Original Article

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Assessment of Disability, Care Dependence and Aggression among Dementia Patients in Selected Day Care Facilities of Hyderabad

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Abstract

Introduction: Dementia is one of the cognitive conditions which leads to severe disability leading to increased aggression and then making the individual dependent on others. Nurses being frontline providers of care are in position to render care to dementia patients. The objectives of the study were to assess disability, care dependence and aggression among dementia patients and find correlation between disability, care dependence and aggression among dementia patient. *Methodology:* The research approach selected for the present study was quantitative approach. Correlational and descriptive research design was adopted.The sample technique was purposive sampling. The data were gathered from the caretakers by interview. Standardized tools namely Disability Assessment for Dementia, Care Dependence Scale and Staff Observation aggression scale were used. *Results:* The results revealed that the care dependence needs had the highest mean (56) which was an indicator that dementia patients required care and were more dependent on care from the family members and caregivers. Followed by Disabilitydomain where the mean was reported to be 17.35. Aggression domain reported least mean (4.5). Aggression domain reported least mean with 4.5. In addition, 16 (80%) had reported disability, highest disability was evident in learning areas with a mean score of 2.6, followed by maintenance of normal temperature and understanding rules and regulations with an equal mean score of 3.2. Additionally, majority of the patients, that is, 15 (30%) were partially care dependent and 80% (16) of the dementia patients demonstrated aggression.Also, weak positive correlation was found between aggression and disability and disability and care dependence. No correlation was found between aggression and care dependence. *Conclusion:* The day care and residential care facilities lack nursing care to a great extent. Nurses need to educate the caregivers at home and hospital to provide care and provide assistance with activities of daily living and engage them cognitive stimulating activities.

Keywords: Disability; Care Dependence; Aggression.

Introduction

People with dementia are often depicted as confused individuals struggling through embarrassing episodes, followed by a loss of independence. The burden and devastation of the diagnosis on the families of people with dementia is exacerbated by their assumption of the role of caregiver with inadequate preparation or training. Dementia is one of the cognitive conditions which leads to severe disability leading to increased aggression and then making the individual dependent on others. Nurses being frontline providers of care are in position to render care to dementia patients. Disability, characterized by the loss of ability to perform activities of daily living (ADL), is a defining feature of dementia that results in growing caregiver burden and the eventual need for alternative care or nursing home placement. Functional decline in patients with dementia can also result from causes other than dementia, such as comorbid medical and psychiatric

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illnesses and sensory impairment. ADL consists of instrumental ADL (IADL) [complex higher order skills, such as managing finances] and basic ADL (BADL) [self-maintenance skills, such as bathing]. Assessment of IADL and BADL is recommended to establish a diagnosis of dementia. Functional assessment also helps the healthcare provider to offer appropriate counselling regarding safety concerns and need for custodial care [1].

A study done by Mass [2] defines care dependency as a process in which an individual's care demands require professional nursing support because of their decreased ability to provide self-care for physical and psychosocial human needs, like eating and drinking, dressing, communication and social contacts. Negative consequences of care dependency and nursing care problems include reduced quality of life, high health care costs and an increased risk of mortality.

The reasons identified for care dependence can be attributed to use of psychopharmacological drugs, sedative effects of which could lead to care dependency affecting functional ability [2]. Vision and hearing are factors which are known to decrease with age, and limit independent functioning. Cartwright reported that there were age variations for the symptoms 'difficulty seeing' and 'difficulty hearing' [3].

Felson et al. reported that loss of vision brought about restrictions in patients' interactions with their environment and limited patients' independence and associated loss of hearing with decreased functioning [4]. Aggression continues to challenge caregivers of persons with dementia, and identification of foci for effective interventions is needed. A study by Karen revealed that aggression persists despite antipsychotic drug use and that further mental health interventions might be targeted at compensating for impaired communication and the treatment of depression to improve the mental health of nursing home residents with dementia [5].

