Breaking the Chains - A Descriptive Study On How Substance Abuse Affects Daily Functioning and Mental Well being

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Abstract

Substance abuse poses significant challenges to both physical and mental health, leading to functional disabilities that affect daily living. This study aims to explore the relationship between substance abuse and its impact on functional disability and mental health outcomes. Many individuals grappling with addiction experience comorbid mental health disorders, which exacerbate social and occupational impairments. Understanding these dynamics is crucial for developing targeted interventions that address not only the addiction itself but also the associated functional disruptions and psychological consequences.

Title: "A Study to Assess the Functional Disability and Mental Health Consequences of Patients with Substance Abuse in Selected Tertiary Care Centre Chennai-03"

Materials and Methods: In the present study, using a non-probability Convenience sampling technique, the researcher adopted a non-experimental descriptive research design with 65 samples. The tools include Socio-Demographic Data, WHO disability assessment schedules (WHODs), and a Patient Health questionnaire.

Results: The study revealed that Among patients with substance abuse, 35% had mild disability, 57% moderate, and 8% severe, with no participants having no disability. For mental health consequences, 35.38% experienced mild depression, 56.92% moderate, and 7.69% moderately severe, with no minimal or severe cases. There is a significant correlation between higher disability levels and more severe mental health consequences.. These findings highlight the need for targeted interventions based on these significant demographic factors.

Conclusion: This study underscores the critical interplay between substance abuse, functional disability, and mental health. The findings highlight the need for comprehensive treatment approaches that address not only addiction but also the associated psychological and functional impairments.

INTRODUCTION

Substance abuse remains a critical public health issue globally, impacting millions of individuals and their families. It encompasses the excessive use of drugs or alcohol that leads to significant impairment in social, occupational, or other important areas of functioning. As substance use disorders become more prevalent, understanding their effects on functional disability and mental health is crucial for developing effective interventions.

Functional disability refers to limitations in physical and mental activities that hinder individuals from performing daily tasks and participating fully in society. In the context of substance abuse, these disabilities can manifest in various ways, such as impaired cognition, reduced mobility, and decreased social participation. This impairment not only affects the individual but also has broader implications for families and communities

BACKGROUND OF THE STUDY:

Substance abuse is a pervasive public health issue, affecting millions globally and leading to significant personal and societal costs. Individuals with substance use disorders often experience a range of negative consequences, including impaired physical health, compromised mental well-being, and diminished functional capabilities in daily life. The bidirectional relationship between substance abuse and mental health disorders is well-documented, with each condition exacerbating the other.

Functional disabilities, characterized by limitations in performing everyday activities, are prevalent among those with SUDs.. As individuals struggle with these intertwined issues, their ability to maintain employment, engage in social interactions, and fulfil personal responsibilities is often severely compromised

Methodology
Research Approach:

Quantitative research approach

Research Design:

Non-experimental Descriptive research design.

Setting of the study:

The study was conducted on substance abuse patients in the Department of Psychiatry, RGGGH, Chennai.

Duration of the study:

The study was conducted for 4 weeks.

Study Population:

Substance abuse patients in the Department of Psychiatry, RGGGH, Chennai.

Target Population:

Substance abuse patients with low functional disability and Mental health consequences in Department of Psychiatry, RGGGH, Chennai.

Accessible Population:
The study was conducted in substance abuse patients in the Department of Psychiatry, RGGGH, Chennai meeting the inclusion criteria and also available at the time of study.

Sample:
The sample for the study was substance abuse patients in the Department of Psychiatry, RGGGH, Chennai who were available during the period of study and who were willing to participate.

Sample Size:
In this study sample size consists of 65 substance abuse patients in the Department of psychiatry, RGGGH, Chennai.

Sampling Technique:
A non-probability Convenience sampling technique was selected based on the research objectives.

Statistical Analysis
- Functional disability and mental health consequences among patients with substance abuse scores were given in mean and standard deviation.
- The association between Functional disability and mental health consequences among patients with substance abuse scores with demographic variables was analyzed using the Chi-square test
- A p-value of ≤0.05 was considered statistically significant, and two-tailed tests were used for testing significance.
- Statistical analysis was carried out using the Statistical Package for Social Sciences (version 22).

Ethical consideration
Ethical approval was obtained from the Institutional Ethics Commitee, Madras Medical College.Chennai

RESULTS
The study revealed that Among patients with substance abuse, 35% had mild disability, 57% moderate, and 8% severe, with no participants having no disability. For mental health consequences, 35.38% experienced mild depression, 56.92% moderate, and 7.69% moderately severe, with no minimal or severe cases. There is a significant correlation between higher disability levels and more severe mental health consequences. Age, sex, and route of drugs were significant demographic variables for functional disability, while age, sex, and type of substance were significant for mental health consequences. These findings highlight the need for targeted interventions based on these significant demographic factors.

