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Comparative Study of Delirium Associated with Alcohol Withdrawal Versus Other Medical Illnesses: Clinical Profile, Course of Illness & Outcome

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Abstract

Background: *Alcohol withdrawal and other medical conditions are among the many etiologies of delirium, a common and dangerous condition seen in the medical intensive care unit (MICU). There hasn't been much study done to compare the clinical characteristics, progression of the illness, and prognoses of these various delirium subtypes. In addition to determining the etiology of delirium and the clinical profile of patients admitted to a tertiary care hospital's medical intensive care unit, this study also attempts to determine the relationship between psychotic symptoms and cognitive status.*

Methods: *In a tertiary care hospital, 152 participants were admitted for the study. Four scales—the delirium rating scale-r-98, the cognitive test for delirium, the brief psychiatric rating scale (BPRS), and the delirium etiology checklist—were used to evaluate the symptoms, progression of the illness, and results. Both the Kuppuswamy scale and the Severity of Alcohol Dependence Questionnaire (SADQ)*

Results: *Preliminary findings revealed a diverse clinical profile and course of delirium among the subjects with various medical illnesses. Predisposing factors, such as advanced age and pre-existing cognitive impairment, were identified, along with precipitating factors such as infections and medication use. Delirium subtypes included hypoactive, hyperactive, and mixed presentations. Cognitive impairment and psychotic symptoms were observed to varying degrees among delirious patients. The BPRS, Delirium Rating Scale-Revised-98, MMSE, and Delirium Etiology Checklist provided valuable insights into the severity, etiology, and symptomatology of delirium. The correlation analysis revealed a significant association between cognitive impairment and the presence of psychotic symptoms in delirium.*

Conclusion: *This study sheds light on the clinical profile, course, and outcomes of delirium in patients admitted to the tertiary care centre. The identification of predisposing and precipitating factors contributes to the understanding of delirium etiology. The recognition of different delirium subtypes highlights the importance of tailored management approaches. The correlation between cognitive status and psychotic symptoms underscores the complex nature of delirium. The scales utilized in this study proved to be effective tools for evaluating delirium severity, symptomatology, and etiology. Further research is necessary to explore interventions aimed at improving outcomes and reducing the burden of delirium in the MICU setting. The results point to the significance of understanding the distinct characteristics and progressions of every kind of delirium in order to provide the proper care and interventions in the MICU.*

Comprehending the relationship between mental state and psychotic indications emphasizes the intricacy of delirium manifestation. These results contribute to the existing literature and can guide future research and clinical practice in the field of delirium management.

Introduction

Delirium, a neuropsychiatric syndrome, is characterized by acute disturbances in attention, cognition, and awareness. It is associated with significant morbidity and mortality, particularly in critically ill patients. Delirium has various etiologies, including alcohol withdrawal and other medical illnesses, yet their clinical profiles and outcomes remain understudied. Understanding the specific features and outcomes of alcohol withdrawal delirium and delirium associated with other medical illnesses can aid in better patient management and tailored interventions. Delirium also results in increased hospital and post-hospital costs due to the need for institutionalization, frequent medical follow-up, rehabilitation services, and home health care. The iatrogenic nature of delirium and its link to the quality of hospital care makes it an important marker for assessing the quality of care provided to the elderly population.

Aims and Objectives

The aim of this observational comparative hospital-based study is to investigate the clinical profile of patients with delirium admitted in a tertiary care hospital.

Aim

- Examine the clinical characteristics of delirium linked to alcohol withdrawal in comparison to other medical conditions, including the illness's course and conclusion.

Objective

- To evaluate the course of delirium as a sign of alcohol withdrawal
- To evaluate the clinical profile of delirium associated with alcohol withdrawal vs other medical illnesses - their course of disease and result • To evaluate the relationship between cognitive status and psychotic symptom

Methods

This study employed an observational comparative design to evaluate the clinical profiles, course of illness, and outcomes of delirium in patients admitted in tertiary care hospital. 152 subjects (76 with alcohol withdrawal and 76 other causes) were recruited from the tertiary care hospital. Inclusion criteria included admission with a diagnosis of delirium (meets DSM 5 criteria), age above 18 years, and ability to provide informed consent. Exclusion criteria included pre-existing cognitive impairment and inability to communicate effectively. Ethical clearance was obtained from institutional ethics committee.

Data were collected using semi structured demographic proforma and standardized assessment tools. The brief psychiatric rating scale (BPRS) was utilized to assess symptom profiles and severity. The delirium rating scale-revised-98 was used to evaluate the severity and course of delirium. The cognitive test for delirium was employed to assess cognitive status, while the delirium etiology checklist was used to determine the underlying causes of delirium. kuppuswamay socioeconomic scale to check social status and Severity of Alcohol Dependence Questionnaire (SADQ) to check alcohol use. The variables of interest included symptom profile, course of illness, and outcomes for associated etiological factors causing delirium. Additionally, the study aimed to explore the correlation between cognitive status, psychotic symptoms, and delirium. Descriptive statistics were employed to summarize the demographic characteristics and clinical profiles of the study participants. Comparative analyses, such as t-tests or chi-square tests, were used to identify differences between various medical illnesses causing delirium. Correlation analyses were performed to assess the relationship between cognitive status, psychotic symptoms, and delirium.

