

ACCEPTED ARTICLE

Evaluation of Different Causes and Consequences in Women Patients Involved in Alzheimer's disease

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Abstract

The aim of the present research to identify the differences between the social acceptance, attention, and emotional and social loneliness feeling in women suffering from Alzheimer's and normal. The sample was analyzed in this study included 39 women age 51 to 69 years with the scope of that 19 of them with Alzheimer's disease (AD) and 18 people had normal cognitive function and healthy in the city of Gorgan in the winter 1395 in the study. Identification of Alzheimer's sufferers and healthy based on the diagnosis of the physician and cognitive status questionnaire (SPMSQ) and they were asked to answer the social acceptance of the scale questionnaire Marlow and Craven, affective and social adults alone feel scale (SELSA-S), Spotlight questionnaire (FAQ). The data using analysis of variance, multivariate factor test method (MANOVA) were studied. The results of this test indicate that it is totally focused attention between petty scale, the Spotlight focused on the notion of social acceptance of social interaction and social-emotional feeling lonely scale in women suffering from Alzheimer's and normal according to the analysis of the one-way variance of a significant difference in the context of manova level ($P < 0.001$). But in the other scale retail spotlight focused on his research, a significant difference was not observed. According to the results of the research in general can be found stating that to provide family-centered care and the implementation of the health-welfare interventions by relevant organs with different educational, supportive, emotional and consultation approaches, can be effective on health promotion of public health and the actual need in the community.

Keywords: Alzheimer's Disease, Loneliness, Social-Emotional, Social Acceptance, Attention Focused

1. Introduction

In the hierarchical order of life and changes, adult age is considered the final period. When it comes to elderly individuals many studies indicate that there are vast majority who are suffering from various disease, namely diabetes, mental disease like addiction (shahsavari et al., 2013), HIV (Mohseni Tabrizi and Hekmatpour, 2016), cancer (Jafarzadeh et al. 2018), and so forth. It seems that some of the completeness properties such as experience and wisdom reach their peak in this period. But, from another side, by passing

from the youth and entering to adult age, there comes to some losses in the person (Porter 2002). If we look to our environment, we can see the old who are still generative, healthy, positive and happy. But some others are dependant and inactive, or suffer from Alzheimer and don't even know their nearest relatives. It is about half a century that WHO has been working on the topic as a prevention of diseases for protecting the old's health.

There are many methods to evaluate medical situation of individuals, testin on animals with PET method (Sanaat et al. 2019 & 2020), Laboratory tests, edical experiences, peoffem method and etc. Growing older, make the different systems of body have disorder and this change makes the old choose to be alone, because of physical weakness they have a feeling of insecurity to others and they prefer being alone to being in the society. Also, mental changes such as the loss of memory, IQ, the receiver's weakness, increase the old tending to maintain the past memories and makes a defensive mechanism from it which pulls the old person from critical times to desirable world of the past. (Porter 2002). One of the diseases that some people are exposed to it in more than 60 year old, is Alzheimer. It is an advanced disease that hurts the brain and makes the person's memory, mind and behavior disordered. (Badali & colleagues 2001) Peri and Hagez (1999) have classified the models of attention disorder which are seen in AD patients, in 3 parts:

1. Attention division (the ability to focus the attention sources between several stimulus
2. Chooosen attention (the ability to focus the attention on 1 related stimuli and ignore the unrelated ones)
3. Keep attention(the ability to maintain the attention focus during the time)

