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# THE EFFECT OF DAILY LIVING ACTIVITIES OF THE ELDERLY SUFFERING FROM HIP FRACTURES

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**ABSTRACT**
Elderly in the world is expected that are double by 2050 and triple by 2100, Elderly who suffer from hip fractures must have tasks and routines that are performed on a daily basis in order to live independently, being able to successfully manage routine tasks. Assess daily living activities of the elderly suffering from hip fractures. Descriptive research design was used. Purposive sample include 200 elderly. The study results revealed that more than two thirds of elderly have unsatisfactory knowledge; nearly two fifths of elderly were partially dependent in doing daily living activities. There was highly statistically significant correlation between elderly total knowledge and total daily living activities. Less than two fifths of elderly were partially dependent in doing their activities and more than three fifths of elderly have unsatisfactory knowledge about hip fractures. Also, there was a positive relation between elderly total knowledge about hip fractures and total daily living activities with highly statisticallysignificantcorrelation.

**Keywords**: daily living activities; elderly; hip factures

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## INTRODUCTION

In the world, the number of elderly is projected to triple by 2050, from 137 million in 2017 to 425 million in 2050. By 2100 it is expected to increase to 909 million, In Europe, 25% of population are elderly, that proportion is projected to reach 35% in 2050 and to remain around that level in the second half of the century, in Africa, the percentage of its population of elderly to rise from 5% in 2017 to around 9% in 2050, and then to nearly 20% by the end of the century, globally, life expectancy at birth has risen from 65 years for men and 69 years for women in 2000-2005 to 69 years for men and 73 years for women in 2010-2015, all regions shared in the recent rise of life expectancy (*Unites National Population Division* UNPD, *2020)*.In Egypt, The number of elderly will reach 5.5 million or 5.4 % of the population during 2020 and the number is expected to rise to 7.9 million or 6.6% of the population in 2030, reach 11million or 7.9% by 2040 and15.9 million in 2050 representing 10.2 % of the population. It is also expected that will 22.7million in 2070 representing 12.3% of the population and 33million or 15.3% in the year2100 *(Central Agency for Public Mobilization, CAPMAS, 2019).*

Daily living activities (DLAS): are term used in healthcare to refer to people's daily self-care activities, health professionals often use a person's ability or inability to perform ADLs as a measurement of their functional status, particularly in elderly Generally, DLAS are divided to basic daily living activities and instrumental daily living activities in order to live independently without the assistance of another person *(Knights, 2019).*

Basic ADLs : these are the basic self-care tasks such as: ambulating ability to get around the home or outside, feeding ability to get food from a plate into one's mouth, dressing and grooming, ability to select clothes, putting them on, and adequately managing one's personal appearance, toileting, ability to get to and from the toilet, using it appropriately, and cleaning oneself, bathing, ability to wash one's face and body in the bath or shower, transferring ability to move from one body position to another, this includes being able to move from a bed to a chair, or into a wheelchair, this can also include the ability to stand up from a bed or chair in order to grasp a walker or other assistive device (*Zasadzka, 2019).*

Instrumental ADLs : Are those activities that allow an individual to live independently in a community, although not necessary for functional living, the ability to perform IADLS can significantly improve the quality of life, the major domains of IADLS include cooking, cleaning, transportation, laundry and managing finances, occupational therapists commonly assess IADLS in the setting of habitation to determine the level of an individual's need for assistance and cognitive function (Sapra, 2021).

Importance for daily living activities: elderly have health benefits of ADLS include: Better stress levels lead to improved mental health, more time to relax and less anxiety, better sleep will leave elderly refreshed, ADLS influence quality of rest, and bedtime habits affect mental sharpness, performance, emotional well- being and energy level, increased feelings of safety and security, they also give stability that elderly often enjoy because they can settle into a schedule, increase cooperation that make elderly be more willing to participate that lead to improve their quality of life (*Columbia, 2019).*

Serious complications can result from a hip fracture, blood clots can happen in the veins, If a clot breaks off, it can travel to a blood vessel in lung, this blockage, called a pulmonary embolism, can be fatal, other complications include: pneumonia, muscle atrophy, Postoperative infection, bedsores from lying in the same position with minimal movement, most elderly spend 1 to 2 weeks in the hospital after a hip fracture, the recovery period may be lengthy and may include admission to a rehabilitation facility, hip fractures can result in a loss of independence, reduced quality of life, and depression (*Romany, 2021*).