Results

There were 152 participants in all for this study, of whom 76 had alcohol withdrawal delirium and the remaining 76 had delirium due to another medical condition.

The psychiatric ward (35.5%), medicine ward (31.6%), intensive care unit (19.1%) (19), orthopedic ward (26.6%), obstetrics and gynecology (1.3%), and surgery ward (8.6% (13)) were the places from which the individuals were recruited.

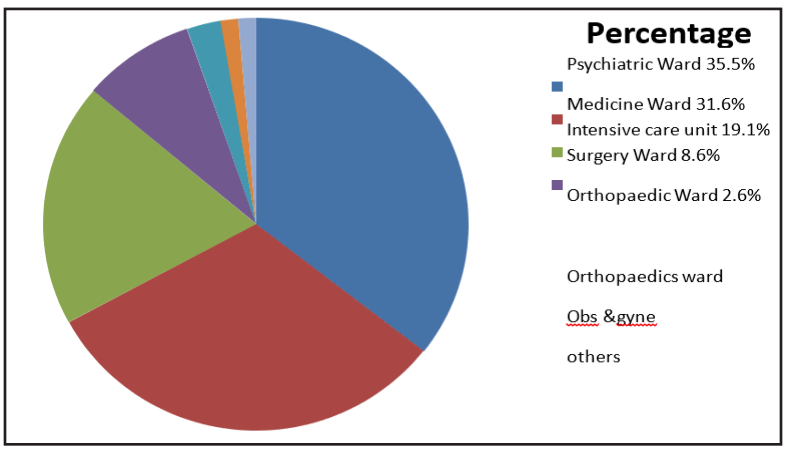

Diagram 1: frequency of the acquired subject

Table 1: Total Socio Demographic Data

Age	16-30 years	(23)	15.1%
	31-45 years	(34)	22.4%
	46-60 years	(56)	36.8%
	Above 60 years	(39)	25.7%
Gender	Male	(131)	86.2%
	Female	(21)	13.8%
Socio-Economic Status	Upper	(2)	
	Upper Middle	(7)	
	Lower Middle	(72)	
	Upper Lower	(57)	
	Lower	(14)	
Type of Family	Nuclear	(104)	68.4%
	Joint	(45)	29.6%
	Extended	(3)	2.0%
H/o of Concurrent Substance Use	SLT	(32)	
		21.1%	
	Cannabis	(6)	
		3.9%	
	Nicotine	(57)	
		37.5%	
Previous h/o of Seizures	(26)	17.1%	
Previous h/o of Head Injury	(1)	0.7%	
Previous h/o Delirium Tremens	(20)	13.2%	
Family h/o Psychiatric Illness	(8)	5.3%	
Family h/o Alcohol Use Disorder	(30)	19.7%	

49 was the contestants' average age. There were 86:14 men to women. Kuppuswamy's sociodemographic score indicates that 47.4% of the participants come from lower medium socioeconomic states, with Upper Lower socioeconomic states coming in second at 37.5%, Lower socioeconomic states at 9.2%, Upper medium socioeconomic states at 4.6%, and Upper socioeconomic states at 1.3%. Nuclear 68.4%, Joint 29.6%, and Extended 2.0 were the three types of subject families.