Focused attention on others is a mood in which the person focuses on the other's behavior, movements and sayings or doing assignments that it is a normal in social interactions. original self-knowing happens when the person concentrates on him/herself as a social thing; mental self-knowing is when the attention is faraway from oneself toward the external things. In contrast, mental self-knowing is a non self-knowing, where the attention is leaded to the persons and events in the external environments. It seems that the loss of social skills is part of learning inability (soleimanfar et al. 2015 & 2016). Than can prevent forming the positive relations with others. Some studies have shown that people who have learning inability are more likely to show their loss of social skills. The meaning of social acceptance is the person's understanding of society according to the others' properties and involves accepting increasing with others, rely on others' being positive, and positive approach to human's exist that all of them cause the person to feel convenient along with the whole society. (Ericson & colleagues 2006). As mental health involves self-acceptance and also, accepting others in society leads to social health and people in every age like the young and the old, who have this dimension of health, understand the society in the whole set. Which iss formed from different persons and relies on the others. And believe that the people can be efficient. (Zoroufi 1394). In social acceptance, the person has the positive view and feeling toward him/herself and past life and accepts all dimensions of life. Wanderwal (2004) in another definition, has defined the social acceptance : loss of opposition for managing a system. From the other side, Schad & Schlog (2003) believed that the presented definitions are paradoxes about this topic. They know separate these words (acceptance) and (the rate of acceptance). The first is a positive view toward a special topic and the second meaning is adaption of behavior with system's aims. Also, one of the discussing topics in social and mental disorders, is the feeling of loneliness resulted from social rejections and eliminating the supportive environment because of choosing and continuing these risk behaviors. In Pila & Perlman's view, there are 2 kinds of loneliness: 1) emotional which appears following the loss of an important dependence or lose such a link. 2) social: appears following loss of correlation to a net of social relationship. In the view of Haylen and Groun (1992) there is a relationship between the feeling of loneliness and social mental problems such as alcoholism, suicide, depression, reasons, being guilty, education failing (Heydari 1395) generally, the Alzheimer happens between 50 to 60 years and comes into view in every patient differently and is the result of a calm brain and physical disorder that it's signals aren't touchable at first, so that the patient and his/her relatives don't realize any abnormal situation until it comes to the memory. (Porter 2003). Once insulin binds with IR there is the activation of various several tyrosine residues by auto phosphorylation (Fig. 1).

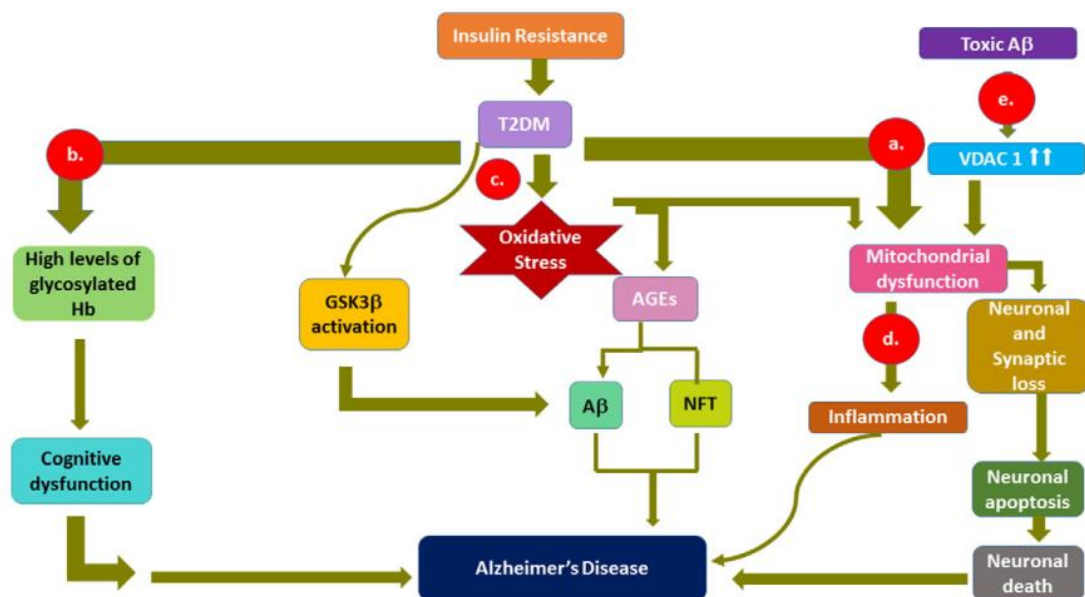


Fig. 1. Schematic representation of T2DM/insulin resistance in Alzheimer's disease through a) mitochondrial dysfunction, which in turn causes synaptic damage, and neuronal death, b) glycosylated hemoglobin in impaired cognitive function by failure in the transport of glucose for neurons, c) oxidative stress-induced amyloid beta and phosphorylated tau formations through advanced glycation end products, d) inflammation by mitochondrial dysfunction and toxicities of amyloid beta and glycation end products, e) activation of voltage-dependent anion channel by amyloid beta-induction in neuronal loss.

