

## Depression, Self-Esteem and Daily Living Activities among Geriatric Home Residence People

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### Abstract

**Aim:** To investigate the relationship between depression, self-esteem and activity of daily livings (ADLs) among geriatric home residence people. **Setting:** Dar Maana and Hedia Barakat geriatric home. **Design:** A descriptive correlation research design was used in this study. **Sample:** A purposive sample of (50) geriatric home residence people. Tools: personal and medical data sheet, geriatric depression scale, Rosenberg self-esteem scale and daily living activities questionnaire. **Results:** 62% of the studied sample had high level of depression, 68% of them had low self-esteem and 84% of them had low function of daily living activities. The study also revealed a statistically significant negative correlation between levels of depression and levels of self-esteem. There was a statistically significant negative correlation between level of depression and level of daily living activities. **Conclusion:** The majority of geriatric home residence people suffer from high level of depression and low function level in daily living activities. Recommendation: The current study recommended that, design a cognitive stimulating treatment program to improve depression, self-esteem and daily living activities among geriatric home residence people.

**Keywords:** Depression, Self-esteem, Daily living activities and Geriatric people and Home Residence.

### Introduction

Early adulthood is the beginning of a long, ongoing process of natural changes called aging. This period of age is marked by degeneration and loss of function across numerous physiological and psychological changes. Everyone must undergo this phase of life at his or her own time and pace (Sharma, & Subramanyam, 2019).

Ageing is a reflection of all the changes that occur throughout life. A fair amount of physical decline and age related changes like graying of hair, wrinkled skin and immune system disorder, musculoskeletal system weakness), all of this changes resulting in increased dependency in the period of old age. Furthermore, impaired cognition among elderly is associated with an increased risk of injuries to self or others, the decline in functional activities of daily living and an increased risk of mortality (Amarya, Singh, & Sabharwal, 2018).

Age related stressors (ageism and dread of ageing), and psychological wellbeing (loneliness and depression) are example of age related psychological changes. Depression is associated with elevated cortisol levels, which negatively affect the immune system. Additionally,

depression people may exhibit a perceived state of anxiety and feelings of fear. Older adults depression is tied to a higher risk of cardiac diseases and of death from illness. At the same time, depression reduces an older person's ability to rehabilitate. In addition, advancing age often comes along with the loss of social support systems due to the death of a spouse or siblings, retirement, or relocation (Mitina, Young & Zhavoronko, 2018).

A depression is marked by sadness, empty feelings, or irritability. In geriatrics, depression usually manifests as a loss of interest in unusual activities, different from normal mood fluctuations and short-lived emotional responses to challenges. The presence of depression was a moderate predictor of lower self-esteem. Depression in older people was associated with age, low self-esteem, and higher levels of anxiety (Lee, & Atterya, 2019).

Self-esteem is defined as the perception of one's ability to cope with life's adversities, and is related to factors such as confidence, competence, and decision-making. It might be described as the feeling of respect and concern that an individual has for them. Self-esteem encompasses subjective self-perceptions, just like quality of life. Older persons with poor self-esteem score, lower on the

quality of life scale (Masselink, Van-Roekel, & Oldehinkel, 2018).

Self-esteem is thought to be a predictor of depressive symptoms in elderly adults. Low self-esteem can result in a lack of interest in one's everyday activities and lifestyle changes. It was also independently mediated by avoidance motive and social issues. Aging may cause deterioration in functional status and is a common reason for the subsequent loss of (ADLs), which are divided into basic ADLs like feeding and instrumental ADLs (IADLs) like managing. ADLs are a measure of someone's functional state (Franak, Alireza, & Malek, 2015).

Musculoskeletal, neurological, and circulatory disorders are frequently accounted for the later loss of ADLs since they can produce a decline in physical function and impairment in ADLs. Poor quality of life can result from being unable to dress or use the restroom. Falls and subsequent deterioration can result from difficulty walking or transferring. Independent eating challenges can cause inadequate nutrition, dehydration, and more weakening, which can impair daily living activities and lower quality of life. Social isolation might make it more difficult to do instrumental activities of daily living (Edemekong, Bomgaars, Sukumaran, & Levy, 2017).

