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FAMILY RELATIONSHIPS AS A RISK FACTOR FOR LATE LIFE DEPRESSION

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A b s t r a c t: *Aim:* To explore the association between depression in older adults and marital status, marital quality and relationships with close family members.

Methods: This study is cross-sectional, carried out at the Department of Geriatric Psychiatry of Skopje Psychiatric Hospital. We studied 120 subjects, 60 patients with unipolar depression and 60 subjects without depression. There is no significant difference in the sex proportion and the average age between the two groups. Data were taken by questionnaire designed for the study. The Geriatric Depression Scale was used to measure depressive symptoms.

Results: The patients with late life depression reported significantly more dissatisfaction with marital relationships in their life ($p = 0.048$). The difference between the two groups in regard to living arrangements was statistically significant, because more patients lived in a geriatric institution ($p < 0.01$). The quality of family relations was confirmed with a significant difference ($p < 0.001$). Harmoniousness and toleration are considerably present in the families of the control group, while lack of interest, dislike and permanent conflictual relationships considerably predominate in the families of the experimental group. High significance was confirmed with regard to the feeling of emotional neglect and a feeling of being an unloved member of the family in the patients with depression.

Conclusion: Dissatisfaction with marital relationships was associated with a considerable risk of late life depression. The patients with late life depression reported significantly more conflictual family relations, a feeling of poor attention and neglect and the sense of not being a loved member of the family.

Key words: late life depression, older adults, risk factor, marital relationships, family relationships.

Introdution

Depression is a persistent alteration in mood, behaviour and cognition that has biological and psychological underpinnings and results in functional decline. Depression is not an inevitable outcome of ageing, but is a disorder of the brain that arises in the context of the medical illnesses and psychosocial stresses that accompany ageing. Late-life depression encompasses both patients with a late-life onset of depression (after age 60) and older adults with a prior and current history of depression. The psychosocial risk factors for depression in late life include impaired social support, loneliness, negative life events, etc. A cumulative load of stresses over a lifetime have been associated with late-onset depression [1]. Among the ageing population, anxiety and depression are currently the most prevalent mental health problems [2]. There is a need for more integrative models taking into account psychological, psychosocial, and macro-social risk factors as well as their interactions, which also connect these factors with physiological and endocrine responses. Furthermore, it is conceivable that across the life span, as well as across cultural settings, individual risk factors will add with varying emphasis to the higher prevalence of depression [3]. Because of the importance of relationships in the life of elderly, the loss of family support and disruptions in close relationships may play a role in a greater propensity toward depression in the elderly.

In this study, we examined the association between depression in older adults and several aspects of social relations such as marital status, the marital quality and relationships with close family members.

Material and Methods

This investigation represents an analytical cross-sectional case control study carried out at the Department of Geriatric Psychiatry of Skopje Psychiatric Hospital. The study included 120 older adults, in two examined groups. One experimental group comprising of 60 patients (45 female and 15 male) suffering from unipolar depression (F 32.x and F 33.x), diagnosed in accordance with the 10-th International Classification of Mental and Behavioural Disorders diagnostic criteria, but without a history of other psychiatric disorders or dementia, compared with the control group (42 female and 18 male) of community-dwelling older adults without a history of depressive symptoms or other psychiatric disorders or dementia. There was no significant statistical difference in the sex proportion in both groups ($p > 0.05$). The included patients of an average age of

70.43 ± 6.63 years; and for the control group an average age of 71.12 ± 6.49 years. With a t-test for independent samples we tested the difference in the average age between the first and the second group, and for the level of $p > 0.05$ ($p = 0.56$) it is statistically insignificant, i.e. the examinees do not differ significantly in relation to the age.

Only participants who had issued a prior written consent to their participation in the research were included.

Investigated data were taken by means of a questionnaire designed with that aim. The Geriatric Depression Scale was used to measure depressive symptoms. The outcome measure was a score of > 10 on the 30-item Geriatric Depression Scale [4].

The mean score in the Geriatric Depression Scale of the experimental group was 24.08 ± 3.67, whereas that of the control group it was 3.67 ± 3.09, for the t-value 23.92 and $p = 0.00000$. The scores in the Geriatric Depression Scale revealed a statistically significant difference between the experimental and the control group.

The collected data are presented in tabular form. The statistical analysis comprises: percentages, t-test for independent samples, D max for distribution in all categories between the two groups and x^2 test with Yates' correction for continuity to compare two frequencies between the two groups. The levels of probability for achieving the zero hypotheses in accordance with the international standards of the biomedical sciences are 0.05 and 0.01.

Results

Division of marital status was made in eight categories: never married, first marriage, second and third marriage, divorced, widowed, with partner, and separated. No significant difference in regard to the distributions of marital status was found between the experimental and the control group ($p > 0.05$) (Table 1).

