

Assessment of late life anxiety and depression among the elderly at geriatric home

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Abstract

Back ground: Ageing is unavoidable developmental facts that bring along several changes in the physical, psychological, and social status. Most of these changes are associated with increasing health complications, including late life depression and anxiety. **Aim:** assess late life anxiety and depression among the elderly at a geriatric room. **Methods:** a descriptive research design was performed on a convenient sample consisted of 20 elderlies at Elhlah Elahmer and El-Noor and El-Amal geriatric homes that are located in Beni-suef governorate, Egypt. **Tools:** data were collected using 1) Socio demographic questionnaire, 2) Geriatric Depression Scale, 3) Hamilton Anxiety Rating Scale. **Results:** the results of this study show that more than half of studied subjects suffer from symptoms of late life depression, results show also that more than two third of studied subjects suffer from late life anxiety. **Conclusion:** results of this study concluded that, there was a significant relationship between late life anxiety and depression among the elderly at a geriatric room. **Recommendations:** The study recommended for further research to assess psychosocial needs of the elderly.

Key words: late life depression, Late life anxiety, Ageing.

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I. Introduction

Nowadays, with the increase in the number of older people there is a need to expect their numbers in order to develop strategies and future plans for them. Demographic transition was fast, particularly the rapid decline in mortality rates during the latter half of the twentieth century. With century changes in the age structure of population, there is an increase in the number of elderly people and a decreased trend of their mortality rates, which is considered as a natural result of reducing of diseases spread among the elderly and the efforts of health care for them. The older layer of a heavy economic burden on society needs a special care from their families, (Yochim et al., 2017).

Egypt is a lower-middle income country with a demographic and epidemiology situation comparable with that of many developing countries that are in the midst of health transition. However, the annual population growth rate has been brought down to 2% annually, population of Egypt will grow by 50% between 1995 and 2020 reaching 92 million by 2020. This is due to the rapidly growing elderly population. In Egypt, the number of elderly people over 60 years was 6.285 million in 2015. It is expected to be 9.118 million in the year 2020, 12.781 million in the year 2030, and 23.702 million in the year 2050 (United Nations, 2015).

Depression, one of the most common diseases in older adults, is a significant cause of morbidity and mortality. As the population ages in high-income countries, depression is projected to become the greatest contributor to illness burden by the year 2030. Moreover, because elderly persons with depression often do not receive diagnosis and treatment, and current treatments achieve remission in only approximately 30-35% of older adults, (Pierre & Conley, 2017).

Anxiety disorders are common, yet clinically under-recognized in late life, with estimated prevalence rates ranging from 1.2 to 15%. They are highly comorbid with depression, sleep disorders, and substance use disorders, may accelerate cognitive decline, and potentially catalyze morbidity and mortality risk in the elderly. Thus, a more detailed knowledge about the underlying mechanisms of late-life anxiety disorders is urgently warranted. Particularly loss and isolation, have been identified as prominent pathogenetically relevant and thus potentially targetable factors. (Lee et al., 2016).

In addition, the nurse should help the elderly to increase self-esteem and use personal strengths as the following: Develop a trusting relationship. Treat the elderly with dignity and respect, Allow sufficient time for

the performance of daily activities of self-care, Encourage verbalization, and Give positive reinforcement for progress (Stebbins *et al.*, 2015).

Significance of the study

Old age has special characteristics that may affect an individual's mental health, such as psychological effects of retirement, deteriorating physical health, loss and grief over previous capacity, loss of friends or family. Loss of interest, diminished social activities, and apathy may be associated with psychosocial problems such as late life anxiety and depression. There is also the challenge of memory lapse in the early stages of dementia that may underline the patient's personal report of depressive symptoms and anxious symptoms. Memory impairment is also associated with difficulties in communication (Sweed, 2016), hence it's important to investigate psychosocial problems among elderly and the relationship between them among elderly residents in geriatric home.

Aim of the study

1- The overall goal of the study is to assess late life anxiety and depression among Elderly resident in geriatric home.

It will be achieved through:

2- Assess late life anxiety among elderly resident in geriatric home.

3- Assess late life depression among elderly resident in geriatric home.

4- Investigate relationship between late life anxiety and depression among elderly.

Research questions

Q1-What is the level of late life anxiety among the elderly resident in the geriatric home?

