A – Study Design
B – Data Collection
C – Statistical Analysis
D – Data Interpretation
E – Manuscript Preparation
F – Literature Search
G – Funds Collection

Psychogenic factors as a cause of depressive disorders in the elderly

Madina Kassymzhanova[A,B,C,D,E,F,G]
ORCID: 0000-0001-7102-4171
Natalya Raspopova[A,B,C,D,E,F]
ORCID: 0000-0001-8456-1822

Department of Psychiatry and Narcology Kazakh National Medical University named after S.D. Asfendiyarov, Republic of Kazakhstan

SUMMARY

Background: Individuals with particular qualities or characteristics are predisposed to develop cognitive impairment non dementia. The mainaim to study socio-demographic factors and personality traits, that contribute tothe development of depressive disorders in elderly patients with cognitive deficits. The purpose of the article was to show that it is important to investigate the socio-psychological factors that can worsen the course of cognitive impairment, which already comes with age.

Material/ Methods: During the research an observational study involving 111 patients from Kazakhstan with cognitive deficits was conducted: 59 patients, whose depressive disorders had been identified by clinical and psychopathological research using the Hamilton Depression Rating Scale (HRSD) and 52 patients for whom psychogenic depressive disorders had not been defined. The recruitment of the study participants was carried out in the state nursing home for the elderly and disabled. The study included male and female individuals aged 60-74 years with different national and ethnic backgrounds, with mild to moderate cognitive impairment, who wished to participate in the study and signed an informed consent to participate in the study.

Results: This study uncovered the primary factors that increase the chances of individuals with cognitive impairments developing a depressive disorder. These factors include personal attributes of the patients, such as their sex, whether they are married or not, and the quality of their relationship with their family members. In addition, personality traits from before their cognitive decline, such as a tendency for isolation, insecurity, and passivity, were also significant.

Conclusions: This study could have an exceptional value for medicine and psychological workers on the whole and in Republic of Kazakhstan in particular to prevent depressive diseases were mentioned.

Keywords: depressive disorders, cognitive deficits, elderly people, psychological diseases, Kazakhstan

INTRODUCTION

The elderly population aged 60 years or overis steadily growing worldwide. From 2015 to 2050 the proportion of people over 60 in the world's population is expected to increase from 12% to 22%. In absolute terms, this percentage increase translates as an increase from 900 million to 2 billion elderly people.The most common neuropsychiatric disorders in this age group are dementia and depression, affecting ~5% and 7% of the world's older population, respectively, while anxiety disorders account for 3.8% of older people. In addition, ~25% of deaths from self-harm occur in people aged 60 years or older (World Population Ageing, 2017).

Old age is a sensitive period during a person's life and is second only to adolescence in terms of vulnerability (Shah et al., 2016). From the age of 60, the influence of psychogenic factors increases, ultimately triggering the development of mental disorders. Great contribution to the study of depressive disorders in the elderly of Kazakhstan was made by scientists R. G. Ilesheva(1981), G. M. Kudyarova (1989), Zaltsman I. G. (1998) Izmailova N. T. et al. (2000). In their works is noted, that at this age depression is one of the most frequent types of mental pathology. Compared with depression in younger people, the proportion of depressive states with psychomotor retardation decreases. On the contrary, anxious agitation, sometimes reaching raptus, is much more often observed. Mental nerve block is less common but quite often emotional lability, irritability, and gloominess. The theme of depressive experiences is dominated by the ideas of damage and impoverishment and hypochondria. These factors can also aggravate the course and outcome of somatic diseases. Several studies highlight the importance of regular assessment of neuropsychiatric symptoms in patients with cognitive deficits in primary geriatric care services, in particular depression (Kim et al., 2020; Ikezaki et al., 2020; Ginsberg et al., 2019; Romero-Sevilla et al., 2018; Lacour et al., 2017). Indeed, by focusing on identifying depressive disorders in people at risk of developing dementia, medicine workers can help slow the rate of progression of cognitive deficits (Lara, 2017; Vicini Chilovi et al., 2009;Yang et al., 2020; Fischer et al., 2019; Yatawara et al., 2018; Petkus et al., 2017). In addition, there is accumulating evidence of an unfavorable association between anxiety and cognitive decline (Mora, 2013;Jia et al., 2020; Hu et al., 2021b; Zufferey et al., 2020; Watanabe et al., 2020; Rainero et al., 2020). This correlation is bi-directional; anxiety can increase with the progression of neurodegeneration and be an independent factor in the deterioration of cognitive status (Jenkins et al., 2021;Gigi and Papirovitz,2021; Thancharoen et al., 2020; Seifan et al., 2019; Nolte et al., 2019).