Resilience may alleviate the negative consequences of risk factors, as nursing home residents are more likely to experience depressed symptoms and constraints on ADL are thought to be contributing reasons. The influence of the health variable was significant on somatization, anxiety, and locus of control, but it had significantly less of an impact on depression. This can possibly be understood given that somatization is an expression of physical sickness symptoms, anxiety is linked to declining capacity, and losing control over one's environment as a result of physical inabilities (Hunter, Linn, & Harris, 2018).

The main factors contributing to depression in elderly individuals is physical inability to perform basic daily tasks. On the other side, depression is related to a lack of independence and a loss of interest in routine activities (Edemekong, et al., 2017). Therefore, the purpose of the current study was to examine the relation

between depression and older persons' capacity for performing Activities of Daily Living (ADL).

Geriatric mental health nurses are responsible for providing safe, effective holistic healthcare through assessment, screening, and evidence-based interventions to patients who are physically ill and have mental health needs. Assisting patients with daily tasks like eating, getting dressed, and taking a bath; encouraging patients to take care of as many of these tasks as they can; providing medications in accordance with the care plan. Supporting patients in exercise as limb massages, planning, creating and managing patient health and care plans (Yeu-Huichuand, 2018).

### Significance of the study

There are a large number of elderly people who suffer from psychological problems and disorders, including depression, and it is accompanied by a lack of self-esteem, because these people have lost their position with some, or they have lost people who were close to them, such as a husband, wife or children, and they found themselves living in homes for the elderly on their own. All of these reasons contribute. In the lack of attention to themselves, such as unwillingness to eat, poor mood and mood disorders, and lack of attention to their appearance lead to depression. Egypt's elderly population had reached 6.5 million; 3.5 million males and 3 million females (Central Agency for Public Mobilization and Statistics (CAPMAS), 2019).

There are several therapeutic strategies which can be broadly classified as either pharmacological or non-pharmacological/psychosocial. In spite of, the modest evidence for success of pharmacological treatments, especially for depression. Although many older age people those are dangerous and cause cognitive problems and impaired activities of daily living to millions of older people, no Egyptian research has been conducted. So, the researchers will conduct this study to make a contribution to nursing body of knowledge because nursing care for older people with depression is essential in caring for those patients.

The results of this study will be beneficial to psychiatrist and mental health nurses to make programs to help the older people with depression

cope with their cognitive ability and activities of daily living problems resulting from depression. After reviewing the pertinent literature and researches in this area, it was found that, there is a scanty of researches that have been done in depression self-esteem and activities of daily living among older people. Therefore, the aim of the current study is to investigate the relationship between depression, self-esteem and activity of daily livings (ADLs) among geriatric home residence people.

### **Aim of the study**

This study aimed to investigate the relationship between depression, self-esteem and activity of daily livings (ADLs) among geriatric home residence people.

### **Research questions**

- Q1.** What is the level of depression, self-esteem and daily living activities among geriatric home residence people?
- Q2.** Is there a relationship between, self-esteem, depression and daily Living activities among geriatric home residence people?

### **Subject & Methods**

#### **Research design**

A descriptive correlation research design was used to investigate the relationship between depression, self-esteem and activity of daily livings (ADLs) among geriatric home residence people. This design includes questions that focus on association or relationships generally answered with inferential and correlational studies. Descriptive correlational studies focus on the relationships between studied variables in the same population (Stangor, & Walinga, 2010).

#### **Research setting**

The study was carried out at geriatric homes at Dar Maana and Hedia Barakat that serving the largest group of old age that need appropriate care. It consists of 2 buildings, each one consists of (2) floors. It's a non-governmental geriatric home, those geriatric home are affiliated administratively to the Ministry of Social Affairs and supervised by it.

#### **Subjects**

A purposive sample consists of (50) geriatric home residence people. The sample size

was calculated using G-power version 3.3.1 with a power of  $\beta = 1-0.95$ , with a significance level of 0.05 (two tails) and a medium effect size of 0.3. Inclusion criteria: Both sexes, age from 60 or more and have willing to participate in the study. Exclusion criteria: People who have cognitive impairment (Alzheimer, dementia) and physical disabilities (deaf, dumb or blind person) was excluded from the current study.

