

Functional Efficiency Among Hospitalized Neurological Elderly Patients

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Abstract

Background: Functional efficiency of the elderly is defined as the ability to perform the activity of daily life safely and independently. **Aim of the study:** Was to assess functional efficiency among hospitalized neurological elderly patients. **Subjects and Methods; Research design:** Descriptive study design was adopted to carry out this study. **Setting:** The study was conducted at Neurological department, at Sednawy hospital, Zagazig University. **Subjects:** A purposive sample of 90 subjects who fulfilled the study inclusion criteria. **Tools of data collection:** A structured interview questionnaire was used for data collection which was composed of three parts. Part I: Elderly demographic characteristics, Part II: Medical history and Part III: Current state of health in relation to neurological status, Functional efficiency was measured by the Barthel Index BI. **Results:** The study reveals that only 23.3% of the studied elderly patients were independent in daily living activity, 21.1% of them were need minor help, 43.3% of them were need major help and 12.2% of them were totally dependent. Meanwhile, this score had a negative correlation with the elderly age, also there was statistically significant relation between elderly patients functional efficiency mean score age, their marital status and having chronic diseases at $p < 0.05$. Additionally, highly statistically significant relation between elderly's functional efficiency and their neurological diagnosis at $p < 0.05$. **Conclusion:** The studied group of elderly patients was characterized by a reduced level of functional efficiency; also there was a highly statistically significant relation between elderly's functional efficiency and their neurological status. **Recommendations:** More similar studies and researches should be done among other ages and also among other patients.

Keywords: Functional Efficiency, Hospitalized Neurological Patients, Elderly.

Introduction

Increasing life expectancy due to better living conditions is changing the age structure of populations across the world so older people will increasingly dominate societies; Older people are a particularly vulnerable group in societies, with higher needs in social and health care services. Concerning this, the demographic change will be a crucial challenge not only for older persons and their family members but also for the governments to provide desirable services to meet the complex requirements in later life ⁽¹⁾. Population aging is a global issue and the world population of the oldest age group (aged over 60 years) is rapidly growing and will exceed 350 million by 2050 ⁽²⁾.

Functional efficiency of the elderly is defined as the ability to perform normal daily life tasks safely and independently. Due to the individuality of aging process, the assessment of functional efficiency is often a

difficult process. The assessment process should be multifaceted and its basis should include meticulous observation. The result of the evaluation should incorporate a holistic perception of an individual rather than merely the sum of the points obtained in the research tool ⁽³⁾.

Functional efficiency, which decreases with age, causes the elderly to lose independence and generates the need for help from others. Impaired mobility increases the risk or worsens the course of diseases which are conditioned, among others, by lack of exercise; Reduced mobility may also lead to immobilization of the patient and, consequently, to the occurrence of pressure ulcers, atrophy and muscle contractions. Functional efficiency is a product of various deficits, regardless of the diseases that cause them and other factors. The assessment of the functioning status allows

for focusing of activities on diagnostic and therapeutic ones and is a platform for agreement between the parties involved in geriatric care ⁽⁴⁾.

The gerontological nurse has a critical role in helping elderly patients to improve functional efficiency, as well educating patients to acquire new activities for daily living; Motivating them to change their life style, adapting the reality of disease and the importance of stop smoking, enhanced gas exchange, air way clearance, activity complication, tolerance, maximal self-management, enhanced coping ability and home care ⁽⁵⁾.

Significance of the study:

Assessment of the functional efficiency of elderly patient with neurological disease is a very important item in treatment and care. Impaired mobility increases the risk or worsens the course of diseases which are conditioned, among others, by lack of exercise. Reduced mobility may also lead to immobilization of the patient and, consequently, to the occurrence of pressure ulcers, atrophy a muscle contractions. Hence, the present study will be designed to assess functional efficiency of elderly patients hospitalized in neurological department.

Aim of the study:

The current study aimed to assess functional efficiency among hospitalized neurological elderly patients.

Research Question:

What is the level of functional efficiency of hospitalized neurological elderly patients?