2. Methodology

The method of this descriptive research is kind of comparison or beyond eventual. The statistic sample of this research involved 39 women from 51 to 69 years old which 16 people were suffering from AD and 18 people had a natural and healthy performance in Gorgan and in winter 1395 and took part in this research.

2.1. The measure's tools

The social acceptance test scale was made by Marlou and Crown for measuring the rate of social acceptance in people. This is one of the most reliable scales. This test has 33 phrases and the testee should choose one of yes/no options, and then determine his/her approval or opposition with that. The testee's answers are adapted with the key answers of the scale and the total answers, determines the general answers for each person

2.2. The scale of social emotional loneliness in adults

This scale was designed and gathered by Di Thomaso, Braton & Best in 2004, according to voce division... this scale involves 14 buoys and 3 underscale romantic loneliness (5 buoys), family (5 buoys) and social (5 buoys), and the mental loneliness is obtained from the total grades of family and romantic.

2.3. The questionnaire of the central attention:

This questionnaire is made by Woody, Chambles and Glass in 1977 and has 2 underscales with 5 grade questions. It has 10 buoys. Its underscales are the scale of the central attention to self, and the scale basic central social interaction. Every buoy involves one scale of 5 grades which shows how much similar the testee's central attention is.

2.4. The questionnaire of assessing the social cultural approaches , Hafsted

This questionnaire is made by Dourfman and Havel (1993) and involves 25 questions that measure and evaluate 4 aspects of manliness, risk accepting, power distribution and togetherness.

Table 1: Mean and standard deviation of focused attention, social acceptance, social & emotional loneliness

Variable	Squad	M	SD	Number
Social acceptance	Women with Alzheimer's disease	24.2000	4.49706	35
	Ordinary women	28.2432	4.61522	37
Romantic	Women with Alzheimer's disease	25.3714	3.60625	35
	Ordinary women	26.6216	4.15232	37
Household	Women with Alzheimer's disease	23.3143	4.20624	35
	Ordinary women	25.4054	4.57930	37
Social	Women with Alzheimer's disease	24.0286	5.06711	35
	Ordinary women	28.0000	4.69633	37
Spotlight focused	Women with Alzheimer's disease	24.7429	4.24502	35
	Ordinary women	26.1622	4.31093	37
Association with the basic idea of social interaction	Women with Alzheimer's disease	23.4571	3.83745	35
	Ordinary women	25.0270	5.03039	37
Patriarchal (male-dominated)	Women with Alzheimer's disease	3.1579	1.30277	35
	Ordinary women	2.4211	0.69248	37
Plurality (individualism)	Women with Alzheimer's disease	2.0526	1.02598	35
	Ordinary women	3.0526	1.05086	37
Risk (uncertainty avoidance)	Women with Alzheimer's disease	3.4737	1.38918	35
	Ordinary women	2.0524	0.91127	37
Distribution of power (power concentration)	Women with Alzheimer's disease	4	1	35
	Ordinary women	2.1579	0.83421	37

Table 2: Box homogeneity of variance-covariance matrices

Test box	61.945
ANOVA	0.786
Degrees of freedom 1	55
Degrees of freedom 2	4185.186
Meaningful	0.874

Table 3: significant lack of consistency variance Levene test review

Variable	F	DOF 1	DOF 2	meaningful
Acceptance	1.161	1	36	0.288
Romantic	0.312	1	36	0.580
Household	6.881	1	36	0.013
Social	1.052	1	36	0.312
Spotlight focused	2.587	1	36	0.116
Distribution of power (power concentration)	0.858	1	36	0.360
Patriarchal (male-dominated)	1.178	1	36	0.103
Plurality (individualism)	0.157	1	36	0.18
Risk (uncertainty avoidance)	0.102	1	36	0.87
Distribution of power (power concentration)	0.001	1	36	0.979

3. Results

Due to a significant lack of homogeneity of variance test test box and a significant lack of homogeneity of variances test with all likelihood it can be said Levin Mirrors data and assumptions multivariate analysis of variance (MANOVA) were not met.