### **Tools**

1. Personal and medical data sheet was developed by researchers, it includes data about: age, gender, marital status, level of education, length of staying in residential home and chronic physical illness.
2. The Geriatric Depression Scale (GDS) was developed by (Greenberg, 2012). It is designed to measure depression extensively with the older population. The scale consists of 15 items; 10 indicated the presence of depression when answered positively, while the rest (question numbers 1, 5, 7, 11, 13) indicated depression when answered negatively. Each item is answered on a two point scale ranging from 1= yes, 0=No. Scores of 0-4 are considered normal, 5-8 indicate mild depression; 9-11 indicate moderate depression; and 12-15 indicate severe depression. It takes about 5 to 7 minutes to complete. Translation and back translation will be done by the researchers and experts in psychiatric nursing / psychiatrists. Validity and Reliability: high correlation ( $r=0.84$ , 0.001).
3. Daily Living Activities questionnaire (DLAQ): was developed by (Lawton & Broody, 1969), it is used to measure the degree of functional impairment in daily living activities. It includes assessment of ability to use telephone, housekeeping, handling finances, personal hygiene, and taking medications. ADL Scale takes approximately 10 to 15 minutes to be filled in. It contains 8 items that are rated with a summary score from 0 (low functioning) to 8 (high functioning). Translation and back translation will be done by the researchers and by experts in psychiatric nursing / psychiatrists. Validity and Reliability: content validity=88.8, inter rater and test retest reliability was 0.95.

4. The Rosenberg Self-Esteem Scale (RSES) which was developed by Rosenberg, (1965): Arabic version of Rosenberg self-esteem scale was used to assess self-esteem of the patient. It is a 10- item self-report measure of self-esteem based upon satisfaction of one's self and life. The scale consists of five positive items and five negative items and need to be scored accordingly by reversing the value of either the positive or negative item responses. Typically, each item is answered on a four point Likert scale ranging from "strongly disagree"(1) to "strongly agree (4). According to these responses, the scale ranges from 1-40. Scores between 15 and 25 are within normal range; scores below 15 suggest low self-esteem. Convergent validity is reported between  $r = 0.56$  and  $r = 0.83$ . The Cronbach's alpha of the scale in the present study was 0.76. Test-retest reliability coefficient was 0.81.

### Ethical Considerations

An official approval was taken from authoritative personnel at geriatric home to conduct the current study. After the eligible subjects were identified, they were informed that they have the right to withdraw from participating in the study at any time without giving any reason. Oral consents were obtained from all eligible participants who agreed to participate in the study. Data confidentiality and privacy were secured. Code numbers were created and kept by the researchers to keep participant's anonymity.

### Procedure

- Official permission was obtained from the authoritative personnel at geriatric home to conduct the current study.
- Then the researchers interviewed with all home residence people who met inclusion criteria and accepted to participate in the study. The aim of the study was explained to all participants.
- The investigators assured voluntary participation and confidentiality to each subject who agreed to participate. In this study the questionnaire was read and explained to every participant and the choices were recorded by the researcher. All

questions related to the study tools were answered and detail explanation was given to the participants.

- Data were collected over a period of three weeks from the end of February up to March 2019 using the previously mentioned tools. Time needed by each subject to complete the four questionnaires was ranged between 25-30 minutes.
- Each geriatric people were interviewed individually, after explaining the purpose of the study and getting agreement of them to participate in the study. The investigator assured voluntary participation and confidentiality to each subject who agreed to participate. The questionnaire was read and explained to every participant and the choices were recorded by the researcher.

### Pilot Study

A Pilot study was carried out on 10% of the sample consisted of 5 geriatric home residence people to ensure the clarity and applicability of the study measures and the feasibility of the research process. The pilot study revealed that, no modifications are needed to be made. Subject who shared in the pilot were excluded from the main study sample.

### Statistical analysis

Statistics were done using window statistical package for social science (SPSS) version (21). Frequency and percentage were used for numerical data as well as mean and standard deviation. Correlation coefficient was used to describe association between variables, Correlation coefficient ( $r$ ) of 0.5 was considered fair correlation, if more than 0.5 to 0.75, it was considered good correlation and if more than 0.75, then it was considered as very good correlation, probability less than 0.05 was considered significant and less than 0.001 considered as highly significant. For parametric analysis t-test and ANOVA (Analysis of Variance) were used.