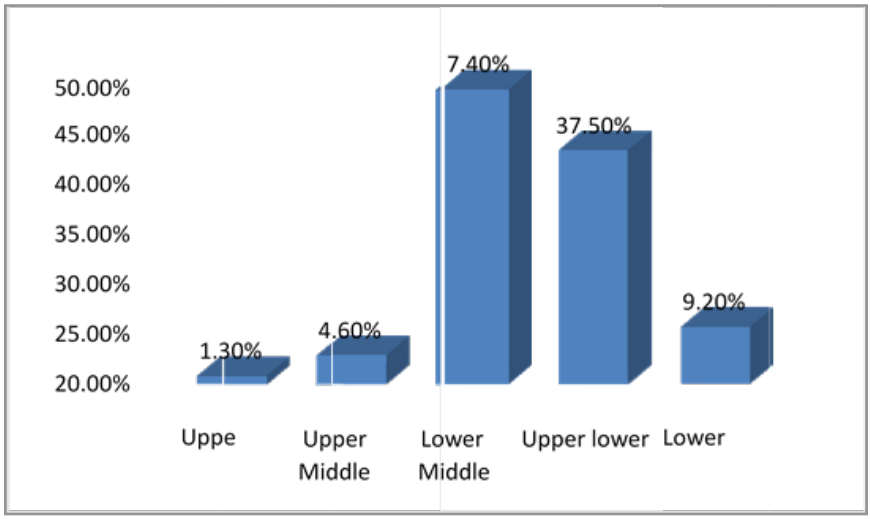

Diagram 2: Frequency of Socio Demographic Score

Table 2: Different Blood Parameter Calculated

Parameter	Minimum	Maximum	Mean±SD
Hb	2.0	17.0	11.334±3.0281
MCV	67.0	99.0	82.012±6.7511
MCHC	29.1	39.0	34.822±2.2075
SGOT	11	530	67.20±74.747
SGPT	9	484	59.26±78.917
S.Bilirubin	.50	22.00	2.0409±3.26431
RBS	52	400	147.97±59.004
Blood urea	11	248	39.31±40.966
S.Creatinine	.4	6.8	1.393±1.3116
Na	110	152	135.62±9.515
K	2.0	5.5	4.018±0.6342

Numerous blood parameters, including serum urea, creatine, electrolytes, liver function test, and total blood count, were investigated.

Table 3: Drs-98 Scale longitudinal Analysis Conducted 48 Hours Apart

Parameter	DRS-1	DRS-2	DRS-3
	Mean±SD	Mean±SD	Mean±SD
Sleep wake cycle Disturbance	2.75±0.434	1.26±0.750	0.46±0.562
Perceptual Disturbance	1.19±1.270	0.23±0.521	0.06±0.238
Delusions	.51±1.042	0.18±0.624	0.09±0.445
Liability of affect	2.05±0.961	0.75±0.721	0.21±0.440
Language	1.36±1.216	0.40±0.721	0.05±0.240
Thought process Abnormalities	0.61±0.971	0.22±0.542	0.09±0.333
Motor agitation	1.76±1.223	0.66±0.745	0.14±0.383
Motor retardation	0.89±1.213	0.32±0.637	0.09±0.421
Orientation	2.13±0.995	0.70±0.789	0.13±0.376
Attention	2.03±1.023	0.51±0.651	0.08±0.316
Short-term memory	1.52±1.104	0.46±0.650	0.07±0.274
Long-term memory	0.99±1.058	0.30±0.562	0.05±0.300
Visuospatial ability	1.45±1.167	0.39±0.710	0.07±0.307

Table 4: Frequency of Delirium-Related Cognitive Testing

Total CTD	Score .5-6	Score. 3-4	Score. 1-2	Score 0	Mean. score (range 0-6)
Orientation.	0	50	102	0	2.19±0.770
Attention span	0	19	133	0	1.81±0.638
Memory	0	16	136	0	1.82±0.603
Comprehension.	0	30	120	2	1.95±0.758
Vigilance.	0	22	128	2	1.80±0.694

Frequency (%) of different. severity levels of cognitive dysfunction Orientation2.19±0.770. mean ± SD Vigilance 1.80±0. 694. item scores assessed. with the CTD (n=152) where. lower scores indicate poorer performance.

Table 5: Average of BPRS, SADQ, DRS R-98, and CTD

Variables	Minimum	Maximum	Mean	Std. Deviation
SADQ-C	0	39	27.03	±4.511
DRS – 1	15	36	24.10	±5.392
DRS – 2	0	21	7.82	±5.491

DRS – 3	0	15	1.79	±2.708
CTD	4	13	9.38	±2.156
BPRS	18	30	20.53	±1.922

The mean score of SADQ-C 27.03±4.511and DRS–1 is 24.10±5.392and DRS -2 is 7.8 ±5.491and DRS –3 1.79 ±2. The cognitive test for delirium was 9.38±2.1 and Brief psychiatric rating scale score was 20.53±1.922

Table 6: Correlation Between the Delirium Rating Scale (-98) and the Cognitive Test for Delirium

CTD DRS	Orientation.	Attention span	Memory	Comprehension.	Vigilance
Sleep-wake. cycle Disturbance	-0.015 (0.856)	-0.006 (0.942)	0.076 (0.353)	-0.096 (0.242)	0.027 (0.737)
Perceptual. Disturbance	0.145 (0.074)	0.086 (0.292)	0.193* (0.017)	0.023 (0.779)	0.180* (0.027)
Delusions.	0.348** (0.000)	-0.071 (0.385)	0.120 (0.141	0.374** (0.000)	0.127 0.118)
Lability of affect	-0.112 (0.169)	0.189* (0.020)	0.097 (0.235	-0.069 (0.396)	-0.063 (0.439)
Language.	-0.067 (0.411)	-0.167* (0.040)	-0.162* (0.047	-0.082 (0.313)	-0.336** (0.000)
Thought. process abnormalities	0.057 (0.484)	0.027 (0.739)	0.113 (0.167	0.092 (0.259)	0.092 (0.259)
Motor agitation	0.092 (0.260)	0.076 (0.353)	0.047 (0.569	009 (0.910)	0.050 (0.538)
Motor retardation	-0.077 (0.343)	-0.077 (0.343)	-0.181* (0.026	-0.113 (0.164)	-0.222** (0.006)
Orientation	-0.293** (0.000)	0.196* (0.015)	-0.059 (0.472	-0.124 (0.129)	-0.230** (0.004)
Attention.	0.078 (0.341)	-0.002 (0.977)	-0.046 (0.575	-0.016 (0.849)	-0.030 (0.716)
Short-term memory	-0.032 (0.698)	0.057 (0.485)	-0.174* (0.032	-0.050 (0.538)	-0.034 (0.681)
Long-term memory.	-.0291** (0.000)	-0.002 (0.982)	-0.002 (0.982)	0.041 (0.617)	-0.119 (0.144)
Visuospatial ability	-0.022 (0.789)	-0.027 (0.742)	-0.023 (0.776	-0.096 (0.237)	-0.238** (0.003)

