

Psychiatric Manifestations of Neurodegenerative Disorders: Focus on Frontotemporal Dementia.

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ABSTRACT

The frontal and temporal brain lobes degenerate in frontotemporal dementia (FTD), a neurodegenerative condition. This study examines the psychological symptoms of FTD to highlight how it differs from other dementias in terms of its characteristics. Examining the complex interaction between brain degeneration and the ensuing mental symptoms, we focus on the effects on cognition, emotion, and behaviour. Disinhibition, apathy, and changed social behaviour are all behavioural abnormalities associated with FTD that are brought on by impaired impulse control and emotional regulation. Social relationships and empathy are further complicated by emotional blunting. Decision-making and communication are impacted by cognitive abnormalities, including executive dysfunction and language disorders, which highlight the susceptibility of crucial brain areas. The difficulties caused by FTD affect not just patients but also carers and medical personnel. The multifaceted character of FTD necessitates a comprehensive strategy that combines treatments in medicine, psychology, and society. This comprehensive approach strives to empower patients and promote mutual understanding between professionals and carers. The mental symptoms of FTD demonstrate the complex relationships between brain anatomy and behaviour. This article emphasizes the need for specialized therapies and ongoing study by examining the behavioural, emotional, and cognitive aspects of FTD. Progress may be achieved in improving the quality of life for persons affected with FTD via compassion and thorough treatment.

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Keywords: Psychiatric Manifestations (PM), Neurodegenerative Disorders (ND), E-views software, Frontotemporal Dementia (FD)

Introduction

The word "Neurodegenerative disorder" can be explained in these words as "a versatile and wide range of conditions of the brain that causes slow damage to cells of the brain and also cells of nervous system wholly thus affecting the process of sensation, coordination, Cognition, and others in the body [1]. There are various disorders such as Alzheimer's disease, abbreviated as AD; Parkinsonism, abbreviated as PD; spinocerebellar ataxia; spinal muscular atrophy; Frontotemporal Dementia; and others. There are different and versatile reasons for Neurodegenerative Disorders like stroke, the use of alcohol, any kind of tumor, any brain-damaging virus, or any toxin or chemicals in the body. Along with it, Neurodegenerative Disorders may be genetic means inherited from parents in the form of genes from one generation to the next. There are a variety of symptoms of Neurodegenerative Disorders, such as blood pressure fluctuations, effect on memory, effect on the human heart, sleep cycle disturbance, bladder, and bowel functioning, forgetfulness, loss of balance in the body, mood swings, apathy, anxiety, and others [2]. These disorders may cause changes in behavior like Aggression, delusion, stress, post-traumatic stress disorder, social alienation, no interest in relationships, and declining social capital. Different Neurodegenerative Disorders have different reasons and symptoms based on their specific type. For example,

in Parkinson's disease, both genetic and environmental factors play an important role. The genetic factors come from the family, and environmental factors are gained from the environment. For example, environmental factors include exposure to toxins such as the insecticide rotenone and permethrin, found in those clothing used for killing mosquitoes, and other chemicals such as organochlorides. Parkinson's disease is basically concerned with the loss of those brain cells that produce a chemical called dopamine [3]. It is characterized by severe pain in the head, lower back pain, or pain in the neck. It is such a kind of Neurodegenerative Disorder that is presently nondurable, which means it has no treatment yet.

The other Neurodegenerative Disorder is named Alzheimer's disease, a disorder of the brain that distorts memory storage and normal thinking in the brain. It is a reason it is explained to a medical specialist that this disorder is caused by different abnormal protein build-ups in the brain, such as amyloid, which deposits to form plaque in the brain's cells; other proteins like tau that cause Alzheimer's disease [4]. Its symptoms include very weak memory, negative thinking processes, poor judgment, antisocial personality, forgetting things, and taking more than normal time to complete tasks in daily routine. As there is no treatment for Parkinsonism, in the same way, there is no effective