### Results

Table (1) shows that, 50% of geriatric home residence people were in the age group of (60-< 65) years old. Also, (64%) of the current study participants were female.

Regarding length of stay 42% of them had 1 to less than 3years of staying in geriatric home. Also, 82% of them suffer from chronic physical illness. The majority (84%) of them had no health insurance services. Concerning education, (40%) were illiterate.

Table (2) illustrates that, 62% of geriatric home residence people had severe level of depression, and 18 of them had mild level of depression.

Figure (1) shows that 68% of geriatric home residence people had low level of self-

esteem. 32% of them had average level of self-esteem.

Table(3) represents that 84% of geriatric home residence people had low function of daily living activities. 14% of them had high function of daily living activities.

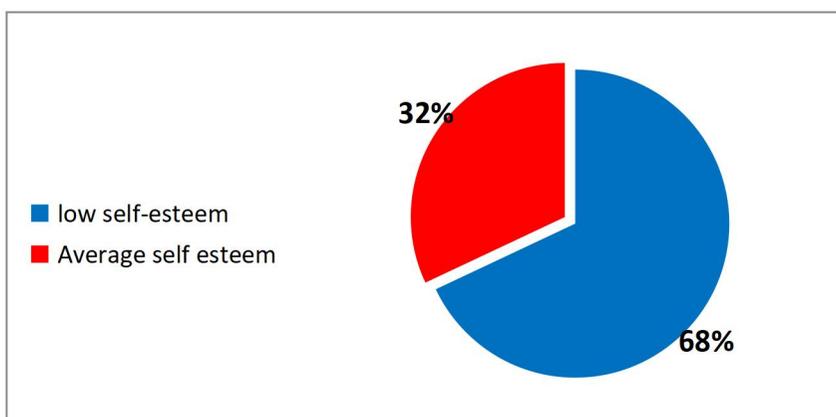
Table (4) illustrates that there was a statistically significant negative correlation between depression, self-esteem and daily living activities (P=0.025, 0.005) respectively. There were statistically significant positive correlation between self-esteem and daily living activities (P=0.019).

**Table (1):** Frequency distribution of personal and medical data of geriatric home residence people (n=50)

Personal and Medical data	No.	%	Personal and Medical data	No.	%
Age:			Gender:		
60-< 65	25	50	Male	18	36
65-< 70	13	26	Female	32	64
70-< 75	10	20	Health insurance		
75 and more	2	4	Yes	8	16
Duration of stay			No	42	84
Less than one year	19	38	Education level		
1 to less than 3years	21	42	University	4	8
3years and more	10	20	Secondary School	6	12
Presence of chronic physical illness			Elementary School	6	12
Yes	41	82	Read & write	14	28
No	9	18	Illiterate	20	40

**Table (2):** Distribution of geriatric home residence people in relation level of depression (n=50)

Level of Depression	No.	%
Mild	9	18
Moderate	10	20
Severe	31	62
Total	50	100



**Figure (1):** Distribution of geriatric home residence people in relation level of self-esteem (n=50)

**Table (3):** Distribution of the geriatric home residence people in relation level of daily living activities (n=50)

Level of daily living activities	No.	%
Low function	42	84
Moderate function	1	2
High function	7	14
Total	50	100

**Table (4):** Correlation between studied variables among geriatric home residence people (n=50)

Variables	Depression		Self-esteem		Daily living activities	
	R	P	R	P	R	P
Depression			-0.071*	0.025	-0.390**	0.005
Self-esteem					0.072*	0.019

\* Correlation is significant at the 0.05 level (2-tailed).

\*\*Correlation is significant at the 0.01 level (2-tailed)

## Discussion

This study may provide evidence of the relationship between ADLs, self-esteem and depressive symptoms among the geriatric home residence people. The current study's findings will assist plant the seed for geriatric care and research.