In assessing the differences between the cognitive and non-cognitive symptom profiles between the delirium rating scale (DRS-98) and the cognitive test for delirium (CTD). While motor retardation (-0.227**) and long-term memory (-.0291**) showed negative correlations with orientation, there was a noteworthy positive connection found between orientation and delusions (0.348**). Significant positive correlations between attention span and orientation (0.196*) and language (-0.167*) were found. Perceptual Disturbance and Memory had a positive connection (0.193*). Motor retardation (0.181*) and short-term memory (-0.174*) had a negative correlation.

Significantly positive associated delusions (0.374**) were seen in comprehension. Significant positive correlations were found between vigilance and perceptual disturbance (0.180*), while negative correlations were found between vigilance and language (-0.336**), visuospatial ability (-0.238**), orientation (-0.230**), and motor retardation (-0.222**).

Table 7: Length of Delirium, Hospital Stay, Course of Therapy, and Result

	DAYS	TOTAL SUBJECT
Total duration of delirium	1	25
	2	58
	3	34
	4	19
	>5	16

Total duration of Hospital	<5	77	
	6-10	43	
	11-45	32	
TRATMENT GIVEN	Benzo diazepam Usage	(82)	56.5%
	Antipsychotic Usage	(22)	14.4%
Outcome /Result	Recovered	137	90.2%
	Death	11	7.2%
	Absconded	4	2.6%

How long a patient stays in the hospital Eight days are spent in the hospital, and in half of the patients, the delirium went away after two days (83). Treatment consists of antipsychotics (14.4%) and benzodiazepines (56.5%).

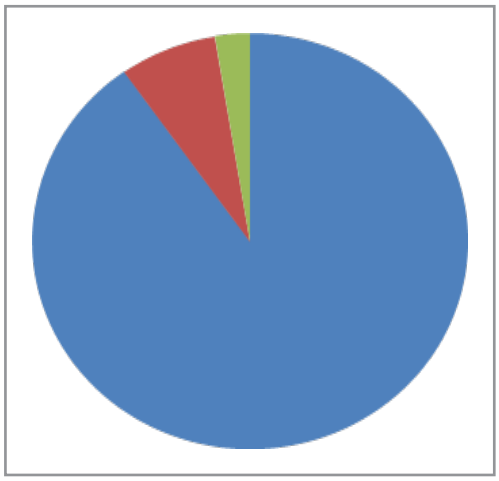

Diagram 3: Result of Delirium

Subjects' delirium results in 90.2% of them being recovered. 7.2% Death Rate 2.6% disappeared

Table: 8 Medical reason of delirium

Causes	Possible	Probable
Drug intoxication	0	0
Drug withdrawal	(5)6.5%	0
Metabolic/endocrine	(19)25%	41 (53.9%)
Traumatic brain injury	0	0
Seizures	(4)5.2%	(8) 10.5%
Infection intracranial	(8)19.8%	(2) 2.6%
Infection (systemic)	6	(9)11.8%
Neoplasm intracranial	0	(1) 1.3%
Neoplasm systemic	(1) 1.3%	0
Cerebrovascular.	(19)25%	(3) 3.9%
Organ. Insufficiency	(6)7.8%	0
Other central. nervous system	0	(2)2.6%
Others.	(2)2.6%	0

Delirium Check List: Of the 76 causes of medical delirium, metabolic/endocrine (41) accounted for 53.9%, systemic infection (11.8%), seizures (10.5%), cerebrovascular disease (3.9%), and infection of the intracranial and other central nervous systems (2.6%). These were the most certain and likely causes (>3) of medical delirium. Metabolic/endocrine causes account for 25% of both existing and potential contributing causes (<2).

