AIM OF THE WORK

The study was conducted to fulfill the followings:

General objective:

The purpose of the study is comparing the psychosocial profile of elderly residing in elderly homes and those living within the community in Alexandria.

Specific objectives:

1. To assess the socio-demographic characteristics of elderly residing in elderly homes and those lives in the community.

2. To assess degree of disability of elderly resides in elderly home and those lives in the community as regard activity of daily living (ADL) and Instrumental activity of daily living (IADL).

3. To assess psychological profile of elderly resides in elderly home and those lives in the community. e.g.: self-esteem, depression, anxiety and dementia.

4. To compare between elderly resides in elderly home and those lives in the community as regard; socio-demographic characteristics, degree of disability and psychological profile.

SUBJECTS AND METHODS

Research strategy:

A comparative descriptive study was adopted to carry out this study.

Research setting:

The study was carried out in randomly selected two elderly homes which were; Dar El Hanan (governmental) and Dar El Mowasah (non-governmental) and one dental outpatient clinic of family medicine unit which was dental outpatient clinic of El Qabary family medicine unit.

Target Population:

One hundred elderly people (sixty five years and over) of both sex were included in the study and they were divided into two equal sub samples; fifty elderly resident in elderly homes of them; twenty five elderly were resident in Dar El Hanan and twenty five elderly were resident in Dar El Mowasah and the other fifty elderly of the sample were attended the dental outpatient clinic of El Qabary family medicine unit and it is considered as a source of elderly living within the community in Alexandria.

Data collection:-

Collective agreement:

An official approval for the implementation of the study was obtained from the community medicine department, the deputy of Ministry of Health and Population and Ministry of Social Solidarity. The manager of the family medicine unit and the managers of the two elderly homes were visited by the researcher for clarification of the purpose of the study. Data were collected from elderly resident after taking an informed written consent.

Tools of data collection:

A-**Structured interviewing questionnaire to collect data about socio-demographic characteristics including:** (Appendix I)

Personal data such as age, sex, marital status, number of children, level of education, work status, source of income, living arrangement and social activities.

B - Assessment of disability of elderly by using interviewing questionnaire including Physical Self-Maintenance Scale: (Appendix II)

The Physical Self-Maintenance Scale: [203]

Lawton and Brody developed the Physical Self- Maintenance Scale (PSMS) as a disability measure for use in planning and evaluating treatment for elderly resident living in the community or in institutions. Brody and Lawton Physical Self-Maintenance Scale (PSMS) included two scales; Activities of daily living scale (ADLs) and Instrumental Activities of Daily Living scale (IADLs). Both scales can be

administered separately or together. They can be scored either by identifying the specific degree of disability for each items, or by identifying the total degree of disability. The degree of disability for each item or for total score ranging from total independence to total dependence as follow:

1-**Activities of daily living scale (ADLs):**

ADLs consist of 6 items which are; toilet, feeding, dressing, Grooming, Physical ambulation and bathing. A modified classification done by the supervisors as follow to represent the degree of disability in ADL; five-point rating scales ranging from total independence (highest score) to total dependence (very poor score). The score of each item ranged from (0- 4) and total score ranged from (0 – 24).

Table (1) Activities of daily living scale (ADLs).

Degree of disability	Score for each answer	Total Score
Completely independent	4 (highest)	24
Partially dependent	3 (high)	23-18
Moderately dependent.	2 (average)	17 - 12
Mostly dependent.	1 (poor)	11 - 6
Completely dependent.	0 (very poor)	5- 0

2- Instrumental Activities of Daily Living scale (IADLs):

IADLs consist of 8 items which are; ability to use telephone, shopping, preparing food, housekeeping, doing laundry, using transportation, handling medications and handling finances. A modified classification done by the supervisors as follow to represent the degree of disability in IADL; three point response scales from total independence (high score) to total dependence (poor score). The score of each item ranged from (0- 2) and total score ranged from (0 – 16).

Table (2) Instrumental Activities of Daily Living scale (IADLs).

Degree of disability	Score For each answer	Total Score
Completely independent	2 (high)	16-15
Partial dependent	1 (average)	14-8
Complete dependent.	0 (poor)	7- 0

C- Assessment of psychological state of elderly by using interviewing questionnaire including: (Appendix III)

Cooper Smith self-esteem inventory scale - Beck's Depression Inventory Scale - Taylor's Manifest Anxiety Scale - Irritability, Depression, and Anxiety (IDA) Scale - Immediate, recent and remote memory tests - Dementia Screening Scale.

Cooper Smith self-esteem inventory scale: [204]

It is a standardized short Arabic form developed by Moussa and derived from the Copper Smith self-esteem inventory [205]. It consists of 25 statements, answered by "yes" or "no" to which a score of '1' is given. The total test score ranges from 0 to 25. Categorization of level of self-esteem was done as follows: very high self - esteem (0-5), high self-esteem (6-10), average self-esteem (11-12), low self-esteem (13-19) and very low self-esteem (20-25).

Beck's Depression Inventory Scale: [206]

Using a standardized Arabic short form of Adult Beck Depression scale translated by Ghareeb. [207] It gives a true rapid estimate of the depth and the level of depression. It comprises 13 sets of statements with four choices for which a score ranging from 0 to 3 is used. Each has to pick one statement from each set that describe his/ her state in the last week including the day of filling of the questionnaire. The total score on the Adult Beck' depression scale ranges from 0-39. Categorization of depression scale was done as follows: normal scale (0-4), mild depression scale (5-7), moderate depression scale (8-15) and severe depression scale (≥16). [208]

Taylor's Manifest Anxiety Scale [209]**:**

A standardized Arabic form of the scale was used. This scale formed of 50 statements self-reported. Each statement assesses one symptom by answering "yes" or "no" and the score is (1) for (yes) and (0) for (no). The total test score ranges from 0 to 50. The categorization of anxiety scale was done as follows: normal scale (0-6), mild anxiety scale (7-16), moderate anxiety scale (17-21) and severe anxiety scale (22-50). [208]

Irritability, Depression, Anxiety (IDA) Scale: [210]

It consists of 18 items; 5 items to assessment of depression, 5 items for anxiety, 4 items for outwardly directed irritability and4 items for inwardly directed irritability. Each item of the scale has responses graded from 0 to 3 and calculated as the following:

Depression: Normal range (0 – 3), borderline range (4 – 6), Depression range (7 – 15).

Anxiety: Normal range (0 – 5), borderline range (6 – 8), Anxiety range (9 – 15).

Outwardly directed irritability: Normal range (0 – 4), borderline range (5 – 7), outwardly directed irritability range (8 – 12).

Inwardly directed irritability: Normal range (0 – 3), borderline range (4 – 6), inwardly directed irritability range (7 – 12).

Table (3) Irritability, Depression, Anxiety (IDA) Scale:

Subscale	Item numbers
Depression	1, 3, 5, 9, 12
Anxiety	2, 7, 10, 14, 17
Inwardly directed Irritability	8, 11, 15, 18
Outwardly directed Irritability	4, 6, 13, 16

Memory test:

• Immediate memory was tested by digit span (backward and forward).

• Recent memory was tested by questions asking about recent event as recall five objects after five minutes, what did you have for breakfast today and yesterday?....etc. The total score ranged from (0-8). The mean and standard deviation was determined to detect the good and poor recent memory as follows;

Table (4) Recent memory scale:

Mean – SD	poor recent memory
Mean + SD	Good recent memory
In between	Average recent memory

• Remote memory was tested by asking about personal and general event in the past such as asking about date of birth or marriage. The total score ranged from (0-10). The mean and standard deviation was determined to detect the good and poor remote memory as follows;

Table (5) Remote memory scale:

Mean – SD	poor remote memory
Mean + SD	Good remote memory
In between	Average remote memory

Dementia Screening Scale: [(211)]

Consist of eleven questions covering short-term and long-term memory, orientation to surroundings, knowledge of current events, and ability to perform mathematical tasks. Some questions were combined (e.g., month, day, and year) and, to make the test more challenging, an answer is accepted as correct only if all parts of the answer are correct. Total score range from 0 to 32.5. Categorization of dementia scale was done as follows: normal range (32.5 - 31), borderline range (30.5 - 22), pre-dementia range (21.5-10.5) and dementia range (10 -0).

Time table:

A-Preparatory phase: this phase was devoted to the following:
1-Review of literature: covered a period of 4 months from August to November 2012.
2-Development of the questionnaire formats: covered a period of 2 months from December 2012 to January 2013.
3-Getting approvals: covered a period of 2 months from February to April 2013.
4-Planning, implementing and evaluating the pilot study: covered a period of 4 months from May to August 2013.
B-Data collection phase: nearly 4 months were spent in data collection starts from September to December 2013, which was carried out by the researcher herself.
C-Analysis of data and reporting phase: take 4 months were spent in coding, tabulation and analysis (from January to April 2014).
D- Writing thesis: 8 months spent in writing thesis (from May to December 2014).

Pilot study:

A Pilot study done in 5 elderly subjects resident at Dar Ahmous Khalifa and 5 elderly subjects living in the community. The sample of pilot study not included in the study sample.

A Pilot study was conducted to:

1-Verify the applicability of conducting the research and reveal problems whether technical or administrative.

2- Estimate time consumed to interview the elderly subjects.

3- Tests the skills of researcher in collecting needed data.

Feedback of the pilot study:

1- Elderly need more simplification and explanation for questions included in the questionnaire.

2- Elderly subjects resident in elderly homes took about 90: 120 minute to answer all questions included in the questionnaire but elderly subjects living in the community took shorter time which was about 30:45 minute.

Ethical consideration

Objective, purposes of the study, the expected benefits and types of information to be obtained was explained to the study elderly subjects and informed consent of subjects was obtained and confidentiality of data will be insured.

Dissemination of results:

A copy of the final report will be submitted to elderly homes following the Ministry of Social Solidarity, and to family medicine centers and units affiliated to MOHP.

Preparation of the data:

Revision of the completed data was routinely carried out. After completion of data collection, the data were coded and transferred into a master table. Data were fed to the computer using Statistical Package for Social Science (SPSS, version 18). Possible mistakes were checked for by a series of range checking and skip checking as well as frequency distributions to ensure that all questions had valid codes and a total set of data was entered for each elderly.

The researcher used several calculations, recoding, computation that were used in analysis and tabulation. These were:

Statistical analysis of the data

The data obtained were analyzed using computers and the Statistical Package for Social Science (SPSS, version 18).

A-Description of the studied sample regards personal and socio-demographic characteristics, degree of physical disability and psychological state using numbers, percentages, mean and standard deviation.

B- Comparison between the two groups of elderly as regard personal and socio-demographic characteristics, degree of physical disability and psychological state using Chi-square test. When more than 20% of the cells have expected count less than 5, correction for chi-square was conducted using Monte Carlo correction.

RESULTS

The present study includes one hundred elderly subjects (65years and over). This sample was divided into two equal sub samples, the first fifty elderly subjects were living in the community and the second group was resident in elderly homes.

The results of the present study will be presented in four sections:

Section 1:

Description of the studied elderly subjects as regard

- Personal data
- Socio-demographic characteristics
- Social activities.

Section 2:

Description of disability of the studied elderly subjects as regard

- Activity of daily living such as toileting, feeding, dressing, grooming, physical ambulation and bathing
- Instrumental activity of daily living such as ability to use telephone, shopping, preparing food, housekeeping, doing laundry, using transportation, handling medications and handling finances.

Section 3:

Description of the psychological profile of the studied elderly subjects as regard

- Self–esteem.
- Depression.
- Anxiety.
- Irritability.
- Memory (Immediate, recent and remote)
- Dementia.

Section 4:

Profile of elderly living in the community and elderly resident at elderly homes:

Comparison between the two elderly groups as regard; personal data, socio-demographic characteristics, social activities, degree of disability and psychological profile.