Subjects and methods:

Research design:

A descriptive design was used to carry out this study.

Study setting:

The current study was carried out at, Neurological department, at Sednawy hospital, Zagazig University sharkia governorate, Egypt. The Neurological Department presents in the fifth floor at El Salam building, Sednawy Hospital, Zagazig University Hospitals. It contains four units such as a paid neurological care unit and a

free stroke unit. Also, the department has 8 functional rooms for a neurology pharmacy, an electroencephalogram, a plasma separation, a lecture, a conference, a room for the head of the department, a room for doctors, a nursing room, and also, there are 2 bathrooms, one for men and the other for women. The department presents 24 hours services around three shifts.

Study subjects:

A purposive sample was composed of 90 elderly patients according to the following eligibility criteria:

Inclusion criteria:

1. Aged 60 years and more.
2. Both sexes.
3. Able to communicate.
4. Free from any mental or psychological disorders.
5. Accept to participate in the study.

Exclusion criteria:

Elderly patients diagnosed with mental or psychological diseases (reported by elderly or caregiver).

Sample size calculation:

The sample size was calculated by software Epi-info package, assuming a prevalence of functional efficiency among elderly patients is 68.10% from 120 elderly patients come to neurological department through 6 months, level of confidence 95%, margin of error 5% and power of test were 80%. The sample size was calculated to be 90 elderly patients.

Sampling technique:

A purposive sampling technique was used in recruiting study subjects according to above mentioned the eligibility criteria.

Tools of data collection:

The following two tools were used to collect the necessary data.

Tool A: A structured interview questionnaire that consisted of three parts.

Part (1): Demographic characteristics of the studied elderly: this involved personal data of the studied elderly such as (age, sex, and marital status, level of education, occupation, source & sufficiency of income, and living with others or alone).

Part (2): Medical history of the studied elderly: This part was intended for collecting information about the medical history of the studied elderly. It involved questions about chronic diseases (e.g., hypertension, diabetes mellitus, renal diseases, respiratory system diseases, heart diseases, liver diseases, digestive system diseases, and arthritis).

Part (3) Current state of health in relation to neurological status: This part was developed by the researcher after reviewed relative literatures .It includes five items which used to test the current neurological state among the elderly like diagnosis, previous hospitalization, previous surgery, hospital admission times and current complain.

Tool B: The barthel index ⁽⁶⁾ designed specifically to assessment of elderly's functional efficiency. The Barthel Index (BI) consists of 10 items that measure a person's daily functioning, particularly the activities of daily living and mobility. The items include feeding, transfers from bed to wheelchair and to and from a toilet, grooming, walking... etc.

Scoring system:

Original 10-item version refers to the following 10 categories: feeding, bathing, grooming, dressing, bowel control, bladder control, toileting, chair transfer, ambulation and stair climbing. Items are weighted according to the level of nursing care required and are rated in terms of whether individuals can perform activities independently, with assistance, or are dependent (scored as 10, 5 or 0). The Index yields a total score out of 100; the higher the score, the greater the degree of functional independence. A modified scoring system has been suggested by Shah and coll, (1989) as followed:

- Total dependence was scored (0-21).
- Need major help was scored (21-61).
- Need minor help was scored (61-91).
- Independent was scored (91-100).

Content validity & Reliability:

The tools were tested for content validity by a panel of three experts from the faculty of Nursing, Zagazige University, faculty of Nursing, Fayoum University and faculty of

Medicine, Zagazige University. Modifications were done according to their recommendations.

Reliability of Barthel Index (BI); (10 items) at Cronbach's Alpha = 0.934.

Fieldwork:

This lasted for 6 months from the first of the beginning of November 2021 up to the end of April 2022. Each elderly was interviewed individually at the elderly's room in the neurological department with considering the preventive and precaution measures to be protected from COVID-19. The data were collected two days a week (Saturday, Monday & Thursday) from 3:00 pm to 8:00 pm. The time used for finishing the questionnaire ranged between 30 - 45 minutes for each one. The questionnaire was filled by the researcher after asking the elderly the questions in simple, Arabic language, also some items of the questionnaire needed observation and some with checking the patient's medical records.