Table 9: Subtype of motor agitation or retardation frequency

Causes	Subtypes		
	Hypoactive	Mixed	Hyperactive
	Percent	Percent	Percent
Drug. Withdrawal	(6) 7.9%	(1) 1.3%	(4) 5.3%
Metabolic/. Endocrine	(3) 3.9%	(13) 17.1%	(37) 48.7%
Seizures.	0	(2) 2.6%	(4) 5.3%
Infection (Intracranial)	(3) 3.9%	(8) 10.5%	(2) 2.6%
Infection (Systemic)	(2) 2.6%	(6) 7.9%	(9) 11.8%
Neoplasm (Intracranial)	0	0	(1) 1.3%
Neoplasm. (systemic)	0	(1) 1.3%	0
Cerebrovascular.	0	(17) 22.4%	(3) 3.9%
Organ Insufficiency	(10) 13.2%	(6) 7.9%	0
Other (Central Nervous System)	0	0	(2) 2.6%
Other	0	2 2.6%	0

Delirium resulting from metabolic/endocrine causes is more likely to be hyperactive (48.7%), mixed (22.4%) and hypoactive (13.2%) in nature. Delirium resulting from cerebral vascular causes is less common.

Table 10: Characteristic Information on Alcohol Withdrawal Delirium

	Delirium Cause
	Alcohol withdrawal Delirium N (76)
Age of onset of alcohol use	19.47±5.541
Duration of Dependence Pattern	16.97±8.534
Amount of Alcohol Intake per Day	478.95±167.933
Family h/o Psychiatric Illness	8 (10.5%)
Family h/o Alcohol Use Disorder	28 (36.8%)
Co morbidity Medical Illness	14 (18.2%)
Concurrent Substance Use-SMOKELESS TOBACCO	30(39.4%)
Cannabis	2(2.6%)
Nicotine	38 (50%)
No Other Substance Use	6 (7.8%)
SADQ	27.03 ±4.511

19.47±5.541 is the average age at which alcohol dependence first manifests itself, 478.95±167.933 is the average daily alcohol consumption volume, and 16.97±8.534 is the average duration of alcohol intake in the dependent pattern. The mean severity of the Alcohol Dependency Questionnaire (SADQ) is 27.03 ±4.511

Table 11: Contrast Medical Delirium with Alcohol Withdrawal Delirium in Terms of Age and Etiology.

Age	Delirium Cause		Chi- Square Value	P-Value
	Alcohol withdrawal Delirium N 76	Medical Illness Delirium N 76		
16-30 years	14	9	<0.001*	16.108
31-45 years	24	10		
46-60 years	28	28		
Above 60 years	10	29		

When comparing the age ranges of alcohol withdrawal delirium with medical illness delirium, the majority of the people with medical disease delirium are older than 60. When compared to alcohol withdrawal delirium, this has been demonstrated to be statistically significant (p value 0.01).

Table 12: Demographic Comparison of Delirium Caused by Medical Disease and Alcohol Withdrawal

Age	Delirium Cause		Chi- Square Value	P-Value
	Alcohol withdrawal Delirium N 76	Medical Illness Delirium N 76		
Previous h/o Seizures	22 28.9%	4 5.2%	15.033a	Ns
Previous h/o Head Injury	0	1	1.007	0.316(ns)
Previous h/o Delirium	18 23.6%	2 2.6%	14.739	0.001**
Family h/o Alcohol Use Disorder	28 36.8%	2 2.6%	28.074	0.001**
Family h/o Psychiatric Illness	8 10.5%	0	8.444	0.006**
Comorbidity Medical Illness	14	61	58.142	0.001**

There were no discernible differences between alcohol withdrawal delirium and medical disease delirium when considering the prior history of seizures. With a Chi-Square Value of 8.444 and a p value of less than 0.006**, the family history of psychiatric illness in alcohol withdrawal delirium (10.5%) is statistically significant. Comorbid medical illnesses (such as diabetes, hypertension, etc.) and delirium were statistically significant, with a p value of 0.001** and a Chi-Square value of 58.142.

Table 13: Comparison of the Intensity and Frequency of Symptoms in Each Group

Delirium rating scale R 98	Present at any severity %		Moderate or severe severity %	
	Alcohol withdrawal. Delirium N 76	Medical Illness Delirium N 76	Alcohol withdrawal Delirium N 76	Alcohol withdrawal Delirium N 76
Neuropsychiatric And Behavioral:				
1. Sleep-wake cycle Disturbance	100	100	100	100
2. Perceptual. Disturbances and hallucinations	63.2	38.2	55.2	35.6
3. Delusions	36.3	5.3	33.7	4
4. Lability of affect	84.2	90.8	78.9	84.2
5. Language	50	76.3	36.2	63.1
6. Thought process Abnormalities	36.2	28.9	23.4	17.1
7. Motor Agitation	88.1	56.6	84.2	43.2
8. Motor Retardation	18.4	60.5	10.5	56.6
Cognitive:				
9. Orientation.	84.2	89.5	78.9	86.9
10. Attention	84.2	90.7	68.4	80
11. Short-term memory	73.7	77.6	44.8	61.8
12. Long-term memory	52.6	56.6	28.9	39.5
13.Visuospatial ability	68.4	69.7	50	52.6

One of the common aspects shared by both Medical Illness Delirium and Alcohol Withdrawal Delirium is disruption of the sleep-wake cycle. The most common symptom of alcohol withdrawal delirium is motor agitation (88.1%), followed by cognitive abnormalities (84.2%), which include attention problems and disorientation. The three most common symptoms of Medical Illness Delirium are motor retardation (60.5%), lability of emotion (90.7%), and attention difficulties (90.7%).