Nurses have to increase their knowledge, understanding and ability to manage common symptoms and syndromes in elderly with hip fracture that with and without cognitive decline, have a lot of common problems and, they require intensive nursing care, routinely assessed patient for : Pain, depression, skin integrity, falls and mobility, continence, safeguarding issues, delirium and dementia, nutrition and hydration, sensory loss, activities of daily living, vital signs and symptoms of physical, cognitive or social frailty (*Micheal, 2018).*

## METHOD

The subject and methods for this study were portrayed under four main items as following: technical item, operational item, administrative item, statistical item.

**I-Technical item:**
The technical item of this study includes adscription of the research design, setting, sample, subject and tools of data collection.

**A- Research design:**
A descriptive research design was utilized in the present study.

**B- Setting:**
This study was conducted in the orthopedic outpatient clinic of El-Tahreer hospital in Embaba city. The structures of El- Tahreer hospital's orthopedic outpatient clinic consists of two parts in the same room, the first part include two writing desks, one for doctor and another for the nurse, one bed for patient, two chairs for patients, two cupbroads for files, one table include: One thermometer, sphygmomanometer, stethoscope, the second part include : One bed for fractures splint, table for casting instruments such as medical gauze packets, cotton, splint materials as bone gypsum, sink and water tap.

**C- Sample:**
Purposive sample will be used in this study. The total number of elderly with hip fractures attended to outpatient orthopedic clinic in last year (2019) were 2000 elderly. The study sample include: 10% of elderly with hip fractures this equal 200 elderly.

***Inclusion criteria***:
1-Elderly aged 60 years or above.
2-Having hip fractures.
3-Accept to participate in the study.

***Exclusion criteria****:*
Were who diagnosed with psychiatric illness and Alzheimer disease.

**D-Tools for data collection:**
Data was collected through using one tool. It developed by the investigator based on extensive review of related literature to collect data pertinent to study:-

**Structured of interview questionnaire:** It contains 4 parts:
**Part 1:- Demographic characteristics** such as: Age, gender, level of education, marital status, occupation, place of residence, monthly income, family care givers (8 questions).

**Part 2:- Medical history (present and past)** such as: Medical diagnosis, site of pain, symptoms associated with pain, factors that elevate pain in affected, factors relive pain, chronic diseases, past orthopedic operations and family history (11questions).

**Part 3:- Elderly knowledge about hip fractures :**It includes questions to assess elderly knowledge about : Meaning of hip fractures, causes, investigation, complications, importance of exercises and physical activity, risk factors that cause hip fractures in elderly, activities can doing for affected hip joint, precautions that must be followed in physical activities, precautions are taking to reduce loading on affected hip and factors that relive pain in affected hip (10 questions)

**Scoring system for elderly knowledge:-**
It includes10 questions and scored as the following: The questions were scored as; (1) for incorrect, (2) for correct, total score to all questions was evaluated as: Was considered unsatisfactory if it is less than 60% (32 grades) and was considered satisfactory if it is equal or more 60% (2grades).

**Part 4:- Daily living activities for elderly with hip fractures scales:** Using two activities of daily living scales. Basic daily living activities (ADL) and (IADL) instrumental activities of daily living, it is modified by ***(Smith, 2019)*** such as (bathing, preparation (cooking), toileting, medications, use telephone and communication, mode of transportation, shopping, housekeeping, laundry **.**

**Scoring system for elderly daily living activities**:
It include10 items scored for both ADL and IADL each function is related to three likers scale. Total score for every elderly was scored as:
(1) for dependent, (2) for partially dependent, (3) for independent . Total scored to all questions evaluated as : It was considered dependent if it is less than 60% (24 grades), it was considered dependent if it is equal or more 60% to 75% (30 grades), it dependent (30 grades).

**Ethical consideration:**
An official permission to conduct the proposed study was obtained from Scientific Research Ethical Committee. Participation in the study is voluntary and a subject was given complete full information about the study and their role before signing the informed consent. The ethical considerations was include explaining the purpose and nature of the study, starting the possibility to withdraw at any time, confidentiality of the information where it will not be accessed by any other party without taking permission of participants. Ethical, values, culture and beliefs were respected.

