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A STUDY TO ASSESS PREVALENCE OF DELIRIUM AMONG ELDERLY IN KALITHEERTHALKUPPAM, PUDUCHERRY

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ABSTRACT:

Introduction: Delirium is an acute, transient, usually reversible neuropsychiatric syndrome, seen in medical-surgical set-ups. It is considered to be a serious problem in acute care settings. **Objectives of the study**: 1) The study to assess the prevalence of delirium among elderly 2) To find out the association between deliriums with their selected demographic variables. **Methodology:** A quantitative research approach and cross-sectional research design was selected for the present study. The sample consists of 50 elderly client in Kalitheerthalkuppam, Puducherry, who meet the inclusion criteria. Using a convenient sampling technique the samples were selected for the present study. **Results:** The present study revealed that, 13 (26%) Mild, 14 (28%) Moderate, and 23 (46%) Severe delirium among elderly clients.

Keywords: Delirium, prevalence, elderly client.

INTRODUCTION:

Delirium is a geriatric syndrome characterized by acute changes in attention, awareness, and cognition, often seen in geriatric, postsurgical, ICU, and palliative care patients. It is a serious problem in acute care settings, with the elderly being a high-risk group for developing delirium. Delirium is a transient neuropsychiatric syndrome, often not detected or delayed, and is associated with negative outcomes such as prolonged hospital stays, poor functionality, high treatment costs, and high mortality rates.

Symptoms of delirium are divided into cognitive, non-cognitive, and motoric symptoms. Cognitive symptoms include disturbances in attention, memory, orientation, comprehension, vigilance, visuo-spatial abilities, and executive functioning. Risk factors for delirium among elderly in acute hospital medical units include dementia, older age, higher severity of medical illness, infection, use of high-risk medications, reduction in daily living activities, immobility, sensory deprivation/impairment, presence of urinary catheter, raised urea levels, electrolyte imbalance, malnutrition, and longer hospital stay duration.

Delirium management requires proper detection, identification of the cause, and treatment of symptoms. Diagnosis should be based on standard nosological systems, and management should involve identifying possible causes, correcting etiological factors, and using both pharmacological and non-pharmacological treatment. Clinicians should also play a role in preventing complications and providing adequate information to the family.

NEED FOR THE STUDY

Delirium is a common but often-underdiagnosed complication in the elderly following major surgery. A study by Hemanth Kumar S. R. et al. (2019) found that delirium is prevalent among elderly ICU patients, with most being hypoactive, hyperactive, or mixed. Post-operative delirium is also a common issue, with a higher morbidity and mortality rate.

A study by Vijayakumar et al. (2018) found that early recognition and management of delirium can improve outcomes. In Puducherry, a study by Lalithapriya P et al. (2019) found that ICU delirium is present in 30% of patients, with 6.67% having hypoactive delirium and 23.33% having hyperactive delirium. Early recognition of delirium in acute health settings can improve patient health outcomes, reduce hospital stays, and prevent unnecessary healthcare costs. So, this study was conducted to assess the prevalence of delirium among elderly at selected community area Puducherry.

STATEMENT OF THE PROBLEM

A study to assess prevalence of delirium among elderly at selected community area Puducherry.

OBJECTIVES OF THE STUDY

1. To assess the prevalence of delirium among elderly
2. To find out the association between delirium with their selected demographic variables

RESEARCH METHODOLOGY:

A quantitative research approach and cross-sectional research design was selected for the present study. The study was conducted in Kalitheerthalkuppam, Puducherry. The study population comprised of all the elderly person who are residing at selected community area Puducherry. The sample consists of 50 elderly at selected community area Puducherry, who meet the inclusion criteria. Using a convenient sampling technique the samples were selected for the present study. The tool consists of demographic variables and 4AT (Arousal, Attention, Abbreviated mental test, Acute changes) rapid assessment test for delirium detection. The data of the study was evaluated by using descriptive and inferential statistics.

MAJOR FINDING

Regarding the age in years, the majority 20 (40%) were in the age group of 60-70 years, 19 (38%) were in the age group of 70-80 years. With regards to gender, majority 29 (58%0 were female and 21(42%) were male. In the aspect of religion majority, 23 (48%) were Hindu, 9 (18%) were Muslims and 18 (36%) were Christian. In the aspect of education qualification, the data shows majority 29 (58%) were illiterate and 13 (26%) were

completed schooling and 8 (16%) were undergraduate. In the aspect of occupation status majority, 23 (46%) were farmer, 7 (14%) were unskilled workers and 20 (40%) were unemployment. Regarding marital status, the data shows that the majority 22 (44%) were married and 28 (56%) were widow. With regards to type of family majority, 30 (60%) were in nuclear family and 20 (40%) were in joint family. In the aspect of dietary pattern majority 22 (44%) were vegetarian, 6 (12%) were non vegetarian and 22 (44%) were mixed. Regarding family income per day, 27 (54%) were had income of Rs.300-499 per day and 8 (16%) were had income of Rs.750-999

RESULTS AND DISCUSSION

The study was to assess the prevalence of delirium among elderly in Kalitheerthalkuppam, Puducherry. The table 1 reveals the frequency and percentage-wise Distribution of prevalence of delirium among elderly. The finding revealed that, 13 (26%) Mild, 14 (28%) Moderate, and 23 (46%) Severe delirium among elderly clients.

The table 2 shows that there is no significance association between prevalence of delirium with Age, gender, religion, education qualification, occupational status, marital status, type of family, family income and dietary income with prevalence of delirium among elderly with their selected demographic variables.