Section 1:

Personal data of the studied elderly subjects:

Table (6) illustrates distribution of the studied elderly subjects according to their personal data:

Age of the studied elderly subjects ranged between 65 years and over 85 years with a mean age of 73.94 ± 7.61years. The most frequent age presented among the studied elderly subjects was between 65 years to less than75 years (60%). As regard sex, the percentages of the studied elderly subjects males and females were equal to each other 50%. As regard marital state, it was found that nearly one half (47%) of the studied elderly subjects were widow, about one third (33%) were married, one eighth (13%) were divorced and less than one tenth (7%) were single.**(Fig. 1)** Regarding number of offspring, more than half (52%) of the studied elderly subjects had three or more offspring, (16%) of them had two offspring, (9%) had one offspring and The remaining (23%) didn't have any offspring.
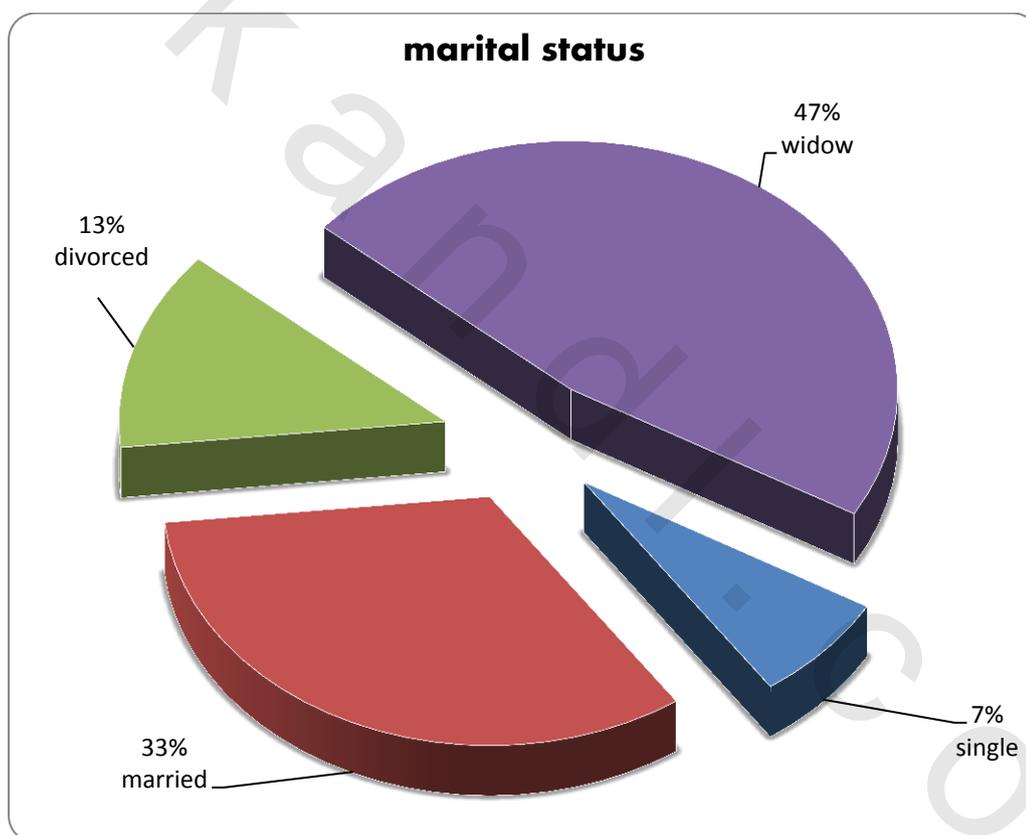

Figure (1): Distribution of the studied elderly subjects according to their marital status**.**

Table 6: Distribution of the studied elderly subjects according to their personal data:

Personal data	Total (n= 100)	
	No.	%
Age in years		
65 – <70	37	37.0
70 – <75	23	23.0
75 – <80	18	18.0
80 – <85	9	9.0
85+	13	13.0
Min. - Max.	65.0 – 95.0 years	
Mean ± SD	73.94 ± 7.61	
Median	72.0	
Sex		
Male	50	50.0
Female	50	50.0
Marital status		
Single	7	7.0
Married	33	33.0
Divorced	13	13.0
Widow	47	47.0
Number of offspring		
None	23	23.0
One child	9	9.0
Two children	16	16.0
Three children	26	26.0
More than three children	26	26.0

Socio-demographic characteristics of the studied elderly subjects:

Table (7) illustrates distribution of the studied elderly subjects according to their socio-demographic characteristics:

Regarding education, about one third (36%) of the elderly subjects were highly educated as they had university or post graduate education , more than one fourth (28%) had middle education as they had preparatory or secondary education, one fourth (25%) had basic education as they had primary education or read and write and only one tenth (11%) were illiterates. As regard work status, more than one half (59%) of the elderly subjects were retired from governmental or private sector, (15%) were working in private sector and about one quarter (26%) were housewives or females resident in elderly homes. Regarding the source of income, it was found that the majority (78%) of the studied elderly subjects were having pension from the governmental sector, while (14%) were having pension from the private sector and (15%) were having salary from the private sector. More than one third (36%) of them were having other sources of income as social security, savings and investments and nearly one fifth (21%) of the studied elderly subjects have financial help from others as offspring- brothers-cousins…etc. Regarding annual income, about one third (31%) of the studied elderly subjects have more than 36000 LE annually which consider high annual income. Less than one half (43%) have an annual income between 10800 - 36000 LE which is considered middle annual income. About one fourth (26%) have less than 10800 LE annually which is considered low annual income. Finally as regard living arrangement, Half (50%) of the elderly subjects of the study live in residential homes, (17%) of them were living in the community with his or her spouse , about (13%) of them were living in extended family (couples and children) , (13%) were living alone and Few (7%) were living with their offspring**. (fig.2)**
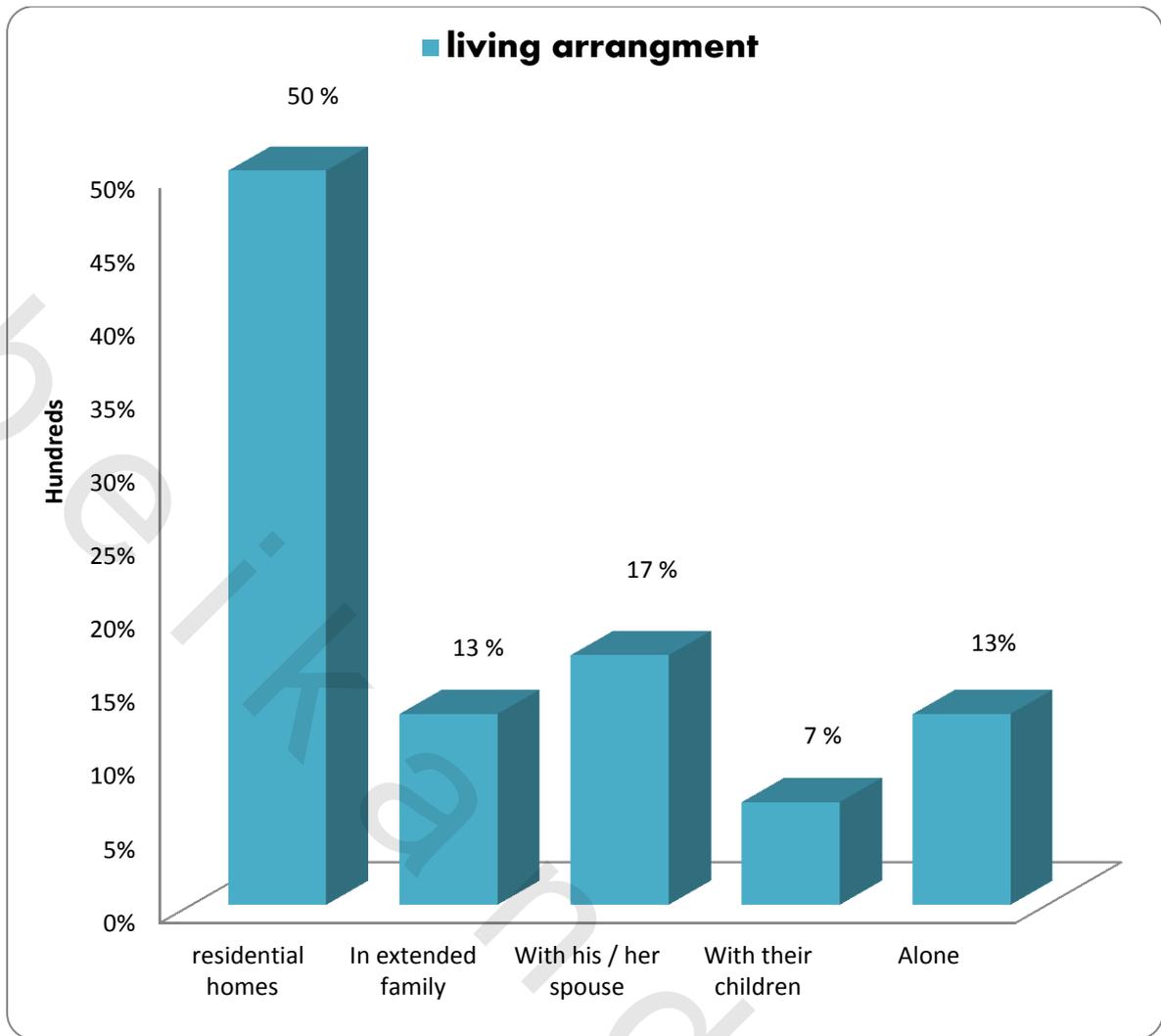
Figure (2): Distribution of the studied elderly subjects according to their living arrangement.

Table 7: **Distribution of the studied elderly subjects according to their socio-demographic characteristics:**

Socio-demographic data	Total (n= 100)	
	No.	%
Education		
Illiterate	11	11.0
Basic education (read and write and primary)	25	25.0
Middle education (preparatory – secondary)	28	28.0
High education (university –post graduate)	36	36.0
Occupation		
Retired (from governmental or private sector)	59	59.0
Work (in the private sector)	15	15.0
Housewife or female resident in elderly homes.	26	26.0
Source of income		
Pension from governmental sector.	78	78.0
Pension from private sector.	14	14.0
Salary from the private sector	15	15.0
Help from others (offspring- brothers-cousins…etc.)	21	21.0
Other Source of income*	36	36.0
Annual income		
Less than 3600 LE	2	2.0
3600 – 7200 LE	12	12.0
7200– 10800 LE	12	12.0
10800– 18000 LE	17	17.0
18000 – 36000 LE	26	26.0
More than 36000 LE	31	31.0
living arrangement		
Residential homes	50	50.0
In extended family	13	13.0
With his / her spouse	17	17.0
With one of their children	7	7.0
Alone	13	13.0

* Other Source of income = Social security, savings and investments.

Social activity of the studied elderly subjects:

Table (8) illustrates distribution of the studied elderly subjects according to their social activity:

As regard outdoor visits done by the elderly were mainly to their offspring (62%) then to their relatives (46%) followed by friends (26%) and lastly to their neighbor (16%). About (19%) of elderly can't do any outdoor visits. As regards indoor visits the majority of elderly were visited by their offspring and relatives (72% and 65% respectively). Minority of elderly were visited by their neighbor, friends and others (volunteers came to elderly homes or relatives of other resident) 19%, 21% and 15% respectively. Only (3%) of elderly weren't visited by any one.

Table (8): Distribution of the studied elderly subjects according to their social activity:

Social activities	Total (n= 100)	
	No.*	%
10 – Outdoor visits		
To offspring	62	62.0
To relatives	46	46.0
To neighbor	16	16.0
To friends	26	26.0
No visits	19	19.0
11 – Indoor visits		
Of offspring	72	72.0
Of relatives	65	65.0
Of neighbor	19	19.0
Of friends	21	21.0
Others**	15	15.0
No visits	3	3.0

*No is more than 100

** Others = volunteers or relatives of other resident

Section 2:
Disability of the studied elderly subjects:-
Activity of daily living scale (ADLs):

Table (9) illustrates distribution of the studied elderly subjects according to Activities of Daily Living scale (ADLs):

As regard ability of the studied elderly subjects in **using toilet;** more than one half (53%) of the studied elderly subjects were completely independent in toileting ﴿Cares for self at toilet completely and without any incontinence ﴾, about one fifth (20%) of them were partially dependent (needs to be reminded, or needs help in cleaning self, or rarely incontinence), about one fourth (24%) of them were moderately dependent ﴿Soiling or wetting while asleep more than once a week﴾, (2%) were mostly dependent (Soiling or wetting while awake more than once a week) and only (1%) were completely dependent (no control of bowels or bladder) . **Feeding;** three fourth (76%) of the studied elderly subjects were completely independent in feeding (eats without assistance). The remaining one fourth (24%) of them need some sort of assistance as follow; (11%) were partially dependent (Eats with minor assistance at meal times and/or with special preparation of food, or help in cleaning up after meals.), (12%) were moderately dependent (Feeds self with moderate assistance and is untidy.), (1%) were mostly dependent (Requires extensive assistance for all meals.) and none of them were completely dependent in eating. **Dressing;** about three fourth (74%) of the studied elderly subjects were completely independent in dressing as they dresses, undresses and selects clothes from their own wardrobe by themselves, the remaining one fourth (26%) of them need assistance during dressing as; (10%) were partially dependent (need minor assistance), (13%) were moderately dependent (need moderate assistance) and (3%) were mostly dependent (Needs major assistance in dressing, but cooperates with efforts of others to help). **Grooming;** nearly three fifths (60%) of the studied elderly subjects were completely independent in grooming as they always neatly dressed and well-groomed without assistance, (22%) were partially dependent (Grooms self adequately with occasional minor assistance, e.g., shaving) and (17%) were moderately dependent (Needs moderate and regular assistance or supervision in grooming). **Ambulatory activities;** more than one half (54%) of the studied elderly subjects were completely independent in ambulatory activities as they can go about grounds or city, one fourth (25%) were moderately dependent (ambulates with assistance of another person, railing, cane, walker or wheelchair) and (10%) were completely dependent (bedridden more than half the time). **Bathing**; about two third (68%) of the studied elderly subjects were completely independent in bathing (use tub, shower and sponge bath without help), (8%) were partially dependent (need help in getting in and out of tub), (9%) were moderately dependent (wash face and hands only and cannot bathe rest of body) and one sixth (15%) of them were mostly dependent (can't bath by themselves but cooperative with those who bathe them).

