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The Impact of Family Cohesion on Social Isolation in Patients with Substance Use Disorders: A Correlational Study

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ABSTRACT

Objective: This study aimed to examine the relationship between family cohesion and social isolation among individuals with substance use disorders (SUDs). It further explored how differing levels of family integration influence perceived social connectedness.

Methods and Materials: A cross-sectional, correlational design was employed, involving 300 patients with SUDs from Iman Hassen Al-Mujtabe Hospital. Convenience sampling was used. Family cohesion and social isolation were assessed using Arabic-translated versions of the Family Environment Scale (FES) and the De Jong Gierveld Loneliness Scale, respectively. Sociodemographic and clinical characteristics were collected via self-report questionnaires. Data analysis included descriptive statistics, Pearson correlation, and independent samples t-tests to compare isolation levels based on family background.

Findings: The sample was predominantly male (95.3%) with a mean age of approximately 32 years. Most participants (83.3%) reported insufficient income. Captagon (30%) and alcohol (26.7%) were the most frequently abused substances. A significant proportion (80%) experienced severe social isolation, while 83.3% reported moderate family disintegration. Pearson correlation analysis revealed a moderate, positive correlation between family disintegration and social isolation (r = 0.488, p < 0.001). Participants from disintegrated family backgrounds reported significantly higher levels of social isolation than those from cohesive families (p < 0.05).

Conclusion: Family disintegration significantly contributes to elevated levels of social isolation among individuals with SUDs. Addressing family cohesion within treatment protocols may improve social functioning and recovery outcomes. Interventions focusing on family dynamics should be integrated into comprehensive addiction treatment strategies.

Keywords: Substance Use Disorder, Family Cohesion, Social Isolation, Addiction Treatment.

Introduction

Addiction is a complex biopsychosocial disorder with profound implications for individuals and their social networks (Smith, 2021).

Social isolation, characterized by a lack of meaningful social connections, is a common comorbidity associated with addiction, often exacerbating the challenges faced by individuals seeking recovery (Holt-Lunstad, 2022).

Family dynamics play a crucial role in shaping an individual's social development and psychological well-being (Prime et al., 2020).

This study aims to explore the relationship between family cohesion/disintegration and social isolation among addiction patients, specifically comparing levels of isolation between those with cohesive versus disintegrated family backgrounds.

Family cohesion, defined as the emotional bonding and support among family members, provides a

protective factor against social isolation (Albert, 2021). Conversely, family disintegration, characterized by conflict, detachment, and lack of support, may contribute to feelings of isolation and alienation. Understanding this relationship can inform targeted interventions aimed at improving social support and reducing isolation among addiction patients (Galbally, 2021).

Social isolation has been consistently linked to substance use disorders. Individuals struggling with addiction often experience social stigma, which can lead to withdrawal from social activities and relationships (Dingle et al., 2015). The cycle of addiction can further isolate individuals, as their behaviors may alienate family and friends. Previous research has demonstrated that social support is a crucial factor in addiction recovery, emphasizing the importance of addressing social isolation in treatment programs (Christie, 2021).

Family systems theory posits that family members are interconnected and that changes in one member affect the entire system. Family dysfunction, including conflict, poor communication, and lack of emotional support, has been identified as a risk factor for addiction (Johnson et al., 2018). Conversely, cohesive families provide a supportive environment that can buffer against the development of substance use disorders (Daniels & Bryan, 2021).

The link between family dynamics and social isolation is well-established. Individuals from disintegrated families may experience emotional neglect, leading to difficulties in forming and maintaining healthy relationships (Moiba, 2016). This can result in feelings of loneliness and isolation. Cohesive families, on the other hand, provide a sense of belonging and support, mitigating the risk of social isolation (Wigfield et al., 2022).

Methods and Materials

Study Design and Participants

A correlational study design was employed using convenience sampling to recruit participants from Iman Hassen Al-Mujtabe Hospital. The study utilized validated measurement tools, including the De Jong Gierveld Loneliness Scale (1987) to assess social isolation that

translate to Arabica according the culture and norm of people by (Abdullah, n.d.2008). And the Family Environment Scale (FES) by Moos & Moos (1974) to evaluate family disintegration that translate to Arabica according culture and norm of people. Data were collected from 300 participants, measuring variables such as age, education level, occupation, monthly income, addiction, and mental health conditions. Statistical analysis was performed using Pearson's correlation to determine the strength and significance of relationships between social isolation and family disintegration in the patients of have addition with substance abuse.