Table 14: Comparison of the two Groups' Delirium Durations

Variables		Alcohol withdrawal Delirium	Medical Illness Delirium	Chi-Square Value	P-Value
total duration of	<3	64	53	4.4913	<0.0340
delirium days	>4	12	23		

This table evaluates the difference in the overall length of delirium between the groups for medical illness and alcohol withdrawal. Three days are needed for recovery in cases of Alcohol Withdrawal Delirium (84.2%) and Medical Illness Delirium (69%). There is no statistically significant difference between the Alcohol Withdrawal group and the Medical Illness group with regard to the percentage of delirium that lasts longer than three days (15.8% versus 30.3%).

Table 15: Treatment and outcome of delirium between two groups

Variables		Alcohol withdrawal Delirium	Medical Illness Delirium	Chi-Square Value	P-Value
Outcome	Recovered	72	65	16.463	<0.001*
	Death	0	11		
	Absconded	4	0		
Treatment	Benzodiaz- epines Usage	74	6	16.463	<0.001*
	Antipsych-otic Usage	22	11	4.683	0.048

5.3% of patients with alcohol withdrawal delirium absconded, whereas 94.7% of them recovered. In cases of medical illness delirium, 14.5% of patients died and 85.5% recovered, according to a p value of less than 0.001** and a Chi-Square value of 16.4633. Pharmacological therapy for alcohol withdrawal delirium was mostly administered with benzodiazepines (97%) and antipsychotics (28%). 7.8% of respondents with Medical Illness Delirium used benzodiazepines, while 14.4% of patients used antipsychotics.

Discussion

Delirium is classified as a neuropsychiatric symptom that arises from either drug intoxication/withdrawal or an underlying medical disease. This study was one of the rare attempts to look at different delirium descriptive data and phenomenology using longitudinal and cross-sectional scales like the drs-98. DRS-98 measures the cognitive deficit by measuring patients three times in a row, 48 hours apart. Cognitive impairment is assessed using the Cognitive Delirium Rating Scale and compared with the DRS-98 to look for phenomenological differences. The fact that so few researches have examined or contrasted Alcohol Withdrawal Delirium with other Medical Illness Delirium as a group is another intriguing fact.

In this study, the average participant age is 49, and 25.7% of the individuals are over 60. In comparison, in studies of a similar kind [1]. the average participant age is 44.5 (SD: 13.05; range 22–85 years), and the percentage of subjects over 60 is 8%. The results of another study by [2]. also show that subjects over 60 years old have significantly more episodes of delirium due to medical illness than those who experience alcohol withdrawal delirium. This finding may be attributed to increased age, which is a risk factor as it increases cognitive deficit, which predisposes elderly population to develop delirium the ratio of men to women is 86: 14. Given that all 76 of the patients in the alcohol withdrawal delirium are male, this significant difference is not surprising. The bulk of the patients in this study, which is being done in an urban tertiary care institution, come from lower middle socioeconomic states. i.e. 47.4%.

A number of risk variables were evaluated, including delirium history, co-morbidity conditions, seizures, concurrent drug use, and a family history of alcoholism and mental illness. When compared to delirium caused by a medical ailment, the historical history of delirium in people with alcohol withdrawal delirium has demonstrated notable differences. Previous delirium was thought to be a risk factor for developing delirium because it causes cognitive impairments that increase the likelihood of having more episodes in the future [3]. Co-occurring medical conditions (such diabetes, hypertension, etc.) are common and have been shown to dramatically increase the risk of delirium from medical conditions, which is thought to be a predisposing factor for delirium. Ancestral history of mental disorders during alcohol detoxification Delirium was considerable, and [4-7]. found comparable results. DRS - r 98 was used to compare the frequency of different symptoms between delirium from alcohol withdrawal and delirium from a medical illness. Alcohol withdrawal delirium was associated with a low incidence of motor retardation and language difficulties and a high prevalence of perceptual disturbances, hallucinations, delusions, and abnormalities of the thought process. This result was in line with Grover et al. Nonetheless, there was no difference in the frequency of central symptoms like attention and orientation between the two delirium groups. As a result, individuals experiencing delirium from any cause will exhibit the main symptoms of the condition; however, minor variations in the symptomatology may result from an underlying etiology.