Table 1 – Табела 1

Distribution of examinees in both groups by marital status
Дистрибуција на испитаниците од двете групи според брачната состојба

Marital status	Experimental group		Control group	
	N	%	N	%
Never married	3	5.00	1	1.67
First marriage	22	36.67	11	18.33
Second marriage	1	1.67	9	15.00

Third marriage	0	0	2	3.33
Divorced	5	8.33	7	11.67
Widowed	27	45.00	30	50.00
With partner	1	1.67	0	0
Separated	1	1.67	0	0
Total	60	100	60	100

Dmax = -0.22 p > 0.05 (distribution in all categories between two groups).

The distribution regarding the quality of marriage in life was divided into five categories: never married, successful marriage, tolerant, not successful, could not estimate. Distribution according to this question shows that in all categories the difference was not statistically significant between the experimental and the control groups (Dmax = 0.12 p > 0.05). But in the category of successful/not successful the difference was statistically significant between the two groups (Yates chi-square = 3.39 df = 1 p = 0.048). The respondents in the experimental group reported more not successful relationships with their spouses (Table 2).

Table 2 – Табела 2

Estimation of quality of marriage in life by examinees of both groups
Процена на квалитетот на бракот во текот на животот од испитаниците во двете групи

How do you estimate your marriage?	Experimental group		Control group	
	N	%	N	%
Never married	3	5.00	1	1.67
Successful*	17	28.33	26	43.33
Tolerant	25	41.67	20	33.33
Not successful*	14	23.33	8	13.33
Couldn't estimate	1	1.67	5	8.33
Total	60	100	60	100

Dmax = 0.12 p > 0.05 (distribution in all categories between two groups).

*Yates chi-square = 3.39 df = 1 p = 0.048 (x^2 test with Yates' correction for continuity was used to compare frequencies of parameters successful/not successful between the two groups).

The living arrangements were divided into six categories: alone, with spouse only, with spouse and children, with children without spouse, living in a geriatric institution, or with others who are not spouse or children. 55% of the

older persons in the experimental group and 53.33% in the control group live in a family setting. 21.67% of the older persons in the experimental group live alone as against 46.67% of the older persons in the control group. 30% reported living with children from the experimental group and 23.33% from the control group. 21.67% of subjects from the experimental group live in a geriatric institution and 1.67% live with others who are not spouse or children, as against 0% from the control group. The difference between examinees from the experimental and control groups with regard to the living arrangements was statistically significant, because there was a considerable number of examinees from the experimental group as against older adults in the control group who lived in a geriatric institution (Dmax = 0.3 $p < 0.01$). (Table 3).

Table 3 – Табела 3

Living arrangements in both groups
Актуелно живеалиште кај двете групи

Living arrangements	Experimental group		Control group	
	N	%	N	%
Alone	13	21.67	28	46.67
With parents	0	0	1	1.67
Only with spouse	15	25.00	17	28.33
With children without spouse	11	18.33	9	15.00
With spouse and children	7	11.67	5	8.33
Geriatric institution	13	21.67	0	0
With others	1	1.67	0	0
Total	60	100	60	100

Dmax = 0.3 $p < 0.01$ (distribution in all categories between the two groups).

About the relations in the family 50% of patients as against 85% subjects from the control group responded that there were harmonious and tolerant relations in their family. In fact intolerant and conflictual family relations were more common among the patients in the experimental group (25.67%) as against examinees in the control group (10%). The distribution of examinees in the experimental and the control group with regard to quality of family relations confirmed a statistically significant difference (Dmax = 0.37 $p < 0.001$). From the distribution demonstrated we can note that harmoniousness and toleration are considerably present in the families of subjects without late life depression, while lack of interest, dislike and permanent conflictual relationships considerably predominate in the families of patients with late life depression (Table 4).

Table 4 – Табела 4

Distribution by quality of family relations in both groups
Дистрибуција на одговорите за квалитетот на семејните релации во двете групи

What are the relations like in your family?	Experimental group		Control group	
	N	%	N	%
Couldn’t estimate	0	0	1	1.67
Harmonious relations	1	1.67	10	16.67
Tolerant ralations	29	48.33	41	68.33
Uninterested	6	10.00	4	6.67
Dislike	6	10.00	2	3.33
Conflictual relations	10	16.67	0	0
Variable relations	8	13.33	2	3.33
Total	60	100	60	100

Dmax = 0.37 $p < 0.001$ (distribution in all categories between the two groups).

The investigation concerning the sense of poor attention and neglect in the family from close family members gave a positive respond from 61.67% from the examinees in the experimental group as against 11.67% of the control group. The difference in relation to the feeling of emotional neglect in the family in the patients with depression and older adults in the control group was confirmed statistically (Yates chi-square = 29.56 df = 1 p = 0.00000) (Table 5).