treatment for Alzheimer's disease but only some medications that can reduce its symptoms to some extent. Different diagnostic tools for this Neurodegenerative Disorders measurement, such as neurological exams, brain imaging, cerebrospinal fluid test, or blood test, can help diagnose these disorders. In this study, we have to focus on one main Neurodegenerative Disorder, which is Frontotemporal Dementia; this disorder is abbreviated as FTD, which involves the disturbance and damage to those neurons which are present in the frontal and temporal lobes of the brain. It has increased many times in recent years [5]. It also explores its behavioural, emotional, and cognitive characteristics. The frontal lobes, which handle executive processes, decision-making, and impulse control, and the temporal lobes, which are involved in language comprehension and emotional regulation, are the particular brain areas that frontotemporal dementia largely affects. The gradual deterioration of these areas causes a wide spectrum of clinical symptoms that distinguish FTD from other dementias. Although closely related to the brain illness of FTD, the psychological symptoms can be extremely unpleasant and confusing for people affected. It is mostly characterized by stringent apathy even if that person does not show a willingness to talk even, a decline in social capital because this type of person does not feel comfortable and satisfied with others, and very abrupt personality little things bother them much like change in moods swiftly that causes depression to themselves even, showing very obsessive, involuntary and repetitive behaviours such as starting collecting items for no reason and other such symptoms. It has also been seen that these language problems are rare in Frontotemporal Dementia people, but in some cases, victims may have difficulty speaking, or we can say that they cannot recall the correct word for the thing they are trying to mention. Not only this, problems in reading and writing are also observed in these patients [6]. In this disorder, when language use is less, these persons become mute and antisocial with time. This disorder leads to damage to brain cells that can be detected by using MRI, which stands for magnetic resonance imaging, in which it has been seen that these patients have shrinkage of the frontal and temporal lobes. Other tests are used for its diagnosis: positron emission tomography, abbreviated as PET; computed tomography, abbreviated as CT; and other tests related to it. It has also been observed that this type of Dementia occurs in different stages, such as different 7 stages of Frontotemporal Dementia arranged from mild symptoms starting with a mild change in the thinking process to severe effects of Dementia that cause a decline in health [7]. The drastic behavioural changes that FTD causes are one of its defining characteristics. Patients may display pronounced personality changes, which are frequently characterized by apathy, impulsivity, and lack of inhibition. These behavioural changes may show up as a disrespect for social conventions and laws, which can result in behaviours that are improper for social situations and possibly embarrassing social encounters. An essential component of good social communication, empathy, may dwindle, which would make it much harder for people with FTD to interact with others. A more complex understanding of the brain-behavior interaction is required because the underlying neurological injury upsets the delicate balance of brain areas in charge of filtering and controlling behaviour. FTD is frequently characterized by apathy, which adds another level of difficulty to the mental environment. The loss of desire and interest in once-enjoyed activities can significantly impair everyday functioning. Relationships suffer, and people become socially isolated as simple duties like housework and personal hygiene go uncompleted. Because the

causes of apathy include brain deterioration, it can be very difficult for careers to distinguish between apathy and disability. However, the reason for Frontotemporal Dementia is still unknown to medical specialists; it has been concluded that this disorder runs into families with the chances of occurrence of almost 10 to 30% because of only genetic causes.

Although it is not confirmed yet, trauma sometimes increases the chances of Frontotemporal Dementia, especially head trauma, and sometimes the thyroid also affects it similarly [8]. Along with it, increased levels of stress and anxiety also increase the chances of Frontotemporal disorder in any person. If we talk about its Treatment, we are still having no proper treatment for Frontotemporal Dementia in this advanced era of medical science yet. Nevertheless, it is prescribed by medical specialists to use antidepressants like trazodone, which is associated with decreasing the behavioral issues related to Frontotemporal Dementia. Some other substances are also effective in some people, like citalopram, Paxil, and Zoloft [9]. These medications can only reduce the intensity of symptoms caused by Frontotemporal Dementia but cannot treat it wholly or long-lasting. It shows that we cannot cure much of Neurodegenerative Disorders in patients. All these studies effectively described the symptoms and stages related to Frontotemporal Dementia but are surely insufficient to describe it is Treatment yet [10].

Research objective

The main research objective of this study is to get an idea about Neurodegenerative Disorders, which are varied and specific depending upon their reasons and symptoms. Frontotemporal Dementia is studied in detail and describes its causes, stages, changes, and other factors related to Frontotemporal Dementia, but Treatment is not available for this disorder yet. This research offers a succinct synopsis of the essay's investigation of frontotemporal dementia (FTD)'s psychiatric symptoms, with an emphasis on its behavioural, affective, and cognitive aspects. It captures the particular difficulties posed by FTD, its effect on patients and careers, and the requirement for thorough interventions.