Table 4: Results of multivariate analysis of variance (MANOVA) focused attention on the difference between the scores, acceptance of social, cultural attitudes and social and emotional loneliness in women with Alzheimer's disease and normal

value	ANOVA	Hypothesis DOF	Error DOF	Significance level	Exam Name
Playy effect	0.741	7.714	0.0001	0.00027	.001
Wilkes Lambdayy	0.259	7.714	0.0001	0.00027	.001
Hotelling effect	2.857	7.714	0.0001	0.00027	.001
The root of the error	2.857	7.714	0.0001	0.00027	.001

Table 3: Results of multivariate analysis of variance, focused attention on the difference between the scores, acceptance of social, cultural attitudes and social and emotional loneliness in women with Alzheimer's disease and normal show. As the above table shows all the tests Manoa (Playy effect $F = 0.741$, Lambdayy Wilkes $F = 0.259$, Asrhtlyng $F = 2.857$, the root of the error $F = 2.857$) levels ($P < 0.001$) were significant, To understand this difference ANOVA was performed at Manoa text that results in the table listed later.

Table 5: results of ANOVA in the Manoa focused attention on the difference between the scores, acceptance of social, cultural attitudes and social and emotional loneliness in women with Alzheimer's disease and normal

Source Distribution	Variables	meaningful	ANOVA	average of squares	DOF	sum of squares
Squad	Acceptance	.000	14.685	354.105	1	354.105
	Romantic	.004	9.318	217.921	1	217.921
	Household	.025	5.490	222.737	1	222.737
	Social	.006	8.525	336.026	1	336.026
	Spotlight focused	.341	.931	38.000	1	38.000
	Distribution of power (power concentration)	.049	4.155	176.947	1	176.947
	Patriarchal (male-dominated)	.036	4.742	5.158	1	5.158
	Plurality (individualism)	.022	5.710	9.500	1	9.500
	Risk (uncertainty avoidance)	.001	13.900	19.184	1	19.184
	Distribution of power (power concentration)	.000	38.017	32.237	1	32.237

The ANOVA in the Manoa significantly different ($P < 0.001$) there. Table of Contents The table above shows the difference between the two groups in terms of acceptance ($F = 14.865$), Romantic ($F = 217.921$), family ($F = 222.727$), social ($F = 236.026$) and Imagine spotlight focused on social interaction ($F = 176.947$), the level ($P < 0.001$) is significant. And the other in scale focused research focus was no significant difference.

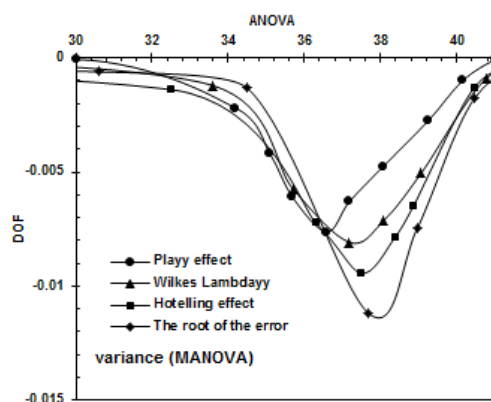


Fig 2. : Results of multivariate analysis of variance (MANOVA) focused attention on the difference between the scores, acceptance of social, cultural attitudes and social and emotional loneliness in women with Alzheimer's disease and normal

4. Conclusion

This research is done with the aim of exploring the comparison between focused attention, social acceptance, cultural approaches and social-mental loneliness in women who are normal or suffer from Alzheimer. Generally, there was a meaningful difference in 3 variables of 2 groups. In collectivism underscale, the women of Alzheimer tend to approach of cultural oneism. And normal women tend to be in society. In minerscale of risk, woman of group 1 tend to avoid from confidence while normal women tend to take more risk. because the home nurses and family, specially wives and girls can be the best sources of treatment, support, and caring of the old who suffer from the timing diseases such as Alzheimer, providing family-oriented care and managing welfare sanitary interfering by so called organs with consultative, emotional, supportive, and educational different approaches can be efficient in improving the health level of patients and is a necessity in the society.