Q2-What is the level of late life depression among the elderly resident at the geriatric home?

Q3-What is the relationship between late life anxiety and depression among the elderly residents at the geriatric home?

Subjects and Methods

This study aimed at evaluating the effect of psychoeducational program for controlling late life anxiety and depression among the Elderly at geriatric home.

Research Hypothesis

This study assumes that:

Psycho-educational program will control the incidence of late life anxiety and depression among the elderly.

The study was portrayed under the four main designs as follows:

Technical Design

Operational Design

Administrative Design

Statistical Design

Technical Design

The technical design for this study includes research design, research setting, subjects of the study, and tools of data collection.

Research Design:

The design of this study is a descriptive study was applied to achieve the aim of the current study.

Research Setting:

This study will be conducted at Elhlah Elahmer geriatric home and El-Noor and El-Amal geriatric home at Beni-Suef governorate, Egypt. Elhlah Elahmer geriatric home is composed of two departments, the first for males and the second for females it includes 10 common rooms and 10 single rooms with 15 elderly total number. Noor Wel Amal geriatric home is composed of one department for males and females. It includes 15 common rooms and 10 single rooms with 25 elderly total number. The geriatric homes create a family like atmosphere among the residents, meeting their basic needs and providing care and medical treatment for them.

Research Subjects:

Type of sample:

A Convenient sample was selected in the current study.

Selection of the sample :sample size

The subjects of the present study included 20 elderly who matched the following criteria:

Inclusion criteria:

1- Age 65 years and above.

2- Had no severe cognitive impairment and could respond to questions.

3- Not suffering from complete hearing or vision impairment.

Tools of Data Collection:

Tools used for data collection were the following:

A. Socio-demographic Questionnaire:

The questionnaire was developed by the researcher after reviewing related literature. that includes items such as age, gender, educational level , place of residence, reason for admission to the home, period of residence, marital status, occupation, economic status.....etc.

B. Geriatric Depression Scale (Yesavege et al., 1983):

It was designed and used by *Yesavege et al. (1983)*. It is 30-item screening tool used to identify depression in older adults. It was used to assess different items such as elderly preferring to do things in an exact manner, looking at the good points of the person rather than the bad points etc. It is “yes/no” format.

Scoring system:

One point for each correct answer. The correct answer is **yes** for questions number (2, 3, 4, 6, 8, 10, 11, 12, 13, 14, 16, 17, 18, 20, 22, 23, 24, 25) and the correct answer is **no** for questions number (1, 5, 7, 9, 15, 19, 21). The correct answer was scored 1 and the wrong answer was scored 0. a score is considered normal if it's between 0-9; an indicator of mild depression is between 10-19, and a positive for severe depression is between 20-30.

	score
normal	0-9
Mild deoression	10-9
Sever depression	20-30
	Total s.30

C) Hamilton Anxiety Rating Scale (Hamilton, 1959):

It was designed and used by *Hamilton, (1959)*. It was used to measure the severity of anxiety symptoms, the scale consists of 14 items designed to assess the severity of anxiety symptoms. Each of the 14 items contains a number of symptoms, and each group of symptoms is rated on a scale of zero to four, with four being the most severe. All of these scores are used to compute an overarching score that indicates anxiety severity.^[4] The Hamilton Anxiety Rating scale has been considered a valuable scale for many years and is still widely used today in both clinical and research settings. The scale consists of 14 items, each defined by a series of symptoms, and measures both psychic anxiety (mental agitation and psychological distress)(from n. 1 to 7) and somatic anxiety (physical complaints related to anxiety) (from n.8 to 14).

Scoring system:

Each item is scored independently based on a five-point, ratio scale. A rating of 0 indicates that the feeling is not present. A rating of 1 indicates mild prevalence of the feeling. A rating of 2 indicates moderate prevalence of the feeling. A rating of 3 indicates severe prevalence of the feeling. A rating of 4 indicates a very severe prevalence of the feeling. Each item is scored on a scale of 0(not present) to 4(sever), with a total score range of 0-56, where <17 indicates mild severity, 18-24 mild to moderate severity and 25-30 moderate to severe.