This research study represents the Psychiatric Manifestations of Neurodegenerative Disorders. The research divided into five specific research chapters: first portion represent that introduction related to the variables. this portion describe objective of research the second section describe literature review the third portion present methodology and explain the variables points. The fourth section represent that result and its descriptions also that the last portion represent and summarized overall research study and present some recommendation about topics.

Literature Review

In the above studies, we found that the rate, level, and intensity of those disorders affecting the brain and its normal functioning is increasing daily in this era. It is because the environment has become more and more stressful day by day people are suffering from loneliness, social alienation, traumas, stress, poor economic conditions many other such factors that have affected our brain badly, for example, because of war conditions in a few countries, their people suffer from more fear, stress, and depression that leads to poor mental health there [11]. The problems of mental health have been seen in developing as well as in developed countries over time. Those disorders that affect the structure and normal functioning of the brain have tremendously increased these days [12]. One of these disorders is Neurodegenerative

Disorders. As the word explains, it is a disorder that can result in damage or degeneration of neurons in the body. Thus, affecting the whole nervous system of the body [13]. Scientific studies prove that the nervous system in the human body is centralized rather than diffused and made up of two main parts called the central nervous system and the peripheral nervous system [14]. The central nervous system comprises of brain and spinal cord, the main components of the nervous system, and the peripheral nervous system, based on all the neurons in the body. Neurons are the elemental structural and functional units of the nervous system, and any damage or degeneration to these neurons may result in a lack of coordination in the whole body [15]. The studies have explained different Neurodegenerative Disorders like Parkinsonism, Dementia, and Alzheimer's disease, which are most common nowadays, but our main focus in this study was on Frontotemporal Dementia [16]. As Parkinson's disease relates to less production of dopamine in the brain, which leads to the degeneration of neurons in the brain because dopamine chemical is one of the main neurotransmitters in the brain [17]. These studies also reveal that this disorder is still incurable, although much research has been conducted. Frontotemporal Dementia is related to the degeneration of neurons in the front and temporal parts of the brain. The brain consists of three lobes: forebrain, midbrain, and hindbrain. The forebrain consists of a few lobes, of which these two lobes are frontal and temporal [18]. The frontal lobe is involved in memory formation in the brain; that is, a little disorder in this lobe that leads to a decline in memory in a short time even [19]. In Frontotemporal Dementia, because the frontal lobe has degeneration of neurons thus, one of the main symptoms of this disorder is loss or decline in memory. The frontal lobe not only functions for memory formation but also coordinates the normal balance in the body; thus, the effect of this lobe results in an imbalance in the body [20]. Behavioural issues have also been seen in these patients. That study explains that because the frontal lobe is involved in the hormonal balance of the body too, thus affects this part, resulting in hormonal imbalance in the body that causes mood swings, antisocial behaviour, less social capital, and Behavioral theirs [21]. Recent studies show that Dementia affects the neural connection in the brain; the main neurons present inside the central nervous system are interneurons, and are present outside the central nervous system are sensory neurons and motor neurons [22]. Because of Dementia, neural connections are affected; in this way, the thinking process also changes along with abruption in feelings [23]. The thinking process changes negatively, like suicidal thoughts, fear, anxiety, forgetfulness, etc. The studies also reveal that this disorder not only affects the brain but also the physical health of a person affected by it [24]. The diagnosis of the first stage of Dementia can be made by its symptoms, but the diagnosis of higher critical stages of Dementia needs medical equipment [25]. Medical history is important in diagnosing this disorder at the initial stage only. However, for accurate diagnosis, it needs some medical instruments and processes like MRI stands for magnetic resonance imaging, SPECT stands for single photon emission computed tomography [26], PET days stands for positron emission tomography, and different blood tests. In the case of blood tests for diagnosis of Frontotemporal Dementia, the protein level called NFL is detected in these patients; the higher level of this protein in the body indicates Frontotemporal Dementia in that person [27]. The other diagnosis technique that can be used for the diagnosis of Frontotemporal Dementia is MRI; in this technique, a medical specialist gets images of the brain using a magnetic field; these images may help to get an idea of

which brain part is shrinking day by day the shrinkage of brain parts is a sign of Dementia because it causes the degeneration of neurons thus automatically the size of the brain is reduced. All of these techniques are used to get an idea about the degeneration of neurons; thus, if neurons start degenerating in the frontal and temporal parts of the brain, it is called frontal, temporal Dementia disorder [28].