A study by Constantine [6] revealed that aggressive behavior was closely associated with moderate to severe depression, male gender, and greater impairment in activities of daily living, even after adjustment for delusions, hallucinations, sleep disturbance, and severity of cognitive impairment. The objectives of the study were to assessdisability, care dependence and aggression and to find correlation between disability, care dependence and aggression among dementia patients.

Methodology

The research approach selected for the present study was quantitative approach. The research design was non experimental correlational and descriptive research design. The sample technique was purposive sampling. The data were gathered from the caretakers by a structuredinterview schedule. The tool consisted of part A demographic profile and Part B consisted of 3 standardized tools namely Disability Assessment for Dementia, Care Dependency Scale and Staff Observation Aggression scale. The scoring for the Disability Assessment for Dementia included 'yes' and 'no' options with 1 point for 'yes' and 0 point for 'no' and 'not applicable'. A score of 33 on 40 (maximum score) out of 100=83%. The more score indicated less disability in activities of daily living. The reliability was found to be 0.96.The scoring for the Care Dependence Scale contained 15 items and were marked on 5-point Likert scale with the responses being 1=completely dependent to 5=almost independent. The interpretation of the scores was as follows:

15-24: completely care dependent

25-44: great extent care dependent

45-59: partially care dependent

60-69: Limited care dependent

70-75: Almost care dependent

As for the scoring for the Staff Observation Aggression Scale, the staff members were required to fill this questionnaire. There were 4 categories in the scale, namely provocation,means used by the patient,consequences for the victims and measures to stop aggression. The total severity varied from 0 (least form of aggression) to 22 (most severe form of aggression). 0-10 indicated no aggression and 11-22 indicated severe aggression. The reliability was found to be 0.96.

Results

The table 1 shows that 15 (75%) subjects belonged to the age group 71 years, (16) 80% were females, 12 (60%) had primary education and the same number were diagnosed with Alzheimer's dementia 12 (60%).

The table 2 highlighted that the care dependence needs had the highest mean (56) which is an indicator that dementia patients required care and were more dependent for care from the family members and caregivers. This was followed by Disability where the mean was reported to be 17.35. Aggression domain reported least mean (4.5).

The table 3 highlighted that 16 (80%) had disability and only a small percentage 4 (20%) did not report any disabilities.

The table 4 highlights that the highest disability was evident in learning areas with a mean score of 2.6 followed by maintenance of normal temperature and understanding rules and regulations with an equal mean score of 3.2. Most of the patients showed independence with eating and drinking and mobility with the mean scores of 4.2 followed by continence

Table 1: Frequency and percentage distribution of students as per demographic variables

(n=20)

S. No	Demographic variables	Frequency	Percentage (%)
1.	**Age(in years)**		
	55-60	2	10%
	61-65	2	10%
	66-70	1	5%
	71 and above	15	75%
2.	**Gender**		
	Male	4	20%
	Female	16	80%
3.	**Educational status**		
	Illiterate	0	0%
	Primary	12	60%
	Secondary	3	15%
	Graduation	5	25%
4.	**Type of dementia**		
	Alzheimer's dementia	12	60%
	Frontal lobe dementia	2	10%
	Vascular dementia	2	10%
	Mixed form	2	10%
	Others	2	10%

Table 2: Mean and standard deviation of disability,care dependence and aggression (n=20)

Parameters	Mean	Standard deviation
Disability	17.35	3.9
Care dependence	56	2.47
Aggression	4.5	3.48

Table 3: Level of disability (n=20)

No of people with Disability	Frequency	Percentage
a. Presence of disability	16	80%
b. Absence of disability	4	20%

Table 4: Mean and standard deviation of care dependence among dementia patients (n=20)

Domains of Care Dependence	Mean Score	Standard Deviation
Eating and drinking	4.2	5.7
Continence	4.1	6.3
Body posture	4.1	5.8
Mobility	4.2	6.2
Day and night pattern	4.05	4.8
Getting dressed and undressed	3.8	5
Body temperature	3.2	4.4
Hygiene	3.5	5.01
Avoidance of danger	3.3	5.45
Communication	3.9	5.09
Contact with others	3.7	5.21
Sense of rules and values	3.2	4.2
Daily activities	3.5	3.9
Recreational activities	3.5	4.2
Learning ability	2.6	4.3

and body posture with a mean of 4.1. The descending order of mean reported were day and night pattern (4.05), communication (3.9), dressing (3.8), maintaining contact (3.7), recreation, daily activities and hygiene (3.5).