Table 5 – Табела 5

Feeling of poor attention and neglect in family reported by subjects in both groups
Чувство на недоволно внимание и занемареност во семејствата рапортирани од испитаниците во двете групи

Are you feeling poor attention and neglect in your family?	Experimenal group		Control group	
	N	%	N	%
No	23	38.33	52	86.67
Yes	37	61.67	7	11.67
Coudn't estimate	0	0	1	1.67
Total	60	100	60	100

Yates chi-square = 29.56 df = 1 p = 0.00000 (x^2 test with Yates’ correction for continuity was used to compare frequencies of yes/no responses between the two groups).

The answers of the subjects as to whether they feel like a loved member of the family by testing the distribution between the experimental and control groups were confirmed with a high statistical significance between the experimental and control groups. (Yates chi-square = 13.13 df = 1 p = 0.0003). Patients with late life depression to a considerable extent considered that they were not loved members of the family (Table 6).

Table 6 – Табела 6

Feeling of being loved/unloved member of family reported by subjects in both groups
Чувство на сакан/несакан член во семејството рапортирано од испитаниците во двете групи

Are you a loved member of the family?	Experimental group		Control group	
	N	%	N	%
No	23	38.33	5	8.33
Yes	37	61.67	54	90.00
Couldn't estimate	0	0	1	1.67
Total	60	100	60	100

Yates chi-square = 13.13 df = 1 p = 0.0003 (x^2 test with Yates' correction for continuity was used to compare frequencies of yes/no responses between the two groups)

Discussion

Few studies have looked at the differential association between social relationships and depression in older populations, and their results are limited to certain specific aspects of relationships, such as marital status or social support [5]. There are studies which confirm with their research that marriage is a protective factor against depression. However, according to another study, the effect of marital status on mental health varies depending on the region or society in which the study was carried out [6]. We consider that cultural differences should be taken into consideration when research is done on this issue. In our research about marital status we found no statistical differences between experimental and control groups. But this finding is not sufficient for a real picture of the association between marital status and late life depression without analysis of the relationship between spouses.

According to Mechakra-Tahiri *et al*. having a confidant and/or being engaged in a good marital relationship was negatively associated with depress-

sion in both men and women [5]. The presence of non-conflictual relationships with one's partner was associated with a decreased probability of reporting a depressive disorder in both men and women [7]. Even more, some studies noted that marital dissolution were also significant contributors to suicidal tendenscies [8] and family cohesion is one of the factors that may reduce suicide rates and proneness to depression [9]. In our research as well, the difference with regard to quality of marriage in life in the category of successful/not sucscesssful between the two groups was statistically significant. The respondents in the experimental group reported more unsuccessful relationships with their spousses. Results showed that dissatisfaction with marital relationships was asssociated with a considerable risk of late life depression. We confirmed that poor marital relations is a risk factor for late life depression.

Size and availability of family support networks are the two most imporstant factors in deferring or preventing the institutionalization of elderly perssons. According to Jongenelis *et al*. nursing-home based studies on risk insdicators of depression are scarce. They concluded that the prevalence of depression in the nursing home population is very high, three to four times higher than in the community-dwelling elderly. Consequently, optimal physical treatment and special attention and a focus on psychosocial factors must be major goals in developing care programmes for this frail population [10]. In our research with regard to living arrangements it is shown that the same percentage of older persons in both groups lived in a family setting, but the difference is considerable in the number of examinees from the experimental group as against older adults in the control group who lived in a geriatric institution. Living in a geriatric institution was associated with a considerable risk of late life depsresssion.

Some studies on risk factors that contribute to depression in the elderly include loneliness and living alone [11]. In our study of "living alone" we got opposite results: more of the older adults from the control group lived alone than patients with late life depression. But we think that this factor ought to be considered together with family relationships.

De Vogli *et al*. in their study say: "There is a growing body of literature that shows that being exposed to negative relationships that increase worry, anxiety, and feelings of low self-esteem can in the long term produce emotional effects that may trigger biological changes in the body." They said that poor marital quality has previously been reported as an important prognostic factor for heart disease. They suggest that negative close relationships may be more powerful predictors of health than other aspects of social support [12]. We agree with De Vogli that close relationships are very important, particularly in our culture. Moreover, in our study we take note that negative close relationships are powerful predictors not only for health and well-being in general, but also for depression in late life. In our results on the distribution of examinees in the

experimental and control groups with regard to the quality of family relations a statistically significant difference was confirmed. From the distribution we can note that harmoniousness and toleration are considerably present in the families of subjects without late life depression, while lack of interest, dislike and permanent conflictual relationships considerably predominate in the families of patients with late life depression.