In addition to studying risk factors for the occurrence of cognitive deficits, researchers have also investigated protective factors (Pais et al., 2021; Delfino et al., 2018; Sutin et al., 2018; Johansson et al., 2014). There are many studies on the influence of protective factors on the development of various types of dementia, including having an active social life, participating in physical activity,

maintaining emotional wellness, and controlling the negative effects of stress (Wiegelmann et al., 2021; Sutin et al., 2021b; McGrattan et al., 2021; Krivanek et al., 2021; Fu et al., 2021; Floud et al., 2021). Recently published results from the Singapore Geriatric Study on the Status of Elderly show a correlation between happiness and higher cognitive scores; low happiness levels among the elderly with cognitive deficits have been associated with depression, disability, and loneliness (Tan et al., 2019). It has been demonstrated that identifying factors that influence the conversion of mild and moderate cognitive deficits to dementia can slow or prevent progressive deficits (Pan et al., 2021; Nelson et al., 2021; Silva et al., 2020; Sharma et al., 2020; Ma, 2020; Hu et al., 2021a). Based on the results of risk factor research, it seems possible to carry out preventive measures at an early stage to preserve and improve the cognitive functions of the aging population.

Kazakhstan is experiencing an accelerated rate of population aging (Vollset et al., 2020). The anticipated "epidemic of dementia" has prompted world-class experts to develop national plans to overcome its devastating socioeconomic impact (World Alzheimer's Report, 2018). To date, a limited number of studies on dementia and risk factors in Central Asia and Kazakhstan have been conducted (Tsoy et al., 2019b; Madenbay et al., 2018; Manton et al., 2004; Askarova et al., 2020; Tsoy et al., 2019a). Determining the factors influencing the conversion of mild and moderate cognitive deficits to dementia disorders could help us to restrain or even prevent progressive deficits as moderate cognitive deficits constitute a transitional stage in developing dementia with a conversion range of 10-15% per year (Eshkoor et al., 2015). For this reason, it was decided to determine the socio-demographic factors and personality traits that predispose elderly patients in Kazakhstan with cognitive impairment non dementiato the development of mixed anxiety-depressive disorders with cognitive deficits.

MATERIAL AND METHODS

During the research an observational study involving 111 patients from Kazakhstan with cognitive deficits was conducted: 59 patients, whose depressive disorders had been identified by clinical and psychopathological research using the Hamilton Depression Rating Scale (HRSD)and 52 patients for whom psychogenic depressive disorders had not been defined.

The recruitment of the study participants was carried out in the state nursing home for the elderly and disabled. The study included male and female individuals aged 60-74 years with different national and ethnic backgrounds, with mild to moderate cognitive impairment, who wished to participate in the study and signed an informed consent to participate in the study.

186 elderly people aged 60-74 years were examined. 111 patients were selected according to the leading selection criterion – the presence of cognitive impairment, not reaching the degree of severe dementia.

Criteria for exclusion of patients from the study:patients under 60 and over 75 years of age; patients with severe cognitive impairment due to the lack of the

possibility of purposeful communication (filling out informed consent, question-naires) and performing test tasks related to this study; patients in an acute psy-chotic state; patients with a history of mental pathology (schizophrenia, affective disorders, traumatic brain damage, epilepsy, etc.); patients who refused to par-ticipate at any phase of the research.