Pilot study:

A pilot study was carried out on 10% of the study subjects to test applicability, feasibility, practicability of the tools, and then the necessary modifications were done according to the results of pilot study. This sample was excluded of the total sample.

Administrative and ethical considerations:

The protocol was approved by the Research Ethics Committee at the Faculty of Nursing, Zagazig University. An oral consent for participation was obtained from each elderly who agree to participate in the study after a full explanation of the aim of the study before conducting the interview. Participants were allowed to refuse the participation, and they were notified that they could withdraw at any stage of the data collection interviews; also, they were assured that the information would be confidential and used for the research purpose only. The investigator assured maintaining anonymity and confidentiality of the subjects' data. The researcher's phone number and all possible communication methods were identified to the participants to return at any time for any explanation.

Official permission for data collection and implementation of the intervention was obtained by submission of official letters issued from the Dean of the Faculty of Nursing at Zagazig University to the Head of Zagazig University Hospitals.

Statistical analysis:

Data entry and statistical analysis were done using SPSS 22.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. The Cronbach alpha coefficient was calculated to assess the reliability of the developed tools through their internal consistency.

Qualitative categorical variables were compared using a chi-square test (χ^2). Quantitative continuous data were compared using the non-parametric Mann-Whitney or Kruskal-Wallis tests. Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5, Fisher exact test was used instead.

The Spearman rank correlation was used for assessment of the interrelationships among quantitative variables and ranked ones. In order to identify the independent predictors functional efficiency scores multiple linear regression analysis was used after testing for normality, and homoscedasticity, and analysis of variance for the full regression models were done. Statistical significance was considered at p-value <0.05.

Results:

Table 1 shows demographic characteristics of the studied elderly. Among 90 studied elderly patients, 70% of them were aged 63 years, with a mean of age of 66.76 ± 5.80 years. As regards their gender and marital status, it was obvious that 56.7% and 71.1% respectively of the elderly were males and married. Likewise, 97.8 % of the elderly were not working, 77.8% and 100% respectively of them had sufficient income and were living with families.

Figure 1 demonstrates that 52.2 % of studied elderly were having hypertension, followed by diabetes (41.1%) and then heart diseases (18.9 %).

Table 2 shows that 62.2 % of the studied elderly patients need help in feeding such as cutting, spreading butter or require modified diet ,while 25.6 % them were able to feed themselves. Regarding bathing, 51.1 % dependent in bathing, but grooming 56.7 % of them were independent. Concerning dress, 61.1 % of them need help but can do about half unaided, finally (87.8 % & 73.3 %) of them were continent in bowels and bladder items. Additionally 40.0 % of the studied elderly patients able to use toilet independent (on, off, dressing and wiping) while, 34.4 % of them need some help but can do something alone. Regarding transfers 45.6 % of the studied elderly patients need major help (one or two people, physical) when transfer from bed to chair and 34.4 % of them need minor help, while 16.7% of them can transfer from bed to chair without help (independent), concerning mobility the table shows that 48.9 % of the studied elderly patients use wheel chair independent, including corners, < 50 yards, and 50.0 % of them unable to use stairs.

As noticed in **Table (3)** only 23.3 % of the studied elderly patients were independent in daily living activity, 21.1% of them were need minor help, 43.3% of them were need major help and 12.2% of them were totally dependent.

Table 4 illustrates statistically significant relation between elderly patients functional efficiency mean score age, their marital status and having chronic diseases at $p < 0.05$. It is evident from the table that the total mean score of functional efficiency was high among elderly who were aged 60-69 years, were married and having no chronic diseases.

Table 5 points to highly statistically significant relation between elderly's functional efficiency and their diagnosis at $p < 0.05$. It is evident from the table that the total mean score of functional efficiency was high among elderly who diagnosed with benign increase in brain pressure.