The investigation on the difference with regard to the sense of poor attention and neglect in the family from close family members was statistically confirmed. The percentage of examinees from the experimental group is higher than that in the control group on this question.

High statistical significance was obtained from testing the distribution of experimental and control groups with regard to the answers of subjects as to whether they feel like a loved member of the family in both groups. A considerable number of patients with late life depression considered that they were not loved members of the family. All previous results have shownd that conflictual family relations, a feeling of poor attention and neglect and feeling like an unloved member of the family were more common in the patients as against examinees in the control group. On the other hand in the control group even if the older adults lived more often alone, they did not have conflictual family relationships, and they had strong family networks and support.

Mechakra-Tahiri found that there was no association found between relationships with adult children, siblings and friends and depression in older men and women in Quebec [5]. This result is different from those reported in some studies which show that offspring are salient for older adults' mental health [13, 14, 15]. In our study it is also noted that offspring were salient for the elderly. In the United States, Silverstein *et al*. showed that support from adult children was important for older adults only if they were in a situation where they needed help (in poor health or widowed) [16].

The elderly in our country give particularly importance to support from offspring. Close parent-child relations are very important relationships for the elderly in our country. Our analysis showed that the elderly with late life depression are dissatisfied and lonely because they lack the kind of relationship they desire. However, the majority of our examinees from the experimental and the control groups expect adult children to be available to help them in time of need. Family network and support are important protective factors in late life depression. For our elderly social relations and social network are in second place mostly due to their financial state.

It is known that social integration is related to participation in the community: regularly going for leisure activities, to cultural or social centres, doing volunteer work, regularly attending religious services, etc. In our cultural and

social-economic specifics the majority of the elderly are not engaged with life, defined as involvement in social, leisure, and productive activities. In our research it is noted that family support and a network for persons with late life depression are lowered, so that in the prevention of depression it is very important that society offers programmes for social support and a good social network for the elderly population.

In conclusion, **o**ur results suggest that some specific aspects of family relationships could play an important role in depression in older adults. We confirmed that a poor marital relationship is a risk factor for late life depression, and it could be an important prognostic factor for depression too. In our study with regard to living arrangement it was proved that living in a geriatric institution is a risk factor for late life depression. The results showed that conflictual family relations, the feeling of poor attention and neglect and feeling an unloved member of the family were more common in the patients in the experimental group as against examinees in the control group.

Based on our research on the risk factors in late life depression, it would be possible to suggest early interventions to reduce late life depression. Also that focusing on older people with compromised family support whould help in both the prevention and recognition of the onset of later-life depression.

This study contributes to the scarce literature on the effects of family relationships, support and conflict on depression in older adults. We recommend further research with more possible risk factors for late life depression with a larger number of examinees.

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Р е з и м е

СЕМЕЈНИ РЕЛАЦИИ КАКО РИЗИК ФАКТОР ЗА ДОЦНА ДЕПРЕСИЈА

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Целта на студијата е анализа на врската меѓу доцната депресија и брачниот статус, квалитетот на бракот и релациите со блиските членови на семејството.

Истражувањето претставува аналитичка пресечна студија со контролна група, спроведена во Одделот за психогеријатрија на Психијатриската болница „Скопје“. Студијата опфати 120 субјекти, 60 пациенти со униполарна депресија и 60 лица без депресија. Не постои сигнификантна разлика во пропорцијата по пол и просечна возраст помеѓу двете групи. Податоците се добиени со користење на прашалник дизајниран за оваа студија. Геријатриската скала за депресија е користена за мерење на депресивните симптоми.

Пациентите со доцната депресија рапортираат сигнификантно поголема диссатисфакција од брачните релации во животот ($п = 0.048$). Разликата помеѓу двете групи во поглед на актуелното живеалиште е статистички сигнификантна, заради големиот процент на пациенти кои живеат во геријатриска институција ($п < 0.01$). Квалитетот на семејните релации помеѓу двете групи беше потврден со статистички сигнификантна разлика ($п < 0.001$). Хармоничноста и толеранцијата значајно повеќе се присутни кај семејствата на испитаниците од контролната група, додека незаинтересираност, нетрпеливост и перманентни конфликтни релации значајно предоминираат кај семејствата од експерименталната група. Висока сигнификантност беше потврдена во поглед на чувството на емоционална занемареност и чувството на несакан член во семејствата на пациентите со депресија.

Диссатисфакцијата од брачната релација беше во асоцијација со значаен ризик за развој на доцната депресија. Пациентите со доцната депресија репортираат сигнификантно повеќе конфликтуални семејни релации, чувство на недоволно внимание и занемарување и чувство на несакан член на семејството.

Клучни зборови: доцната депресија, постари лица, ризик фактори, брачна релација, семејни релации

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