**II- Operational item:**
The operational item for this study includes preparatory phase, testing validity, tool reliability, pilot study and field work:-

**Preparatory phase:**
It includes reviewing of past, current, national and international related literature and theoretical knowledge of various aspect of the study using books, articles, internet, periodicals magazines by the investigator to develop tools for data collection.

**Content validity:**
The revision of the tools for clarity, relevance, comprehensiveness, understanding and applicability was tested through a panel of five experts in Community Health Nursing, Faculty of Nursing to assess the content validity of the tools and simple modification was done accordingly.

**C- Tool reliability:**
Reliability of the tools was tested to determine the extent to which the questionnaire items are related to each other. The internal consistency cronbach's alpha was 0 .829 for the elderly's knowledge and the internal consistency cronbach's alpha was 0.820 for the elderly's daily living activities.

**D- Pilot study:**
A Pilot study it was conducted on 10% (20) of elderly of total study sample in order to examine the clarity of questions and determine the time needed to complete the study tools. According to the result of pilot study no modifications were needed. So they were included in the actual study sample.

**E- Field work:**
The actual field work started from beginning of October 2020 till the end of March 2021 for data collection for a period of six months. The investigator make visit to El-Taheer hospital collected data in the morning three days/week (Saturday, Monday, Thursday) of each week from 10 am to 1pm, Each interview questionnaire takes about 20-30 minute. Oral consent was taken from each participant after the investigator introduced himself and explained the purpose of the study and the components of the tool was explained to elderly at beginning of data collection.

**III- Administrative item:**
After explanation of the study aim and objectives, an official permission was obtained from the Dean of Faculty of Nursing and the general manager of El-Taheer hospital asking for cooperation and permission to conduct the study.

**IV-Statistical item:**
Upon completion of data collection, data will be computed and analyzed using Statistical Package for the Social Science (SPSS), version 24 for analysis. The P value will be set at 0.05. Descriptive statistics tests as numbers, percentage, mean standard deviation (SD), will be used to describe the results. Appropriate inferential statistics such as "F" test or "t" test will be used as well.

**RESULTS**
Collected data was organized, revised, coded, tabulated and presented in the following parts**:-**
**Part I:** Demographic characteristics of elderly suffer from hip fractures (Table 1).
**Part II:** Medical history (present & past) (Table 2).
**Part III:** Elderly knowledge about hip fractures (Table 3) & (Figure1).
**Part IV:** Daily living activities for elderly with hip fractures (Table 4) & (Figure 2).
**Part V:** Relation between elderly total satisfactory knowledge about hip fractures and demographic characteristics (Table 5). Correlation between elderly total knowledge about hip fractures and total daily living activities (Table 6).

**Part I: Demographic characteristics for elderly suffering from hip fractures**
Table 1, demonstrates that demographic characteristics of elderly who suffer from hip fractures. According to elderly age the mean age ± SD were 63.01+ 6.043. Regarding to gender 60% of them were female. Regarding to level of education 10% of them not read and write, while 30% of them were have secondary education. Regarding to marital status 83.5% was married .Regarding to occupation 85.0% of them on retirement. Regarding to the monthly income 90 % of them not have enough income and live in urban area.

Table 1.
Distribution of studied elderly according to demographic characteristics of elderly (n=200)

| Demographic Characteristics | f | % |
|---|---|---|
| Age in years | | |
| 60 - 64 | 81 | 40.5 |
| 65 – 74 | 79 | 39.5 |
| ≥ 75 | 40 | 20.0 |
| Mean ± SD 63.01+ 6.043 | | |
| Gender | | |
| Male | 80 | 40.0 |
| Female | 120 | 60.0 |
| Level of education | | |
| Not read and write | 20 | 10.0 |
| Read and write | 45 | 22.5 |
| Primary education | 23 | 11.5 |
| Preparatory education | 22 | 11.0 |
| Secondary education | 60 | 30.0 |
| University education | 30 | 15.0 |
| Level of education | | |
| Not read and write | 20 | 10.0 |
| Read and write | 45 | 22.5 |
| Primary education | 23 | 11.5 |
| Preparatory education | 22 | 11.0 |
| Secondary education | 60 | 30.0 |
| University education | 30 | 15.0 |
| Marital status | | |
| Single | 8 | 4.0 |
| Married | 167 | 83.5 |
| Widowed | 15 | 7.5 |
| Divorced | 10 | 5.0 |
| Occupation | | |
| Not working | 20 | 10.0 |
| Private work | 10 | 5.0 |
| Retirement | 170 | 85.0 |
| Place of residence | | |
| Rural | 30 | 15.0 |
| Urban | 170 | 85.0 |
| Monthly income | | |
| Enough | 20 | 10.0 |
| Not enough | 180 | 90.0 |
| Family caregivers | | |
| Son | 10 | 5.0 |
| Daughter | 20 | 10.0 |
| Husband / wife | 170 | 85.0 |