Discussion:

The independence of the elderly can be limited due to biological processes taking place during aging, concomitant diseases, psychological factors, and physical health; Poor physical and mental functioning can lead to the necessity of assistance during daily activities or institutional care and result in decreased functional efficiency and their life quality of life, especial among hospitalized elderly patients ⁽⁷⁾.

In terms of demographic characteristics, the result of the current study revealed that more than two thirds of the studied elderly their age were from 60 and 69 years with mean age 66.76 ± 5.80 years. The previous findings were in the same line with a study carried in Poland by **Fidecki et al.** ⁽⁸⁾ who revealed that the studied elderly women in their study aged from 60 and 69 years. On other hand, this finding was inconsistent with a study conducted in China by **Wang et al.** ⁽⁹⁾ who showed that less two thirds of the studied elderly their age was from 85 and 93 years with mean 74.76 ± 6.19 years.

Concerning to gender of the studied elderly, the current findings of the study showed that more than half of them were males. In the same context, **Yu et al.** ⁽¹⁰⁾ carried out a study in China, which reported more than half of their studied elderly were males. On other hand; **Okudur & Soysal** ⁽¹¹⁾ found in their study to investigate the relationship between malnutrition / micronutrient deficiency and EDS in patients with and without dementia that most of their subjects 70.7% were females.

Regarding the marital status; the current study reported that most of the studied patients were married. Similar to that finding, **El Sayed & Ewees** ⁽¹²⁾ found in their Egyptian study that most of their studied subjects were married. This finding disagreed with **Abd-Elraziq et al.** ⁽¹³⁾ who stated that about half of their subjects were married and the others were among divorced or widow status.

Concerning to the level of education of the studied elderly, the current study reported that less than half of studied elderly were illiterate. From view point of the

researcher, this could be due to their old ages; as in the past time, most people didn't care for the educational level of their children especially in agricultural environments like the study setting.

This finding matched with study done by **Vaish et al.** ⁽¹⁴⁾ in India who reported that nearly less than half of the studied elderly were illiterate. On the contrary, a study conducted in Egypt by **El Sayed & Ewees** ⁽¹²⁾ who showed that most of studied sample were read and write. Also, **Hammond & Wilson** ⁽¹⁵⁾ in Iran who found that 39% of their subjects had secondary education.

Regarding the income, the present study illustrated that most of the studied elderly had enough income and all of them were living with their family. This could be explained by the natural of most Egyptian people who thank Allah for any income and reported it for any one as enough and that is because of their religious considerations, also the all studied elderly were living in their family because of Egyptian traditions in agricultural environments in which the parents must be cared by their sons and live with them in houses.

This finding agreed with study done by **Chauhan et al.** ⁽¹⁶⁾ in India which represented that most and majority of the studied elderly had enough income and were living with family. Additionally, the preset finding disagreed with the Egyptian research published by **Abd-Elraziq et al.** ⁽¹³⁾ who stated that 52.1% of their subjects reported that their monthly income was sufficient of essential need and nearly one third of them (31.3%) lived alone.

In terms of medical history, considering the history of chronic diseases, the current study findings revealed that less than two thirds of the elderly had chronic diseases with a mean number of diseases 1.37 ± 1.33 diseases and the most commonly diseases were hypertension followed by diabetes and heart diseases. This could be explained by the reduction in physiological and physical functions associated with aging.

Those findings were in the same line with **Abd-Elraziq et al.** ⁽¹³⁾ in Egypt who clarified that the most prevalent chronic diseases among their studied sample were hypertension, Diabetes and arthritis (60.4%, 47.9% & 27.8%). Also, **Darjani et al.** ⁽¹⁷⁾ in Iran agreed with the present study as they found that the most common comorbidities of elderly subjects were hypertension (87%) and diabetes mellitus (18%). On other hand, a study published by **Azzolino et al.** ⁽¹⁸⁾ in Italy demonstrated that most common diseases were arthritis.