Apart from alcohol withdrawal, the most prevalent causes in the delirium etiological check list are metabolic/endocrine disor-

ders, which account for 53.9% of cases, followed by cerebrovascular disease (25%), and systemic infection (11.8%). Previous investigations by Grover et al. have shown similar results. The frequency of pattern motor subtype has been evaluated in medical sickness delirium. In comparison to previous research, the results for the hyperactive type (48%), hypoactive type (13.7%), and mixed type (22.4%) indicate no statistical significance. In comparison to [8]. the morality rate in our study is 7.2%. our low result may be attributed to the fact that we did not find any mortality from alcohol withdrawal delirium.

A similar conclusion was seen in [9]. The delirium rating score of -98 was used in three consecutive sessions every two days. The results indicate that psychomotor abnormalities and disruptions in the sleep-wake cycle are typical presentations of early delirium. The most enduring effects include sleep problems, emotional lag, and issues with orientation; these results were consistent with those of and [10, 11]. The linguistic signs of the medical condition delirium varied statistically significantly between groups.

The symptoms of delirium are divided into two categories: "associated" features, which vary in presentation and include different motoric profiles, affective disturbances, and psychotic symptoms, and "core" features, which include disturbances of orientation, memory, attention, sleep-wake cycle, thought processes, and language [13, 14]. While the DRS-R98 is a symptom rating scale that evaluates behavioural and cognitive symptoms over a 48-hour period, and the CTD is a cognitive exam that measures present state, the evaluation of identical cognitive questions on both measures has significant correlations (inversely as predicted).

Cognitive impairment may lead to misperceptions or misunderstandings of the external environment, or an individual's susceptibility to psychotic symptoms, or it may be a component of mood disorders. There was a significant positive correlation found between the cognitive domain (orientation, memory, comprehension, and vigilance) and that of psychotic symptoms (perceptual disturbance, delusions) [15, 16].

In a number of studies comparing the psychotic symptoms of acute confusional state with those of schizophrenia, it was discovered that hallucinations in acute confusional state are more often visual than auditory, and formal thought disorders—which are often characterized by illogicality and poverty of thought—involve themes related to the immediate environment and circumstances [17,18]. The correlation seen between the scores for visuospatial ability and disorientation might be attributed to the common involvement of the representative posterior parietal cortex in both orientation and visuospatial tasks [19,20].

The study's mean morality rate is 12.7%. In contrast, when alcohol withdrawal delirium and medical disease delirium were compared for mortality, the latter had a mortality rate of 14.4%, which was in line with the findings of Gover et al. The prognosis for hypoactive delirium is reportedly worse. The average length of delirium was two days; comparable results were reported in previous research by [21-23]. In line with a previous Indian research, the majority of the alcohol withdrawal group recovered in two days, with a mean duration of delirium of 2.45±1.171. There was no discernible difference in the overall duration of delirium between the two groups. Eight days is the average length of stay in the hospital. The Medical Illness group had a significantly longer mean total hospital stay (11.37±8.230) than the Alcohol Withdrawal Delirium group (5.50±2.517), which is consistent with findings by Reluizmoschetta [24].

Conclusion

According to this study, a higher percentage of delirium cases had a medical reason among older people. There were no discernible variations between the two groups with regard to gender, socioeconomic level, or family structure.

As people aged, delirium from medical illnesses was more common than delirium from alcohol withdrawal. In the alcohol withdrawal delirium group, patients with a prior history of delirium showed statistically significant differences from the medical disease delirium group. Regarding prior history of seizures or head injuries, no discernible difference was discovered. In comparison to the control group, the alcohol withdrawal delirium group had a significantly greater proportion of family history of mental illness.

The delirium etiology check list for the medical condition delirium group indicated that metabolic / endocrine disorders were the most prevalent cause, with hyperactive motor subtypes accounting for the majority of cases. There was no change in the main features of delirium when the severity of the symptoms was compared between the two groups using the DRS R-98. Alcohol withdrawal delirium was shown to have a high incidence of psychotic symptoms. The first 48 hours of a two-group longitudinal follow-up with DRS R-98 are marked by behavior symptoms (disturbances in psychomotor function and disturbed sleep-wake cycles) and core symptoms (difficulties with orientation, emotional lability, and concentration impairment).

Positive correlations were found between the cognitive test of delirium and the delirium rating scale with respect to the cognitive and psychotic domains. The delirium lasted an average of three days. When compared to alcohol withdrawal delirium, the death rate for the medical ailment delirium group was much greater. It was discovered that delirium caused by a medical condition required a longer overall hospital stay. The patients with medical illnesses were older and had a worse prognosis than the alcohol withdrawal group, which included younger people who recovered better.