**Part II: Medical history (present and past)**

Table 2, reveals that present medical history shows 60 % of elderly have direct fractures in hip bones. 50 % of them cannot walk or move. 50 % of factors that elevate pain in affected hip, 75 % of factors relive pain were comfort action compresses (cold – warm) or dealing with pain medications. 5o % of elderly have more than one chronic disease. 90% of elderly have past orthopedic operations. Regarding to past orthopedic operations 75% of them have internal fixation .Regarding to orthopedic family history 95% of them have history and 50% of them have osteoporosis.

Table 2.
Medical history (present and past) of the studied sample (n = 200)

| Present history | f | % |
|---|---|---|
| *Medical diagnosis | | |
| Severe arthritis | 20 | 10.0 |
| Direct fracture of the hip bones | 120 | 60.0 |
| Rheumatoid arthritis | 35 | 17.5 |
| Malignant tumor on the hip | 5 | 2.5 |
| Vascular necrosis | 10 | 5.0 |
| Other such as edema around hip | 10 | 5.0 |
| Site of pain | | |
| Pain in the hip | 120 | 60.0 |
| Lowe back pain | 20 | 10.0 |
| Pain in legs | 30 | 15.0 |
| Other such as general body pain | 30 | 15.0 |
| *Symptoms associated with pain | | |
| Inability to walk | 100 | 50.0 |
| Tingling of limbs | 50 | 25.0 |
| Spasm or cramps in muscles | 25 | 12.5 |
| The presence of edema around the hip. | 13 | 6.15 |
| Other such as Inability to move | 12 | 6.15 |
| Factors that elevate pain in affected hip | | |
| Walking | 100 | 50.0 |
| Standing for long period | 50 | 25.0 |
| Sitting for long period | 25 | 12.5 |
| Descending or ascending stairs | 25 | 12.5 |
| Sudden up from a sitting positions | 0 | 0 |
| Other | 0 | 0 |
| *Factors relive pain, | | |
| Comfort action compresses (cold / warm / dealing with pain medications) | 150 | 75.0 |
| Doing massage on affected hip | 25 | 12.5 |
| Other | 25 | 12.5 |
| Chronic diseases: | | |
| Yes | 180 | 90.0 |
| No | 20 | 10.0 |
| **If yes, | | |
| what is it (n= 180) | | |
| Hypertension | 22 | 12.4 |
| Diabetes | 23 | 12.6 |
| Systemic lupus | 0 | 0.0 |
| Osteoporosis | 45 | 25.0 |
| Thyroid gland | 0 | 0.0 |
| More than one chronic disease as | | |
| Diabetes and osteoporosis | 90 | 50 |
| Suffering from past orthopedic operations. | | |
| No | 20 | 10.0 |
| Yes | 180 | 90.0 |
| If yes, what are they (n=180) | | |
| Internal fixation | 45 | 25.0 |
| External fixation | 135 | 75.0 |
| Total joint replacement | 0 | 0.0 |
| Skeleton traction | 0 | 0, 0 |
| Other | 0 | 0, 0 |

| Present history | f | % |
|---|---|---|
| Family history | | |
| Orthopedic family history for elderly | | |
| Yes | 190 | 95.0 |
| No | 10 | 5.0 |
| If yes, what is it (n=190) | | |
| Malignant bone tumor | 45 | 25.0 |
| Rheumatoid arthritis | 45 | 25.0 |
| Osteoporosis | 100 | 50.0 |
| Other | 0 | 0.0 |

** Some elderly have more than one chronic disease.

**Part III: Elderly Knowledge about Hip Fractures**

Table 3, the study shows that 75% of elderly have incorrect knowledge about meaning of hip fractures, Regarding to causes of hip fractures about 70% of them have incorrect knowledge. Regarding to investigations of hip fractures 60% of elderly have incorrect knowledge. Regarding to risk factors that cause hip fractures 80% of elderly have incorrect knowledge. Regarding to factors that relive pain in the affected hip 85 % of them have incorrect knowledge.