Regarding **Total Activities of Daily Living scale (ADLs)**, the studied elderly subjects abilities were ranged from completely dependent to completely independent (0 - 24). About two fifth (40%) of the studied elderly subjects were completely independent in their daily living activities as they doing all the six activities of ADLS without any help at any time. The remaining three fifth (60%) had a certain degree of dependence in their daily living activities as they need assistance in one or more activity by different degrees. The dependence ranged between; nearly one third (36%) were

partially dependent, (12%) were moderately dependent, (11%) were mostly dependent and only (1%) were completely dependent. The mean of daily living activities were 19.98 ± 5.23 and the median were 22.0 which means partially dependent. **(Fig. 3)**
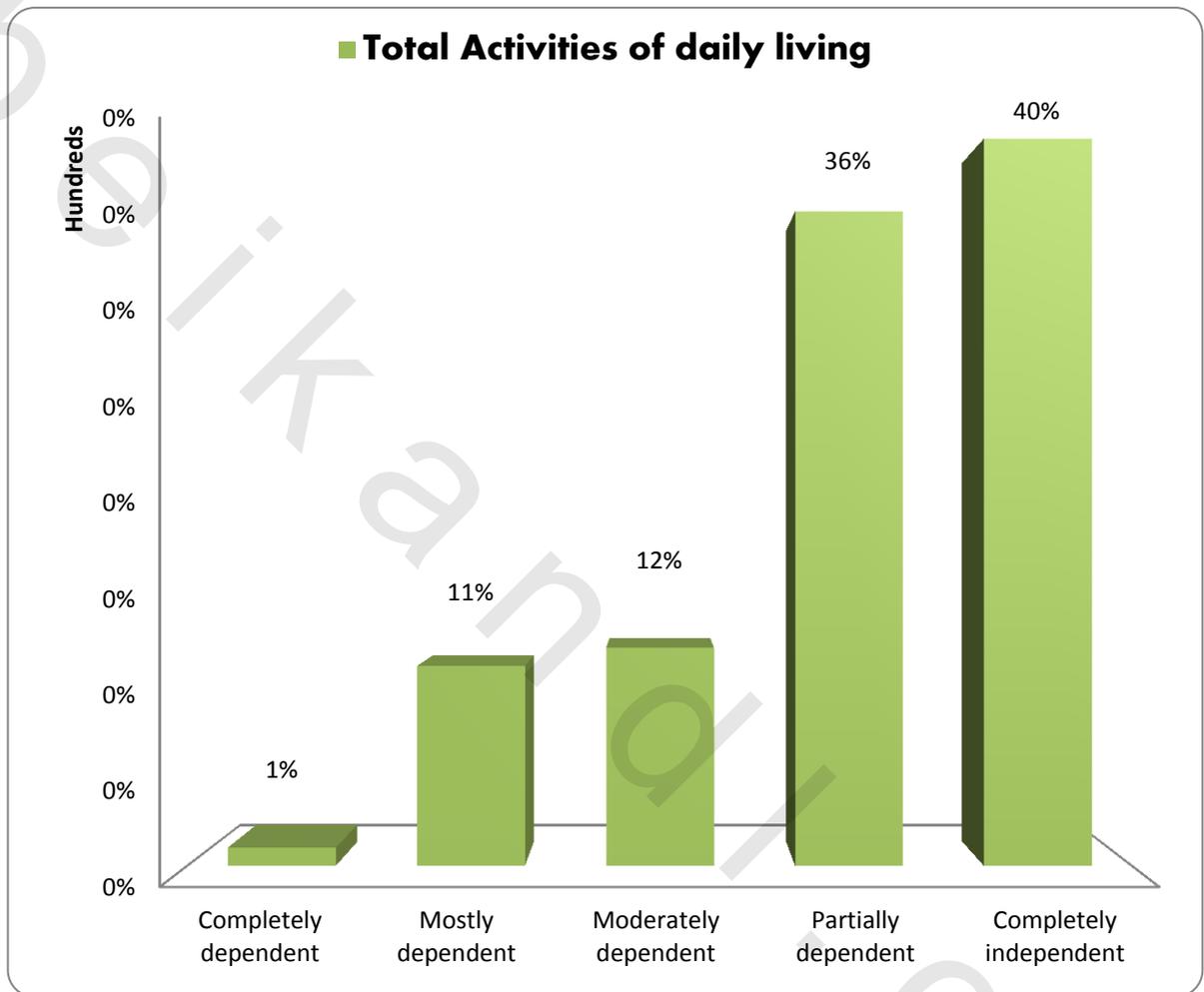

Figure (3): Distribution of the studied elderly subjects according to Total Activities of Daily Living scale (ADLs)

Table (9): Distribution of the studied elderly subjects according to their Activities of Daily Living scale (ADLs):

Activities of Daily Living scale	Total (n= 100)	
	No.	%
Toilet		
Completely dependent	1	1.0
Mostly dependent	2	2.0
Moderately dependent	24	24.0
Partially dependent	20	20.0
Completely independent	53	53.0`
Feeding		
Mostly dependent	1	1.0
Moderately dependent	12	12.0
Partially dependent	11	11.0
Completely independent	76	76.0
Dressing		
Mostly dependent	3	3.0
Moderately dependent	13	13.0
Partially dependent	10	10.0
Completely independent	74	74.0
Grooming		
Mostly dependent	1	1.0
Moderately dependent	17	17.0
Partially dependent	22	22.0
Completely independent	60	60.0
physical ambulation		
Completely dependent	10	10.0
Mostly dependent	5	5.0
Moderately dependent	25	25.0
Partially dependent	6	6.0
Completely independent	54	54.0
Bathing		
Mostly dependent	15	15.0
Moderately dependent	9	9.0
Partially dependent	8	8.0
Completely independent	68	68.0
Total Activities of Daily Living scale		
Completely dependent (0-5)	1	1.0
Mostly dependent. (6-11)	11	11.0
Moderately dependent. (12-17)	12	12.0
Partially dependent. (18-23)	36	36.0
Completely independent. (24)	40	40.0
Min. – Max.	4.0 – 24.0	
Mean ± SD	19.98 ± 5.23	
Median	22.0	

Instrumental Activities of Daily Living scale (IADLs):

Table (10) illustrates distribution of the studied elderly subjects according to Instrumental Activities of Daily Living scale (IADLs):

As regard **using telephone;** three fourth (76%) of the studied elderly subjects were completely independent in their ability to use telephone, (19%) were partially dependent (Dials a few well-known numbers or answers telephone but does not dial) and (5%) were completely dependent (don't use telephone at all). **Shopping;** nearly one third (36%) of the studied elderly subjects were completely independent in their shopping, one third (33%) were partially dependent (Shops independently for small purchases or needs to be accompanied on any shopping trip) and one third (31%) were completely dependent. **Food preparation;** more than two fifth (43%) of the studied elderly subjects were completely independent in their food preparation, about one third (35%) were partially dependent (Prepare adequate meals if supplied with ingredients or heat and serve prepared meals or prepares meals but does not maintain adequate diet) and nearly one fifth (22%) were completely dependent. **Housekeeping**; nearly one third (34%) of the studied elderly subjects were completely independent in their housekeeping (Maintains house alone or with occasional assistance for heavy work and perform light daily task alone), more than two fifth (44%) were partially dependent (perform light daily tasks but cannot maintain acceptable level of cleanliness or needs help with all home maintenance tasks) and one fifth (22%) were completely dependent. **Laundry**; nearly one fifth (22%) of the studied elderly subjects were completely independent (doing their personal laundry completely), two fifth (42%) were partially dependent (doing small items only) and about one third (36%) were completely dependent. **Mode of transportation;** more than one half (55%) of the studied elderly subjects were completely independent (travel via drives own car or use public transportation or taxi), about one third (31%) were partially dependent (Travel on public transportation or taxi when assisted or accompanied by another) and about one sixth (14%) were completely dependent. **Responsibility for own medications**; the majorities (85%) of the studied elderly subjects were completely independent (taking medications in correct dosages at correct time by themselves), nearly one tenth (12%) were partially dependent (need previous preparation for medication in separated dosages) and only (3%) were completely dependent. **Ability to handle finances;** about three fourth (76%) of the studied elderly subjects were completely independent in ability to handle finances, (21%) were either partially dependent (Manage day-to-day purchases but need help with banking and major purchases) and (3%) were completely dependent.

As regard **Total Instrumental Activities of Daily Living**; the studied elderly subjects abilities were ranged from completely dependent to completely independent (0 – 16). More than half (56%) of the studied elderly subjects were partially dependent in their Instrumental Activities of Daily Living, one fourth (23%) were completely dependent, and only one fifth (21%) were completely independent. The mean of Instrumental Activities of Daily Living were 10.93 ± 4.18 and the median were 12.0 which means partially dependent. **(Fig .4)**

Table 10: **Distribution of the studied elderly subjects according to Instrumental Activities of Daily Living scale (IADLs):**

Instrumental Activities of Daily Living	Total (n= 100)	
	No.	%
Ability to use telephone		
Completely dependent	5	5.0
Partially dependent	19	19.0
Completely independent	76	76.0
Shopping		
Completely dependent	31	31.0
Partially dependent	33	33.0
Completely independent	36	36.0
Food preparation		
Completely dependent	22	22.0
Partially dependent	35	35.0
Completely independent	43	43.0
Housekeeping		
Completely dependent	22	22.0
Partially dependent	44	44.0
Completely independent	34	34.0
Laundry		
Completely dependent	36	36.0
Partially dependent	42	42.0
Completely independent	22	22.0
Mode of transportation		
Completely dependent	14	14.0
Partially dependent	31	31.0
Completely independent	55	55.0
Responsibility for own medications		
Completely dependent	3	3.0
Partially dependent	12	12.0
Completely independent	85	85.0
Ability to handle finances		
Completely dependent	3	3.0
Partially dependent	21	21.0
Completely independent	76	76.0

Total Instrumental Activities of Daily Living

Partial dependent
(score= 8-14)
56%

Complete
dependent
(score= 0-7)
23%
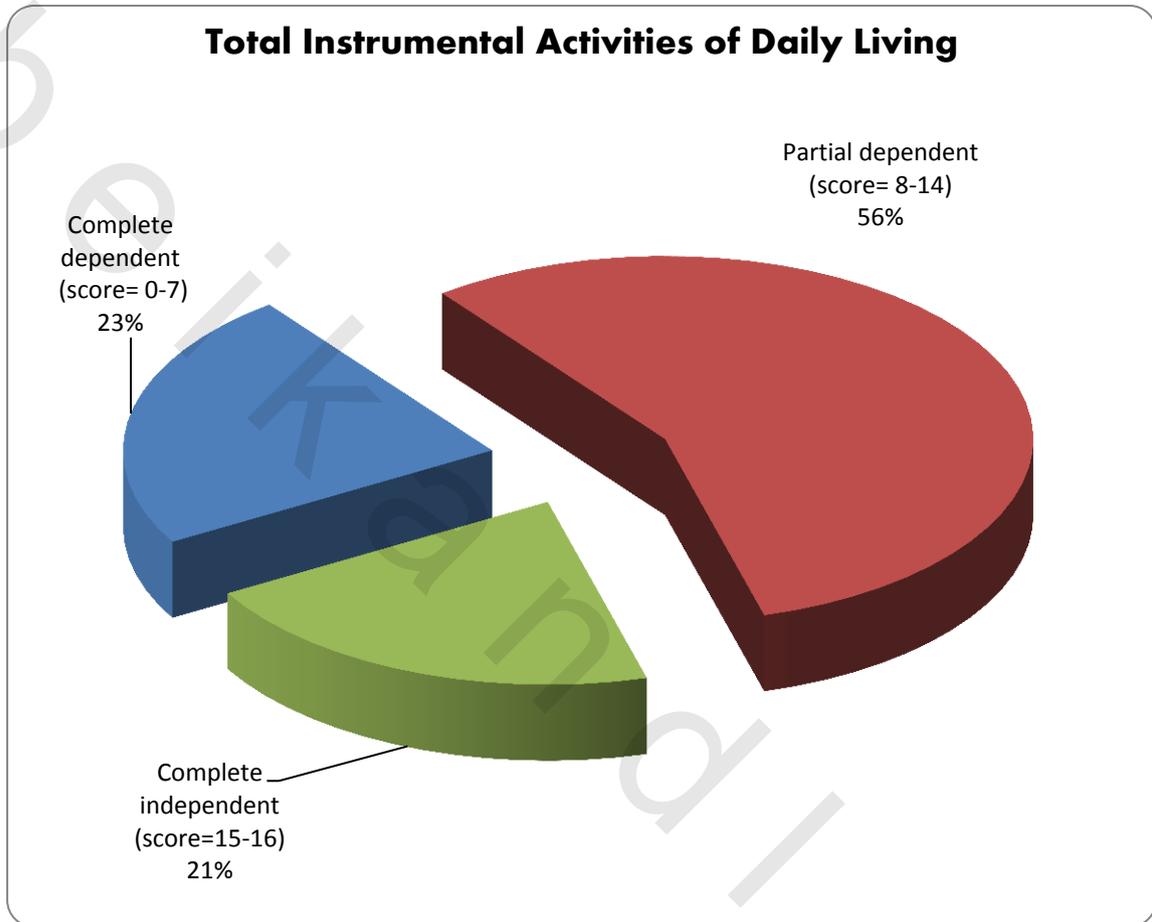
Complete
independent
(score=15-16)
21%

Figure (4): Distribution of the studied elderly subjects according to Total Instrumental Activities of Daily Living scale (IADL)

Section 3:

Psychological profile of the studied elderly subjects:

Figure (5) shows distribution of the studied elderly subjects according to Cooper Smith self-esteem Inventory Scale:

      The study revealed that the majority (77%) of the studied elderly subjects had high level of self-esteem as follow; about two fifth (39%) of the studied elderly subjects had a very high self-esteem score, about one third (33%) of them had high self-esteem score and (5%) had average self-esteem score. On the other hand one fifth (22%) of them had low self-esteem score and only (1%) of them had a very low self-esteem score.
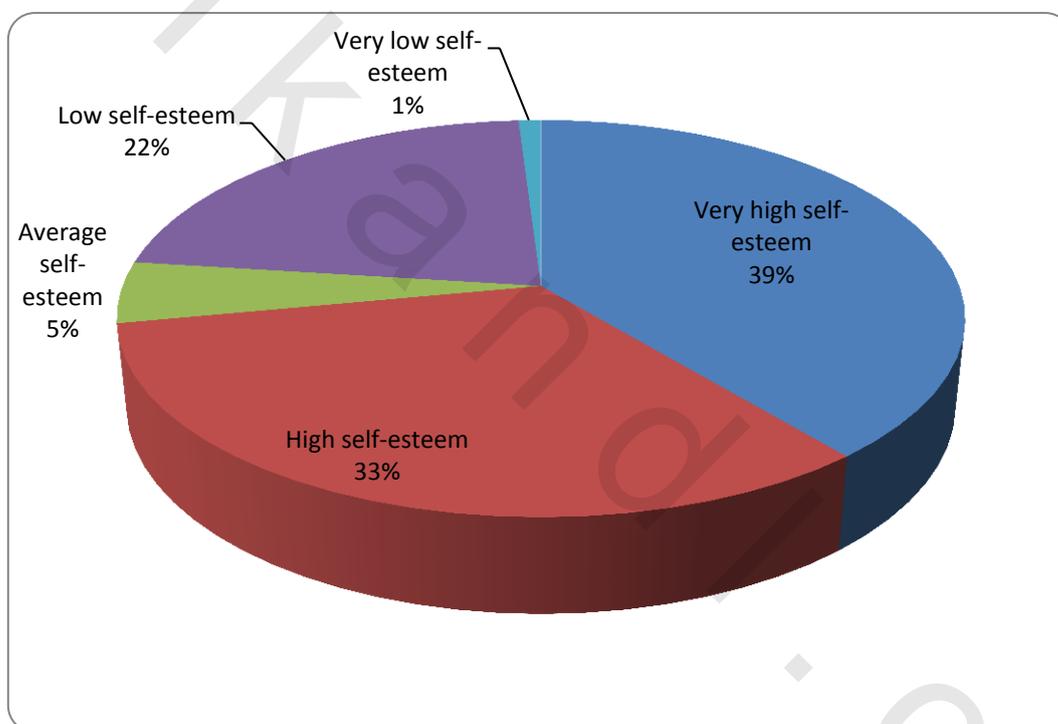

Figure (5): Distribution of the studied elderly subjects according to Cooper Smith self-esteem inventory scale.

Figure (6) illustrates distribution of the studied elderly subjects according to Beck's Depression Inventory Scale:

The study revealed that the majority (71%) of the studied elderly subjects had certain degree of depression ranged from mild to severe. Nearly one third (35%) had score of mild depression, (29%) had score of moderate depression and only (7%) had score of severe depression.
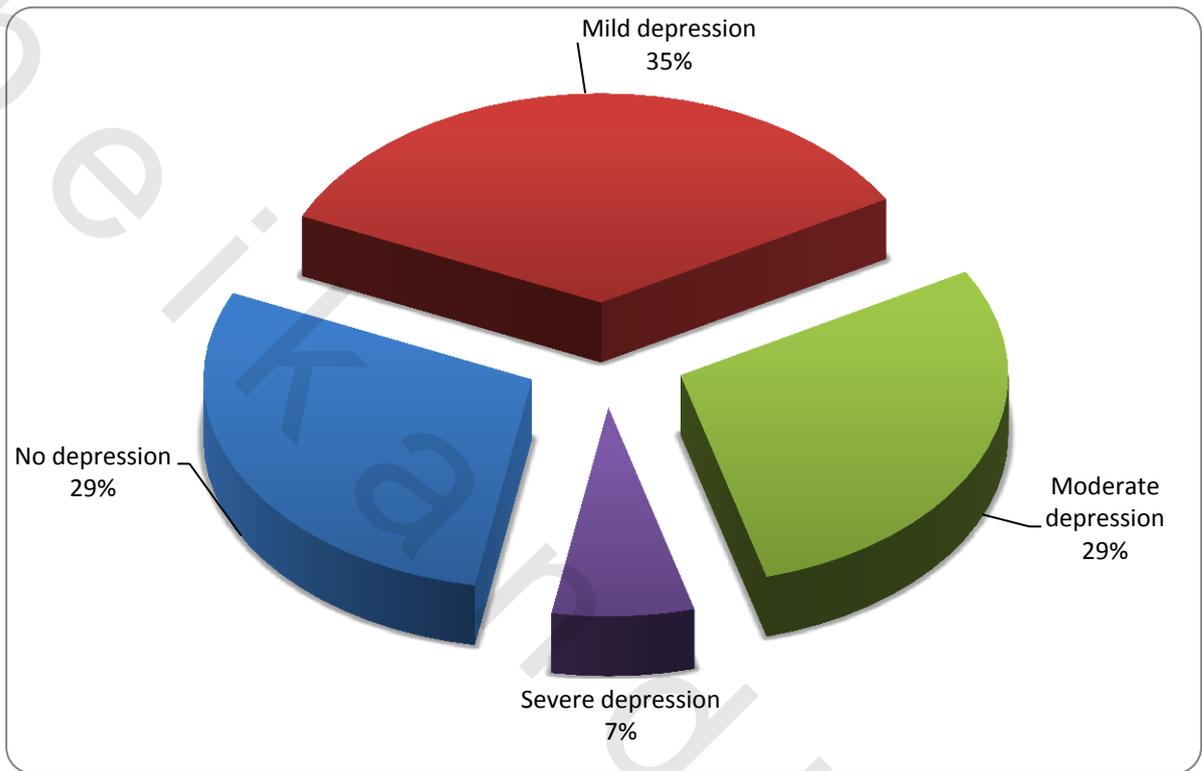

Figure (6): Distribution of the studied elderly subjects according to Beck's Depression Inventory Scale

Figure (7) illustrates distribution of the studied elderly subjects according to Taylor's Manifest Anxiety Scale:

The study revealed that about two fifth (38%) of the studied elderly subjects had certain degree of anxiety ranged from mild to severe. Nearly one quarter (24%) had score of mild anxiety, (12%) had score of moderate anxiety and only (2%) had score of severe anxiety.
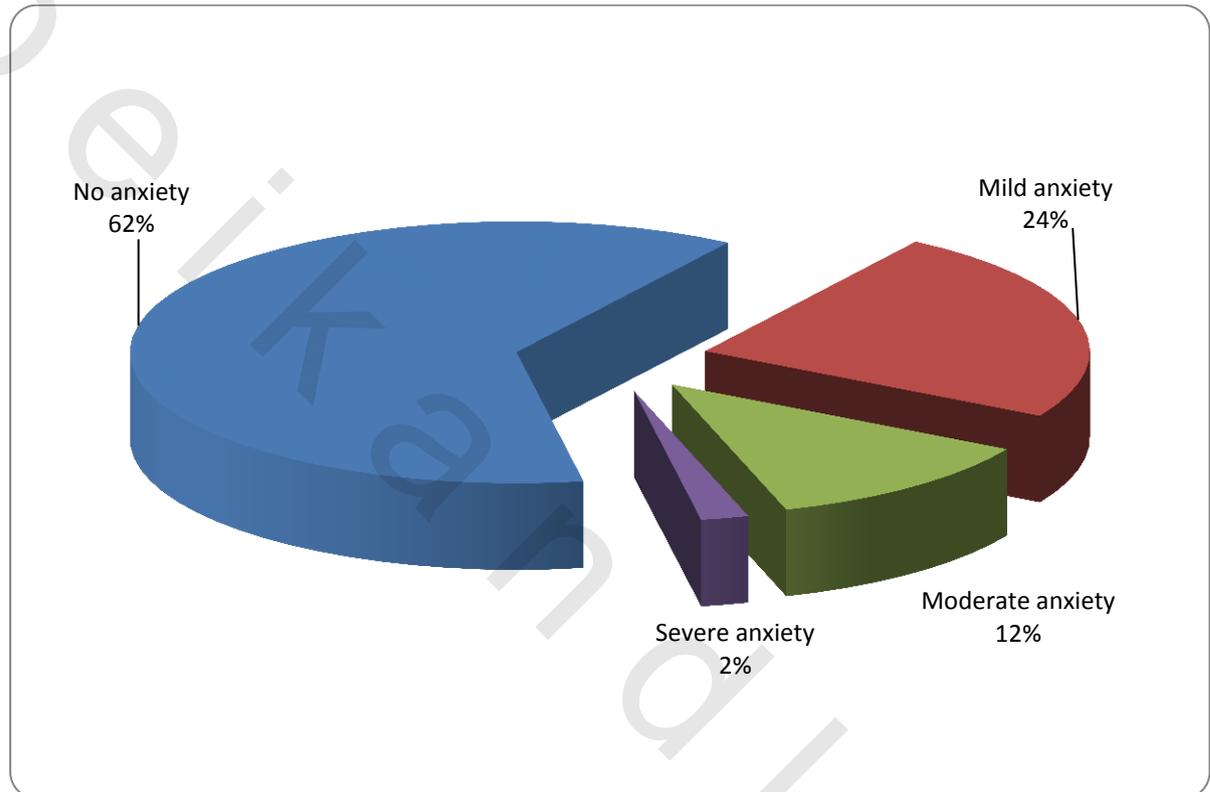

Figure (7): Distribution of the studied elderly subjects according to Taylor's Manifest Anxiety Scale.

Table (11) illustrates distribution of the studied elderly subjects according to Irritability, Depression, Anxiety (IDA) Scale:

Regarding *Inwardly directed irritability;* 7% of the studied elderly subjects had score of inwardly directed irritability, one fourth (27%) of them had score of borderline and the majority (66%) had score of normality. Regarding *Outwardly directed irritability;* 5% of the studied elderly subjects had score of outwardly directed irritability, one fifth (20%) of them had score of borderline and the majority (74%) had score of normality. Regarding *depression;* nearly two fifth (43%) of the studied elderly subjects had depression score, two fifth (42%) of them were borderline score and only one fifth (15%) had score of normality. Regarding *anxiety;* more than half (58%) had score of normality, only (14%) of the studied elderly subjects had anxiety score and one fourth (28%) of them had borderline score.

Table (11):   Distribution of the studied elderly subjects according to Irritability, Depression, Anxiety (IDA) Scale:

Irritability, Depression, Anxiety (IDA) Scale:	Total (n= 100)	
	No.	**%**
Inwardly directed irritability		
Normal	66	66.0
Borderline	27	27.0
Inwardly directed irritability	7	7.0
Outwardly directed irritability		
Normal	74	74.0
Borderline	21	21.0
Outwardly directed irritability	5	5.0
Depression		
Normal	15	15.0
Borderline	42	42.0
Depression	43	43.0
Anxiety		
Normal	58	58.0
Borderline	28	28.0
Anxiety	14	14.0

Figure (8) illustrates distribution of the studied elderly subjects according to their immediate memory:

As regard **immediate memory**; about one third (29%) count until four digits forward, one third (30%) count until five digits forward , one fourth (25%) count until six digits forward, one tenth (11%) who can count until seven digits forward and only (1%) can't count any digit forward. Regarding *digit Backward;* the majority of elderly can count until three and four digits backward (39% and 34% respectively), about one six (15%) count until five digits backward and only (2%) of the studied elderly subjects can't count digit backward at all.
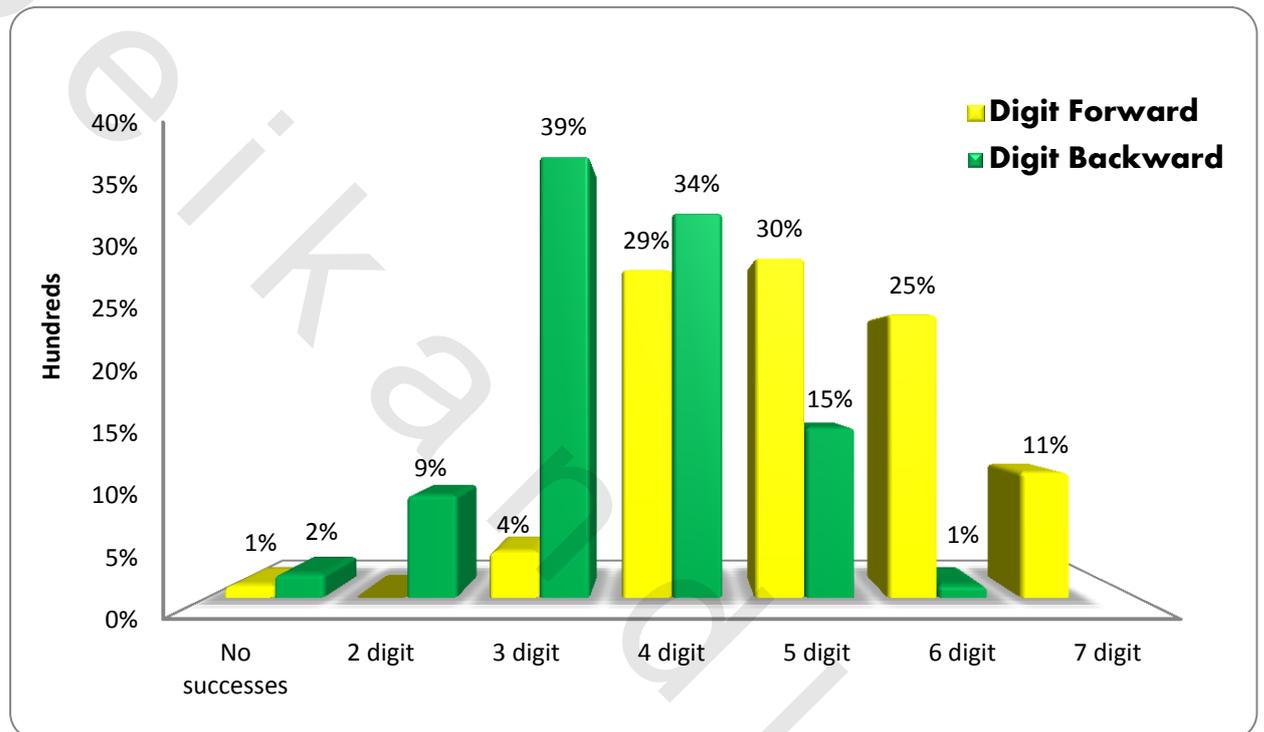

Figure (8): Distribution of the studied elderly subjects according to their immediate memory.