Another key feature of FTD is disinhibition, which exposes the deterioration of impulse control. This might result in actions that defy social conventions, from offensive jokes and remarks to rash financial decisions. Patients are unable to repress or moderate their behaviours because the prefrontal cortex's integrity, which is essential for executive function, is damaged. The delicate nature of our cognitive architecture is shown by this complex tango between brain anatomy and behaviour. The emotional processing-related brain areas' delicate dance is on display in the emotional blunting that frequently accompanies FTD. Patients may find it difficult to identify and react to their own and others' emotions. Not only does this make it difficult to connect socially, but it also offers a moving glimpse into the neurological bases of human empathy and emotional resonance. Planning, decision-making, and multitasking are made possible by higher-order cognitive processes, which are destroyed by executive dysfunction, which results from frontal lobe degeneration. The difficulties in budgeting, problem-solving, and task organization that follow can be extremely stressful for both patients and careers, underscoring the significant effects of brain degeneration on daily living. If we talk about the Treatment of Frontotemporal Dementia, there is no satisfying and effective treatment for it yet. Once the degeneration of neurons starts, it is impossible to regain these neurons in the body because the number of neurons is fixed in the brain after adulthood. Only a few antidepressants are suggested by medical experts to minimize the symptoms of Frontotemporal Dementia [29]. These antidepressants do not treat Dementia, but they only boost the level of neurotransmitters in the brain that increases the brain's neural activity, resulting in a feeling of pleasure and relaxation but for only a short time. Recent studies reveal that mainly two neurotransmitters are connected to the usage of antidepressants, these are serotonin and noradrenaline [30].

Different therapies can be carried out to reduce symptoms, such as cognitive therapy, which can relieve a person, but these are not long-lasting and require consistency with time. The studies related to Frontotemporal Dementia are overviewed many times to get an idea about its causes and symptoms treatments [31]. Although not always present, language impairment is one more thread in the complex tapestry of FTD. Effective communication is damaged by anomia, the inability to recall words, and perseverance, the repeating of statements. The more severe kind, primary progressive aphasia, affects language ability and makes it difficult to comprehend, express oneself, and make basic verbal connections. Even though they are less noticeable, rigidity and compulsive behaviours highlight the wide variety of symptoms that FTD may cause. Patients may insist on the sameness and create strict routines, which reflects the brain's conflict between the need for stability and decaying neural networks. Even mood can change in FTD, however it happens secondarily to the behavioural and cognitive alterations. Although they can occur, depression and anxiety are sometimes obscured by the more noticeable behavioural changes. These mood changes highlight the varied character of FTD by adding even another level of complication to the clinical picture. However, we learned that its

causes are still unclear; mostly caused by genetic factors, but environmental factors also play an important role in Dementia. The symptoms are also explained by study, but in the field of its Treatment, we are still lagging because most of the Neurodegenerative Disorders at the time are incurable [32]. Same as it is, Frontotemporal Dementia is also not curable yet, which shows that there is still more need for study and research on it to overcome these Neurodegenerative Disorders that have been unceasing and increasing daily [33].

Methodology: this research study describes the Psychiatric Manifestations of Neurodegenerative Disorders. For determine the research used E-views software and generate results included descriptive, unit root test and least square analysis between the dependent and independent. A neurodegenerative condition called frontotemporal dementia (FTD) typically affects the frontal and temporal lobes of the brain and manifests as a range of cognitive, behavioural, and psychiatric symptoms. The psychological signs and symptoms of FTD might be extremely different from those of other dementias, such Alzheimer's disease. These symptoms frequently result from the gradual degradation of certain brain areas that control emotions, social behaviour, and personality. Let's examine some of frontotemporal dementia's main psychological symptoms:

1. Behavioural Changes: FTD frequently manifests with abrupt and inappropriate behavioural changes. Patients may act in ways that are unsuitable for social situations, show impulsivity, lack of restraint, and empathy. They could act in ways that go against social conventions and laws, which might result in uncomfortable or humiliating circumstances.
2. Lack of enthusiasm, motivation, or initiative is referred to as apathy. People who have FTD may lose interest in things they formerly found enjoyable and may neglect personal care, household duties, and social interactions. Their everyday