Table 1: Distribution of prevalence of delirium among elderly **N = 50**

S.NO	PREVALENCE OF DELIRIUM	FREQUENCY (n)	PERCENTAGE %
1.	Mild	13	26%
2.	Moderate	14	28%
3.	Severe	23	46%

Figure 1: Bar diagram representing prevalence of delirium among elderly clients

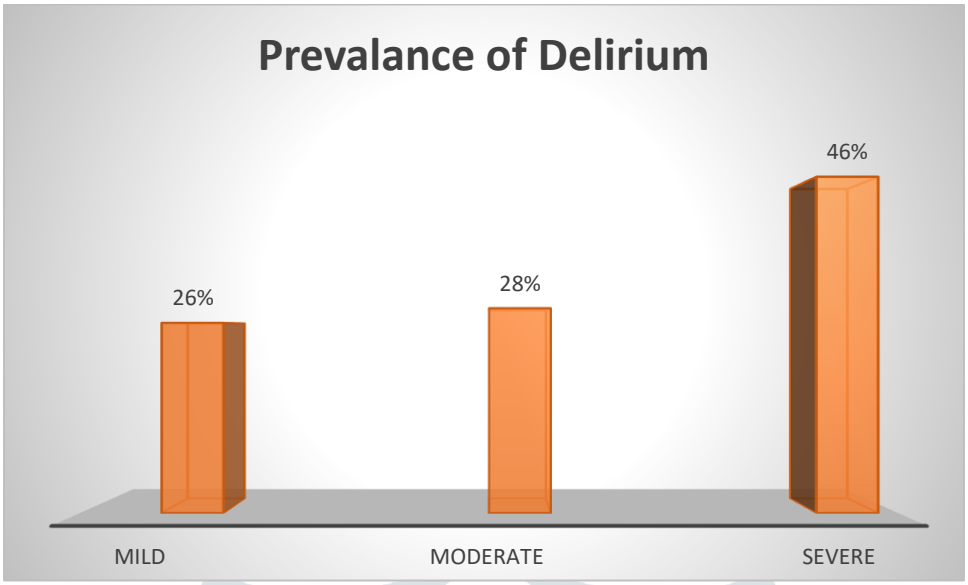

Table 2: Association between the delirium with their selected demographic variables

N = 50

S.NO	Demographic variables	PREVALENCE OF DELIRIUM						X^2 value
		Cognitive Impairment		Delirium		Possible delirium		
1	**Age in years**	**n**	**%**	**n**	**%**	**n**	**%**	
	a) 50-60 years	3	6.0	0	3	0	0.0	$X^2 = 7.433$ p = 0.283 (NS)
	b) 60-70 years	10	20.0	5	10	5	10.0	
	c) 70-80 years	9	18.0	5	9	5	10.0	
	d) Above 80 years	1	2.0	3	1	4	8.0	
2.	**Gender**							$X^2 = 0.512$ p = 0.774 (NS)
	a) Male	9	18.0	5	9	7	14.0	
	b) Female	14	28.0	8	14	7	14.0	
3.	**Religion**							$X^2 = 9.653$ p = 0.047 (NS)
	a) Hindu	6	12	8	16	9	18	
	b) Muslims	6	12	3	6	0	0	
	c) Christian	11	22	2	4	5	10	
	d) Others	0	0	0	0	0	0	
4.	**Education qualification**							$X^2 = 8.877$ p = 0.064 (NS)
	a) Illiterate	13	26	8	16	8	16	
	b) Schooling	9	18	3	6	1	2	
	c) Undergraduate	1	2	2	4	5	10	

	d) Post graduate	0	0	0	0	0	0	
5.	**Occupational status**							X^2 =2.118 p = 0.714 (NS)
	a) Professional	0	0	0	0	0	0	
	b) Farmer	12	24	5	10	6	12	
	c) Semi-skilled workers	0	0	0	0	0	0	
	d) Unskilled workers	4	8	1	2	2	4	
	e) Unemployment	7	14	7	14	6	12	
6.	**Marital status**							X^2 =2.001 p = 0.368 (NS)
	a) Married	11	22	7	14	4	8	
	b) Unmarried	0	0	0	0	0	0	
	c) Widow	12	24	6	12	10	20	
	d) Divorced	0	0	0	0	0	0	
7.	**Type of family**							X^2 =068 p = 0.967 (NS)
	a) nuclear	14	28	8	16	8	16	
	b) joint	9	18	5	10	6	12	
8.	**Family income**							X^2 =6.317 p = .177 (NS)
	a) Rs. 20001 & above	0	0	0	0	0	0	
	b) Rs. 10001-2000	2	4	4	8	2	4	
	c) Rs. 5001-10000	13	26	4	8	10	20	
	d) Less than Rs. 5000/-	8	16	5	10	2	4	
9.	**Dietary pattern**							X^2 =0.585 p = 0.965 (NS)
	a) Vegetarian	2	4	2	4	2	4	
	b) Non vegetarian	11	22	5	10	6	12	
	c) Mixed	10	20	6	12	6	12	

***p<0.05 - Significant; p<0.01 - Highly Significant**

CONCLUSION:

The present study reveals that, 13 (26%) Mild, 14 (28%) Moderate, and 23 (46%) Severe delirium among elderly clients.

RECOMMENDATIONS:

- Same study can be conducted with large samples.
- Same study to can be conducted to assess knowledge on delirium among the general public.
- Same study can be conducted in Hospital settings

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