Table (12) illustrates distribution of the studied elderly subjects according to their recent and remote memory:

The study revealed that the score of recent memory was ranged from 3 to 8 with mean of (6.40 ± 1.19) and the median of (7.0). Nearly one half (55%) of the studied elderly subjects had score of good recent memory, about one fourth (23%) had score of average recent memory and about one fourth (22%) had score of poor recent memory. As regard remote memory, the score was ranged from 3 to 10 with mean of (8.53 ± 1.66) and the median of (9.0). Majority (82%) of the studied elderly subjects had score of good remote memory, (15%) of them had average remote memory and only (3%) had score of poor remote memory.

Table (12):   Distribution of the studied elderly subjects according to recent and remote memory:

Memory score	Total (n= 100)	
	No.	%
Recent memory score		
Poor	22	22.0
Average	23	23.0
Good	55	55.0
Min. – Max.	3.0 – 8.0 score	
Mean ± SD	6.40 ± 1.19	
Median	7.0	
Remote memory score		
Poor	3	3.0
Average	15	15.0
Good	82	82.0
Min. – Max.	3.0 – 10.0 score	
Mean ± SD	8.53 ± 1.66	
Median	9.0	

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Figure (9) illustrates distribution of the studied elderly subjects according to Dementia Screening Scale:

The study revealed that none of the studied elderly subjects had score of dementia, nearly one sixth (14%) of the studied elderly subjects had score of pre dementia, about one half (51%) of them had a score of borderline dementia and only one third (35%) had a score of normality.
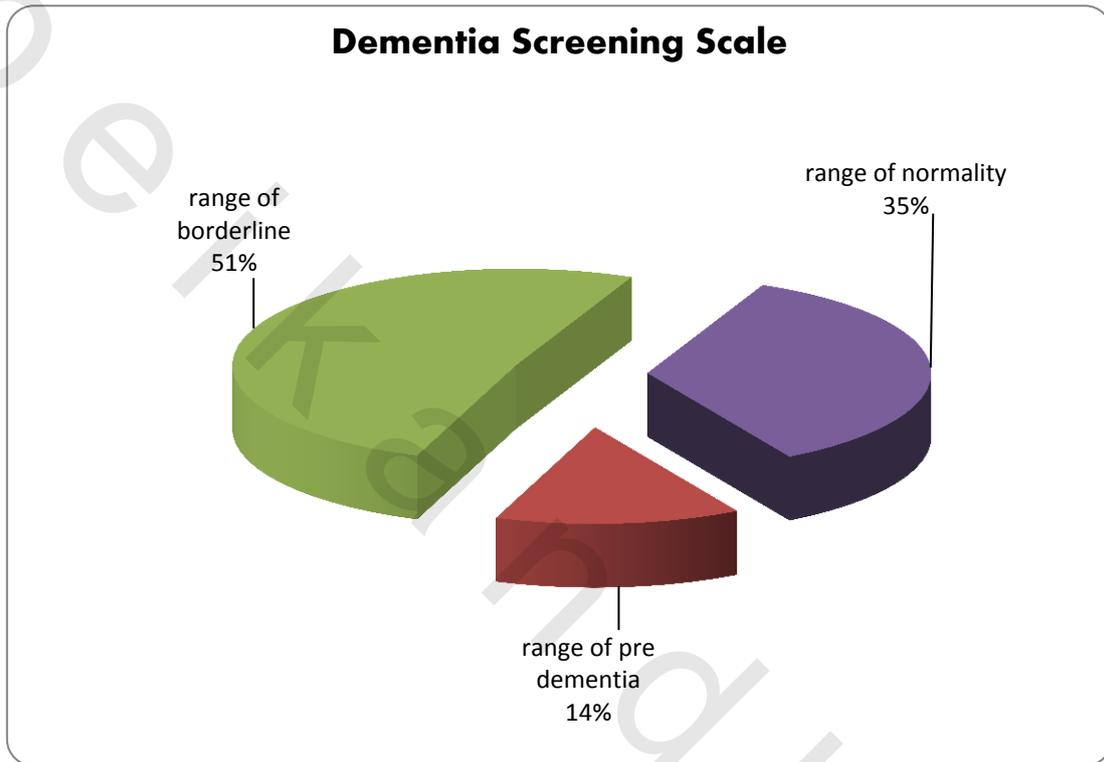

Dementia Screening Scale

range of borderline 51%

range of normality 35%

range of pre dementia 14%

Figure (9): Distribution of the studied elderly subjects according to Dementia Screening Scale**.**

Section 4:

Profile of elderly living in the community and elderly resident at elderly homes:

Table (13) shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their personal data:

By comparing the two elderly groups as regards age, it was found that about one half (50%) of the studied elderly subjects living in the community their age ranged between 65 years to less than70 years as compared to nearly one fourth (24%) of elderly subjects resident in elderly homes. On the other hand, elderly subjects aged 85 years and above were only represented in the elderly homes (26%) and not in the community. These differences were statistically significant where $\chi^2 = 18.292$ and p=0.001. **(Fig.10)**. Females elderly subjects resident in elderly homes were more represented than males (52.0% to 48% respectively) while in the community group the ratio was reversed as males elderly subjects living in the community were (52.0%) and females (48.0%), however, these differences were insignificant ($\chi^2 = 0.160$, **p**= 0.689). Regarding marital status, nearly two thirds (62%) of the studied elderly subjects resident in elderly homes were widow as compared to one third (32%) of those who were living in the community, While married subjects in the community group were more than half (58%) as compared to only (8%) of those living in elderly homes. These differences were highly statistically significant where (χ^2=33.324 and $^{MC}\mathbf{p} < 0.001$). As regard number of offspring it was found that two fifth (40%) of the studied elderly subjects resident in elderly homes hadn't any offspring as compared to only (6%) in the community group. Two third (68%) of the studied elderly subjects living in the community had three or more offspring as compared to one third (36%) in the elderly homes group. these differences were statistically significant where (χ^2=20.129 and $^{MC}\mathbf{p} = 0.001$).

Figure (10): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their age.

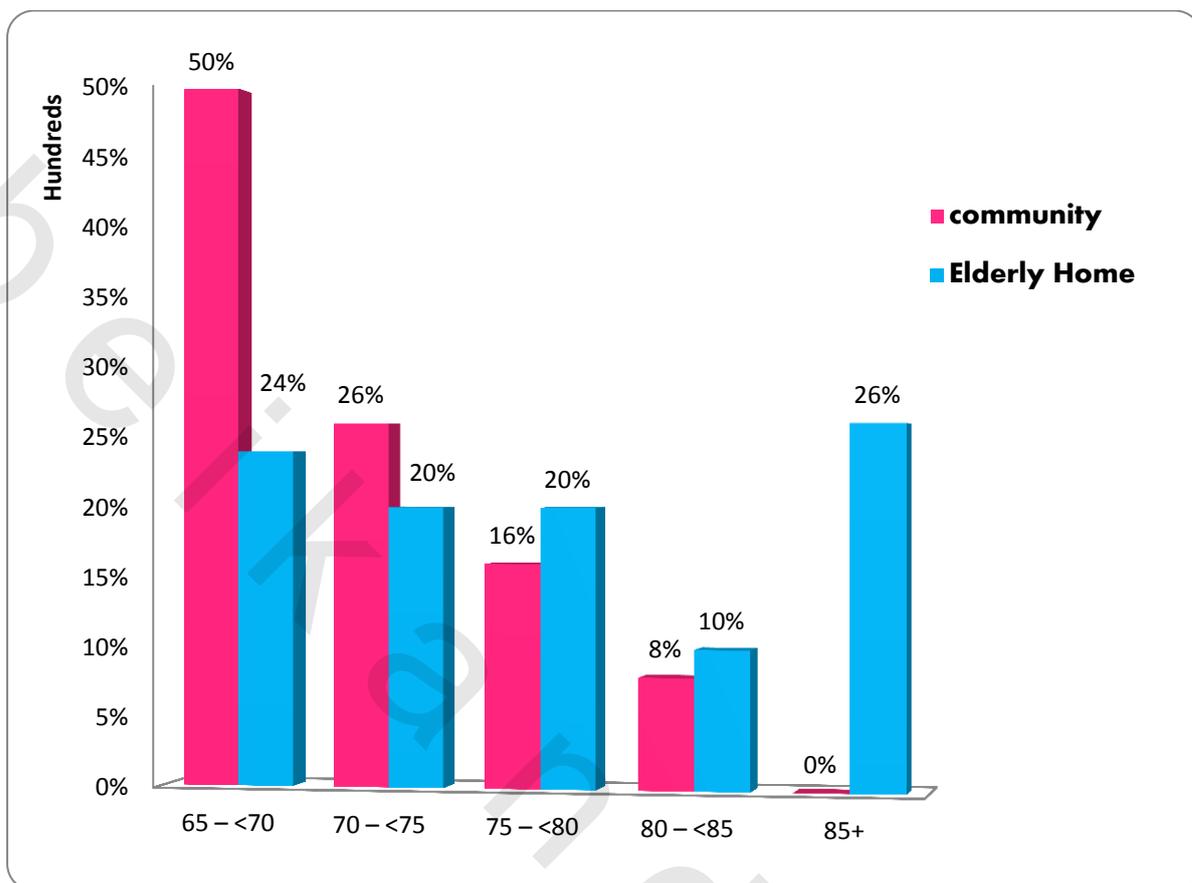**Table 13:** **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their personal data:**

personal data	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Age in years					
65 – <70	12	24.0	25	50.0	
70 – <75	10	20.0	13	26.0	χ^2=18.292
75 – <80	10	20.0	8	16.0	**P**=0.001[*]
80 – <85	5	10.0	4	8.0	
85+	13	26.0	0	0.0	
Min. - Max.	65.0 – 95.0 years		65.0 – 84.0 years		
Mean ± SD	77.0 ± 8.63		70.88 ± 4.85		
Median	76.0		69.50		
Sex					χ^2=0.160
Male	24	48.0	26	52.0	P= 0.689
Female	26	52.0	24	48.0	
Marital status					
Single	7	14.0	0	0.0	
Married	4	8.0	29	58.0	χ^2=33.324[*]
Divorced	8	16.0	5	10.0	^{MC}P<0.001[*]
Widow	31	62.0	16	32.0	
Number of offspring					
None	20	40.0	3	6.0	
One	6	12.0	3	6.0	χ^2=20.129[*]
Two	6	12.0	10	20.0	^{MC}P= 0.001[*]
Three	9	18.0	17	34.0	
More than three	9	18.0	17	34.0	

p: p value for comparing between the two studied groups
χ^2: value for Chi square   MC: Monte Carlo test
t: Student t-test   Z: Z for Mann Whitney test
*: Statistically significant at p ≤ 0.05

Tables (14) shows comparison between the studied elderly subjects living in the community and residents of elderly homes according to their socio-demographic characteristics:

No statistically significant difference between the two elderly groups as regards their level of education as elderly subjects resident in elderly homes were 10% Illiterate, 26% basic education, 28 middle education and 36% high education as compared to (12%, 24%, 28% and 36% respectively) for elderly subjects living in the community (x^2 = 0.131and p = 0.988). As regard working status, the majority (72%) of elderly resident in elderly homes were retired as compared to (46%) of the community group. Moreover, (30%) of the studied elderly subjects living in the community were working in private sector as compared to none in the elderly homes group. These differences were statistically significant where (x^2 = 18.018 and p < 0.001). Regarding to source of income, no statistically significant differences were found between the two groups as regard to their source of income except for salary from the private sector as 30% of elderly subjects living in the community had their salary from the private sector as compared to none in elderly homes. This difference was statistically significant where (x^2 = 17.647and p <0.001). As regard annual income, it was found that (30%) of elderly subjects resident in elderly homes had an annual income less than 10800 LE which is considered low annual income, (38%) of them were have an annual income between 10800 - 36000 LE which is considered middle annual income and (32%) of them had more than 36000 LE annually which is considered high annual income as compared to (22%,48% and 30% respectively) for elderly subjects living in the community. But these difference were statistically insignificant where (x^2=4.746 and ^{MC}**p** = 0.240).