Evolution	Score
No anxiety	0
Mild anxiety	<17
Mild to moderate anxiety	18-24
Moderate to sever anxiety	25-30
	Total s.56

Fieldwork:

The actual fieldwork for the process of data collection has consumed six months started at the beginning of August 2020 and was completed by end of January 2021. Data were collected in 2 days per week average With 2 elderly a day. Each interview lasted for 60 minutes, depending on the response of the participants. The participants were asked to give a verbal agreement to participate in the study, the investigator explained the aim and objectives to the participants. Confidentiality of any obtained information was assured, and the subjects were informed about their right to participate or not in the study. The participants were also assured about anonymity, and that data will only be used for the purpose of the study.

D. Ethical considerations:

The ethical research considerations in this study included the following:

1. Prior to the actual work of research study, ethical approval was obtained from the Scientific Research Ethical Committee of faculty of Nursing, Helwan University.
2. The research approval of each participant to share in the study was taken.
3. The investigator cleared the objective and aim of the study to subjects.

III- Administrative Design:

Official letters were issued from Faculty of Nursing, Ain Shams University to get permission from the directors of geriatric homes for gathering data of research at Beni-Suef for gathering data of research.

IV- Statistical Design:

The data were collected and coded. Then the collected data were organized, analyzed using appropriate statistical significance tests using the Computer Statistical Package for Social Science (SPSS), version 24. Data were presented using descriptive statistics in the form of frequencies and percentages. Chi square test was used to compare the frequencies and the correlation between study variables.

Degrees of significance of results were considered as follow:

- p-value > 0.05 Not significant (NS)
- p-value ≤ 0.05 Significant (S)
- p-value ≤ 0.01 Highly Significant (HS)

II. Results

The result obtained from the study was presented in the following parts:

- Part I** Personal characteristics of the studied elderly at geriatric home(tab1,2)
- Part II** Geriatric Depression Scale (Tables 3-4)
- Part III** Percentage distribution of elderly total anxiety (Tables 5)
- Part IV** Correlation between total anxiety level and total depression level of the studied elderly (Tables 6)

Part I: Personal characteristics of the studied elderly at geriatric home

Table (1): Personal characteristics of the studied elderly at geriatric home (n=20).

Personal characteristics	No.	%
Age in years		
- <70 years	14	70.0
- 70-<80 years	6	30.0
- >80 years	0	0
Gender		
- Male	12	60.0
- Female	8	40.0
Marital status		
- Single	4	20.0
- Divorced	2	10.0
- Widowed	8	40.0
- Married	6	30.0
Job		
- Governmental work	8	40.0
- Free business	6	30.0
- Not working	6	30.0
Educational level		
- Illiterate	4	20.0
- Read and write	10	50.0
- Secondary education	6	30.0
- University education	0	0
- Postgraduate education	0	0
Income per month		
- Sufficient	14	70.0
- Insufficient	6	30.0
Source of income		
- The son	4	20.0
- A relative	2	10.0
- Pension	10	50.0
- A charity	4	20.0

Table (1) shows that nearly three quarters (70%) of elderly people had ages <70 years. More than half (60%) of them were male. More than one third (40%) of elderly were widowed, and had governmental work. Half (50%) of them were read and write. Nearly three quarters (70%) of elderly had sufficient income. Half (50%) of them had source of income from pension.

Table (2): Percentage distribution of geriatric home related data (n=20).

Items	No.	%
Residence		
- Elhelal Elahmer geriatric home	10	50.0
- Noor and Amal geriatric home	10	50.0
The people who visit elderly person regularly		
- Sons	5	25.0
- Relatives	3	15.0
- Neighbors	0	0
- Friends	2	10.0
- Non	10	50.0
The reason for joining the elderly home		
- There is no one caring for	12	60.0
- Feeling lonely	3	15.0
- Stay away from family problems	0	0
- Lack of special housing	2	10.0
- Unwillingness of sons to be with them	1	5.0
- Leave the apartment for one of the sons	2	10.0
Duration of stay in the elderly home		
- <one year	0	0
- 1-5 years	13	65.0
- 5-10 years	5	25.0
- >10 years	2	10.0
Type of room		
- Common room	13	65.0
- Single room	7	35.0

Table (2) shows that half (50%) of elderly were residence at Elhelal Elahmer geriatric home, and Noor and Amal geriatric home respectively. Half (50%) of them hadn't people to visit them regularly. More than half (60%) of them were joined to geriatric home due to there is no one caring for them. Nearly two thirds (65%) of elderly had duration of stay in the elderly home ranged from 1:5 years, and 65% of them were lived in common room.