Procedure

Participants completed the questionnaires in a private setting. Informed consent was obtained prior to data collection.

Data Analysis

Descriptive statistics were used to summarize demographic data. Independent samples t-tests were conducted to compare levels of social isolation between participants from cohesive and disintegrated family backgrounds. Correlation analyses were used to examine the relationship between family cohesion and social isolation.

Findings and Results

Table 1 shows that 36.7% of addicts are with age group of 32 – 39 year and 23.3% are with age group of 25 – 31 years. The sex indicates that all addicts are males (95.3%) and females (4.7%). The marital status refers that 50% of addicts are married and 13.3% of them are unmarried. Regarding level of education, the highest percentage refers to 30.0% for those who read and write, 3.3% for those who don't read and write. The monthly income indicates that 83.3% of addicts perceive insufficient monthly income. The occupational status reveals that 66.7% of addicts was Unemployed and only 26.7% of them was Employed.

Table 1

Socio-demographics data of Addicts (N=300)

List	Characteristics		f	%
1	Age Group	18 – 24	60	20.0
		25 – 31 years	70	23.3
		32 – 39 years	110	36.7
		40 – 46 years	40	13.3
		47+ years	20	6.7
		Total	300	100
2	Sex	Male	286	95.3
		Female	14	4.7
		Total	300	100
3	Marital status	Unmarried	40	13.3
		Married	150	50.0
		Divorced	110	36.7
		Total	300	100
4	Level of education	Doesn't read & write	10	3.3
		Read & write	90	30.0
		Intermediate school	10	10.0
		Secondary school	80	26.7
		Diploma	20	6.7
		Bachelor	50	16.7
		Postgraduate	10	3.3
		Total	300	100
5	Occupation	Employed	80	26.7
		Unemployed	200	66.7
		Student	10	3.3
		Housewife	10	3.3
		Total	300	100
6	Perceived monthly income	Insufficient	250	83.3
		Barely sufficient	20	6.7
		Sufficient	30	10.0
		Total	300	100

f: Frequency, %: Percentage

The highest percentage of individuals (43.3%) had an addiction duration of 1-5 years, followed by those addicted for 6 years and above (30.0%), while the lowest percentage (26.7%) had an addiction of less than a year.

The Individuals shows that nearly three-quarters (73.3%) of the sample did not report a mental disease, whereas 26.7% experienced some form of mental disorder.

Regarding The Types of Mental Disorders (66.7%) was Schizophrenia for (10.0%), obsessive-compulsive disorder (OCD) was (6.7%), Depression (10.0%) bipolar disorder (3.3%), PTSD (Post-Traumatic Stress Disorder (3.3%)

In Table 2 the results of the Duration of Addiction show The Less than one year: 80 individuals (26.7%), 1-5 years: 130 individuals (43.3%), 6 years and above: 90 individuals (30.0%) Total: 300 individuals (100%).

Table 2

Distribution of Addicts according to their Clinical Characteristics (N=300)

Family addiction		F	%
	Yes	50	16.7
	No	250	83.3
	Total	300	100.0
Type of addiction	Crystal myths	70	23.3
	Alcohol	80	26.7
	Captagon	90	30.0
	Carbamazepine (Tegretol)	30	10.0
	Crystal and Alcohol	30	10.0
	Total	300	100.0
Mental Disease	Yes	80	26.7
	No	220	73.3
	Total	300	100.0
Type of disease	No	200	66.7
	Schizophrenia	30	10.0
	OCD	20	6.7
	Depression	30	10.0
	Bipolar Disorder	10	3.3
	post-traumatic stress disorder	10	3.3
	Total	300	100.0
Duration of addiction	Less than one year	80	26.7
	1-5	130	43.3
	6&above	90	30.0
	Total	300	100.0

f: Frequency, %: Percentage, M: Mean, SD: Standard deviation

The result of Table 3: Descriptive Statistics of Social Isolation this table indicates that 60 participants (20.0%) reported experiencing moderate family disintegration, while 240 participants (80.0%) indicated experiencing severe family disintegration, culminating in a total of 300 participants (100%).

Table 3

Descriptive statistics of social isolation levels (N=300)

Social Isolation	Frequency	Percent
Moderate Social Isolation	60	20.0
Severe Social Isolation	240	80.0
Total	300	100.0

The result of Table 4: Descriptive Statistics of Family Designation this table indicates that 250 participants (83.3%) reported experiencing moderate family disintegration, while 50 participants (16.7%) indicated experiencing severe family disintegration, culminating in a total of 300 participants (100%).

