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CONSIDERATION OF THE RELATIONSHIP BETWEEN THE SELF-EFFICACY LEVELS AND THE DEPRESSION IN INDIVIDUALS OVER 65

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Abstract

The aging is a universal process to be observed in all living things and causing regression in all functions. The individuals may experience various problems biological, psychological and social dimensions together with the aging.

The research is planned to consider the relationships between the self-efficacy levels and the depression in individuals older than 65 years. The sample of the research was 374 old individuals who were selected with the simple random sampling from the elder people to be registered in FHCs. The researchers used the socio-demographic question form to be formed through the literature review, Geriatric Depression Scale (GDS) and Self-efficacy Sufficiency Scale (SESS) to collect the data.

When the socio-demographical features are compared with their self-efficacy and depression average scores; the difference between the SESS and GDS average points were found meaningful for the age, level of education, income level, marital status, living with whom, health status, perception of personal health and use of free times statistically ($p<0.05$). The negative correlation was found for the total SESS and GDS points of elder people (-0.491, p=0.000). Also, a positive correlation between the age and GDS (0.187, p=0.00), on the other hand, there was a negative correlation to be found between the age and SESS (-0.264, p=0.000) in the research.

As a result, important evident was found indicating that the depression increases as the age is getting older, the self-efficacy decreases, and the negative correlation between the depression and self-efficacy for elder people, in the research.

Keywords: Self-Efficacy, Depression, Aging, Elder People.

1. Introduction

As expected lifetime increases in the world and in our country, the proportion of elder people also increases. The aging is observed in every living creature and causes regression in all the functions. The individuals may experience various biological, psychological and social problems as they get older. Older ages may bring the problems such as dysmnesia, concentration disorder, as the loss of cognitive skills, reduction in social relationships, remission in the skill to getting closer, loneliness, economical shortages, and the need for the care/support of others increases, so the older individual becomes weaker in terms of psycho-social matters and resulting with the loss of the social and statue role with reference to the post to be achieved (Blazer, 2003:249–265; Şahin et al. 2012:38-41; Gürhan, 2016). The National Council on Aging (2014) reports that 92% of elderly individuals had at least one chronic illness and 77% had at least two chronic illnesses (National Council on Aging, 2014). Additionally, the physical and mental problems are seen more as people get older. The most common psychiatric disorders seen in elderly people are depression and self-slaughter attempts (World Health Organization, 2014; Deshpande, et al. 2014:125-132; Townsend, 2016; Tamam and Öner, 2001:50-60). The depression in older people can be seen with the symptoms like having no fun from the activities to be already made, feeling guilty, physical complaints, to be too busy, self-depreciation, desperation, hopelessness, regret, insomnia, anorexia, weight loss (Gürhan, 2016; Eker and Noyan, 2004:75-83). The physical and psycho-social limitations, chronic illnesses, increase in dependency to others affect the self-efficacy and autonomy of the individuals negatively and form a ground for suicidal thought and depression (Şahin et al. 2012:38-41; Kim, 2016:9-12).

The self-efficacy includes the self-confidence of individuals on their success to cope with the difficult situations which they may encounter in the future (Bandura, 1997; Senemoğlu, 1998; Gözüm and Aksayan, 1999:21-34). The individuals with higher self-efficacy can cope with the crucial matters in an easier way and they experience less depression (Chemers, et al. 2001:55-64). While the low self-efficacy perception is causing desperation, anxiety, depression, decrease in self-confidence, the higher self-efficacy perception on the other hand, enables to understand the operations more easily and to work harder to achieve an aim (Karadağ, et

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al. 2011:13-20; Keskin and Orgun, 2006:92-96). The older individual who have physical, emotional and social difficulties with reference to the previous life, and whose self-efficacy has been impacted may have difficulties to communicate/inform the difficulties to be experienced and cannot fight against those difficulties easily (Şahin et al. 2012:38-41; Bilir 2006:3-9). Therefore, the nurses working in field of mental health require to know about the self-efficacy, depression and the factors relating with those concepts for the care of elder people and to plan the nursing attempts to increase the independency of the elder individual during the care. This research was planned to examine the relationships between the level of self-efficacy and the depression in individuals older than 65 years and the factors affecting this relationship.