The current results showed that the prevalence of depressive symptoms was more than two thirds of participants which in the same vein with study of Al-Qahtani, Khamis, Sebiany, and Awadalla (2014) titled "Severity of Depression among Elderly Women Attending Holy Quran Memorization Centers in Saudi Arabia" who revealed that about half of participants had depression. This percentage was significantly higher than the 10% to 15% international average recorded for elderly people living in communities by (WHO, 2008). Elderly community-based studies revealed a rate of depression in developing nations, such as Arab nations, 24.3%, 25%, and 38.9%, respectively, in Jordan, Kuwait, and Iraq. Additionally, it exceeded the figures given in the majority of nations and regions, including South Korea (16.08%) (Lee & Kim, 2014), Singapore (7.8%) (Ng, Tan, Gunapal, Wong, & Heng, 2014) and Taiwan (18.9%) (Chang, & Weng, 2013). The prevalence of depression symptoms varies significantly across cultures, environments, application measures, and methodological variables (including the screening scale employed and the cut-off point

selected), these factors could all be contributing factors.

The findings also show that the majority of participants experienced ADL disabilities, which is consistent with previous studies of Costa Filho et al., (2018) and Xie et al., (2018). Surprisingly, conflicting results have been found in a study in Iran of Mohamadzadeh, Rashedi, Hashemi, and Borhaninejad (2018) who found that 2.7% and 41.2% of participants were unable to execute ADL and IADL without assistance, respectively. Furthermore, according to a study conducted in Qatar in 2019 by Alshamali, Makhlof, Rady, and Selim, all older people had ADLs that ranged from fair to very good, and the majority of them scored in the fair to good range for IADL. From researcher point of view, current results might be due to around half of participants had chronic illnesses that may affect ADL. Additionally, depression can result in loss of interest in daily activities and lack of independence. To prevent the harmful effects on mood status, the elderly with ADL disability need physical recovery and emotional intervention in healthcare and public service.

The present results found negative correlation between depression and ADL, many previous studies have suggested that ADL disability is a risk factor for depressive symptoms (Zhao et al., 2018). On contrary to study results, Nakamura, Michikawa, Imamura, Takebayashi, and Nishiwaki, (2017) found that

no conclusive evidence of any link between depressive symptoms and future dependence in ADLs was observed. The stress theory offers a potential viewpoint on the root causes of how ADL affects depression symptoms. ADL impairment can be seen of as a stressful condition, and ongoing difficulties with managing instrumental and social tasks can impair mental health and raise the risk of depressive symptoms.

Regarding self-esteem, more than two thirds of participants had low self-esteem, a study of Salerno, Bolina, Dias, Martins and Tavares, (2015) was in the same vein with current study. However, Ogihara, (2019) observed that people in East Asian cultures have more modest attitudes toward themselves, which may be related to the fact that the sharp reduction beyond the age of 50 was not found. Moreover, Wagner et al., (2015) found that elderly people have satisfactory self-esteem; it was interpreted as they had greater possibilities for income, occupation, and access to healthcare, a finding that is contradictory with the findings of the current study.

From researcher point of view, the study's findings could be attributed to loneliness/isolation, majority of study's residents of geriatric homes had physical limitations, chronic illnesses, and hadn't health insurance. In addition, as the sensory functions are in charge of establishing connections between the person and the outside world, having the power to affect their patterns and behavior, any alteration in the sensory components of the elderly interferes in an unfavorable way with their quality of life which affects self-esteem (Tavares et al., 2016). Moreover, about half of them were illiterate, yet research suggests that education levels are related to self-esteem (Franak, et al., 2015). The level of education is linked to information access, greater social opportunities throughout life, and also facilitates the ability to get access to health care, which contributes to better living conditions.

Another relevant finding of our study was negative correlation between self-esteem and depression, this conclusion was validated by Salerno et al., (2015) and Mazo, Krug, Virtuoso, Streit, Benetti, (2014) who discovered that depressive symptoms were the

primary predictor of lower self-esteem. This may be because elderly individuals who move into nursing homes (NHs) frequently have low social support than older persons who are able to reside in their own homes with relatives. Older adults who transfer into NHs tend to be in worse health, have more dementia, and have more functional impairment. Physical and mental health issues can have an impact on psychological well-being, undermine self-esteem, and cause depression in elderly people (Ibrahim, Ai-Lami, Al-Rudainy, & Khader, 2019).

### **Conclusion**

Based on the findings of the current study, it is concluded that the prevalence of depression is higher among geriatric home residence people attributed to low self-esteem. The majority of geriatric home residence people had low function of daily living activities. There was a statistically significant negative correlation between depression and self-esteem and daily living activities. There were statistically significant positive correlation between self-esteem and daily living activities.