Regarding the number of chronic diseases among studied elderly, the current results revealed nearly two fifths of studied subjects had less than three diseases with a mean number of diseases 1.37 ± 1.33 diseases. This result disagreed with study done in Egypt by **Mohamed et al.** ⁽¹⁹⁾ who reported that about three quarters of the studied elderly have three diseases and more. Additionally, **Chaleekrua et al.** ⁽²⁰⁾ in Northeastern Thailand who showed that more than half of elderly had not chronic diseases.

Elderly's functional efficiency, functional efficiency is a product of various deficits, regardless of the diseases that cause them and other factors. The assessment of the functioning status allows for focusing of activities on diagnostic and therapeutic ones and is a platform for agreement between the parties involved in geriatric care ⁽⁴⁾.

As related to functional efficiency among the studied elderly patients, the present results reported that less than two thirds of them studied elderly patients need help in feeding such as cutting, spreading butter or require modified diet. This could be due to their aging as negative physiological changes of aging on musculoskeletal system usually cause weakness of muscles. In same line with these results, a study done by **Stolarz et al.** ⁽⁷⁾ conducted in Poland reported that more than half of the elderly need assisting in feeding such as cutting, spreading butter or require modified diet.

Additionally, the present of result study showed that less of two thirds of the studied elderly need help for dressing. This could be

due to the reduction in all physiological status with aging, and also might be due to the natural of their neurological disorders as mentioned in our present results. This finding was supported with a study carried out in Poland by **Talarska et al.** ⁽²¹⁾ who found that elderly required partial help for dressing.

As regards to total functional efficiency among the studied elderly patients; the current result reported that nearly half of the studied elderly patients needed major help and about 12.2% of them were totally dependent on their activity of daily living. From the point of the researcher's view, those results might be due to the subjects' neurological conditions as mentioned before in this results which lead to weakness of extremities, additionally, this could be due to their old age as with aging, there is a reduction in all physiological functions that negatively affect their dependency.

This finding agreed with a study done by **O'Shaughnessy et al.** ⁽²²⁾ who showed that nearly half of elderly need major help for activity of daily living. Additionally, this finding was in harmony with **Fidecki et al.** ⁽⁴⁾, in their study in which they stated that half of the elderly had a reduced level of functional fitness. On other hand, this result disagreed with study performed by **Mohamed et al.** ⁽¹⁹⁾ in Egypt and showed that one quarter of the studied elderly had dependent regarding functional efficiency.

The current result of study revealed that statistically significant relation between elderly patient functional efficiency, elderly's age, their marital status and having chronic diseases also the total mean score of functional efficiency was high among elderly who were aged 60-69 years, were married and having no chronic diseases.

Similar results were obtained in the study done by **Fidecki et al.** ⁽⁴⁾ in Poland and illustrated that the efficiency deteriorates with age, and it was also statistically significant. Also confirmed by the research done by **Głowacka et al.** ⁽²³⁾ in Białogard and showed that statistical significance difference between functional efficiency and their age and marital status. Conversely, this finding disagreed with study by **Stolarz et al.** ⁽⁷⁾ who carried out in Poland and stated that a

greater score was obtained by elderly who had higher education levels and a statistically significant effect on functional efficiency.

Related to the relation between elderly patients' functional efficiency, their neurological history; the result of present study reported that there was highly statistically significant relation between elderly's functional efficiency and their diagnosis and the total mean score of functional efficiency was high among elderly who diagnosed with benign increase in brain pressure. The previous findings were in the same line with a study carried done in India by **Vaish et al.** ⁽¹⁵⁾ who reported that there statistically significant relation between elderly's functional efficiency and their diagnosis.

Conclusion:

The studied group of elderly patients was characterized by a reduced level of functional efficiency. Additionally, less than third of them were need minor help, and nearly half of them were need major help.

Recommendations:

Given the study findings, the following recommendations are proposed:

1. More similar studies and researches should be done among other ages and large groups.
2. Training programs for nurses should be applied in the study setting; as nurses could play a key role in decreasing complications and improve the symptoms.
3. Replicate the study on a larger group; selected from different geographical areas in Egypt to obtain more generalized findings in relation to current study.
4. Training programs for nurses should be applied in the study setting for improving their knowledge and awareness about functional efficiency for elderly hospitalized patients.