Part II: Geriatric Depression Scale

Table (3a): Percentage distribution of elderly depression scale (n = 20).

Items	N	%	p-value
1. Satisfaction with their life	3	15.0	.028*
2. Dropping many of their activities and interests	4	20.0	.041*
3. Feeling that their life is empty	4	20.0	.036*
4. Get bored	6	30.0	.064
5. Hopeful athinfbout the future	9	45.0	.009*
6. Bothered by thoughts that can't get out of the head	6	30.0	.047*
7. In good spirits most of the time.	5	25.0	.004*
8. Afraid that something bad is going to happen to them	5	25.0	.039*
9. Feeling happy most of the time	4	20.0	.003*
10. Feeling helpless	6	30.0	.028*

(* statistically significant $p < 0.05$ (** highly statistically significant $p < 0.001$)

Table 3a illustrates that less than half of studied subjects feeling hopeful about the future. 25%of studied subjects are in good spirits most of time and afraid that some thing bad is going to happen to them.less than 25% of studied subjects are satisfied with their life.

Table (3b): Percentage distribution of elderly depression scale (n = 20).

Items	N	%	P-value
11. Get restless and fidgety	6	30.0	.028*
12. Prefer to stay at home, rather than going out and doing new things	4	20.0	.023*
13. Frequently worry about the future	6	30.0	.034*
14. Feeling that have more problems with memory than most	12	60.0	.010*
15. Thinking it is wonderful to be alive now	14	70.0	.000**
16. Feeling downhearted and blue	6	30.0	.005*
17. Feeling pretty worthless the way they are now	1	5.0	.024*
18. Worry a lot about the past	6	30.0	.017*
19. Life is very exciting	4	20.0	.704
20. It is hard to get started on new projects	13	65.0	.036*

(*) statistically significant $p < 0.05$ (**) highly statistically significant $p < 0.001$

Table3b shows that two third of studied subjects are thinking that it is wonderful to alive now and are worried a lot about the past.less than 25% of studied subjects prefer to stay at home,rather than going out and doing some thing new.

Table (3c): Percentage distribution of elderly depression (n = 20).

Items	N	%	P-value
21. Feeling full of energy	9	45.0	.019*
22. Feeling that their situation is hopeless	6	30.0	.024*
23. Thinking that most people are better off than they are	3	15.0	.042*
24. Frequently get upset over little things	5	25.0	.033*
25. Frequently feel like crying	6	30.0	.469
26. Having trouble concentrating	7	35.0	.042*
27. Enjoy by getting up in the morning	16	80.0	.048-*
28. Prefer to avoid social gatherings	6	30.0	.013*
29. It is easy to make decisions	10	50.0	.003*
30. Their mind is clear as it used to be	2	10.0	.016*

(*) statistically significant $p < 0.05$ (**) highly statistically significant $p < 0.001$

Table 3 clarified that more than 75% of studied subjects enjoy by getting up in the morning.Half of studied subjects see that it is easy to make decision.25%of studied subjects frequently get up set over little things.

Table (4): Percentage distribution of elderly total depression level (n = 20).

Items	N	%	P
Normal	8	40.0	.000**
Mild depression	8	40.0	
Moderate depression	0	0.0	
Severe depression	4	20.0	

(*) statistically significant $p < 0.05$ (**) highly statistically significant $p < 0.001$

Table4 illustrates that more than half of studied subjects suffer from symptoms of depression.

Part III: Percentage distribution of elderly total anxiety

Table(5): Percentage distribution of elderly total anxiety (n = 20).

Items	N	%	P
No anxiety	5	25.0	.006*
Mild anxiety	7	35.0	
Moderate anxiety	3	15.0	
Severe anxiety	5	25.0	

(*) statistically significant $p < 0.05$ (**) highly statistically significant $p < 0.001$

PartIV:table6 Correlation between total anxiety level and total depression level of the studied elderly.

		Total depression level	Total anxiety level
Total depression level	R	1	.726
	p-value	-	.000**
Total anxiety level	R	.726	1
	p-value	.000**	-

(*) statistically significant $p < 0.05$ (**) highly statistically significant $p < 0.001$

Table (6) reveals that there is a positive correlation between total anxiety level and total depression level of the studied elderly.