### **Recommendations**

- Design a cognitive stimulating treatment program to improve depression, self-esteem and daily living activities among geriatric home residence people.
- Community-based geriatric depression screening programs may be useful for the secondary prevention of depression.
- Further studies should investigate possible methods to motivate geriatric home residence people to participate in physical activity and how health workers might contribute to improve physical functioning and hence possibly decrease depressive symptoms.

### **Acknowledgement**

We would like to extend our sincere appreciation to the elderly people who participated in the study.

**Conflict of interest**

No conflict of interest has been declared by the authors.

**Author's Contributions**

Mona H., Mostafa and Nareman A. Mohamed: Conception and study design, data collection, analysis, interpretation, manuscript writing, reviewing and revising. All authors read and approved the final manuscript.

**References**

- Al-Qahtani, A. M., Khamis, A. H., Sebiany, A. M., & Awadalla, A. (2014). Severity of Depression among Elderly Women Attending Holy Quran Memorization Centers in Saudi Arabia. *Journal of Gerontology & Geriatric Research*, 3, 4, 174-181. DOI: 10.4172/2167-7182.10001
- Alshamali, M. H., Makhlof, M. M., Rady, M., Selim, N. A., & Salem, M. F., (2019). Quality of Life and its predictors among Qatari Elderly Attending Primary Health Care Centers in Qatar. *World Family Medicine*, 17, 6, 9-19. DOI: 10.5742/MEWFM.2019.93654
- Amarya, S., Singh, K., & Sabharwal, M. (2018). Ageing Process and Physiological Changes. Intech open.
- Chang, K., & Weng, L., (2013). Screening for depressive symptoms among older adults in Taiwan: cutoff of a short form of the Center for Epidemiologic Studies Depression Scale. *Health*, 5, 3, 588e94.
- Costa Filho, A. M., Mambrini, J. V. D. M., Malta, D. C., Lima-Costa, M. F., & Peixoto, S. V. (2018). Contribution of chronic diseases to the prevalence of disability in basic and instrumental activities of daily living in elderly Brazilians: the National Health Survey (2013). *Cadernos de Saúde Pública*, 34.
- Edemekong, P., Bomgaars, D., Sukumaran, S., & Levy, S. (2017). The limited activities of daily living among Thai older adult: evidence from the 2017 national survey of older persons in Thailand. Accessed from: <http://www.thailandometers.mahidol.ac.th/>.
- Eichenberg, C., Schott, M., Sawyer, A., Georg, A., & Plöbning, M. (2018). Feasibility and Conceptualization of an e-Mental Health Treatment for Depression in Older Adults: Mixed-Methods Study, *JMIR Aging*, 1, 2.
- Franak, J., Alireza, K., & Malek, M., (2015). Self-Esteem among the Elderly Visiting the Healthcare Centers in Kermanshah-Iran (2012). *Glob. J. Health Sci.*, 7, 352-358.
- Greenberg, S. (2012). The Geriatric Depression Scale (GDS). Available at: <http://www.Stanford.edu/~yesavage/GDS.html>
- Hunter, K., Linn, M., & Harris, R. (2018). Characteristics of High and Low Self-Esteem in , *J of Aging and Human Development*, 14, 2, 117-26
- Ibrahim, A. A., Ai-Lami, F., Al-Rudainy, R., Khader, Y. S. (2019). Mental Disorders among Elderly People in Baghdad, Iraq, 2017. *Inquiry*, 56, 46958019845960
- Lawton, M., & Broody, E. (1969). Assessment of Older People: Self-Maintaining and Instrumental Activities of Daily Living. *The Gerontologist*, 9, 179-186.
- Lee, S., & Atterya, M. (2019). Depression, poverty, and abuse experience insuicide ideation among older adults. *Int. Journal of Aging Hum. Dev*, 88, 46-59.
- Lee, S. H., & Kim, Y. B. (2014). Which type of social activities decrease depression in the elderly? An analysis of a population-based study in South Korea. *Iran J Public Health*, 43, 7, 903e12.
- Masselink, M., Van Roekel, E., & Oldehinkel, A. (2018). Self-esteem in Early Adolescence as Predictor of Depressive Symptoms. *Journal of youth and adolescence*, 47, 5, 932-946
- Mazo, G. Z., Krug, R. R., Virtuoso, J. F., Streit, I. A., & Benetti, M. Z. (2014). Autoestima e depressão em idosos praticantes de exercícios físicos. *Revista Kinesis.*, 30, 1. Disponível: <http://cascavel.ufsm.br/revistas/ojs-2.2/index.php/kinesis/article/download/5724/3399>