Table 1: Demographic characteristics of the studied elderly (N=90)

Demographic characteristics	Frequency	Percent
Age:		
60-	63	70.0
70-	24	26.7
80+	3	3.3
Mean±SD	66.76 ± 5.80	
Rang	60-81	
Gender:		
Male	51	56.7
Female	39	43.3
Marital status:		
Unmarried	26	28.9
Married	64	71.1
Education:		
Illiterate	43	47.8
Read/write	16	17.8
Basic/primary	21	23.3
Secondary	10	11.1
Job (before retirement):		
Working	45	50.0
Not Working	45	50.0
Current work:		
Working	2	2.2
Not Working	88	97.8
Income:		
Not Enough	20	22.2
Enough	70	77.8
Income source: @		
Pension:	66	73.3
Son Help:	25	27.8
Still Work:	2	2.2
Property Income:	3	3.3
With Whom you Live:		
With Family	90	100.0

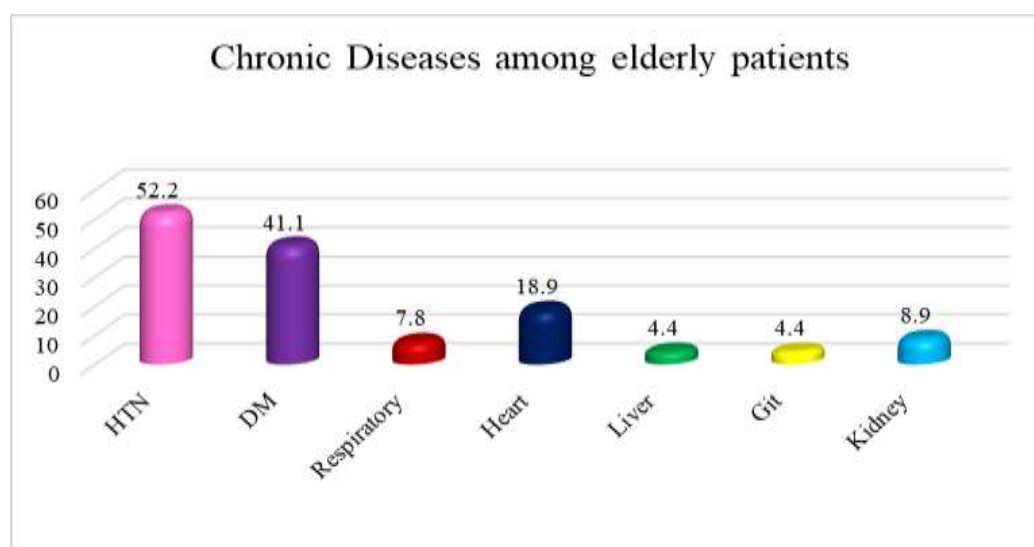
**Figure 1: Medical history of the studied elderly (N=90)**

Table 2: functional efficiency among the studied elderly patients (n=90)

Functional efficiency items	N = 90	
	No.	%
FEEDING		
• Unable.	11	12.2
• Needs help cutting, spreading butter, etc, or requires modified diet.	56	62.2
• Independent.		25.6
BATHING		
• Dependent.	46	51.1
• Independent (or in shower).	44	48.9
GROOMING		
• Needs to help with personal care.	39	43.3
• Independent face, hair, teeth, shaving (implements provided).	51	56.7
DERSSING		
• Dependent.	22	24.4
• Needs help but can do about half unaided.	55	61.1
• Independent (including buttons, zips, laces etc.).	13	14.4
BOWELS		
• Incontinent or (needs to be given enemas).	7	7.8
• Occasional accident.	4	4.4
• Continent.	79	87.8
BLADDER		
• Incontinent or catheterized and unable to manage alone.	23	25.6
• Occasional accident.	1	1.1
• Continent.	66	73.3
TOILET USE		
• Dependent.	23	25.6
• Needs some help, but can do something alone.	31	34.4
• Independent (on and off, dressing, wiping).	36	40.0
TRANSFERS (Bed to chair and back)		
• Unable, no sitting balance.	3	3.3
• Major help (one or two people, physical), can sit.	41	45.6
• Minor help (verbal or physical).	31	34.4
• Independent.	15	16.7
MOBILITY		
• Immobile or > 50 yards.	4	4.4
• Wheel chair independent, including corners, < 50 yards.	44	48.9
• Walks with help of one person (verbal or physical) < 50 yards.	27	30.0
• Independent (but may use any aid for example stick) < 50 yards.	15	16.7
STAIRS		
• Unable.	45	50.0
• Needs help (verbal, physical, caring aid).	29	32.2
• Independent.	16	17.8