Table 14: **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Socio-demographic characteristics:**

Socio-demographic characteristics	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Education					
Illiterate	5	10.0	6	12.0	
Basic education	13	26.0	12	24.0	χ^2=0.131 **P**=0.988
Middle education	14	28.0	14	28.0	
High education	18	36.0	18	36.0	
Occupation					
Retired (from government or private sector).	36	72.0	23	46.0	χ^2 = 18.018 **p** < 0.001
Work in the private sector.	0	0.0	15	30.0	
Housewife or female resident in elderly homes.	14	28.0	12	24.0	
Source of income					
Pension from government sector	35	70.0	43	84.0	χ^2=3.730 **P**=0.053
Pension from private sector	7	14.0	7	14.0	χ^2=0.0 **P**=1.000
Salary from the private sector	0	0.0	15	30.0	χ^2= 17.647* **P**< 0.001*
Help from others*	13	26.0	8	16.0	χ^2= 1.507 **p**= 0.220
Other**	17	34.0	19	38.0	χ^2= 0.044 **p**= 0.834
Annual income					
>3600 LE	1	2.0	1	2.0	
3600 – 7200	8	16.0	4	8.0	
7200– 10800	6	12.0	6	12.0	χ^2= 4.746 MC**p**= 0.240
10800– 18000	4	8.0	13	26.0	
18000 – 36000	15	30.0	11	22.0	
<36000	16	32.0	15	30.0	

* Help from others = Offspring- brothers-cousins

** Other = Social security, savings and investments.

P: p value for comparing between the two studied groups

χ^2: value for Chi square

MC: Monte Carlo test

Table (15) shows comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their social activities:

Regarding outdoor visits, it was found that (34%) of elderly resident in elderly homes didn't do any outdoor visits as compared to (4%) of elderly living in the community and this difference was highly statistically significant where ($x^2 = 14.620$ and $p < 0.001$). Outdoor visits done by elderly living in the community were to their offspring (86%), to their relatives (52%), to their Friends (32%) and to their neighbors (32%) as compared to (38%, 40% and 20% respectively) for those who were resident in elderly homes and no one of them do visits to their neighbors . the differences were highly statistically significant in outdoor visits to offspring ($x^2 = 24.448$ and $p < 0.001$) and neighbors ($x^2 = 19.048$ and $p < 0.001$).

As regard indoor visits, it was found that the majority (90%) of elderly living in the community were visited by their offspring as compared to (54%) of elderly resident in elderly homes ($x^2 = 16.071$ and $p < 0.001$). (38%) of elderly living in the community were visited by their neighbor as compared to none of elderly resident in elderly homes ($x^2 = 23.457$ and $p < 0.001$). On the other hand, elderly resident in elderly homes were visited by their friends (36%) and others as volunteers and relatives of other residents (30%) as compared to (6% and 0% respectively) for elderly living in the community. These differences were highly statistically significant (**p** < 0.001). Indoor visits done by relatives were higher in elderly homes group than community group (74% compare to 56%) but this difference was statistically insignificant where ($x^2 = 3.560$ and $p = 0.059$)

Table (15): **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their social activities:**

Demographic data	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
10 – Outdoor visits					
To offspring	19	38.0	43	86.0	$\chi^2 = 24.448^*$ $P < 0.001^*$
To relatives	20	40.0	26	52.0	$\chi^2 = 1.449$ $P = 0.229$
To neighbor	0	0.0	16	32.0	$\chi^2 = 19.048^*$ $P < 0.001^*$
To friends	10	20.0	16	32.0	$\chi^2 = 1.871$ $P = 0.171$
No visit	17	34.0	2	4.0	$\chi^2 = 14.620^*$ $P < 0.001^*$
11 – Indoor visits					
Of offspring	27	54.0	45	90.0	$\chi^2 = 16.071^*$ $P < 0.001^*$
Of relatives	37	74.0	28	56.0	$\chi^2 = 3.560$ $P = 0.059$
Of neighbor	0	0.0	19	38.0	$\chi^2 = 23.457^*$ $P < 0.001^*$
Of friends	18	36.0	3	6.0	$\chi^2 = 13.562^*$ $P < 0.001^*$
Of others**	15	30.0	0	0.0	$\chi^2 = 17.647^*$ $P < 0.001^*$
No visit	3	6.0	0	0.0	$\chi^2 = 3.093$ $^{MC}p = 0.079$

p: p value for comparing between the two studied groups

χ^2: value for Chi square   MC: Monte Carlo test

t: Student t-test   Z: Z for Mann Whitney test

*: Statistically significant at $p \leq 0.05$

Table (16) shows comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Activities of Daily Living scale (ADLs):

By comparing the two elderly groups as regard **toileting,** it was found that among community elderly group a larger percent (64%) of subjects were completely independent than subjects in elderly homes (42%). About one third (36%) of the community subjects were either partially dependent (18%) or moderately dependent (18%) in toileting as compared to nearly one half (52%) of the other group. a minor percentage of residents in elderly homes (6%) were either completely dependent or mostly dependent. Differences between both groups were statistically insignificant (x^2 = 6.513 and ^{MC}p =0.105). **Feeding**, the majority (92%) of the studied elderly subjects living in the community were completely independent in feeding as compared to (60%) of residents of elderly homes. Elderly subjects in residential homes who were moderately dependent or partially dependent for feeding accounted for (20%) and (18%) respectively as compared to (4%) for each in elderly subjects living in the community. Differences in the feeding between both groups were statistically significant (x^2 =13.990 and ^{MC}p =0.001). **Dressing**, the majority (92%) of the studied elderly subjects living in the community were completely independent in dressing as compared to (56%) of residents of elderly homes. Elderly subjects in residential homes who were moderately dependent or partially dependent or mostly dependent for dressing accounted for (22%, 16% and 6% respectively) as compared to lower percentages in elderly subjects living in the community (4%, 4% and 0% respectively). Differences in the feeding between both groups were statistically significant where (x2 = 16.760and ^{MC}p< 0.001). **Grooming,** three fourth of the sample (76%) of elderly subjects living in the community were completely independent in grooming as compared to (44%) of residents of elderly homes. Nearly one third (30%) of the studied elderly subjects resident in elderly homes were moderately dependent as compared to (4%) in the studied community group. these differences were statistically significant where (x^2 = 15.837and ^{MC}p< 0.001). **Ambulatory activities,** more than two third (70%) of the studied elderly subjects living in the community were completely independent in Physical ambulation as compared to (38%) of residents in elderly homes. About one fourth (28%) of residents of elderly homes were classified either mostly dependent (10%) or completely dependent (18%) as compared to only (2%) in the community group. These differences were highly statistically significant where (x^2 = 18.650 and ^{MC}p< 0.001). **Bathing,** the percentage of elderly subjects living in the community who were completely independent as regards bathing was significantly higher than their percentage in the elderly homes (86% as compared to 50% where x^2 = 22.913and ^{MC}p <0.001) .

Finally it was found that complete independence in **Total Activities of Daily Living** among elderly living in the community was significantly higher than those resident in elderly homes (54% as compared to 26% where x^2 = 8.167 and p = 0.004) . Moreover, the percentage of moderately dependent subjects resident in elderly homes (20%) was significant higher than their counterparts in the community group (4%). (x^2 = 6.061and ^{FE}p = 0.014). Also, the percentage of those who were mostly dependent in elderly homes (20%) was significant higher than their counterparts in the community group (2%). (x^2 = 8.274 and ^{FE}p = 0.004). The mean ADLs for community group was significantly higher than that of elderly homes group (22.12 ± 3.14 and 17.84 ±6 respectively where t = 4.47 and p = 0.001) . **(Fig. 11)**

Table (16): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Activities of daily living scale (ADLs):

Activities of daily living	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Toilet					χ^2=6.513 ^{MC}p=0.105)
Completely dependent	1	2.0	0	0.0	
Mostly dependent	2	4.0	0	0.0	
Moderately dependent	15	30.0	9	18.0	
Partially dependent	11	22.0	9	18.0	
Completely independent	21	42.0	32	64.0	
Feeding					χ^2=13.990* ^{MC}p=0.001*
Mostly dependent	1	2.0	0	0.0	
Moderately dependent	10	20.0	2	4.0	
Partially dependent	9	18.0	2	4.0	
Completely independent	30	60.0	46	92.0	
Dressing					χ^2=16.760* ^{MC}p< 0.001*
Mostly dependent	3	6.0	0	0.0	
Moderately dependent	11	22.0	2	4.0	
Partially dependent	8	16.0	2	4.0	
Completely independent	28	56.0	46	92.0	
Grooming					χ^2=15.837* ^{MC}p<0.001*
Mostly dependent	1	2.0	0	0.0	
Moderately dependent	15	30.0	2	4.0	
Partially dependent	12	24.0	10	20.0	
Completely independent	22	44.0	38	76.0	
physical ambulation					χ^2=18.650* ^{MC}p<0.001*
Completely dependent	9	18.0	1	2.0	
Mostly dependent	5	10.0	0	0.0	
Moderately dependent	12	24.0	13	26.0	
Partially dependent	5	10.0	1	2.0	
Completely independent	19	38.0	35	70.0	
Bathing					χ^2=22.913* ^{MC}p=<0.001*
Mostly dependent	14	28.0	1	2.0	
Moderately dependent	8	16.0	1	2.0	
Partially dependent	3	6.0	5	10.0	
Completely independent	25	50.0	43	86.0	

χ^2: value for Chi square   MC: Monte Carlo test
t: Student t-test   *: Statistically significant at p ≤ 0.05

Table (16): **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Activities of daily living scale (ADLs) (cont.):**

Activities of daily living scale (ADLs)	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
0 - 5 completely dependent	1	2.0	0	0.0	χ^2=1.010 ^{FE}p=1.000
6 - 11 mostly dependent	10	20.0	1	2.0	χ^2=8.274* ^{FE}p=0.004*
12 - 17 moderately dependent	10	20.0	2	4.0	χ^2=6.061* ^{FE}p=0.014*
18 - 23 partially dependent	16	32.0	20	40.0	χ^2=0.694 p=0.405
>23 completely independent	13	26.0	27	54.0	χ^2=8.167* p= 0.004*
Min. – Max. Mean ± SD Median	4.0 – 24.0 17.84 ± 6.0 19.50		9.0 – 24.0 22.12 ± 3.14 24.0		t=4.470* p <0.001*

χ^2: value for Chi square   MC: Monte Carlo test   FE: Fisher Exact test
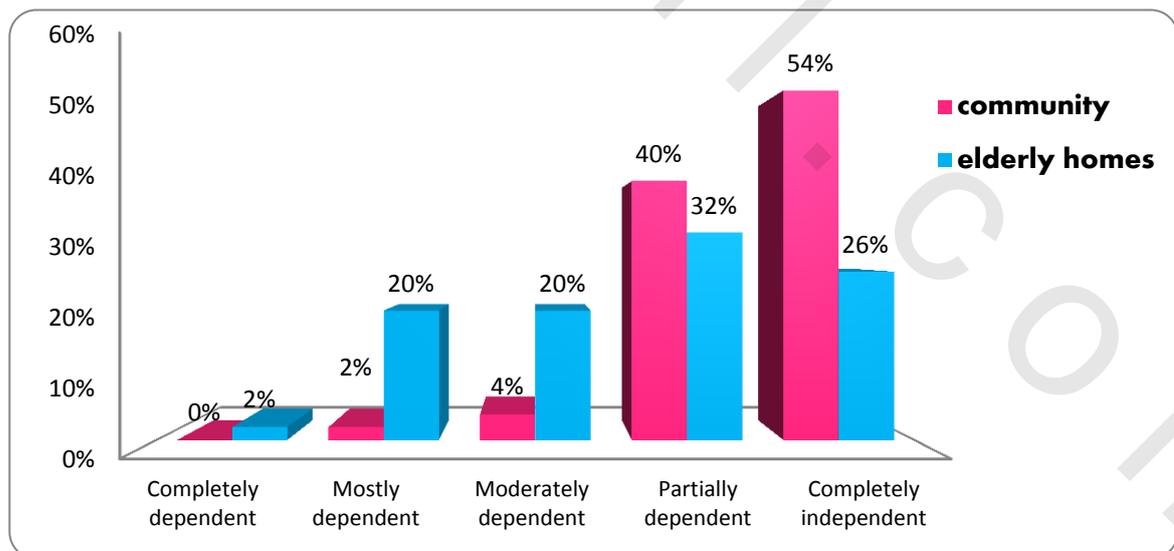t: Student t-test   *: Statistically significant at $p \leq 0.05$

Figure (11): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Activities of Daily Living scale (ADLs).