- Mitina, M., Young, S., & Zhavoronkov, A. (2020). Psychological aging depression, and wellbeing. *Journal on Aging*, 12, 18.
- Mohamadzadeh, M., Rashedi, V., Hashem, M., & Borhaninejad, V. (2018). Relationship Between Activities of Daily Living and Depression Among Older Adults in Manch and Samalghan. *Salmand: Iranian Journal of Ageing*, Doi: [http:// dx. doi. org/ 10. 32598/ sija.13.10.180](http://dx.doi.org/10.32598/sija.13.10.180)
- Nakamura, T., Michikawa, T., Imamura, H., Takebayashi, T., Nishiwaki, Y., (2017). Relationship Between Depressive Symptoms and Activity of Daily Living Dependence in Older Japanese: The Kurabuchi Study. *The American Geriatrics Society*, 65, 12, 639–2645.
- Ng, C.W., Tan, W.S., Gunapal, P.P., Wong, L.Y., & Heng, B.H. (2014). Association of Socioeconomic Status (SES) and social support with depressive symptoms among the elderly in Singapore. *Ann Acad Med Singapore*, 43, 12, 576e87.
- Ogihara, Y. (2019). A decline in self-esteem in adults over 50 is not found in Japan: age differences in self-esteem from young adulthood to old age. *BMC Res Notes*, 12, 274. <https://doi.org/10.1186/s13104-019-4289-x>.
- Rosenberg, M. (1965). *Society and the Adolescent Self-Image*. Princeton, NJ: Princeton University Press.
- Salerno, M. C., Bolina, A.F., Dias, F. A., Martins, N.F.P., & Tavares, D. M. S. (2015). Self-esteem of community-based elderly and associated factors: a population-based study. *Cogitare Enferm.*, 20, 4, 768-774
- Sharma, A., & Subramanyam, M. (2019). Assessment of Poor Function Status and its Predictors among the Elderly in a rural area of West Bengal. *J Midlife Health*. Vol. 10(3): 123-130.
- Stangor, C., & Walinga, J. (2010). *Introduction to psychology*. 1st ed. BC Campus, Victoria, B.C. [https:// opentextbc. ca/ introductiontopsychology/](https://opentextbc.ca/introductiontopsychology/)
- Tavares, D.M.S., Matias, T.G.C., Ferreira, P.C.S., Pegorari, M.S., Nascimento, J.S., & Paiva, M.M. (2016). Quality of life and self-esteem among the elderly in the community. *Ciê nSaúde Coletiva*, 21, 11, 3557–64. <https://doi.org/10.1590/1413-812320152111.03032016>
- Wagner, J., Hoppmann, C., Ram, N., & Gerstorf, D. (2015). Self-esteem is relatively stable late in life: The role of resources in the health, self-regulation, and social domains. *Dev. Psychol.*, 51, 136–149.
- World Health Organization/Wonca, (2008). *Integrating Mental Health into Primary Care: a global perspective* Geneva: World Health Organization.
- Xie, H., Cheng, P.W., Zhao, L., Sun, X., Jia, X.J. (2018). Relationship between Activities of Daily Living and Depression among Older Adults and the Quality of Life of Family Caregivers. *Frontiers Nursing*, 2, 97-104. [https:// doi. org/ 10. 2478/ fon-2018-0013](https://doi.org/10.2478/fon-2018-0013)
- Yeu-Huichuan, et al., (2018). Nurses Confidence in Providing and Managing Care for older Persons with Depression in Long Term Care Facilities: a national survey. *Int J Mental Health Nurse*.
- Zhao, D., Hu, C., Chen, J., Dong, B., Ren, Q., Yu, D., . . . Sun, Y. (2018). Risk factors of geriatric depression in rural China based on a generalized estimating equation. *International Psychogeriatrics*, 30, 10, 1489-1497. doi: 10.1017/S1041610218000030.