Table 3.
Frequency distribution of the studied elderly knowledge about hip fractures (n=200)

| Items of elderly knowledge | Incorrect | | Correct | |
|---|---|---|---|---|
| | f | % | f | % |
| Meaning of hip fractures | 150 | 75.0 | 50 | 25.0 |
| Causes of hip fractures | 140 | 70.0 | 60 | 30.0 |
| Investigations | 120 | 60.0 | 80 | 40.0 |
| Complications | 145 | 72.5 | 55 | 27.5 |
| Importance of exercises and physical activity | 170 | 85.0 | 30 | 15.0 |
| Risk factors that cause hip fractures in elderly | 160 | 80.0 | 40 | 20.0 |
| Activities can doing for affected hip joint | 100 | 50.0 | 100 | 50.0 |
| Precautions that must be followed in physical activities | 150 | 75.0 | 50 | 25.0 |
| Precautions are taking to reduce loading on affected hip | 160 | 80.0 | 40 | 20.0 |
| Factors that relive pain in the affected hip | 170 | 85.0 | 30 | 15.0 |

Table 4.
Daily living activities of elderly with hip fractures (n=200)

| Items | Independent | | Partially dependent | | Dependent | |
|---|---|---|---|---|---|---|
| | f | % | f | % | f | % |
| Basic daily living activities | | | | | | |
| Bathing | 55 | 27.5 | 65 | 32.5 | 80 | 40.0 |
| Preparation meals | 70 | 35.0 | 75 | 37.5 | 55 | 27.5 |
| Self-toileting | 65 | 32.5 | 80 | 40.0` | 55 | 27.5 |
| Self-getting dressing | 50 | 25.0 | 85 | 42.5 | 65 | 32.5 |
| Instrumental daily living activities | | | | | | |
| Medications | 60 | 30 | 90 | 45 | 50 | 25 |
| Use telephone | 40 | 20 | 80 | 40 | 80 | 40 |
| Mode of transportation | 50 | 25 | 85 | 42.5 | 65 | 32.5 |
| Shopping | 60 | 30 | 65 | 32.5 | 75 | 37.5 |
| Housekeeping | 20 | 10 | 50 | 25 | 130 | 65 |
| Laundry | 30 | 15 | 85 | 42.5 | 85 | 42.5 |

Table 4, **s**hows that 40% of the elderly dependent on their caregiver in bathing and use telephone. Also 40% of them partially dependent related to toileting, 25 % of them were dependent on others in taking medications, 37.5% of elderly were dependent in shopping, 65% of them were dependent on others in housekeeping and 42.5% of them were dependent on others in laundry.

Table 5.
Relation between elderly total satisfactory knowledge about hip fractures and demographic characteristics

| Demographic characteristics | Total satisfactory Knowledge | | | Chi Square | |
|---|---|---|---|---|---|
| | Mean | ± | SD | X2 | P-value |
| Age in (years) | | | | 22.761 | <0.001** |
| 60-64 | 12.833 | ± | 4.665 | | |
| 65-74 | 6.077 | ± | 5.491 | | |
| ≥ 75 | 7.877 | ± | 7.756 | | |
| Gender | | | | 23.782 | <0.001** |
| Female | 9.744 | ± | 8.855 | | |
| Male | 5.453 | ± | 7.655 | | |
| Level of education | | | | 24.710 | <0.001** |
| Not read and write | 8.823 | ± | 8.579 | | |
| Read and write | 1.700 | ± | 2.557 | | |
| Primary education | 8.833 | ± | 7.388 | | |
| Preparatory education | 9.744 | ± | 8.855 | | |
| Secondary education | 5.453 | ± | 7.655 | | |
| University education | 8.823 | ± | 8.579 | | |
| Marital status | | | | 14.821 | <0.001** |
| Single | 10.834 | ± | 9.667 | | |
| Widowed | 12.077 | ± | 8.691 | | |
| Married | 9.677 | ± | 9.755 | | |
| Divorced | 8.877 | ± | 8.766 | | |
| Occupation | | | | 22.761 | <0.001** |
| Unemployed | 9.823 | ± | 8.544 | | |
| Privet work | 10.711 | ± | 9.651 | | |
| Retirement | 17.308 | ± | 10.456 | | |
| Residence | | | | 21.665 | <0.001** |
| Rural | 8.662 | ± | 7.766 | | |
| Urban | 10.822 | ± | 4.875 | | |
| Monthly income | | | | | |
| Enough | 7.55 ± 6.568 | | | 20.396 | <0.001** |
| Not enough | 8.872±7.458 | | | | |
| Family caregivers | | | | | |
| Son | 3.4556± 4.569 | | | | |
| Husband /wife | 7.987± 8.543 | | | 2.655 | <0.566 |
| Daughter | 7.988± 8.566 | | | | |