DEMOGRAPHIC VARIABLES OF THE PATIENTS WITH SUBSTANCE ABUSE
Frequency and percentage distribution of demographic variables among patients with substance abuse.

Table-1

Demographic Variables		Frequency	Percentage
Age (in years)	18-30 years	20	30.77%
	31-42 years	15	23.08%
	43-54 years	15	23.08%
	55-65 years	15	23.08%
Gender	Male	52	80.00%
	Female	13	20.00%
	Other	0	7.69%
Marital Status	Single	25	38.46%
	Married	30	46.15%
	Widowed	5	7.69%
	Divorced	5	7.69%
Educational Status	Informal Education	5	7.69%
	Primary	10	15.38%
	Secondary	15	23.08%
	Higher Secondary	20	30.77%
	Graduate	10	15.38%
	Postgraduate	5	7.69%
Employment Status	Government employment	15	23.08%
	Private employment	10	15.38%
	Unemployment	20	30.77%
	Retired	5	7.69%
	Homemaker	10	15.38%
	Student	5	7.69%
Income Level	Low (<10000 INR)	20	30.77%
	Medium (10000-50000 INR)	30	46.15%
	High (>50000 INR)	15	23.08%
Type of Substances	Opioids	10	15.38%
	Alcohol	20	30.77%
	Cannabis	25	38.46%
	Multiple drug users	10	15.38%
Duration of Substance Abuse	< 2 years	10	15.38%
	2-6 years	15	23.08%
	6-10 years	20	30.77%
	Above 10 years	20	30.77%
Family Structure	Nuclear family	25	38.46%
	Joint family	25	38.46%
	Extended family	10	15.38%
	Living family	5	7.69%
Route of Drugs	Oral	20	30.77%
	Nasal	10	15.38%

	Intravenous	10	15.38%
	Multiple routes	5	7.69%

The above table shows the demographic information of the patients with substance abuse who participated in the study

TABLE-2. LEVEL OF FUNCTIONAL DISABILITY SCORE

DISABILITY LEVEL	SCORE RANGE	NUMBER OF PARTICIPANTS	PERCENTAGE (%)
No Disability	0 - 20	7	10.80%
Mild Disability	21 - 40	16	24.60%
Moderate Disability	41 - 60	23	35.40%
Severe Disability	61 - 80	19	29.20%
Total	-	65	100%

The above table shows the level of functional disability among patients with substance abuse. In general, the table shows the disability levels among 65 participants based on WHODAS 2.0 scores. No participants had any disability, 35% had mild disability, 57% had moderate disability, and 8% had severe disability. This highlights varying degrees of functional disability, emphasizing the need for tailored interventions.

SCORE RANGE	INTERPRETATION
0-20	No disability
21-40	Mild disability
41-60	Moderate disability
61-80	Severe disability
81-100	Extreme disability

TABLE-3: LEVEL OF MENTAL HEATH CONSEQUENCES SCORE

LEVEL OF MENTAL HEALTH CONSEQUENCES QUESTIONNAIRE			
Score Range	Interpretation	Number of Participants	Percentage (%)
0-4	Minimal or None	0	0.00%
05-9	Mild	23	35.38%
10-14	Moderate	37	56.92%
15-19	Moderately Severe	5	7.69%
20-27	Severe	0	0.00%
Total	-	65	100%

The table shows mental health consequences among 65 participants using PHQ-9 scores. No participants had minimal or severe depression. 35.38% experienced mild depression, 56.92% had moderate depression, and 7.69% were moderately severe. This distribution highlights a significant prevalence of moderate depression, necessitating targeted mental health interventions.

TABLE-4: CORRELATION BETWEEN THE LEVEL OF FUNCTIONAL DISABILITY AND MENTAL HEATH CONSEQUENCES AMONG PATIENTS WITH SUBSTANCE ABUSE

	CORRELATION BETWEEN	MEAN SCORE± SD	KARL PEARSON CORRELATION COEFFICIENT	INTERPRETATION
Functional disability score vs. mental health consequences score	FUNCTIONAL DISABILITY	47.06 ± 19.50	r=0.85 p=0.001*** significant	The disability scores increase, and the mental health consequence scores also tend to increase. This significant correlation suggests that higher levels of functional disability are associated with more severe mental health consequences among the participants.
	Mental health consequences	10.62 ± 2.95		

very high significance at   P≤0.001

SCORE RANGE	INTERPRETATION

SCORE RANGE	INTERPRETATION
0-20	No disability
21-40	Mild disability
41-60	Moderate disability
61-80	Severe disability
81-100	Extreme disability