III. Discussion

Concerning the socio-demographic characteristics of studied elders, the present study showed that more than two thirds of studied elders were males. According to the researcher point of view, this finding may be due to that males in Upper Egypt have the ability to take decision to enter geriatric homes more than women. This result is supported by **Steele (2018)** who reported that the highest percentages of institutionalized elderly were males. This result is in disagreement with **Afeife (2018)** who stated that females constituted the highest percentage among institutionalized elderly.

The present study findings showed that the highest percentages of elders were less than 70years. This may be due to worse psychological condition after retirement. This result is supported by **Wilmowska-pietruszynska(2018)**who found that the majority of the elderly in geriatric homes aged from 65-70. The previous results contradicted with **Afeife (2018)** who mentioned that the highest percentages of institutionalized elderly were at age group of 70-80.

The present study revealed that more than two thirds of the elderly were widowed or divorced. This is because longevity is associated with lack of social support and frailties have ahigh risk of institutionalization. Several studies are agreed with the present study such as **Cho et al.,(2016)**who stated that being without apartner or partner loss was related to high risk for institutionalization. **Shokry ,Adel,and Rashad(2018)** who reported that single (never-married) women are eight times more likely than their married counterparts to live in residential or nursing care.

In the recent study, most of our subjects could read and write. According to the researcher point of view this result may be due to that most of the sample selected from private geriatric home, and highly educated elderly with having highly pensioned to live. This is in accordance with **Chand (2016)** who stated that elderly with acollege education often have better opportunities to earn more money and develop skills.

As regard to monthly income in the present study, more than half of studied elderly receive monthly income less than 1500 Egyptian pounds /month. Moreover their income was mainly affected by retirements and other resources such as minister of social affairs. Thus most of the elderly in the governmental homes feel financially insecure because their needs are increasing while financial resources do not cover their basic needs. Similar results were reported by **cankovic et al.(2016)**.

Regarding depression level of studied subjects,the present study also referred that, a high percentage of the studied elderly had in appropriate psychosocial condition. Most of the studied elderly were afraid of something bad to happen. This may be due to having in adequate financial, social support and being afraid that one day they would become frail and disable, and no one can help them. In addition, an observation of staff-resident interaction showed that staff members were not part of their support system, and did not chat with them, so the most of them had low self –esteem and life is not worth living.This is supported by **Sharma (2016)** who stated that elderly people adopt the pessimistic attitude towards future. In the absence of social support network, indifferent attitude of care takers, increased dependency, physical illness, and state of unhappiness, loss of activities from life and many more are responsible for the poor self rated mental health.

The present study showed that most of studied elderly suffer from lack of psychosocial needs. This may be due to lack of social support, absence of organized activities program. So that most of them feel lonely, empty life, bored and low- spirited most of the time.This result may be due to the main reasons for institutionalization ,as reported by the elderly were feeling of loneliness at home,or absence of care giver ,or feeling rejected by family members.This may be due to the fact that the move from extended to nuclear families has made the elderly redundant,as well as their adult children have grown up,got married and moved to new houses with their own families leaving the elderly alone .elderly do not feel respected and being valuable among their adult children,which enforces them to seek geriatric homes. This is agreed **with Gautam et al. (2017)** who found that, participation in social activities by older adults had been linked to outcomes such as, increased subjective wellbeing, decreased depression, high self-esteem, better perceived health, and less suicidal thoughts

and emotional distress. Also this result is in agreement with **Hancock et al. (2016)** who reported that most of elderly people resident in geriatric homes were suffering from isolation, anxiety, and depression. This result may be due to entering institutions is generally considered a stressful event among elderly, and most of them perceive institutionalization as a stigma and a place to go to die, and the fact that many of these institutions are poorly equipped, understaffed and disorganized, keeps this societal perception on alive.

Regarding anxiety level of studied subjects, the present study shows that 75% of subjects suffer from symptoms of anxiety. This result is agreed with **Joan et al. (2016)** who reported that most of elderly with anxiety disorder.

The present results show that there is a positive correlation between depression level and anxiety level. This result is incongruent with **Winer et al. (2017)** who stated that highly statistically significant correlation between psychosocial problems of elderly.