Table (17) shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Instrumental Activities of Daily Living scale (IADLs):

By comparing the two elderly groups as regards their ability to **use telephone;** it was found that no significant difference between the two groups of the study as 82% and 70% of community group and elderly homes group respectively were completely independent for this instrumental activity (x^2=5.416 and ^{MC}p =0.067). As regards **shopping**, more than one half (52%) of the subjects in the community group were completely independent for this activity as compared to only (20%) of the elderly homes groups. Differences in the both groups were statistically significant as (x2=27.002 and p<0.001).**Food preparation**, the majority of residents in elderly homes were either completely dependent (40%) or partially dependent (40%) as regards food preparation whereas (66%) of community group sample were completely independent in this area. Differences between both groups were statistically significant as (x^2=29.426 and p<0.001). **Housekeeping,** it was found that completely independent was significantly higher in community group (40%) than in residents of elderly homes (28%) where(x^2=15.572 and p<0.001). regarding **laundry,** the majority of residents in elderly homes (84%) were either completely dependent (54%) or partially dependent (30%) for laundry activity as compared to (18% and 54% respectively) in community group. These differences were statistically significant (x^2=14.156 and p=0.001).**Mode of transportation**, complete independence was significantly higher in community group than residents of elderly homes (80% and 30%respectivily where (x^2=31.759 and p<0.001). **Responsibility for own medications,** the majority (96%) of the studied elderly subjects living in the community were completely independent in taking responsibility for their own medications. On the other hand about three fourth (74%) of residents of elderly homes were completely independent, about one fifth (20%) were partially dependent and (6%) were completely dependent. These differences were statistically significant (x^2=9.340 and ^{MC}p =0.006) . **Ability to handle finances**, the majority (88%) of the studied elderly subjects living in the community was completely independent in handling finances. On the other hand about two thirds (64%) of residents of elderly homes were completely independent. this difference was statistically significant (x^2=8.301 and ^{MC}p =0.008).

Finally it was found that as regard **Total Instrumental Activities of Daily Living scale**, there were statistically significant differences between the two groups of the studied sample as (44%) of the of the elderly subjects resident in elderly homes were completely dependent and (42%) were partially dependent on the other hand (2% and 70% respectively) of the elderly subjects living in the community were completely dependent and partially dependent. The mean IADLs for community group was higher than that of elderly homes group (12.96 ±2.33 and 8.9 ±4.63 respectively where t = 5.642 and p < 0.001). **(fig.12)**

Table (17): **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Instrumental Activities of Daily Living scale (IADLs):**

Instrumental Activities of Daily Living scale (IADLs)	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Ability to use telephone					
Completely dependent	5	10.0	0	0.0	χ^2= 5.416
Partially dependent	10	20.0	9	18.0	^{MC}p= 0.067
Completely independent	35	70.0	41	82.0	
Shopping					
Completely dependent	27	54.0	4	8.0	χ^2= 27.002*
Partially dependent	13	26.0	20	40.0	P < 0.001*
Completely independent	10	20.0	26	52.0	
Food preparation					
Completely dependent	20	40.0	2	4.0	χ^2= 29.426*
Partially dependent	20	40.0	15	30.0	P < 0.001*
Completely independent	10	20.0	33	66.0	
Housekeeping					
Completely dependent	19	38.0	3	6.0	χ^2=15.572*
Partially dependent	17	34.0	27	54.0	P < 0.001*
Completely independent	14	28.0	20	40.0	
Laundry					
Completely dependent	27	54.0	9	18.0	χ^2=14.156*
Partially dependent	15	30.0	27	54.0	P = 0.001*
Completely independent	8	16.0	14	28.0	
Mode of transportation					
Completely dependent	14	28.0	0	0.0	χ^2=31.759*
Partially dependent	21	42.0	10	20.0	P <0.001*
Completely independent	15	30.0	40	80.0	

χ^2: value for Chi square   MC: Monte Carlo test
t: Student t-test   *: Statistically significant at $p \leq 0.05$

Table (17): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Instrumental Activities of Daily Living scale (IADLs) Cont.:

Instrumental Activities of Daily Living scale	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Responsability for own medications					χ^2=9.340[*]
Completely dependent	3	6.0	0	0.0	^{MC}P = 0.006[*]
Partially dependent	10	20.0	2	4.0	
Completely independent	37	74.0	48	96.0	
Ability to handle finances					χ^2=8.301[*]
Completely dependent	3	6.0	0	0.0	^{MC}P = 0.008[*]
Partially dependent	15	30.0	6	12.0	
Completely independent	32	64.0	44	88.0	
Total Instrumental Activities of Daily Living scale					
0 - 7 completely dependent	22	44.0	1	2.0	χ^2=24.901[*] P <0.001[*]
8 - 14 partially dependent	21	42.0	35	70.0	χ^2=7.955[*] P = 0.005[*]
15-16 Completely independent	7	14.0	14	28.0	χ^2=2.954 P = 0.086
Min. – Max. Mean ± SD Median	0.0 – 16.0 8.90 ± 4.63 9.0		6.0 – 16.0 12.96 ± 2.33 13.50		t=5.642[*] P <0.001[*]

χ^2: value for Chi square   MC: Monte Carlo test
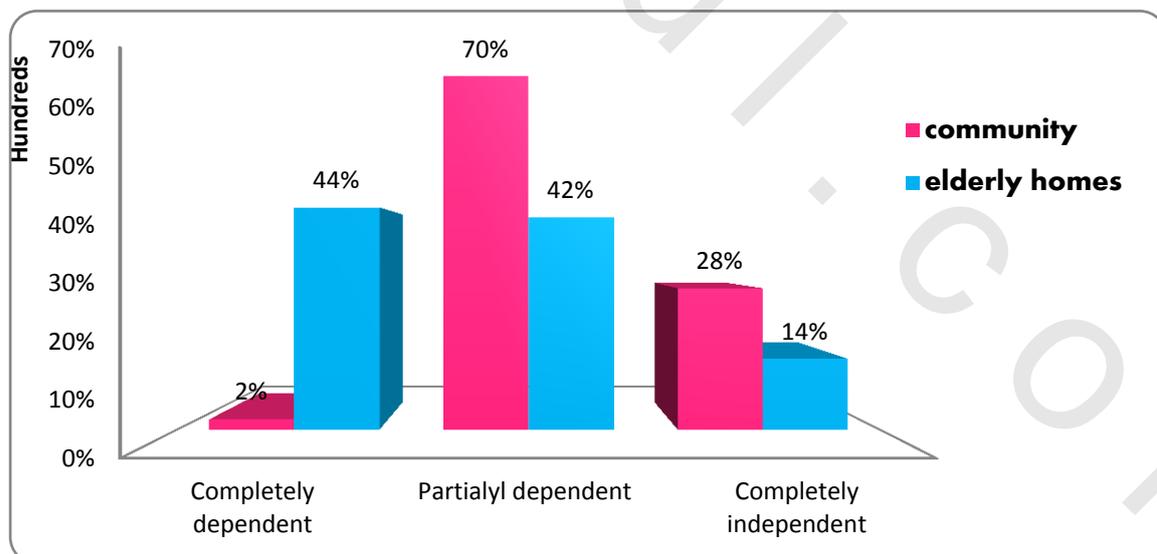t: Student t-test   *: Statistically significant at p ≤ 0.05

Figure (12): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their Instrumental Activities of Daily Living scale (IADLs).

Table (18) Shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Cooper Smith self-esteem inventory scale:

By comparing the two elderly groups as regards their level of self-esteem it was found that score of very high self-esteem was higher in the elderly home group than in the community group (42% vs 36%) and the score of high self-esteem was higher in the community group than in elderly home group (40% vs 26%) although these differences were insignificant. On the other hand, elderly resident in elderly home had score of low and very low self-esteem (26%) as compared to (20%) for those living in the community and these differences were insignificant. (x^2= 3.096 and ^{MC}p = 0.580). **(Fig. 13)**
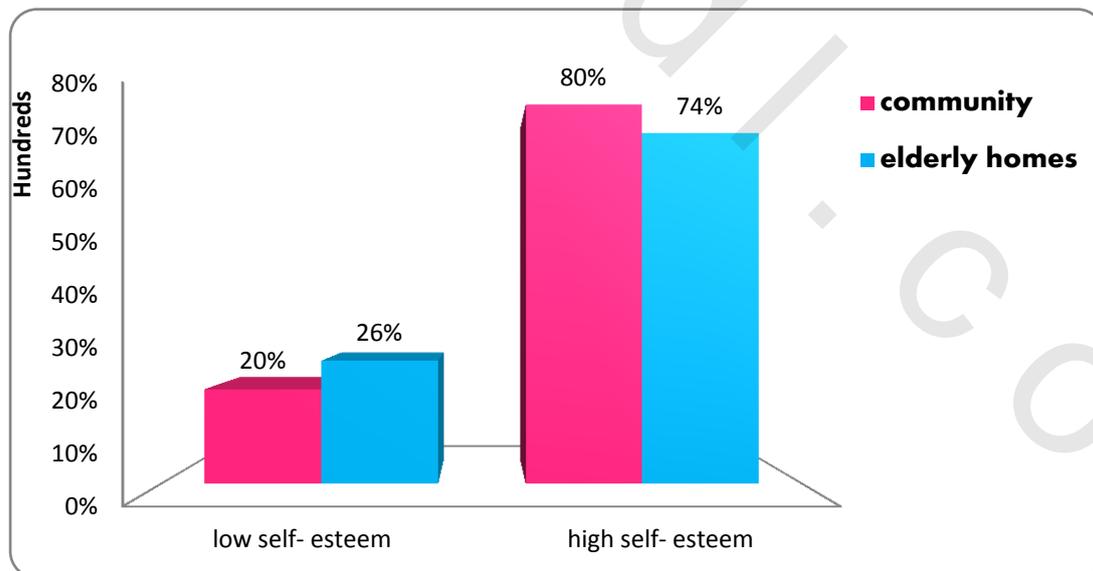
Table (18): **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Cooper Smith self-esteem inventory scale:**

Cooper smith self-esteem inventory scale	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Very high	21	42.0	18	36.0	
High	13	26.0	20	40.0	χ^2=3.096 ^{MC}p= 0.580
Average	3	6.0	2	4.0	
Low	12	24.0	10	20.0	
Very low	1	2.0	0	0.0	

Figure (13): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their level of self-esteem.

Figure (14) Shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Beck's Depression Inventory Scale:

The study revealed that (74%) of elderly resident in elderly homes had certain degree of depression as compared to (68%) of elderly in community group. The score of mild depression was higher among elderly living in the community than in elderly resident in elderly homes (38% vs 32%). On the other hand, the score of severe depression was higher among elderly resident in elderly homes than in elderly living in the community (12% vs 2%). These differences were insignificant where $x^2 = 4.042$ and $^{MC}p = 0.278$.
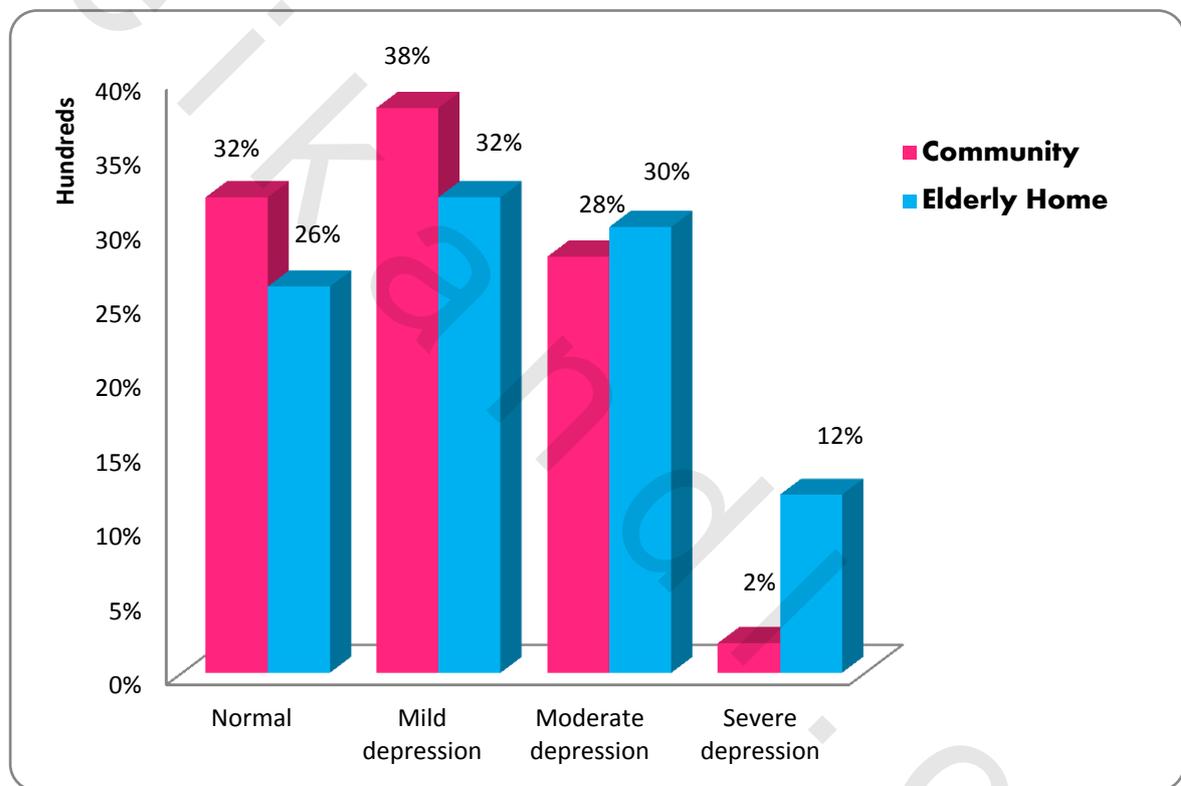