2. Methods

2.1. Sample

This descriptive study was performed between June and August 2016. The universe of the study was 3752 individuals at or over 65 years in three Family Health Cabinets (FHCs) in Malatya provincial centre. The sample of the research was 374 old individuals who were selected with the simple random sampling as the proportion of the universe from the clusters to be accepted as the cluster sampling from the elder people to be registered in FHCs. The criterion to be included in the research was defined as the non-existence of a communication problem preventing the scale to complete. The researchers used the socio-demographic question form to be formed through the literature review, Geriatric Depression Scale and Self-efficacy Sufficiency Scale to collect the data (Deshpande, et al. 2014:125-132; Tamam and Öner, 2001:50-60; Kulakçı, et al. 2012:53-64). The data was collected by the researchers by using the face-to-face interview technique and the questions were answered averagely within 25 or 30 minutes.

2.2. Ethical Statement

Following written permissions from the establishment in which the research was performed and Malatya Ethical Committee on Clinic Researches were obtained, the research was started. Before the data collection tools were implemented to the elder people, the researcher explained the aim of the research and their oral consents were obtained and the confidentiality principle was observed.

2.3. Measures

2.3.1. Socio-Demographical Question Form:

It consists of 13 questions in total to define their descriptive characteristics which are age, gender, level of education, marital status, profession, presence of the socio-economical insurance, number of children if any, presence of chronic disorders, perception of personal economic situation and the health, whom they live with, existence of a negative matter within the last month and way of using the spare times.

2.3.2. Self-Efficacy Sufficiency Scale:

The reliability and validity of the scale that was developed by Sherer and others in 1982 were enabled by Gözüm and Aksayan in Turkish in 1999 (Gözüm and Aksayan, 1999:21-34; Sherer, et al. 1982:663-671). The scale measures general SESS perception that is not specific to any particular area. It is possible to have 23 points as the lowest and 115 points as the highest from the 5-point Likert scale. In the scale, it was requested to sign any one of the alternatives which were 1- do not define me at all, 2- defines me little bit, 3- not sure, 4- defines me well, 5- exactly defines me for each item and then the point to be assigned for each item is considered. However, the items 2., 4., 5., 6., 7., 10., 11., 12., 14., 16., 17., 18., 20., 22 were pointed reversely. Higher the point to be obtained indicates that the SES perception is high. The scale has four sub-factors: 1. Beginning of the behaviour: Items 2., 11., 12., 14., 17., 18., 20., 22; 2. Maintaining the behaviour: Items 4., 5., 6., 7., 10., 16., 19; 3. Achieving the behaviour: Items 3., 8., 9., 15., 23; 4. Fighting against the obstacles: Items 1., 13., 21 (Gözüm and Aksayan, 1999:21-34; Sherer, et al. 1982:663-671). The consistency factor of the scale for Cronbach alfa is found as 0.81, test-repeating test reliability was found as 0.92. In this research, Cronbach alfa inner consistency factor was found as 0.85.

2.3.3. Geriatric Depression Scale:

It is a scale for older people and it was formed by Yesavage and others (1983), it consists of 30 questions (Yesavage, et al. 1983:37-49) (21). For the scoring, the answer of yes to the questions in 1., 5., 7., 9., 15., 19., 21., 28., 29., 30 are pointed as 0 and the answer of no as 1. For the rest of the questions, it is reverse, yes is 1 and no is 0. The final score varies between 0 and 30 which defines the depression point. No depression for 0 to 11; possible depression for 11 to 14 and 14 and over is defined as absolute depression. The reliability and validity of the scale was evaluated in people living in the society, the individuals living in healthcare centres or care centres and the one having dementia, and it was found that it is valid (Ertan, et al. 2000:163-172). The Cronbach alfa inner consistency factor of the scale is 0.82, it was also found in this research as 0.91.

2.4. Analysis

The data was analysed on computer by using SPSS 17 software pack and it was evaluated with Kolmagoroc – Smirmov test if it was in compliance with ordinary distribution. In case of ordinary distribution the T test and One Way ANOVA test were applied and in other case, Mann-Whitney U Test and Kruskal-Wallis Variance test were applied. Also, the correlation was used for the data analysis.

3. Results

In this part, the findings of the research on the relationships between the self-efficacy and the depression in individuals older than 65 years and effecting factors are presented.

