (r=0.077), while DUQOL and self-esteem were negatively correlated (r=-0.016). Significant associations were found between age and self-esteem (F=1.765), age and DR-LOC (F=0.567), and education level and self-esteem (F=1.168). Higher control was linked to better quality of life and self-esteem, with age and education significantly influencing self-esteem.

CONCLUSION

These findings underscore the importance of addressing psychosocial factors in addiction recovery, suggesting that enhancing self-esteem and fostering an internal locus of control (ILoC) may improve the quality of life (QoL) for individuals in rehabilitation.

KEYWORDS: *Self-esteem, Locus of Control, Quality of Control, Drug Addiction, Rehabilitation*

INTRODUCTION

The scourge of drug addiction knows no boundaries, affecting people from diverse backgrounds and socioeconomic strata.[1] According to the United Nations Office on Drugs and Crime's 2021 report, approximately 269 million individuals between the ages of 15 and 64 were identified as drug users People Who Use Drugs (PWUD) in 2018. This figure is anticipated to increase to 300 million by the year 2030.[2] These numbers paint a grim picture of a crisis that extends beyond physical health, delving deep into psychology and social well-being. Consequently, addressing drug addiction necessitates comprehensive approaches that go beyond the mere physiological aspects of the problem.[3] The global impact of substance abuse has spurred extensive research and intervention efforts. Substance addiction not only inflicts grievous physical harm but also takes a toll on individuals' psychological and emotional well-being.[4] As a result, psychosocial factors, notably self-esteem and locus of control or perceived control over outcomes, have gained recognition in the context of addiction recovery.[5] Self-worth, maintaining an individual's self-esteem, self-perception, self-confidence, and locus of control, which illuminates one's perception of control over life events and personal actions, plays pivotal roles in the journey to recovery from drug addiction.[6] While previous research highlights the significance of self-esteem (S) and locus of control (LoC) in addiction recovery, gaps remain in understanding their dynamic interplay and specific impact on quality of life (QoL) at different treatment states.[7] Self-esteem refers to an individual's overall evaluation of their worth, self-confidence, and self-perception. This study measures self-esteem using Rosenberg's Self-Esteem Scale (RSES), a 10-item

questionnaire where higher scores indicate higher self-esteem. Locus of control describes how individuals believe they control the events and outcomes in their lives. Our study assesses locus of control using Rotter's Locus of Control Scale, which categorizes individuals into internal locus of control (believing they influence their outcomes) or external locus of control (believing outcomes are determined by external forces such as fate or luck). Quality of life reflects an individual's overall well-being, including physical, psychological, and social functioning. Quality of life is measured using the Drug User Quality of Life Scale (DUQOL), which evaluates mental health, social relationships, and daily functioning in rehabilitation. Drug addiction is a chronic condition characterized by compulsive drug seeking and use despite harmful consequences. In our study, participants are classified as having drug addiction if they have a diagnosed substance use disorder (SUD) and are currently receiving treatment at a rehabilitation center. Rehabilitation refers to the different phases of treatment an individual undergoes in a drug rehabilitation center. Treatment stages are categorized based on the duration of stay in rehabilitation (e.g., early stage: 0-1-month, middle stage: 1-3 months, late stage: 3+ months). This study aims to examine how self-esteem and perceived control influence QoL in individuals recovering from drug addiction.[8] By exploring these psychological factors, we seek to provide insights that contribute to a holistic understanding of addiction recovery and inform tailored treatment strategies for improved rehabilitation outcomes.[9,10]