Descriptive statistical analysis:

Table 1

	PM	ND
Mean	1.837717	1.941693
Median	1.889700	1.851550
Maximum	2.673000	3.289920
Minimum	1.115000	1.111000
Std. Dev.	0.253673	0.496657
Skewness	0.528943	1.704864
Kurtosis	8.387278	5.487386
Jarque-Bera	30.14189	17.81334
Probability	0.000000	0.000135
Sum	44.10520	46.60062
Sum Sq. Dev.	1.480055	5.673363
Observations	24	24

The above result describes that descriptive statistical analysis result present the mean values, median values, the standard deviation rates, the skewness value also that present sum of square deviation and probability. The PM is main independent variable according to the result its mean value is 1.83 the median rate is 1.88 the maximum value is 2.67 its shows positive average value the probability value is 0.000 shows that 100% significant

functioning may be greatly impacted by apathy.

3. Disinhibition: Disinhibition refers to the inability to resist inappropriate behaviours or remarks and a loss of impulse control. This may result in offensive jokes, unwanted sexual approaches, or other behaviours against societal standards.
4. Emotional Blunting: FTD patients may have less emotional expressiveness as well as an inability to identify or react to other people's feelings. Relationship and social challenges may be exacerbated by this emotional blunting.
5. Executive Dysfunction: Tasks requiring organization, planning, decision-making, and problem-solving are handled by executive functions, which are cognitive processes. Executive dysfunction in FTD might make it difficult to manage money, make complicated decisions, or multitask.
6. Language Impairment: Grammatical mistakes, difficulty finding the correct words (anomia), and perseveration are all signs of language impairment in FTD. A disease known as primary progressive aphasia, which predominantly impairs language skills, may also manifest in certain people.
7. Rigidity and Obsessive Behaviours: Some FTD patients may display obsessive-compulsive traits as well as inflexible routines. They could demand consistency and act out when their routines are disturbed.
8. Eating Changes: Patients may have altered eating habits, such as binge eating or a predilection for a certain food group. This may result in gaining weight and other health problems.
9. Mood Disturbances: Some people with FTD may develop mood disturbances such as sadness or anxiety. Mood alterations are more frequently linked to other kinds of dementia like Alzheimer's disease. These mood swings, meanwhile, could be obscured by the larger behavioural and psychological changes.

relation between them. the result also describes that sum of square deviation rate is 1.48 the skewness value is 0.52 its shows that 52% skewness rate between them. the ND is dependent variable according to the result its mean value is 1.94 the probability value is 0.0000 the sum of square deviation rate is 5.67 its shows positive deviate from mean. The result describes those significant values of descriptive statistical analysis between them.

Unit Root Test analysis

Table 2

Null Hypothesis: PM has a unit root				
Exogenous: Constant				
Lag Length: 0 (Automatic - based on SIC, maxlag=5)				
			t-Statistic	Prob.*
Augmented Dickey-Fuller test statistic			-6.278730	0.0000
Test critical values:	1% level		-3.752946	
	5% level		-2.998064	
	10% level		-2.638752	
*MacKinnon (1996) one-sided p-values.				

The above result describes that unit root test analysis result present that t statistic also that probability. The result describe the t statistic value is -6.2787 the probability rate is 0.000 shows that

100% significantly level between them. according to the analysis 1% critical level is -3.75, 5% critical level is -2.99 also that present the 10% critical level is -2.63 respectively.

Table 3

Augmented Dickey-Fuller Test Equation				
Dependent Variable: D(PM)				
Method: Least Squares				
Sample (adjusted): 2 24				
Included observations: 23 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
PM(-1)	-1.083851	0.172623	-6.278730	0.0000
C	2.023410	0.320595	6.311416	0.0000
R-squared	0.652447	Mean dependent var		0.029313
Adjusted R-squared	0.635897	S.D. dependent var		0.347747
S.E. of regression	0.209834	Akaike info criterion		-0.202058
Sum squared resid	0.924637	Schwarz criterion		-0.103319
Log likelihood	4.323668	Hannan-Quinn criter.		-0.177226
F-statistic	39.42246	Durbin-Watson stat		1.904070
Prob(F-statistic)	0.000003			

The above result describe that augmented dickey fuller test analysis result present that coefficient value, the t statistic value, also that probability value of variable. the coefficient value is -1.0838 the standard error value is 0.17 the t statistic rate is -6.2787 the probability value is 0.000 shows that 100% significant analysis between dependent and independent.

result also present that adjusted R square its rate is 0.63, it also shows that 63% adjusted R value.