Table 1: Assessment of the relationships between the socio-demographic features of old individuals and the self-efficacy with depression

Descriptive Features	n %	Self-efficacy [Mean (SD)]	Test and Meaningfulness	GDS [Mean (SD)]	Test and Meaningfulness
Age					
65-74	291 (77.8)	82.98±15.9	KW: 17.147	12.83 ±7.4	KW:11.941
75-84	69 (18.4)	73.43±21.4	**p: 0.001**	15.76±8.0	**p: 0.003**
85 and older	14 (3.7)	65.35±23.8		18.07±8.5	
Gender					
Female	212 (56,7)	79.39±18.5	t: -1.439	15.71±7.5	t: 6.493
Male	162 (43,3)	82.09 ±17.2	p: 0.151	10.76±6.9	**p: 0.001**
Disease Condition					
Yes	269 (71.9)	78.79 ±18.9	t: -3.061	14.96 ±7.4	t: 5.850
No	105 (28.1)	85.07 ±14.6	**p: 0.002**	10.00±7.3	**p: 0.001**
Social Security					
Yes	357 (95.5)	80.89±17.8	MW: -1.618	13.29±7.6	MW: -3.049
None	17 (4.5)	73.52±19.71	p: 0.106	19.47±7.4	**p: 0.002**
Level of Education					
Illiterate	142 (38.0)	73.13±20.26	F: 23.971	16.71±7.3	F: 26.151
Primary / Secondary	193 (51.6)	84.07 ±15.18	**p: 0.001**	12.29±7.3	**p: 0.001**
High School / University	39 (10.4)	90.23 ±11.55		8.46±6.05	
Marital Status					
Married	266 (71.1)	83.43±16.4	MW: -4.539	12.42±7.6	MW: -4.608
Single	108 (28.9)	73.48±19.6	**p: 0.001**	16.39±7.2	**p: 0.001**
Income Level					
Well	88 (23.5)	85.27 ±16.63		10.30 ±7.03	
Middle	207 (55.3)	82.91 ±16.56	F: 23.042	13.22 ±7.18	F: 24.633
Poor	79 (21.1)	69.15 ±18.65	**p: 0.000**	18.11 ±7.66	**p: 0.001**
Living with					
None	37 (9.9)	72.67 ±19.59		17.59 ±7.19	
Spouse	145 (38.8)	82.20 ± 17.17	F: 9.011	12.29 ±7.88	F: 7.574
Spouse and children	121 (32.4)	84.95 ±15.32	**p: 0.000**	12.60 ±7.24	**p: 0.001**
Children	71 (19.0)	73.83 ±20.14		15.73 ±7.28	
Number of Children					
None	5(1.3)	73.20±16.2		16.00±7.6	
1-4 children	180 (48.1)	82.23±16.7	KW: 4.984	13.03±8.0	KW: 2.946
5-8 children	164 (43.9)	80.18±18.2	p: 0.173	13.99±7.4	p: 0.400
9 and over	25 (6.7)	72.44±23.3		14.16±6.3	
Health Perception					
Good	106 (28.3)	85.90 ±15.7		8.31 ±5.9	
Average	149 (39.8)	81.38 ±17.5	F: 11.601	13.05 ±6.2	F: 74.901
Bad	119 (31.8)	74.76 ±18.9	**p: 0.000**	18.90 ±7.2	**p: 0.001**
Negative Life Experience					
Yes	288(77.0)	81.23 ±17.8	t: -0,393	15.91 ±7.9	t: -3.262
No	86(23.0)	80.36 ±18.1	P: 0.694	12.87 ±7.5	**P: 0.001**
Use of Spare Times					
Tv + Resting	142 (38.0)	73.86±19.2	KW: 41.405	16.66±7.8	KW: 42.260
Chat	43 (11.5)	81.97±16.5	**p: 0.001**	13.97±6.7	**p: 0.001**
Walking	97 (25.9)	81.95±17.4		11.16±7.0	
Newspaper	19 (5.1)	92.57±8.2		7.26±4.6	
Hand craft + Garden	73 (19.5)	87.76±13.8		12.16±6.9	

Working Situation Working Not working	 27 (7.2) 347 (92.8)	 76.62±23.3 80.86±17.5	 MW: -0.654 p: 0.513	 13.18±7.8 13.60±7.7	 MW: -0.261 p: 0.794