The associative relationship of depression with three groups of predictors was assessed: personal characteristics (sex, age, marital status, education, attitude to religion, relationships with relatives, psychopathological burden of heredity, and the age of onset of cognitive deficits); premorbid personality pattern (isola-tion, dependence, insecurity, passivity, selfishness, hostility, a tendency to feel guilty, and a tendency for self-justification), and the type of personality accentuation, according to Leonhard-Schmieschek (demonstrativeness, stuckness, pedantry, ex-citability, hyperthymia, dysthymia, anxiety, exaltation, and emotiveness).

Microsoft Excel and the SPSS Statistics package (IBM) were used for stati-stical processing of the data. The standard method was used to calculate the specific gravity (%) and standard error of the mean (± SE). Pearson's chi-squared test and the odds ratio (OR) were used to measure the reliability and closeness of the relationship between depression and the predictors studied.

Patients were included in the research sample after getting acquainted with the information about the objectives and methods of the study and signing the informed consent.Cognitive impairment using the Mini Mental State Examination (MMSE), as well as subjective complaints of cognitive impairment (memory im-pairment, lack of concentration, etc.) were assessed.

Among 111 patients with cognitive impairment,a HRSD questionnaire, a sur-vey, and a conversation to identify anxiety-depressive symptoms were con-ducted. All this was carried out by a psychiatrist, who had studied medical history of each patient. Additionally, the patients were examined by a neuropathologist and a clinical psychologist and a general practitioner.

Conversation and observation are the main clinical and psychopathological method for diagnosing mental disorders. Almost all patients had cerebrovascular and cardiovascular diseases, which indicates in favor of verification of vascular cognitive impairment.

At stage II,study and comparison of these groups according to the socio-de-mographic, personal-psychological, clinical and psychopathological data of the patients in the observed groups were occurred. It has been found out that two groups differ.

For instance, in the group with anxiety-depressive disorders, women, patients who did not have a spouse (died, divorced) predominated, and more often these patients had conflict relationships with close relatives. Also, in that group there were more of those patients who described themselves as private, uncommu-nicative, anxious and inactive individuals.

It can be assumed that these personality traits contributed to the fact that these patients were more often lonely, had conflict or had a cold relationship with relatives and given the fact that in Kazakhstan the homes of the elderly are quite

unpopular choice of destination, they were forced to go there. In Kazakhstan, the elderly is held in high esteem and usually they are less likely to live alone in old age.

Further, in this study there is a prescription of anti-dementia treatment for all patients (donepezil hydrochloride, memantine in dosages of either 5 or 10 mg according to the treatment protocol of Republic of Kazakhstan), also conducted cognitive training in both groups. In a group 1 – with anxiety-depressive disorders, additional antidepressants with anti-anxiety effects were prescribed and conducted psychotherapy. And the results of treatment were evaluated after 6 months, but this will be presented in another article. Below there is brief results description for the reference purpose.

RESULTS

An associationbetween depression and sex (p = 0.001), marital status (p≤ 0.001), and the nature of the patients' relationship with relatives (p=0.005) was revealed. Further, it was found that the chance of developing depression was higher in female patients (OR=3.657), lonely patients (OR=5.984), and patients with conflicting relationships with relatives (OR=3.222). The frequency of depression was higher in patients with the personality traits of isolation (OR=2.624, p= 0.016), insecurity (OR=2.879, p=0.007), and passivity (OR=2.175, p=0.049). Patients showing the "stuckness" effect (OR=2.924, p=0.049), pathological properties of dysthymia (OR = 2.279, p = 0.035), and anxiety (OR=4.345, p=0.001), were more likely to develop depression.