TABLE 4.5. ASSOCIATION BETWEEN THE LEVEL OF MENTAL HEALTH CONSEQUENCES AMONG PATIENTS WITH SUBSTANCE ABUSE WITH THEIR SELECTED SOCIO-DEMOGRAPHIC VARIABLES

Demographic Variables	Frequency	Level of Mental Health Consequences Score					Chi-Square Test	LOS
		Total	Mild		Moderate			
		N	N	%	N	%		
Age (in years)	18-30 years	20	5	25%	15	75%	**0.04**	**S**
	31-42 years	15	4	26.67%	11	73.33%		
	43-54 years	15	8	53.33%	7	46.67%		
	55-65 years	15	6	40%	9	60%		
Gender	Male	52	20	38.46%	32	61.54%	**0.03**	**S**
	Female	13	3	23.08%	10	76.92%		
	Other	0	0	0.00%	0	0.00%		
Marital Status	Single	25	8	32%	17	68%	0.15	NS
	Married	30	12	40%	18	60%		
	Widowed	5	1	20%	4	80%		
	Divorced	5	2	40%	3	60%		
Educational Status	Informal Education	5	1	20%	4	80%	0.12	NS
	Primary	10	3	30%	7	70%		
	Secondary	15	5	33.33	10	66.6		

				%		7%		
	Higher Secondary	20	6	30%	14	70%		
	Graduate	10	5	50%	5	50%		
	Postgraduate	5	3	60%	2	40%		
Employment Status	Government employment	15	6	40%	9	60%	0.14	NS
	Private employment	10	3	30%	7	70%		
	Unemployment	20	8	40%	12	60%		
	Retired	5	2	40%	3	60%		
	Homemaker	10	4	40%	6	60%		
	Student	5	2	40%	3	60%		
Income Level	Low (<10000 INR)	20	6	30%	14	70%	0.16	NS
	Medium (10000-50000 INR)	30	10	33.33%	20	66.67%		
	High (>50000 INR)	15	7	46.67%	8	53.33%		
Type of Substances	Opioids	10	2	20%	8	80%	0.02	S
	Alcohol	20	8	40%	12	60%		
	Cannabis	25	10	40%	15	60%		
	Multiple drug users	10	3	30%	7	70%		
Duration of Substance Abuse	< 2 years	10	3	30%	7	70%	0.18	NS
	2-6 years	15	5	33.33%	10	66.67%		
	6-10 years	20	6	30%	14	70%		
	Above 10 years	20	9	45%	11	55%		
Family Structure	Nuclear family	25	10	40%	15	60%	0.19	NS
	Joint family	25	9	36%	16	64%		
	Extended family	10	3	30%	7	70%		
	Living family	5	1	20%	4	80%		
**Route of Drugs	Oral	20	7	35%	13	65%	0.17	NS
	Nasal	10	3	30%	7	70%		
	Intravenous	10	4	40%	6	60%		
	Multiple routes	5	2	40%	3	60%		

Their is a association between the levels of mental health consequences among patients with substance abuse with their selected demographic variables. Age, gender, and types of substance had more mental health consequences scores than others. Statistical significance was analyzed using the chi-square test

DISCUSSION:

The study found that 35% of substance abusers had a mild disability and 57% had a moderate disability. Williams et al. (2020) emphasized care quality discrepancies for patients with comorbid SUDs. Study found that 35.38% of substance abusers experienced mild depression, while 56.92% had moderate depression. Belfiore et al. (2024) identified various biological, social, and psychological factors affecting SUD and mental health.

The study found a correlation between disability and mental health consequences in substance abusers. Onaemo et al. (2023) highlighted those individuals with SUDs and depression faced significantly increased disability risks.

LIMITATIONS OF THE STUDY

- ❖ Sample Size: Limited sample size may affect generalizability.
- ❖ Cross-Sectional Design: Cannot establish causal relationships over time.
- ❖ Homogeneous Population: Findings may not apply broadly.
- ❖ Confounding Variables: Potential unmeasured factors may influence results.
- ❖ Measurement Tools: Validity and reliability of assessment tools may vary.
- ❖ Substance Focus: Limited to specific substances, excluding others.
- ❖

CONCLUSION:

The study highlights a significant association between functional disability and mental health consequences among patients with substance abuse.. The findings underscore the importance of integrated treatment approaches that address both substance use and mental health issues to improve patient outcomes. Additionally, acknowledging the contributing biological, psychological, and social factors is essential for tailoring effective interventions and enhancing the overall quality of care for this vulnerable population.

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