According to the result its long likelihood value is 4.32 the F statistic rate is 39.422 the overall probability value is 0.0000 shows that 100% significant value between them. The mean dependence var value is 0.02 the standard deviation rate is 0.34 its shows that 34% value between them.

The R square value is 0.65 its shows that 65% model fit for analysis

Table 4 Test of equality:

Test for Equality of Means of PM			
Categorized by values of PM and ND			
Sample (adjusted): 1 24			
Included observations: 24 after adjustments			
Method	df	Value	Probability
Anova F-test	(5, 18)	19.40225	0.0000
Analysis of Variance			
Source of Variation	df	Sum of Sq.	Mean Sq.
Between	5	1.248417	0.249683
Within	18	0.231638	0.012869
Total	23	1.480055	0.064350

The above result describes that equality test analysis result present value and probability values the result describe the rate of ANOVA F test its value is 19.40225 the probability value is 0.000 shows that positive and 100% significant the result describe that analysis of variance result shows sum of square value as between

the group and within the group. The sum of square values is 1.248, 0.23 and its total value is 1.4800 respectively according to the result its mean square rate is 0.24, 0.01 and 0.06 its present that 24%, 100% and 6% average square value of each indicator.

Table 5

Dependent Variable: ND				
Method: Least Squares				
Sample (adjusted): 1 24				
Included observations: 24 after adjustments				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.183923	0.772310	2.827781	0.0098
PM	-0.131810	0.416470	-0.316494	0.7546
R-squared	0.784532	Mean dependent var		1.941693
Adjusted R-squared	-0.740716	S.D. dependent var		0.496657
S.E. of regression	0.506667	Akaike info criterion		1.557729
Sum squared resid	5.647648	Schwarz criterion		1.655900
Log likelihood	-16.69275	Hannan-Quinn criter.		1.583774
F-statistic	0.100169	Durbin-Watson stat		0.667879
Prob(F-statistic)	0.754611			

The above result describes that least square analysis between dependent and independent result present that coefficient values, the standard error value, also the t statistic rate and probability value of independent variable. the coefficient rate is -0.13 the standard error value is 0.41 the t statistic value present that

negative value also that its probability rate is 75% significantly level between them. according to the result its R square value is 0.78 shows that 78% model fit for analysis. The adjusted R square value present that 74% rate the probability shows 75% significant rate between dependent and independent.