Following the diagnoses of depressive disorders in some patients using the HDRS, the existence of an associativerelationship between depression andthepatients' personal characteristics (common predictors) was assessed. It is clear now that depression was associated with sex(c^2=10.845, p=0.001), marital status (c^2=13.708, p≤0.001) and the nature of the patient's relationship with relatives (c^2=8.068, p=0.005) (Table 1).

Female had a 3.657-fold (in some cases, 8.020-fold) increased chance of a depressive disorder compared with male patients. The proportion of depressive disorders among women and men was 67.8±6.08% and 36.5±6.68%, respectively.

Depressive disorders were 5.984-fold more common in single patients than in married patients (OR CI 2.180÷16.425). The proportion of single and married patients with depression was 63.1±5.27% and 22.2±8.00%respectively.

The incidence of depression was higher among patients with conflicting relationships with relatives than among patients with benevolent and (or) formal relationships: 70.7±7.11% and 42.9±5.91% respectively. The strength of the association between depression and the nature of the patient's relationship with relatives was high;OR=3.222 (CI 1.415÷7.335).The predominance of women in the group (CIND+Depressive disorder) – 67.8%, while in the comparison group (depressive disorder) the majority were men – 63.5%. This can be explained by the greater emotionality of women compared to men and confirms the literature

Table 1. Association of depression with patients' personal characteristics (common predictors)

Common predictors	Depression scale (according to the HDRS)				OR	χ^2 Pearson's, p-value
	Depressive disorder group		Comparison group			
	Absolute number	%	Absolute number	%		
Gender					3.657 (1.667÷8.020)	χ^2=10.845, p = 0.001
female	40	67.8%	19	32.2%		
male	19	36.5%	33	63.5%		
Age					0.661 (0.304÷1.435)	χ^2=1.101, p = 0.294
over 65	34	49.3%	35	50.7%		
up to 65	25	59.5%	17	40.5%		
Marital status					5.984 (2.180÷16.425)	χ^2=13.708, p ≤ 0.001
single	53	63.1%	31	36.9%		
married	6	22.2%	21	77.8%		
Education level					1.051 (0.419÷2.634)	χ^2=0.011, p = 0.916
primary/secondary	47	53.4%	41	46.6%		
higher	12	52.2%	11	47.8%		
Religious beliefs					0.554 (0.222÷1.384)	χ^2=1.622, p = 0.203
atheist	10	41.7%	14	58.3%		
believer	49	56.3%	38	43.7%		
Relationship with relatives					3.222 (1.415÷7.335)	χ^2=8.068, p = 0.005
conflicting	29	70.7%	12	29.3%		
friendly and/or formal	30	42.9%	40	57.1%		
Psychopathological burden of heredity					1.986 (0.802÷4.920)	χ^2=2.242, p = 0.134
no	49	57.0%	37	43.0%		
yes	10	40.0%	15	60.0%		
Age of onset of cognitive deficits					0.869 (0.410÷1.843)	χ^2=0.134, p = 0.715
over 60	32	51.6%	30	48.4%		
up to 60	27	55.1%	22	44.9%		

that anxiety-depressive disorders in the general population are more common in women than in men.

Next the association between depression and the patients' premorbid personal characteristicswas looked (Table 2). Depression was conditioned by the personality traits of isolation (c^2=5.755, p=0.016), insecurity (c^2=7.360, p=0.007), and passivity (c^2=3.875, p=0.049).

A higher proportion of depressive disorders were identified in patients displaying the premorbid personal characteristic of isolation than in patients who did not display this characteristic (67.4±7.15% versus 44.1±6.02%; OR 2.624, CI 1.182÷5.825).

Depressive disorders were more typical for patients with the premorbid personality characteristic ofinsecurity than for patients who did not have this personality characteristic (65.0±6.16% versus 39.2±6.84%; OR 2.879, CI 1.329÷ 6.235).