METHODOLOGY

Our research employed a cross-sectional descriptive correlational design to explore the relationships among psychosocial variables like self-esteem (S), locus of control (LoC), and quality of life (QoL) in individuals undergoing treatment for drug addiction. The study was conducted for six months in four private drug rehabilitation centers in Peshawar, precisely two branches of the Dost Foundation, Umeed Foundation, and Zahid Foundation. Utilizing the World Health Organization (WHO) sample size calculator, we determined an appropriate sample size of 142 participants from 223 individuals seeking treatment. This ensured a 95% confidence interval and a 5% margin of error with an anticipated frequency of 50%. All the participants in the study were male because there is no rehabilitation center available in our societal setup for females. Participants were recruited through non-probability convenience sampling, which allowed for selecting individuals who met the study's inclusion criteria. Participants were required to meet several inclusion criteria: they had to be aged 18 years or older male, currently receiving treatment at one of the selected drug addiction rehabilitation centers, diagnosed with drug addiction or substance use disorder, able to communicate effectively in the study language, and providing informed consent to participate in the study. Conversely, individuals were excluded from the study if they had co-existing psychiatric disorders (e.g., schizophrenia, bipolar disorder) that could significantly impact S, LOC, or QOL. Additionally, those with severe cognitive impairments or intellectual disabilities that hinder accurate responses or participation were excluded. Individuals who had recently undergone major medical procedures or were currently experiencing severe physical health conditions affecting quality of life were also excluded, as were those unwilling or unable to participate due to personal reasons or constraints. Lastly, individuals who had previously participated in a similar study investigating the relationship between S, LOC, and QOL during treatment stages in drug addiction rehabilitation centers were omitted. Following the acquisition of ethical and administrative approvals, data collection was conducted using structured closed-ended interviews. A validated questionnaire comprising closed-ended questions was utilized, which included four sections: demographic information, -Rosenberg's Self-Esteem Scale, (11) -Rotter's Locus of Control Scale, and the - Drug User Quality of Life Scale (DUQOL).[12,13] The scales were administered using self-administered and interviewer-administered methods, depending on the participants' preferences and feasibility. The scales used were standardized and validated. Each scale employed its standardized scoring system, and trained researchers conducted one-on-one structured interviews with participants in the rehabilitation centers. The -Drug User Quality of Life Scale (DUQOL) is a recognized tool for evaluating the quality of life among drug users. This scale encompasses multiple domains, each focusing on different aspects of a drug user's quality of life, including management of drug-related physical issues, mental and emotional well-being, interpersonal relationships, substance use, financial and material resources, challenges and involvement with the criminal justice system, and optimistic outlook on life. DUQOL aims to evaluate various dimensions of quality of life comprehensively. The collected data were subsequently entered into SPSS version 23 for analysis. Data analysis involved computing descriptive statistics, including means, standard deviations, and frequency distributions for the relevant variables. Pearson's correlation coefficient was calculated to explore the relationships between S, LOC, and QOL, and results were presented using scatterplots. Additionally, one-way analysis of variance (ANOVA) was applied to identify statistical

differences among various variables.

RESULTS

Variable		Frequency	Variable		Frequency
Gender	Male	141 (100%)	**Occupational Status**	student	35(24.8%)
				household	16(11.3%)
				employee	20(14.2%)
				unemployed	12(8.5%)
				unofficial job	58(41.1%)
Age	<25	57(40.4%)	**Family History of Drug Consumption**	Yes	79(56%)
	26-35	45(31.9%)		No	62(44%)
	36-45	24(17.0%)			
	>45	15(10.6%)			
Educational Level	illiterate	55(39.0%)	**Salary Sufficiency**	Insufficient	28(19.9%)
	high school diploma	63(44.7%)			
	undergraduate diploma	07(5.0%)		Sufficient	72(51.1%)
	bachelors	04(2.8%)		Rather sufficient	41(29.1%)
	masters	12(8.5%)			
Marital Status	Single	55(39.0%)	**Previous Treatment Records**	No	62(44%)
	married	86(61.0%)		Yes	70(56%)

Table 2: Frequency, Mean, and Std. Dev. For DR-LOC, S-E, DUQOL

Variable	Category	Frequency (%)	Mean	Standard Deviation
Self-Esteem Score	Low (<15)	0 (0%)	23.4	2.371
	Moderate (15–25)	117 (83%)		
	High (>25)	24 (17%)		
Drug-Related Locus of Control	External (<22)	24 (17%)	24.15	2.549
	Internal (>22)	117 (83%)		
Drug User Quality of Life	–	–	66.48	7.649

Table 3: Pearson's Correlation Coefficient and One-Way ANOVA Test

Variables	Pearson's Correlation Coefficient (R)	Variables	One-Way Anova (F-Value)
Drug User Quality of Life & Age	0.059	Age & Drug User Quality of Life	1.765
Self-Esteem & Age	0.077	Age & Self-Esteem	0.567
Drug-Related Locus of Control & Educational Level	-0.016	Educational Level & Self-Esteem	1.168