**Highly statistically significant at (p<0.001)

Table 5, describes that there were highly statistically significant relation between age, gender, level of education, marital status, occupation, residence, monthly income and total satisfactory knowledge (P < 0.001) but there was no statistical significant relation between family caregivers and elderly total satisfactory knowledge.

Table 6.
Correlation between elderly total knowledge and total daily living activities

| Items | Total daily living activities | |
|---|---|---|
| | R | P - value |
| Total knowledge | 0.463 | <0.001** |

Table 6, shows highly statistically significant correlation between elderly total knowledge and total daily living activities.

## DISCUSSION

Bone Fractures can be defined according to the part of the bone anatomy injured bone fractures are caused by injuries from vehicle crashes or falls, also, can be caused by certain diseases such as osteoporosis and tumors. Osteoporotic fractures are those of the spine, wrist, and hip. Global data indicate that twenty percent of women with hip fracture die within one year of the fracture and fifty percent of them never regain their functional independence (Meeta, et al., 2020).

The risk of osteoporotic fractures, the clinical endpoint of osteoporosis, increases with age. It is associated with deterioration in quality of life, inability to perform daily activities, increased morbidity, mortality and high socio-economic costs. According to the 2016 World Osteoporosis Day report, osteoporotic fractures may affect one in three women and one in five men over the age of 50 .Middle-aged and older men and women with annual height loss of more than 0.5 cm are at increased risk of hip and other fractures, as the bone strength decreases rapidly due to osteoporosis after reaching 50 years of age. Parmet et al, (2020). Hip fracture most series types of musculoskeletal injuries those results in additional injury to soft tissue surrounding the fracture, these type of fracture accounts for approximately one third of all type fractures special with old age. hip fractures are associated with loss of ability to walk independently and may require long-term care. Common complications of hip fracture include venous thromboembolism, pressure ulcers, cardiovascular events and urinary tract infections, surgical site infections and pneumonia. Patients need help carrying out daily activities and thus may be totally dependent on their family members and relative (Ibrahim, et al., 2020).

According to the demographic characteristics of elderly, the present study findings indicated that the mean age ± SD of elderly were 63.01± 6.043 years. This result is similar to a study conducted by Sathiy akumaret al (2020), a study conducted in Japan about:" Hip fractures are risky business: an analysis of the NSQIP data " found that, age of elderly patients was mean 63 .18 ±4.95 for the study sample . As well it is nearly consistent with Foster (2019), a study conducted in Milano about: "Hip fractures in adults and represented that mean age of elderly were 63.17 ±10.8 years.

Regarding the elderly gender, the study finding revealed that more than two thirds of elderly were females . This study finding is in agreement with Weinstein, (2021) his study conducted in Chicago about " The Dartmouth Atlas of Musculoskeletal Health Care." . "found that 62% of study sample were females. Concerning the elderly level of education, the current study result revealed that one third of them had secondary diploma education ., and the minority of them had university education and more the In the same line with Su, et al (2020) in Omen about "The relation between discharge hemoglobin and outcome after hip fracture". They found that 40.0% of elderly had secondary or diploma level and 15.0% of elderly had university education or more .In my opinion, social factors and financial factors that make people see secondary or diploma level that is enough.