The incidence of depressive disorders was higher among passive patients than patients who did not display this characteristic (64.4±7.14% versus 45.5± 6.13%; OR 2.175, CI 0.998÷4.741).Thus, premorbid character traits like insecurity, passivity and isolationdetermined the increased vulnerability of elderly patients to stressful situations and increased the risk of developing psychogenic anxiety-depressive disorders.

Table 2. Association of depression with patients' premorbid personal characteristics

Premorbid personal characteristics	Depression scale (according to the HDRS)				OR	χ^2 Pearson's, p-value
	Depressive disorder+CIND		CIND			
	Absolute number	%	Absolute number	%		
Isolation					2.624 (1.182÷5.825)	χ^2=5.755, p=0.016
yes	29	67.4%	14	32.6%		
no	30	44.1%	38	55.9%		
Addiction					1.943 (0.882÷4.282)	χ^2=2.749, p=0.097
yes	26	63.4%	15	36.6%		
no	33	47.1%	37	52.9%		
Uncertainty					2.879 (1.329÷6.235)	χ^2=7.360, p=0.007
yes	39	65.0%	21	35.0%		
no	20	39.2%	31	60.8%		
Passivity					2.175 (0.998÷4.741)	χ^2=3.875, p=0.049
yes	29	64.4%	16	35.6%		
no	30	45.5%	36	54.5%		
Selfishness					0.348 (0.160÷0.756)	χ^2=7.283, p=0.007
yes	19	38.8%	30	61.2%		
no	40	64.5%	22	35.5%		
Hostility					0.942 (0.386÷2.298)	χ^2=0.017, p=0.896
yes	13	52.0%	12	48.0%		
no	46	53.5%	40	46.5%		
Tendency to feel guilty					1.855 (0.872÷3.944)	χ^2=2.595, p=0.107
yes	34	60.7%	22	39.3%		
no	25	45.5%	30	54.5%		
Tendency for self-justification					0.357 (0.164÷0.776)	χ^2=6.919, p=0.009
yes	25	41.7%	35	58.3%		
no	34	66.7%	17	33.3%		

Finally, the association between depressive disorders andcharacteraccentuations according to K. Leonhard and H. Schmieschek(Methodology for the study, 1970) was looked (Table 3). It was identified that depression was associated with the "stuckness" effect (c^2=3.881, p=0.049), and the pathological properties of dysthymic (c^2=4.437, p=0.035) and anxious personality types (c^2=11.987, p=0.001).

The incidence of depression was higher among patients showing a stucktype of personality accentuation than patientswho did not show this effect (73.7± 10.10% versus 48.9±5.21%; OR 2.924, CI 0.974÷8.785).

The proportions of depressive disorders in patients with and without dysthymic personality typeswere 64.6±6.90% and 44.4±6.26%, respectively (OR 2.279,CI 1.053÷4.936).

The incidence of depression was significantly higher in patients with an anxious personality type than in patients who did not express this personality type (75.0±6.85% versus 40.8±5.83%; OR 4.345, CI 1.842÷10.247). The worsening of premorbid character traits such as isolation, passivity, uncertainty in elderly patients against the background of the development of vascular cognitive impairment contributed to the formation of accentuations (strengthening) of character traits mainly of the type of "anxiety", "dysthymia" and a tendency to "get stuck" on emotionally negatively colored experiences, which made these patients vulnerable

Table 3. Association of depression with patients' personality accentuations according to K. Leonhard and H. Schmieschek