The table 5 shows that the majority of the patients, that is, 15 (30%) were partially care dependent, followed by 5 (25%) who showed limited care dependence, 4 (20%) were almost care dependent, 3 (15%) demonstrated great extent care dependence and 2 (10%) were completely dependent for care.

The figure 1 depicts that 80% (16) of the dementia patients were having aggression and 20% (4) dementia did not experience aggression.

The table 6 shows that there is weak positive correlation between aggression and disability and disability and care dependence with value of 0.006. There is no correlation between aggression and care dependence.

Discussion

As per a study done in Australia aimed to explore changes in care dependency and nursing care problems (incontinence, malnutrition, decubitus, falls and restraints) in residents with and without dementia over time. In total, nine Australian nursing homes participated, including 258 residents (178 with, 80 without dementia) who completed all five measurements. Data were collected with the International Prevalence Measurement of Care Problems questionnaire, the Care Dependency Scale

Table 5: Grading of care dependency

Grades of care dependence	Frequency	Percentage
Completely care dependent	2	10%
Great extent care dependent	3	15%
Partially care dependent	6	30%
Limited care dependent	5	25%
Almost care dependent	4	20%

Table 6: Karl Pearson Correlation between aggression and disability

Karl Pearson Correlation	Test score
Aggression and disability	0.006
Aggression and care dependence	0.2
Disability and care dependence	0.006