Table 4

Descriptive statistics of Family disintegration levels(N=300)

Family disintegration	Frequency	Percent
Moderate Family disintegration	250	83.3
Severe Family disintegration	50	16.7
Total	300	100.0

Table 5 presents show the Pearson correlation analysis between social isolation and family disintegration among the study participants.

There is a moderate positive correlation (r = 0.488) between social isolation and family disintegration, this means that as social isolation increases, family disintegration also tends to increase, Also the table indicating that the correlation is statistically significant (p = 0.000) between social isolation and family disintegration (p = 0.000).

Table 5

Relationship between social isolation and family disintegration N=300

		Social Isolation	Family disintegration
Social Isolation	Pearson Correlation	1	.488**
	Sig. (2-tailed)		.000
	N	300	300
Family Breakup	Pearson Correlation	.488**	1
	Sig. (2-tailed)	.000	
	N	300	300

Sig.= significant, N=number, r=Pearson Correlation

Discussion and Conclusion

The study findings indicate that 36.7% of individuals with addiction are within the age group 32 – 39 years, these results resemble finding by (Hosseinbor et al. 2014) mentioned that study samples were within the age group of 30_40 years.

In current study A significant majority of the participants were male (95.3%). This finding is inconsistent with the study by (Desai et al. 2024) in the United States, investigated the relationship between social isolation and substance abuse. Utilizing data from the 2018 National Inpatient Sample, the study revealed that 55.6% of socially isolated patients with substance use disorders were male, indicating a higher prevalence of substance abuse among males. With regard to the marital status that fifty percent of addicts are Married and (13.3%) unmarried this finding is in line with the study by Hosseinbor et al. (2014), which found that marital status plays a role in substance dependence, with married individuals experiencing different patterns of social isolation compared to unmarried individuals (Hosseinbor et al., 2014). In terms of educational level (30%) of addicts who are Read & write, while (26.3%) are secondary school, these finding consistent with finding conducted by (Desai et al., 2024), which reported that lower educational attainment was associated with higher rates of substance use disorders, suggesting that limited education may be a risk factor for addiction and associated social isolation. Regarding to income per month that (83.3%) of participants have inadequate month income, current result agrees with finding conducted by A significant portion of participants reported insufficient income (83.3%). This observation aligns with the findings of Desai et al. (2024), which indicated that financial instability is Low socioeconomic status associated with higher rates of substance use disorders and social isolation (Desai et al., 2024).

Most participants reported no family history of addiction (83.3%), this contrasts with findings from the systematic review by Hosseinbor et al. (2014), which suggested that family history of addiction is a significant factor in the development of substance use disorders (Hosseinbor et al., 2014). Regarding to substance use type, it is indicated that (30.0%) of participants are engaged in the abuse of Captagon, where16..5% of them are only abusing % of them are only abusing drugs, these finding not agreement with study results done by (Desai et al., 2024) who revealed that 10.0% of addicts are polysubstance abusers, meaning that they misuse both alcohol and drugs. 10.0% of participants was reported Depression This aligns with the study by Hosseinbor et al. (2014), which found a significant association between substance dependence and mental health disorders, including depression, exacerbating social isolation (Hosseinbor et al., 2014). The majority of participants had been addicted for 1-5 years (43.3%). The current research findings indicates that individuals with addiction often have experienced significant with social isolation.

Regarding to the influence of social isolation and family disintegrations among addicted patients, the

study results depict that social isolation has a great impact on addiction in adults as indicated by the probability of significantly influence of social isolation at p_values=1, these rustles supported with result performed by (Desai et al., 2024; Shamsaei et al., 2019) showing that there are is a significant influence family disintegration on addiction. present study result agree with study findings conducted by (Nikmanesh et al., 2020) were shown that the social isolation and family disintegration link and the both contributing to addiction these factors play an important role in addiction potential.

Distribution of addicts according to their clinical characteristics:

The study findings indicate that reported that 97.4% of patients with SUDs were male, average age of patients was approximately 32 years, with a standard deviation of 9.46 years, suggesting that substance use predominantly affects young adults in this area indicating a significant gender disparity in substance use within this region by (Saeed, 2024).