References

- Berardi, A. Parasuraman, R and Haxby, J. V. (2001). Overall vigilance and sustained attention decrements in healthy aging. *Experimental Aging Research*, 27, 19-39.
- Cassidy, J. (2012). Loneliness and peer relations in adolescence. *Soc Dev.*, 21: 273-293. 10.1111/j.1467-9507.2011.00611.x
- Eriksson, L. J., Garvill and A. M., Nordlund. (2006). Acceptability of travel demand management measures: The importance of problem awareness, personal norm, freedom, and fairness. *J. Environ. Psychol.* 26, P.p: 15-26
- Jafarzadeh, M., Mousavizadeh, K., Joghataei, M. T., Bahremani, M. H., Safa, M., & Asghari, S. M. (2018). A Fibroblast Growth Factor Antagonist Peptide Inhibits Breast Cancer in BALB/c Mice. *Open Life Sciences*, 13(1), 348-354.
- Mohseni Tabrizi, A., & Hekmatpour, P. (2016). HIV/AIDS related stigma in Iran: A qualitative study. *IAU International Journal of Social Sciences*, 6(2), 13-19.
- Porter, S.h. (2002). *New Hope for People with Alzheimer's and their Caregivers: Your Friendly, Authoritative Guide to the Latest in Traditional and Complementary Treatments*, New York: Crown Publishing
- Sanaat, A., Arabi, H., Ay, M., & Zaidi, H. (2019). Novel preclinical PET geometrical concept using a monolithic scintillator crystal offering concurrent enhancement in spatial resolution and detection sensitivity: a simulation study. *Phys Med Biol*. doi:10.1088/1361-6560/ab63ef
- Sanaat, A., Arabi, H., Mainta, I., Garibotto, V., & Zaidi, H. (2020). Projection-space implementation of deep learning-guided low-dose brain PET imaging improves performance over implementation in image-space. *J Nucl Med*. doi:10.2967/jnumed.119.239327
- Schade, J. & Schlag, B. (2003). Acceptability of urban transport pricing strategies. *Transportation Research Part F: Traffic Psychology and Behaviour*. 6 (1), P.p: 45-61.
- Schuitema, G. (2010). *PRICELESS POLICIES Factors influencing the acceptability of transport pricing policies*. unpublished doctoral dissertation, Groningen University.
- Shahsavari, F., Kheirollahi, A., Jafarzadeh, M., & Hedayati, M. (2013). SUMO4 M55V Polymorphism is associated with diabetic nephropathy in Iranian type 2 diabetes patients. *Life Science Journal*, 10(5s).
- Shahsavari, F., Ghanadi, K., Jafarzadeh, M., Nasiri, B., & Forutani, S. (2013). Opium addiction decreases T3 uptake amount. *Life Science Journal*, 10(5s), 485-487.
- Soleimanifar, S., Jafari, Z., Zarandy, M. M., Asadi, H., & Haghani, H. (2016). Relationship between intelligence quotient and musical ability in children with cochlear implantation. *Iranian journal of otorhinolaryngology*, 28(88), 345
- Soleimanifar, S., Jafari, Z., & Zarandy, M. M. (2015). Validity and Reliability of "Parental Attitudes of Various Aspects of Cochlear Implantation" Questionnaire. *Iranian journal of otorhinolaryngology*, 27(83), 449
- Stickley, A. (2014). Loneliness and health risk behaviours among Russian and U.S. adolescents: a cross-sectional study. *BMC Public Health*, DOI: 10.1186/1471-2458-14-366.
- Stickley, A., Koyanagi, A., Roberts, B., Richardson, E., Abbott, P., Tumanov, S., McKee, M. (2013). Loneliness: its correlates and association with health behaviours and outcomes in nine countries of the former Soviet Union. *PLoS One.*, 8: e67978-10.1371/journal.pone.0067978.
- Victor, C.R., Burholt, V., Martin, W. (2012). Loneliness and ethnic minority elders in Great Britain: an exploratory study. *J Cross Cult Gerontol.*, 27: 65-78. 10.1007/s10823-012-9161-6.
- Zue, J. B., Hudson, J. L., & Rapee, R. M. (2007). The effect of attentional focus on social anxiety. *Behavior Research and Therapy*, 45, 2326-2333.