Table 3: Total functional efficiency among the studied elderly patients (n=90)

Total functional efficiency	No.	%
Total dependent	11	12.2
Need major help	39	43.3
Need minor help	19	21.1
Independent	21	23.3
Total mean score of (BBDST-R)		57.11±27.64
Mean ± SD		10-100
Range		

Table 4: Relation between elderly patients' functional efficiency, their demographic characteristics and medical history

Demographic characteristics	Functional efficiency		Kruskal Wallis	p-value
	Mean ± SD	Median		
Age:				
60-69	64.44 ±26.73	70.0	8.66	.000**
70-79	40.00 ±23.07	32.5		
80+	40.00 ± 8.66	45.0		
Gender:				
Male	55.68±26.98	55.0	H=.310	.579
Female	58.97±28.72	60.0		
Marital status:				
Single	48.07±25.30	45.0	H=4.04	.048*
Married	60.78±27.89	65.0		
Education:				
Illiterate	56.16±26.92	55.0	1.89	.137
Read/write	46.87±31.14	37.50		
Basic/primary	59.52±24.69	55.0		
Secondary	72.50±27.11	77.50		
Previous occupation:				
Working	56.78±26.99	55.00	H=.013	.910
Not working	57.44±28.57	55.00		
Income:				
Not enough	61.00±26.49	62.50	H= .506	.479
Enough	65.00±28.05	55.00		
Having chronic diseases:				
Yes	51.78±26.62	50.0	H=5.79	.018*
No	65.88±27.43	70.0		
No. of diseases:				
0 no disease	65.88 ± 27.43	70.0	3.08	.051
< 3	50.14 ±25.26	50.0		
≥ 3	55.0 ±29.53	60.0		

(*) Statistically significant at $p < 0.05$

(H) Mann Whitney Test

Table 5: Relation between elderly patients' functional efficiency, their neurological history

Demographic characteristics	Functional efficiency		Kruskal Wallis	p-value
	Mean ± SD	Median		
Diagnosis:				
▪ Benign increase in brain pressure	93.75 ± 6.29	95.00	3.95	.001*
▪ Clotting in brain	46.22 ± 27.96	40.00		
▪ Hemorrhage in brain	55.00 ± 25.24	70.00		
▪ Epileptic convulsions	85.00 ± 7.07	87.50		
▪ Guilianberry syndrome	56.25 ± 22.50	45.00		
▪ Lower extremities weakness	59.28 ± 22.25	70.00		
▪ Sclerosis	77.50 ± 16.04	80.00		
▪ Neuropathy	64.33 ± 23.66	60.00		
Previous hospitalization:				
Yes	55.21 ± 24.93	50.00	.144	.706
No	57.76 ± 28.66	60.00		
If yes from when.....				
≤ one year	57.76 ± 28.66	60.00	1.32	.271
> one year	62.50 ± 24.39	55.00		
Number of hospitalization:				
≤ two times	57.76 ± 28.66	60.00	.122	.886
> two times	54.12 ± 27.23	45.00		
Previous surgery:				
Yes	40.00 ± 14.14	40.00	.144	.706
No	57.88 ± 27.09	60.00		

(*) Statistically significant at $p < 0.05$

(H) MannWhitney Test

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