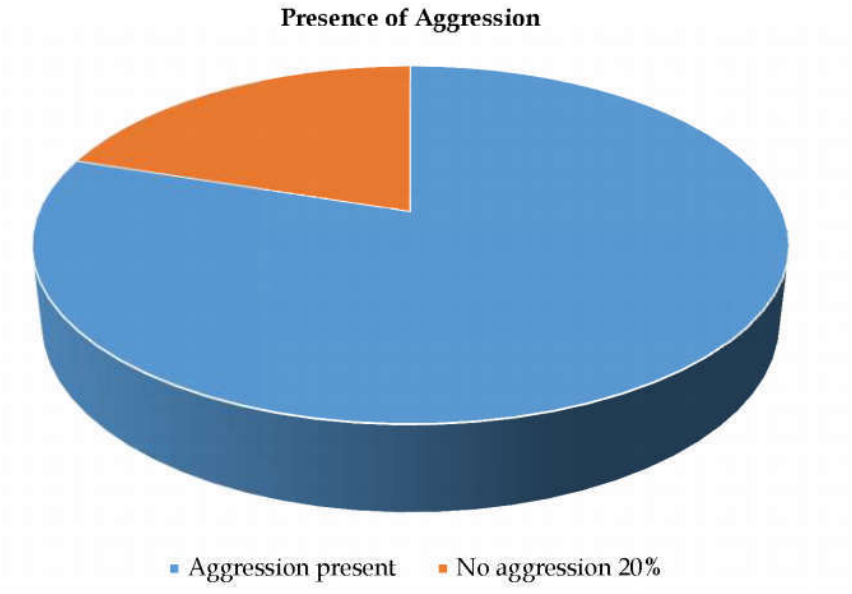

Fig. 1: Pie diagram illustrates the presence of aggression

and the Mini-Mental State Examination-2. Repeated measures ANOVA and crosstabs were used to analyze changes. The results showed that care dependency in dementia residents increased significantly for all 15 items of the Care Dependency Scale, with the highest increase being residents' day-/night pattern, contact with others, sense of rules/values and communication. In contrast, care dependency in residents without dementia increased for four of the 15 items, with the highest increase being for continence, followed by getting (un) dressed. With respect to the assessed nursing care problems, residents with dementia and those without only differed significantly in terms of an increase in urinary- (12.3% vs. 14.2%), fecal- (17.4% vs. 10%), and double incontinence (16.7% vs. 11.9%). The results indicated that residents with dementia experienced increased care dependency in different areas than residents without dementia. Furthermore, residents with dementia experienced a lower increase in urinary incontinence but a higher increase in fecal- and double incontinence [5]. The presentstudy is similar to the study done in Australia as in both the studies care dependency is studied but in the present study, the researcher did not compare between dementia and non-dementia patients unlike the previous study. Researchers found significant care dependency among dementia patients due to disability in variousareas like incontinence, hygiene, communication, day and night pattern, sense of rules and regulations etc. The results revealed that the care dependence parameter had the highest mean (56) which is an indicator that dementia patients required care and were more dependent for care from the family members and caregivers.Disability mean was observed to be 17.35 which is an indicator that they have deterioration in functioning making them more prone to be dependent on others for assistance and care. Aggression domain reported least mean with 4.5. In addition, 16(80%) study subjects had reported disability, highest disability was evident in learning areas with a mean score of 2.6 followed by maintenance of normal temperature and understanding rules and regulations with an equal mean score of 3.2. Additionally, majority of the patients that is 15 (30%) were partially care dependent and 80% (16) of the dementia patients demonstrated aggression. Also, weakly positive correlation was found between aggression and disability and disability and care dependence with value of 0.006. There is no correlation found between aggression and care dependence.

A study was done by Constantine [6] to determine the frequency of physically aggressive behavior in community-residing patients with dementia and its relationship to depression on 541 patients with DSM-IV-defined dementia underwent comprehensive neuropsychiatric evaluation and were rated on the Cornell Scale for Depression in Dementia, the Mini-Mental State, the Psychogeriatric Dependency Rating Scale, and the General Medical Health Rating. Physically aggressive behavior was exhibited by 79 patients in the 2 weeks before evaluation. Aggressive behavior was closely associated with moderate to severe depression, male gender, and greater impairment in activities of daily living, even after adjustment for delusions, hallucinations, sleep disturbance, and severity of cognitive impairment. After adjustment for depression, gender, and impairment in activities of daily living, there was no association between physically aggressive behavior and the presence of either delusions or hallucinations. In the present study the researchers found that 80% (16) of the dementia patients demonstrated aggression. Also,weak positive correlation was found between aggression and disability and disability and care dependence with value of 0.006. There was no correlation found between aggression and care dependence.

Conclusion

The day care and residential care facilities lack nursing care to a great extent. The researchers has highlighted the need of providing care to demented patients, as the disease progresses disability steps in making them vulnerable to anger and hostility. Nurses need to educate the caregivers at home and hospital to provide care and provide assistance with activities of daily living and engage them in cognitive stimulating activities.

References

1. Dijkstra A, Buist G, Dassen T. Operationalization of the concept of Nursing Care Dependency for use in long-term care facilities. Aust N Z J Ment Health Nurs. 1998;7(0):142–51.
2. Maas, M., Buckwalter, K.C., Hardy, M. Nursing Diagnosis and Interventions for the Elderly. AddisonWesly Nursing, Redwood City.International Journal of Nursing Studies. 1999;36:487-95.
3. Cartwright, A. Dying when you're old. J.Age and Ageing. 1993;22(6):425-30.
4. Felson D.T., Anderson J.J., Hannan M.T., Milton R.C., Wilson P.W.F., Kiel D.P. Impaired vision and hip fracture: the Framingham study. Journal of American Geriatrics Society. 1989;37:495-500.
5. Karen Amann Talerico, Lois K. Evans. Mental Health

Correlates of Aggression in Nursing Home Residents With Dementia. The Gerontologist. 2002:42(1):169–77.

6. Constantine G. Lyketsos, Cynthia Steele, Elizabeth Galik, Adam Rosenblatt, Martin Steinberg, Andrew Warren,Jeannie-Marie Sheppard. Physical Aggression in Dementia Patients and Its Relationship to Depression. American Journal of psychiatry 1999;156(1):4-4.