Figure (14): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Beck's Depression Inventory Scale

Figure (15) Shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Taylor's Manifest Anxiety Scale:

The study revealed that (46%) of elderly resident in elderly homes had certain degree of anxiety as compared to (30%) of elderly in community group. Among elderly resident in elderly homes the score of mild anxiety was (28%), score of moderate anxiety was (14%) and score of severe anxiety was (4%) as compared to (20%, 10% and 0% respectively) for elderly living in the community. These differences were insignificant where $x^2 = 3.663$ and $^{MC}p = 0.272$.
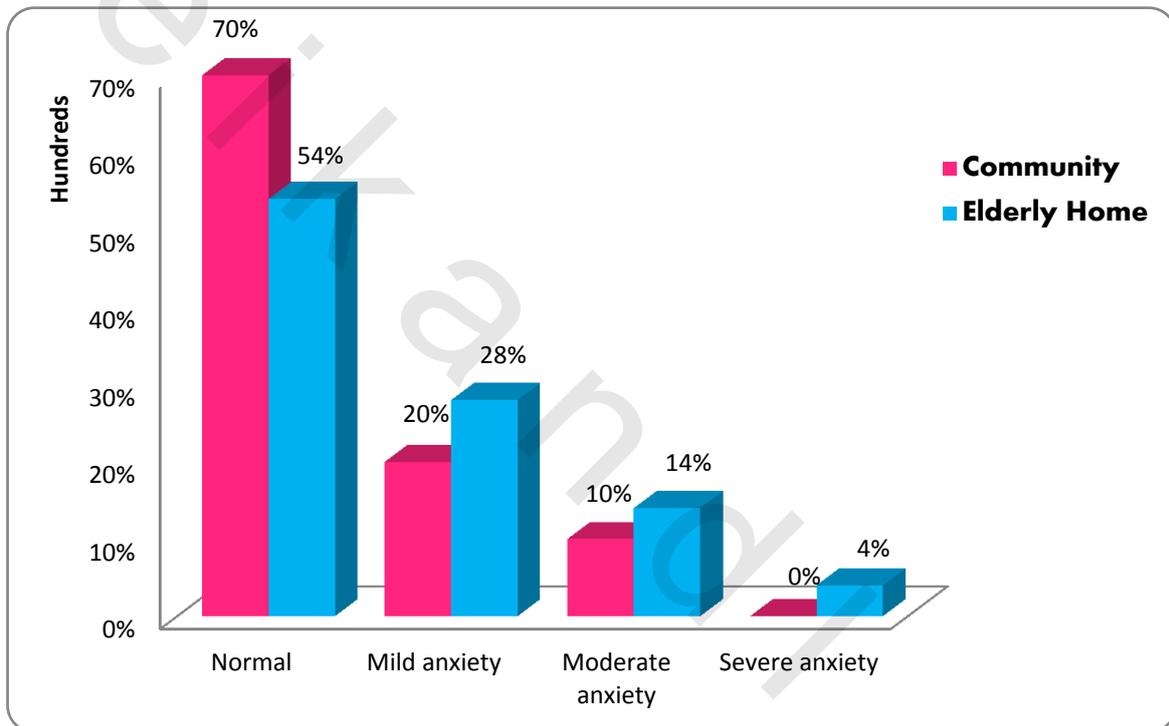

Figure (15): Shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Taylor's Manifest Anxiety Scale

Table (19) Shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Irritability, Depression, Anxiety (IDA) Scale:

The study revealed that score of inwardly directed irritability and borderline were higher among elderly subjects resident in elderly homes than between elderly subjects living in the community (10% and 30% compared to 4% and 24% respectively). These differences were insignificant. Regarding outwardly directed irritability; the score of borderline were higher among elderly subjects resident in elderly homes than between elderly subjects living in the community (28% compared to 14%). Moreover, outwardly directed irritability between elderly subjects living in the community was (8%) as compared to (2%) for those residents in elderly homes, and these differences were insignificant. As regard **depression**; two fifth (40.0%) of the studied elderly subjects living in the community had score of depressed, (44%) had score of borderline and (16%) had score of normality as compared to (46%, 40% and 14% respectively) for elderly residents in elderly homes. these differences were statistically insignificant ($x^2 = 0.371$ and p=0.831). Regarding **anxiety**, about one tenth (12%) of the studied elderly subjects living in the community had score of anxiety, one fifth (22%) had score of borderline and nearly two third (66%) had score of normality as compared to (16%, 34% and 50% respectively) for elderly residents in elderly homes. These differences were statistically insignificant ($x^2 = 2.675$ and p= 0.263).

Table (19): **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Irritability, Depression, Anxiety (IDA) Scale:**

IDA Scale	Elderly Home (n= 50)		Community (n= 50)		Test of significant
Inwardly Directed Irritability					
<4 Normal	30	60.0	36	72.0	$_{MC}\chi^2$=2.099
4 – 6 borderline	15	30.0	12	24.0	**p** = 0.369
>6 inwardly irritability	5	10.0	2	4.0	
Outwardly Directed irritability					
<5 Normal	35	70.0	39	78.0	$_{MC}\chi^2$=4.155
5 – 7 borderline	14	28.0	7	14.0	**p** = 0.128
Outwardly	1	2.0	4	8.0	
Depression					
<4 Normal	7	14.0	8	16.0	χ^2=0.371
4 – 6 borderline	20	40.0	22	44.0	**P**= 0.831
>6 Depression	23	46.0	20	40.0	
Anxiety					
<6 Normal	25	50.0	33	66.0	χ^2=2.675
6 – 8 borderline	17	34.0	11	22.0	P=0.263
>8 Anxiety	8	16.0	6	12.0	

Table (20) shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their memory:

The study revealed that (36%) of elderly resident in elderly homes count until four digits forward and (22%) of them count until five digits forward as compared to (22% and 38% respectively) for elderly subjects living in the community also (14%) of elderly resident in elderly homes count until seven digits forward as compared to (8%) for community group. As regard remote memory the majority of elderly in both groups had score of good remote memory; (80%) for elderly homes group and (84%) for community group. No statistically significant difference between the two groups of the studied elderly subjects regarding their immediate and remote memory. But there was statistically significant difference between the two groups regarding their recent memory as the majority (70%) of the studied elderly subjects living in the community had good recent memory score and one tenth (10%) had poor recent memory score as compared to (40% and 34% respectively) for elderly resident in elderly homes group where ($x^2 = 11.028$ and p =0.004) **(fig 16)**

Table (20):   Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their memory:

Immediate memory	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Digit Forward					
No successes	1	2.0	0	0.0	
3 digit	2	4.0	2	4.0	
4 digit	18	36.0	11	22.0	χ^2=5.991
5 digit	11	22.0	19	38.0	^{MC}p= 0.281
6 digit	11	22.0	14	28.0	
7 digit	7	14.0	4	8.0	
Digit Backward					
No successes	1	2.0	1	2.0	
2 digit	7	14.0	2	4.0	
3 digit	18	36.0	21	42.0	χ^2=4.295
4 digit	16	32.0	18	36.0	^{MC}p=0.522
5 digit	8	16.0	7	14.0	
6 digit	0	0.0	1	2.0	

Table (20): **Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their memory Cont.:**

	Elderly Home (n= 50)		Community (n= 50)		Test of significant
	No.	%	No.	%	
Recent memory					
Poor score	17	34.0	5	10.0	χ^2=11.028[*]
Average score	13	26.0	10	20.0	**P**= 0.004[*]
Good score	20	40.0	35	70.0	
Remote memory					
Poor score	2	4.0	1	2.0	χ^2=0.557
Average score	8	16.0	7	14.0	[MC]p= 0.835
Good score	40	80.0	42	84.0	

p: p value for comparing between the two studied group. χ^2: value for Chi square
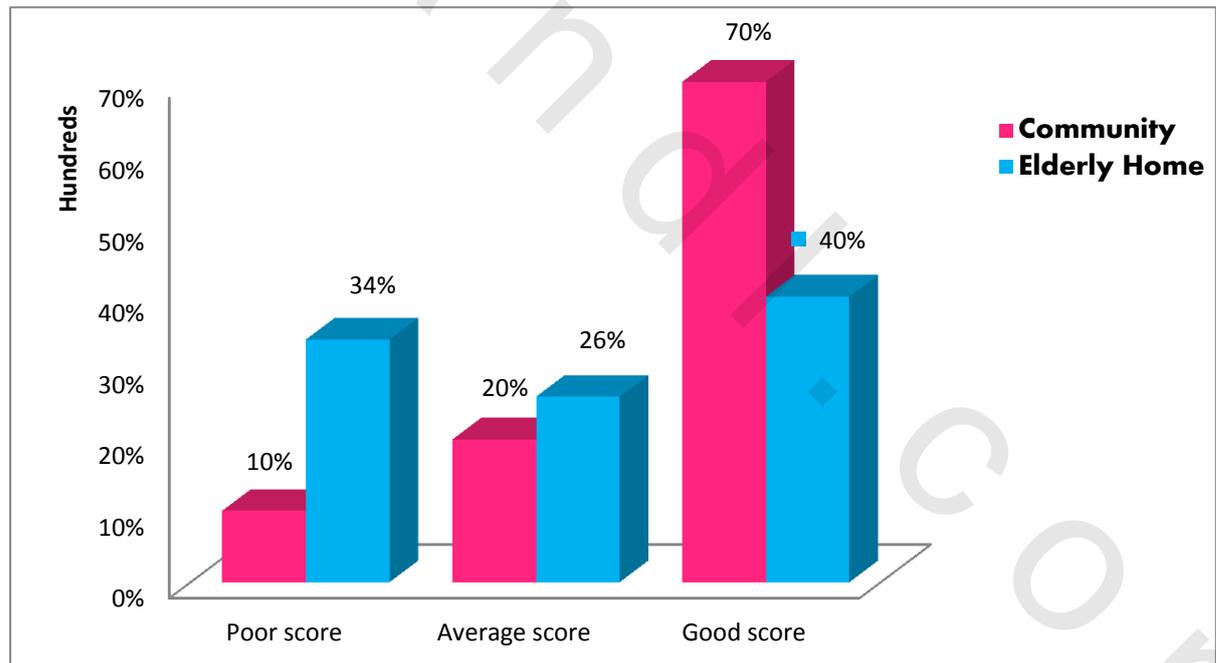MC: Monte Carlo test *: Statistically significant at $p \leq 0.05$

Figure (16): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to their recent memory.

Figure (17) shows Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Dementia Screening Scale:

The study revealed that about one fifth (22%) of the studied elderly subjects resident in elderly homes had score of pre dementia as compared to only (6%) for community group. About (28%) of elderly resident in elderly homes had score of normality as compared to two fifth (42%) for community group. These differences were statistically significant (x^2 =5.991 and ^{MC}**p** =0.048).
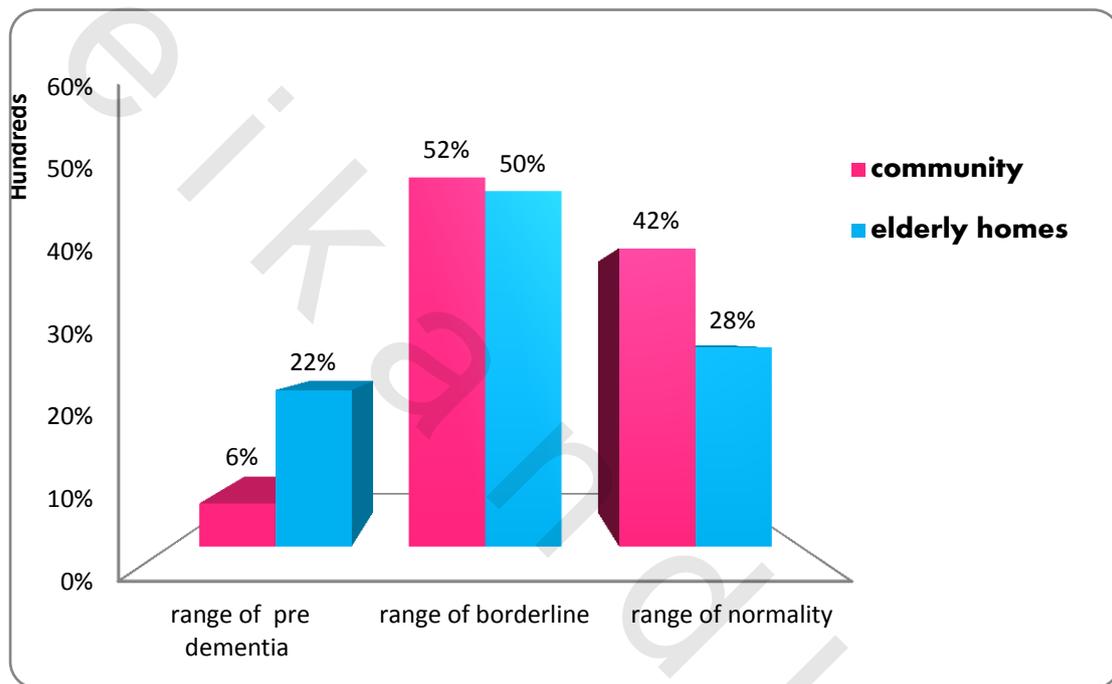

Figure (17): Comparison between the studied elderly subjects living in the community and the studied elderly subjects resident in elderly homes according to Dementia Screening Scale.