Reference

1. Sandeep Grover, Akhilesh Sharma, Natasha Kate, Surendra K Mattoo, Debasish Basu, et al. (2013) Symptom Profile and Outcome of Delirium Associated with Alcohol Withdrawal Syndrome: A Study from India Am J Addict 22: 503-509.
2. Levkoff SE, Marcantonio ER (1994) Delirium: a major diagnostic and therapeutic challenge for clinicians caring for the elderly. Compr Ther 20: 550-557.
3. McCusker J, Cole M, Dendukuri N, Han L, Belzile E, et al (2003) The course of delirium in older medical inpatients: a prospective study. J Gen Intern Med 18: 696-704.
4. David Meagher, MRCPsych (Neuroscience) MHSc (Clinical Teaching) University of Limerick Medical School and Limerick Mental Health Services

5. Michael F Mayo-Smith, Lee H Beecher, Timothy L Fischer, David A Gorelick, Jeanette L Guillaume, et al. (2004) Management of Alcohol Withdrawal Delirium Management of alcohol withdrawal delirium. An evidence-based practice guideline. Arch Intern Med 164:1405-12.
6. Daniele Stagno, Christopher Gibson, William Breitbart (2004) The delirium subtypes: A review of prevalence, phenomenology, pathophysiology, and treatment response. Palliat Support Care 2: 171-179.
7. Ross CA, Peyser CA, Shapiro I, Folstein MF (1991) Delirium: Phenomenologic and Etiologic Subtypes. Int Psychogeriatr 3: 135-147.
8. Juliana Barr, Gilles L Fraser, Kathleen Puntillo, E Wesley Ely, Céline Gélinas, et al. (2013) Clinical practice guidelines for the management of pain, agitation, and delirium in adult patients in the intensive care unit. Crit Care Med 41: 263-306.
9. Giuseppe Bellelli, Giovanni B Frisoni, Renato Turco, Elena Lucchi, Francesca Magnifico, et al. (2007) Delirium superimposed on dementia predicts 12-month survival in elderly patients discharged from a postacute rehabilitation facility. J Gerontol a Biol Sci Med Sci 62: 1306-1309.
10. Brown TM (2000) Basic mechanisms in the pathogenesis of delirium. In: Stoudemire A, Fogel BS, Greenberg DB, eds. The Psychiatric Care of the Medical Patient. 2nd ed. New York: Oxford University Press.
11. Camus V, Gonthier R, Dubos G, Schwed P, Simeone I, et al. (2000) Etiologic and outcome profiles in hypoactive and hyperactive subtypes of delirium. J Geriatr Psychiatry Neurol 13: 38-42.
12. Cole M, McCusker J, Dendukuri N, Han L (2003) The prognostic significance of subsyndromal delirium in elderly medical inpatients. J Am Geriatr Soc 51: 754-760.
13. Collinsworth AW, Priest EL, Campbell CR, Vasilevskis EE, Masica AL, et al. (2016) A review of multifaceted care approaches for the prevention and mitigation of delirium in intensive care units. J Intensive Care Med 31: 127-141.
14. Fang CK, Chen HW, Liu SI, Lin CJ, Tsai LY, et al (2008) Prevalence, detection and treatment of delirium in terminal cancer inpatients: a prospective survey. Jpn J Clin Oncol 38: 56-63.
15. Fick D, Foreman M (2000) Consequences of not recognizing delirium superimposed on dementia in hospitalized elderly individuals. J Gerontol Nurs 26: 30-40.
16. Gagnon P, Allard P, Mâsse B, DeSerres M (2000) Delirium in terminal cancer: a prospective study using daily screening, early diagnosis, and continuous monitoring. J Pain Symptom Manage 19: 412-426.
17. Häussinger D, Schliess F, Kircheis G (2002) Pathogenesis of hepatic encephalopathy. J Gastroenterol Hepatol.
18. Inouye SK, Westendorp RDG, Saczynski JS (2014) Delirium in elderly people. Lancet 383: 911-922.
19. Jackson JC, Gordon SM, Hart RP, Hopkins RO, Ely EW, et al. (2004) The association between delirium and cognitive decline: a review of the empirical literature. Neuropsychol Rev 14: 87-98.
20. Kalisvaart KJ, de Jonghe JF, Bogaards MJ, Vreeswijk R, Egberts TC, et al. (2005) Haloperidol prophylaxis for elderly hip-surgery patients at risk for delirium: a randomized placebo-controlled study. J Am Geriatr Soc 53: 1658-1666.
21. Lawlor PG, Gagnon B, Mancini IL, Pereira JL, Hanson J, et al. (2000) Occurrence, causes, and outcome of delirium in patients with advanced cancer: a prospective study. Arch Intern Med 160: 786-794.
22. Liptzin B, Levkoff SE (1992) An empirical study of delirium subtypes. Br J Psychiatry 161: 843-845.
23. Marcantonio ER, Flacker JM, Michaels M, Resnick NM (2000) Delirium is independently associated with poor functional recovery after hip fracture. J Am Geriatr Soc 48: 618-624.
24. McCusker J, Cole M, Dendukuri N, Belzile E, Primeau F, et al. (2001) Delirium in older medical inpatients and subsequent cognitive and functional status: a prospective study. Can Med Assoc J 165: 575-583.