Table 1 includes the socio-demographical features of old individuals whose average age is (±6.61, min=65, max=96), self-efficacy and depression average scores in addition to the comparisons of social-demographic features with the self-efficacy and depression scores. When we consider those findings, most of the participants (51,6%) were at primary school level with middle income level (55,3%). When we look at the comparison of the socio-demographical features and the self-efficacy with the depression; the difference between the age, level of education, income level, marital status, whom they live with, state of illness, health perception, use of spare times and average SESS and GDS points were statistically found meaningful ($p<0.05$). While the gender, social security and negative life experience was being found important in terms of GDS, it was not found important in terms of the relationship with SESS ($p>0.05$). Also, number of children and the state of working was not found important in terms of their relationships with SESS and GDS average points statistically ($p>0.05$).

Table 2: Total Geriatric Depression Scale scores of elder people together with sub-dimensional score and relationship with Self-Efficacy Sufficiency Scale average scores

Scales	N	Mean (SD)	Correlation
Self-Efficacy Sufficiency Scale **GDS Total Scores**	374	80.56±01 13.57±7.70	r= - 0.491 **p= 0.001**
Self-Efficacy Sufficiency Scale **No Depression (0-11 points)**	172	87.43±13.46 6.56±2.86	r= -0.236 **p= 0.002**
Self-Efficacy Sufficiency Scale **Possible Depression (between 11-14 points)**	45	83.44±16.78 13.11±0.85	r= -0.041 p= 0.787
Self-Efficacy Sufficiency Scale **Absolute Depression (14 points and over)**	157	72.20±19.32 21.38±4.11	r= -0.423 **p= 0.001**

When Table 2 is seen, a correlation with negative direction was found between the total Self-Efficacy Sufficiency Scale scores and the Geriatric Depression Scale scores in elder people (-0.491, p=0.000). As the GDS score of the individual increases, the score of the SESS decreases. The lowest SESS score of elder people is 23 and the highest one is 115 but the average score of the individuals to be included in the research is 80.56±18.0, and the GDS score is 1 for the lowest and 30 for the highest with average score of 13.57±7.7, as it was found. When no depression, possible depression and absolute depression situations to be defined with reference to the scores of the Geriatric Depression Scale are considered together with SESS average scores for the correlation, a negative correlation was found between the SESS average score and GDS 'no depression' situation average score, and this was seen as important statistically (-0.236, p=0.002). This finding indicates that if the individual does not suffer from the depression, the self-efficacy is high. When the Table is examined for the correlation between the SESS average score and GDS "absolute depression" average score, a negative correlation relation that was found important, was found statistically important between these two variables (-0.423, p=0.000). By this finding, it is possible to define the self-efficacy of the patient suffers from absolute depression. The correlation between the SESS score and GDS "possible depression" situation was found as negative but it is not an important finding statistically (-0.041, p=0.787).

Table 3. Evaluation of the relationship of socio-demographical characteristics of elder people and SESS with GDS average scores

Socio-demographic Characteristics (N=374)	Self-Efficacy		Depression	
	r	p	r	p
Age	- 0.264	**0.001**	0.187	**0.001**
Number of Children	- 0.099	0.055	0.042	0.418
Daughter	- 0.009	0.865	0.029	0.585
Son	- 0.100	0.056	0.091	0.081

When the Table 3 is examined, there is a positive correlation between the GDS and age (0.187, p=0.00), it means that as the age of the individual increases, the level of depression also increases; there is, on the other hand, a negative correlation between the SESS and the age, it means that as the age increases, the self-efficacy of the individual decreases (-0.264, p=0.000). No correlation could be found between the number of children, no matter if they are daughters or sons, SESS and GDS.

Discussion

Together with the continuous increase in the proportion of old people in the society, related medical, psychiatric and social problems are seen, as well (Orhan, 2010:50-72)(23). Since the active life activities decrease, the cognitive functions, social interactions and independent actions also become less resulting with the decrease in the self-efficacy (Forsen, et al. 2010:601-623).

According to the findings of this research that examined the relationship between the self-efficacy levels and the depression together with affecting factors, the SESS scores decrease as the age increases. Aydoğan et al, (2011) also stated in their research that some physiological changes (like the neuron number in the brain and reduction in blood flow) resulting from aging may cause decrease in the number of activities which the individual may perform alone (Aydoğan, et al. 2011:1-12). Additionally, Bandura (1995) noted that the individual with higher self-efficacy has a better life and it brings the success (Bandura, 1995).