Regarding to elderly marital status, the majority of them ware marriage This result agree w Costa, et al (2020) a study conducted in Pakistan about "When, where and how osteoporosis-associated fractures occur: An analysis from the global longitudinal study of osteoporosis in women . Stated that 80% of older adult in the study sample wear marriage. Regarding the elderly occupation, the current study revealed that the majority of elderly were retirement. This finding was in accordance with Kates, et al (2019) a study carried out in United States about" Comparison of an organized geriatric fracture program to United States government data". discover that, 90% of elderly patient in the study sample were retirement . From the investigator point of view, the majority of the elderly age between 60-64 years, and this age is the retirement age in Egypt.

Regarding the elderly place of residence, the majority of them residence in urban area .This result agree with Amin et al (2020) in United States about " Fracture incidence: a population-based study over 20 years and found that, 76 % of elderly residence in urban area. Regarding the elderly monthly income, the current study revealed that majority of elderly their monthly income not enough , This finding was in accordance with Braithwaite et al, (2019), a study conducted in Jordanian about "Estimating hip fracture morbidity, mortality and costs"" found that, the majority of elderly their monthly income not enough from the investigator point of view, In fact, the costs of living in Egypt has become high, with the decrease in monthly income after the retirement age, making most of the elderly income not enough.

Regarding elderly family care givers, the current study result revealed that less than half of them their family caregivers were husband or wife . this results in the same line with Ekman, (2019). in Emirate about" The role of the orthopedic surgeon in minimizing mortality and morbidity associated with fragility fractures.", showed that, 45% of elderly in the study sample the family care giver were husband or wife. Regarding to elderly present medical history, the current study revealed that, less than two thirds of them complain from direct fracture of the hip bones, pain in the hip, while, more than half of them had inability to walk or move, Also, more than half of them had the pain affected by walking, and the majority of them relive the pain by comfort action compresses (cold / warm / dealing with pain medications) . These findings in the same line with Johnell, & Kanis (2020) in Tarkio about "An estimate of the worldwide prevalence and disability associated with osteoporotic fractures". explained, less than two thirds of them complain from direct fracture of the hip bones, pain in the hip, while, more than half of them Inability to walk or move, Also, more than half of them the pain affected by walking, and the majority of them relive the pain by comfort action compresses (cold / warm / dealing with pain medications).

Regarding elderly past medical history, the current study revealed that, the majority of them suffering from chronic diseases, more than half of them complain from osteoporosis, the majority of elderly had orthopedic family history more than two thirds of them the types of surgery external fixation. And more than fifths of them suffer from past surgery as external fixation . In the same line with Gosch, , et al (2019) . conducted in Chicago who studied about " Inappropriate prescribing as a predictor for long-term mortality after hip fracture" found that 82% of elderly patient were suffered from chronic diseases.75 % of them had osteoporosis, while 76 % of them had mobility problems before the operation. According to, the period for mobility problems each older adult was 2 to less than3 months 75.0 %. As regard the past orthopedic surgery, 72% of elderly patient had operation in the past. 640% of them had External Fixation surgery .Also, 57.0 % of elderly patient had Osteoporosis diseases which was reason for this surgery.

Regarding to research question : Answer the research question No (2) what is the elderly knowledge about hip fractures?. Regarding to elderly knowledge of hip fractures. The results demonstrated a wide variation in their knowledge. Thus, a majority of them had incorrect knowledge regarding meaning of hip fractures, importance of exercises and physical activity, risk factors that cause hip fractures in elderly, precautions are taking to reduce loading on affected hip and Factors that relive pain in the affected hip. In the same line with Schuit et al (2019) . In Indonesia about "Fracture incidence and association with bone mineral density in elderly men and women, they found that the majority of elderly had incorrect knowledge regarding meaning of hip fractures, importance of exercises and physical activity, risk factors that cause hip fractures in elderly, precautions are taking to reduce loading on affected hip and Factors that relive pain in the affected hip. The investigator point of view, the lack of knowledge in elderly due to the majority of elderly not attended any work shops or educational program about hip fractures.