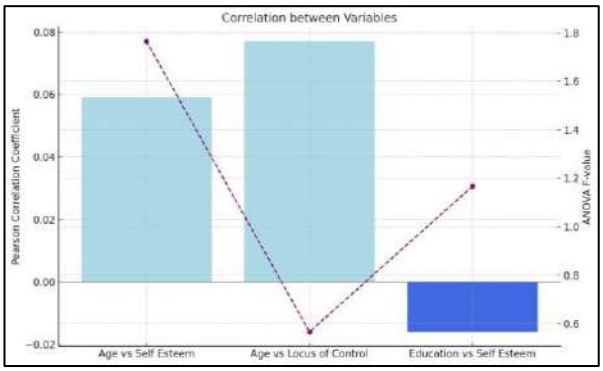

Figure 1: Correlation and ANOVA Analysis of DUQOL, DR LOC, and Self-Esteem

DISCUSSION

The intricate relationship between S, LOC, and QOL in the context of drug addiction rehabilitation is a vital area of study, particularly given the rising prevalence of substance abuse globally. Our findings indicate that S and LOC are significant psychosocial factors influencing the quality of life among individuals undergoing treatment for drug addiction. This aligns with previous research that has established a direct relationship between self-esteem and quality of life, as well as between locus of control and quality of life in patients in rehabilitation settings.[14,15] Self-esteem, defined as an individual's perception of their worth, plays a crucial role in recovery. Our study found that most participants exhibited moderate self-esteem, with only a small fraction demonstrating high self-esteem. This finding is consistent with the literature that suggests individuals with low self-esteem are more vulnerable to addiction and face greater challenges in recovery.[14,16] Furthermore, the positive correlation between self-esteem and quality of life underscores the importance of fostering self-worth in rehabilitation programs. Previous studies have shown that enhancing self-esteem can improve mental health outcomes and greater life satisfaction, critical for successful recovery.[16] LoC, which refers to the degree to which individuals believe they have control over the outcomes of their lives, also emerged as a significant factor in our study. Most participants demonstrated an internal locus of control, which is associated with better coping strategies and resilience in the face of challenges.[15] This finding is supported by research indicating that individuals with an internal locus of control are likelier to engage in proactive behaviors that facilitate recovery.[16] Our results suggest that interventions aimed at enhancing both self-esteem and internal locus of control could be beneficial in improving the quality of life for individuals in drug rehabilitation. Moreover, our study's negative correlation between self-esteem and

quality of life warrants further investigation. While we anticipated a positive relationship, the unexpected finding suggests other mediating factors may be at play. Individuals with higher self-esteem may have higher expectations for their quality of life, leading to dissatisfaction when those expectations are unmet.[16] This aligns with the notion that self-esteem can sometimes be a double-edged sword, where inflated self-perceptions may lead to disillusionment if recovery does not progress as hoped. The findings of our study underscore the critical interplay between S, LOC, and QOL in individuals undergoing drug addiction rehabilitation. Recent literature further elucidates these relationships, emphasizing the importance of psychosocial factors in recovery outcomes. For instance, one study highlights that personality traits, particularly conscientiousness, positively predict self-esteem among drug addicts, suggesting that fostering certain personality characteristics may enhance self-esteem and, consequently, improve recovery outcomes.[17] This aligns with our findings, which indicate that self-esteem is vital to quality of life during rehabilitation. Moreover, the family environment plays a significant role in shaping self-esteem and, by extension, the quality of life for individuals in recovery. A study by Shi et al. discusses how a supportive family atmosphere can bolster self-esteem, thereby mitigating negative emotions and reducing the risk of addiction.[18] This finding is particularly relevant in the context of our study, where a significant portion of participants reported a positive family history of drug abuse. The implications of family dynamics on self-esteem and recovery highlight the need for involving family members in rehabilitation programs to foster a supportive environment that enhances self-esteem and quality of life. Additionally, the locus of control has been shown to influence recovery outcomes significantly. A study postulates that individuals with an internal locus of control tend to exhibit better mental health and quality of life.[19] This is consistent with our findings, where most participants demonstrated an internal locus of control. The ability to perceive control over one's recovery journey can empower individuals, leading to more proactive engagement in their treatment. This is further supported by the work of (Bello, 2023), which indicates that an internal locus of control is associated with lower levels of internet addiction, suggesting that individuals who believe in their ability to influence outcomes are less likely to engage in maladaptive behaviors.[20] The relationship between self-esteem and QOL is also underscored by recent studies that explore the impact of social media and internet addiction. For instance, Chen et al. found that higher self-esteem negatively predicts mobile phone addiction, indicating that individuals with better self-worth are less likely to engage in addictive behaviors.[21] This finding resonates with our results, where self-esteem was expected to correlate positively with quality of life. The negative correlation observed in our study may suggest that individuals with higher self-esteem have higher expectations for their quality of life, leading to potential dissatisfaction if those expectations are not met. Furthermore, the role of self-esteem in mediating the effects of external factors on addiction is critical. Zed, in 2022, discusses how social alienation negatively impacts the quality of life for drug addicts, suggesting that low self-esteem may exacerbate feelings of isolation and disconnection.[22] This highlights the importance of addressing social factors in rehabilitation programs to enhance self-esteem and improve overall quality of life. In conclusion, our study contributes to the growing body of literature emphasizing the importance of self-esteem and locus of control in the recovery process from drug addiction. The findings suggest rehabilitation programs should incorporate strategies to enhance self-esteem and foster an internal locus of control among patients.

LIMITATIONS

This study has certain limitations. First, its cross-sectional design restricts the ability to establish causal relationships between variables. Second, the study was conducted in a limited geographical area (four private rehabilitation centers in Peshawar), which may affect the generalizability of the results. Third, the use of self-reported questionnaires could introduce response bias. Future longitudinal studies are recommended to assess changes over time and evaluate the impact of specific interventions on self-esteem, locus of control, and quality of life.

CONCLUSIONS

Our study adds to the existing literature by highlighting the pivotal role of self-esteem and locus of control in the recovery process from drug addiction. The findings suggest that rehabilitation programs should integrate strategies to boost self-esteem and cultivate an internal locus of control to improve patient outcomes and overall quality of life.

CONFLICT OF INTEREST: None

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