The most common mental problem in older people is seen as depression (Deshpande, et al. 2014:125-132; Orhan, 2010:50-72; Lee, et al. 2014:37-41; Akyol, 2010:165-73). When the findings of the research is considered, the depression score increases along whit the age. Hacıhasanoğlu and his colleagues (2010) had a study with individuals with chronic diseases and they similarly found that the depression score increases in individuals as the age increases (Hacıhasanoğlu, et al. 2010:209-216). There are many studies having similar conclusions with this present study (Deshpande, et al. 2014:125-132; Gül, et al. 2012:308-10; Demir Akça, et al. 2014:267-274; Mancuso, et al. 2001:1326-1338).

When the results of the study are seen, the difference between the level of education, marital status, sickness status, income level, whom they live with, personal health perception, use of spare times with SESS and GDS are statistically found meaningful. In the study of Deshpande and others (2014) found that the most common mental problem of depression in elder people is related with non-existence of family support, economic poverty, chronic sickness and depending on others (Deshpande, et al. 2014:125-132). These findings are parallel to the findings indicating living alone, poor economic situation and low self-efficacy cause the depression to increase. Similarly, Demir Akça and his friends (2012) found that low level of education and socio-economic level cause the destruction in cognitive functions and rise in depression, in their research (Demir Akça, et al. 2014:267-274). In the study of Aylaz and others (2012) to consider the level of loneliness and the depression, as the level of loneliness increases, the depression score also increases like the results of our study (Aylaz, 2012:548-554). When the results of the research of Gül (2012) are seen, being a widow with lower level of education has an effect in the direction of the increase in depression (Gül, et al. 2012:308-10). The present study found that the negative perception on personal health impacts on the depression, negatively. In the researches having similar results with our study reached the conclusions that negative perception of health impacts the physical activity negatively and it affects the cognitive functions badly (Lök, 2016:21-24); in case the cognitive functions are failed, depression increases (Gül, et al. 2012:308-10).

Another result to be found in the research is the existence of a negative correlation between the self-efficacy and the depression. This finding indicates that as the depression symptoms in elder people increase, their believes to themselves and the self-efficacy and skills to cope with crucial matters decrease. Jerant and others (2008) provided another parallel conclusion with the present study as the depression score increases, the self-efficacy score decreases (Jerant, et al. 2008:523-531). In another study with elder people suffering from asthma, it was found that as the level of self-efficacy decreases, the depression symptoms increases and the course of the illness gets worsen, and these findings are also parallel to the results of the present study (Mancuso, et al. 2001:1326-1338). Besides, the results of study that was performed by Demir Akça and others (2014) are in the literature and they are similar with the results of the present study (Demir Akça, et al. 2014:267-274). Deshpande and others (2014) found that the depression in elder people increases as they become more dependent to others in their daily activities (Deshpande, et al. 2014:125-132). Similarly, studies by Lee et al. (2014) and Choi et al. (2015) found that physical activity during depression in elderly patients is good for the symptoms of depression (Lee, et al. 2014:37-41; Choi, et al. 2015:301-305). It is known that the depression is the most common thing affecting the mental health of elder people and it reduces the mental health, so the study of Vaezi and Fallah (2011) supports this conclusion by referring the negative correlation

between the self-efficacy and the stress that impacts the mental health negatively (Vaezi and Fallah, 2011:1168-1174).

5. Conclusion

As a result, significant findings indicating the negative correlation between the self-efficacy and the depression that increases as the age increases and the self-efficacy decreases were obtained. Besides, the parameters like age, illness status, level of education, profession, marital status, level of income, whom they live with, personal health perception, negative life experience and use of spare time also affect the self-efficacy and depression; the depression level of females is higher and these findings are also statistically important. Comprehensive consideration of elder people along with those results, definition of the depression at an earlier stage, preparation and implementation of the training programs to increase the self-efficacy, to be able to use their own potentials at a higher level in their daily life and to cope with the depression, provision of psychiatric rehabilitation services to the elder people regularly, and cooperating with their family to enable a social support should be tried. In all these implementations, especially the mental health nurses working in preventive services have great responsibilities and it is suggested the nurses to be aware of their respective responsibilities on the matter.

Conflict of interest

The authors declare not to have any conflicts of interest.

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