The study findings indicate that reported that no family addiction (83.3%) these fending doesn't agree with study Hoffmann al., (2022), this study was to find the mental health status of families with and may by leading to use addiction.

Regarding the type of addiction, it is indicated that (30.0%) of addicts are engaged in the abuse (Captagon)of multiple substances. These findings are inconsistent with the findings conducted by (El Hayek et al., 2023) highlighting a potential link between lower educational attainment and substance use. Methamphetamine was the most commonly used substance, with 45.2% of patients reporting its use, Alcohol in Lebanon, alcohol was the predominant substance used, with 60% of patients with SUDs reporting its use (El Hayek et al., 2023).

Regarding the mental disease (26.7%) haven depression and psychosis. A high rate of psychiatric comorbidities was observed among patients with SUDs. 84.3% of patients were diagnosed with additional mental health conditions, such as depression and psychosis (Saeed, 2024). Similarly, in Lebanon, patients with SUDs exhibited notable comorbidities, including depression (50.6%), anxiety (11.4%), and delirium (10.9%).

The highest percentage of individuals (43.3%) had an addiction duration of 1-5 years, followed by those addicted for 6 years and above (30.0%), while the lowest percentage (26.7%) had an addiction of less than a year. This aligns with the study by Lee & Chen (2020), which social isolation is a major risk factor for substance abuse. When individuals lack social support, they may turn to drugs or alcohol as a coping mechanism for loneliness, depression, or anxiety and found that social isolation significantly increases the likelihood of substance abuse, particularly among young adults. Similarly, Hawkley & Capitanio (2015) reported that socially isolated individuals exhibit higher stress levels and are more prone to addictive behaviors.

The percentage of individuals with marital status (Divorced 36.7%). family disintegration, including parental divorce, domestic conflict, and lack of parental support, has been strongly linked to addiction. The current study's Pearson correlation of 0.488 suggests a moderate positive relationship between family disintegration and addiction, indicating that individuals from broken families are at higher risk of developing substance use disorders. A study by Brook et al. (2011) confirmed that adolescents who experience family instability are significantly more likely to engage in drug use. Another study by (Lander et al., 2013) emphasized that addiction not only results from family breakdown but also exacerbates familial conflicts, creating a cycle of dysfunction.

The Pearson correlation coefficient of 0.488 (p = .000) indicates a moderate positive correlation between family disintegration and addiction. Similiter In Lebanon, patients with SUDs were more likely to require intubation during admission (odds ratio OR = 1.81, p = 0.048), indicating a higher severity of medical conditions among this population (El Hayek et al., 2023).

The results of the independent samples t-test revealed that addiction patients from disintegrated family backgrounds exhibited significantly higher levels of social isolation compared to those from cohesive family backgrounds There is a moderate positive correlation (r = 0.488) between social isolation and family disintegration, this means that as social isolation increases, family disintegration also tends to increase, Also the table indicating that the correlation is statistically significant (p = 1) between social isolation and family disintegration (p = 0.488).

A significant negative correlation was found between family cohesion and social isolation (r = 1p < .05). This indicates that higher levels of family cohesion were associated with lower levels of social isolation.

The findings of this study support the hypothesis that addiction patients from disintegrated family backgrounds experience higher levels of social isolation. The significant correlation between family cohesion and social isolation underscores the importance of family dynamics in addressing addiction. These results align with previous research highlighting the role of social support in addiction recovery.

These findings suggest that interventions aimed at improving family cohesion and addressing social isolation should be integrated into addiction treatment programs. Family therapy, social skills training, and support groups can help individuals develop healthier social connections and reduce feelings of isolation.

This study has several limitations. The cross-sectional design limits the ability to establish causality. The sample was recruited from a specific setting, which may limit the generalizability of the findings. Future research should employ longitudinal designs and diverse samples to further explore the relationship between family dynamics and social isolation in addiction.

Future research should examine the mediating factors that explain the relationship between family disintegration and social isolation. Additionally, qualitative studies can provide a deeper understanding of the lived experiences of addiction patients from different family backgrounds.

This study highlights the significant association between family disintegration and social isolation among addiction patients. Addressing family dynamics and promoting social support are crucial components of effective addiction treatment. By recognizing the impact of family backgrounds on social isolation, clinicians can develop targeted interventions to improve the well-being of individuals struggling with addiction.

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Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants. Ethical considerations in this study were that participation was entirely optional.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

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Authors' Contributions

All authors equally contribute to this study.

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