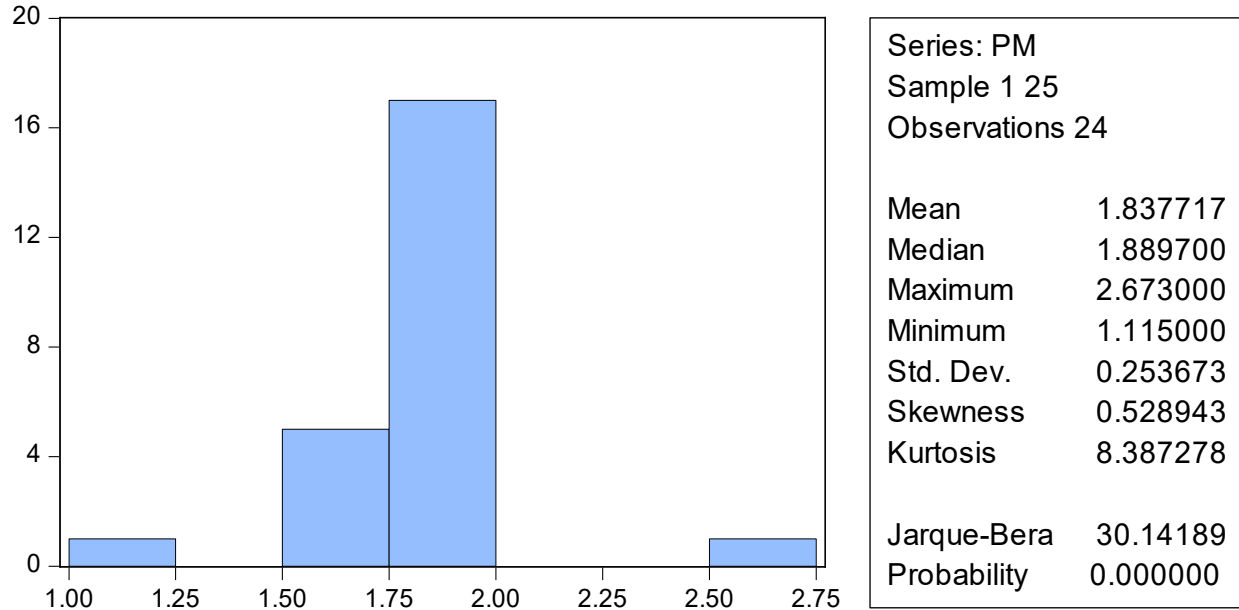


Figure 1

Histogram and State

The above graph presents that histogram and state analysis result present that mean value is 1.83 the median rate is 1.88 the maximum value is 2.67 also that explain the minimum value is 1.11 respectively. According to the result skewness value is 0.52 shows 52% the probability value is 0.000 shows that 100% significantly level between them. the above graph presents that histogram and state analysis the vertical side shows frequency level its start from 0 and end at 20 the horizontal side present range of histogram its start from 1.000 and end at 2.75 respectively.

Discussion and conclusion

The complex interplay of psychiatric symptoms in frontotemporal dementia (FTD) emphasizes the crucial relationships between the structure of the brain, cognitive processes, and behavior. The distinctive symptoms of FTD, which are brought on by frontal and temporal lobe atrophy, provide a challenge to patients, careers,

and medical professionals comparable. It's crucial to remember that people with FTD might exhibit a wide range of symptoms, both in terms of specificity and severity. A comprehensive strategy encompassing medical, psychological, and social therapies is required to help both the patient and their loved ones because managing these symptoms may frequently be difficult for careers [34].

The management of mental symptoms in people with FTD can be improved with an early diagnosis and individualized care plan. The subtle balance that supports proper social relationships is revealed by the behavioural abnormalities associated with FTD, such as disinhibition, apathy, and changed social behaviour. The breakdown of impulse control and the deterioration of emotional awareness provide a window into the complex brain networks that drive empathy and human behaviour. Such behaviours frequently rank among the most notable and difficult symptoms of FTD, affecting how patients interact with their surroundings and making relationships more difficult. In conclusion,

frontotemporal dementia serves as a powerful illustration of the complex interaction between psychiatric symptoms and brain deterioration. The distinctive features of the disorder—profound behavioural alterations, emotional numbing, and cognitive deficits—highlight the complex linkages between the brain areas responsible for behaviour, cognition, and interpersonal relationships. Beyond the difficulties it presents to the patients, careers and healthcare workers also struggle to comprehend and treat its wide range of symptoms. The best care for people with FTD requires a comprehensive strategy that combines medical, psychological, and social therapies. Our capacity to empathize with individuals who are affected and to create more potent support and intervention measures grows along with our understanding of the condition. The emotional blunting and cognitive abnormalities, such as executive dysfunction and linguistic deficiencies, highlight the frontal and temporal lobes' susceptibility to injury. These areas, which are important for controlling emotions, making decisions, and communicating, deteriorate, exposing the frailty of our cognitive architecture and the complex systems that guide our thoughts and behaviours. Caretakers struggle with the emergence of their loved ones as alien personas, while medical experts work to provide comprehensive treatment that takes into account the multifaceted character of the condition. FTD poses issues well beyond the person who has been diagnosed. The quality of life for people with FTD and their careers might potentially be improved if research into targeted therapies and support measures develops. A comprehensive strategy is necessary for navigating the realm of psychiatric symptoms in FTD. To provide a complete support system, medical, psychological, and social therapies must work together. Further investigation into the neurological mechanisms behind FTD's symptoms also promises to provide light on the complex relationships between the brain and behaviour. Frontotemporal dementia ultimately serves as a reminder of the intricacy of the human mind due to its complex fusion of behavioural, emotional, and cognitive abnormalities. We increase our awareness of neurological illnesses as we work to understand and manage its many forms, and we confirm our common humanity as we offer compassion and support to individuals coping with its difficulties.

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