IV. Conclusion

In the light of the present study findings, it can be concluded that the majority of elderly people residents in geriatric homes included in this study suffer from inappropriate psychosocial condition (depression & anxiety). However, there was a significant relationship between depression level and anxiety level of studied elders.

V. Recommendations

Based upon the findings of the current study, the following recommendations can be deduced:

- Further researches for the elderly should focus on enhancing their perception toward their lives and change their attitudes and relative traditional concepts regarding aging.
- Further researches should be applied on the quality of life of older adults (QOL) with MCI, especially when the number of elderly people with memory issues is increasing.
- Services given to the elderly must be based on actual assessment to identify actual assessment to identify the appropriate facilities to meet these basic needs.

References

- [1]. **Afeke, A. (2018):** Life satisfaction through meeting basic human needs among elderly, doctorate dissertation. Submitted to faculty of nursing. Ain Shams University.
- [2]. **Cankovic, S., Ac-Nikolic, E., Mijatovic-Jovanovic, V., Kvirgic, S., Harhaji, S. & Radic, I. (2016):** Quality of life of elderly people living in a retirement home, *Vojnosanitetski pregled*, 73(1), 42-46.
- [3]. **Chand, R. (2016):** The relationship between depression and cognitive deterioration in older adults, doctorate dissertation. Submitted to New York Institute of Technology. Walden University.
- [4]. **Cho, H.; Lavretsky, H.; Olmstead, R.; Levin, M.; Oxman, M. N. & Irwin, M.R. (2016):** Prior depression history and deterioration of physical health in community-dwelling older adults—A prospective cohort study. *The American Journal of Geriatric Psychiatry*; 18(5): 442-451.
- [5]. **Gautama, R.; Saito, T. and Kai, I. (2017):** Leisure and religious activity participation and mental health: gender analysis of older adults in Nepal. *BMC Public Health*; 7(147): pp.299.
- [6]. **Hancock, G.; Woods, B.; Challis, D. & Orrell, M. (2016):** The needs of older people with dementia in residential care. *Int J Geriatr Psychiatry*; 21: pp.43-49.
- [7]. **Joan, A.; Wang, J. & Shang, J. (2016):** Mental Health Disorders in Elderly People Receiving Home Care. *Journal of the American Geriatrics Society*; 52: 995-999.
- [8]. **Lee, S. H., Yim, S. J. & Kim, H. C. (2016):** Changes of aging process. *Kosin Medical Journal*, 31(1), 11-18.
- [9]. **Pierre, J.S. & Conley, D.M. (2017):** Introduction to gerontological nursing. *Gerontological competencies for care*, 1.
- [10]. **Sharma, K.L. (2016):** Loneliness and Life-satisfaction among the elderly, *Indian journal of gerontology*; 20(4): pp.405-416.
- [11]. **Shokry, A. A. E., Adel, M. R. & Rashad, A. E.-S. A. (2018):** Educational program to improve quality of life among elderly regarding oral health. *Future Dental Journal*, 4(2), 211-215.
- [12]. **Stebbins, G.T.; Carrillo, M.C.; Dorfman, J.; Dirksen, C.; Desmond, J.E.; Turner, D.A. & Gabrieli, J.D. (2015):** Aging effects on memory encoding in the frontal lobes. *Psychology and Aging*; 17(1): 44-55. **Steele, C. (2018):** *Psychology and aging: principles of geriatric medicine and gerontology* (4th ed). New Hill-Hill, USA, pp.78.
- [13]. **Sweed, H. (2017):** Population ageing Egypt report. *Middle East journal of age and ageing*; 13(2).
- [14]. **United Nations (2015):** International strategy for action on ageing the chairman of the commission for social development. New York, pp.10-14.
- [15]. **Wiener, J.M.; Freiman, M.P. & Brown, D. (2017):** Nursing home care quality: Twenty years after the Omnibus Budget Reconciliation Act of 1987. Retrieved from The Henry J. Kaiser Family Foundation.
- [16]. **Wilmowska-Pietruszyrska, A. (2018):** Quality of life and related factors among older people living in rural areas in south-eastern Poland. *Annals of Agricultural*, 25(3), 539-545.
- [17]. **Yochim, B.P.; Mueller, A.E. & Segal, D.L. (2017):** Late life anxiety is associated with decreased memory and executive functioning in community dwelling older adults. *Journal of Anxiety Disorders*; 27: 567-575.