Regarding the elderly knowledge of hip fractures, the current study revealed that, more than half of them had correct knowledge regarding activities that can doing for affected hip joint, types of investigation and causes of hip fractures this study .In the same line with Solomon, et al (2019) study conducted in United States who studied about osteoporosis medication use after hip Fracture in United States patients between 2017 and 2018". the study reveals that, more than half of them had correct knowledge, regarding meaning, activities can doing for affected hip joint, types of investigation and causes of hip fractures. From the investigator point of .view. On the other hand, the result show that total knowledge of elderly about hip fractures reveals that nearly three quarters of elderly had unsatisfactory total knowledge, while one thirds of them had satisfactory total knowledge about hip fractures. This is in the same line with Rosen et al. (2019), the study conducted in Iran about " Efficacy of preoperative skin traction in hip fracture patients: a prospective, randomized study"and showed that, the nearly three quarters of them were unsatisfactory level of total knowledge patients had satisfactory knowledge. From the investigator point of view the majority of elderly Patient unsatisfactory knowledge because it has not received any seminars about hip fractures .

Answer the research question No (1) what are the daily living activities for elderly suffer from hip fractures?. Regarding to elderly basic daily livings activities, the findings of the current study showed that, less than half of them partially dependent regarding getting dressing, and one thirds of them independent regarding preparation meals, this in the same line with Friedman, et al (2019), the study conducted in Pakistan about " Impact of a coma aged geriatric fracture center on short-term hip fracture outcomes" The study revealed that, less than half of them partially dependent regarding self - getting dressing, and one thirds of them independent regarding Preparation meals from the investigator point of view, the pain that the patient feels dependent on others.

Regarding elderly instrumental daily living activities .The findings of the current study showed that, less than half of them partially dependent regarding mode of transportation, and one thirds of them Independent regarding medication and shopping . In the same line with Friedman, et al (2020), in Brazil about " Geriatric co-management of proximal femur fractures: total quality management and protocol-driven care result in better outcomes for a frail patient population " and found that, less than half of them partially dependent regarding mode of transportation, and one thirds of them Independent regarding medication and shopping .this may be due to most of the elderly had difficult to go to shopping household necessities because they feel pain while walking.

Regarding elderly total daily living activities of elderly with hip fractures, the current study illustrates that, one third of elderly were partially dependent on others in doing their daily living activities, about two fifth of them were dependent on other and one quarters of them were independent related to daily living activities. This results In the same line with Simunovic et al (2019) . United States American. About " Effect of early surgery after hip fracture on mortality and complications: systematic review and meta-analysis found that, one third of elderly were partially dependent on others in doing their daily living activities, about two fifth of them were dependent on others and one quarters of them were independent related to daily living activities. The investigator point of view related to the majority of elderly improved daily living activaties after participation.

According to research question No (3) is there relation between elderly knowledge about hip fractures & demographic characteristics?. The current study describes that there were highly statistically significant relation between age, gender, level of education, marital status, occupation, residence, monthly income and total satisfactory knowledge ($P < 0.001$) but there was no statistical significant relation between family caregivers and elderly total satisfactory knowledge. the same line with Bottle, and Aylin, (2019), a study conducted in Italy, about " Mortality associated with delay in operation after hip fracture: observational study, he found that, highly statistically significance positive correlation between age, gender, level of education, marital status, occupation, residence, monthly income and total satisfactory knowledge ($P < 0.001$) but there was no statistical significant relation between family caregivers and elderly total satisfactory knowledge.

The current study showed that there were highly statistically significant correlation between elderly total knowledge and total daily living activities. This result in the same line with Rosen et al. (2020) . In Iran about " Efficacy of preoperative skin traction in hip fracture patients: a prospective, randomized study" and showed that, highly statistically significant correlation between elderly total knowledge and total daily living activities. This may be due to the investigator point of view the majority of elderly behaviors and concepts affected by knowledge about hip fractures that may lead to change in daily living activities .

## CONCLUSION

On the light of the current study result, and answer the research questions it can be concluded that: There were highly statistically significant relation between age, gender, level of education, marital status, occupation, residence, monthly income and total satisfactory knowledge ($P < 0.001$) but there was no statistical significant relation between family caregivers and elderly total satisfactory knowledge.68.3 % of them often have unsatisfactory total knowledge about hip fractures and 38% of them were partially dependent in doing daily living activities. Also, there was a positive relation between elderly total knowledge about hip fractures and total daily living activities with highly statically significant relation.

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