Personalityaccentuations according to K.Leonhard and H. Schmieschek	Depression scale (according to the HDRS)				OR	χ^2 Pearson's, p-value
	Depressive disorder+CIND		CIND			
	Absolute number	%	Absolute number	%		
Demonstrativeness					0.327 (0.135÷0.787)	χ^2=6.486, p=0.011
tendency and/or accentuation	10	33.3%	20	66.7%		
not expressed	49	60.5%	32	39.5%		
Stuckness					2.924 (0.974÷8.785)	χ^2=3.881, p=0.049
tendency and/or accentuation	14	73.7%	5	26.3%		
not expressed	45	48.9%	47	51.1%		
Pedantry					1.641 (0.593÷4.542)	χ^2=0.921, p=0.337
tendency and/or accentuation	12	63.2%	7	36.8%		
not expressed	47	51.1%	45	48.9%		
Excitability					0.321 (0.146÷0.704)	χ^2=8.276, p=0.004
tendency and/or accentuation	17	37.0%	29	63.0%		
not expressed	42	64.6%	23	35.4%		
Hyperthymia					0.552 (0.251÷1.213)	χ^2=2.208, p=0.137
tendency and/or accentuation	17	43.6%	22	56.4%		
not expressed	42	58.3%	30	41.7%		
Dysthymia					2.279 (1.053÷4.936)	χ^2=4.437, p=0.035
tendency and/or accentuation	31	64.6%	17	35.4%		
not expressed	28	44.4%	35	55.6%		
Anxiety					4.345 (1.842÷10.247)	χ^2=11.987, p=0.001
tendency and/or accentuation	30	75.0%	10	25.0%		
not expressed	29	40.8%	42	59.2%		
Exaltation					0.272 (0.107÷0.694)	χ^2=7.929, p=0.005
tendency and/or accentuation	8	29.6%	19	70.4%		
not expressed	51	60.7%	33	39.3%		
Emotiveness					0.375 (0.172÷0.818)	χ^2=6.202, p=0.013
tendency and/or accentuation	27	42.9%	36	57.1%		
not expressed	32	66.7%	16	33.3%		
Cyclothymia					0.841 (0.364÷1.945)	χ^2=0.164, p=0.685
tendency and/or accentuation	15	50.0%	15	50.0%		
not expressed	44	54.3%	37	45.7%		

to stressful situations and contributed to the development of psychogenic anxiety-depressive disorders.

The mean value of the Hamilton Depression Scale (HDRS, HAM-D) before the complex intervention was 9.8 (standard deviation 1.5), after the interventions the mean value was 3.7 (SD±1.0). It can be qualified as a complete reduction of depressive disorders. The values of the difference in the test results disprove the null hypothesis, and confirm that, the means in the two groups after the interventions are unequal, and the mean difference is 6.119 (SD±1.566), CI (5.711; 6.527), *p* -value=0.000.

A similar positive dynamics (during treatment) therapy was observed in the level of anxiety.The mean score of the level of anxiety on the Hamilton anxiety scale (HDRS, HAM-Anxiety) before treatment was 15.0 points (SD±2.7), and after therapy this the indicator dropped to 5.1 points (SD±1.3). The test data in-

dicated that the null hypothesis should be refuted, since the average difference between the indicators was 9.881 (SD±2.738), CI (9.174; 10.589), *p*-value= 0.000.

It was assessed not only the dynamics of anxiety and depressive disorders, but also the level of cognitive impairment after 6 months of observation.In the group of patients with VCI, before treatment, the mean score of cognitive functions according to the MMSE Scale was 25.9 points (SD±1.2), after treatment the mean score result rose up to 26.7 points (SD±0.7). The difference in mean score before and after treatment was 0.8 points (SD±1.09), CI 1.074; -0.464, and *p* -value 0.000. In this case, it was managed to suspend the development of cognitive impairment.

In the group of patients with VCI + ADD (anxiety-depression disorder), the mean score of cognitive functions according to the MMSE Scale was 24.4 (SD ±0.6), after treatment the mean score result was 27.2 points (SD±1.0). The difference in values before and after treatment was 2.79 (SD±1.229), CI –3.117; –2.476, and *p*–value 0.000.

In the group, good treatment results were observed, given that an additionally application of psychopharmacotherapy and psychotherapeutic methods to treat psychotraumatic factors and personality traits, which were assumed to worsen the patients' conditions.

In Kazakhstan, the problem is that elderly patients often complain about the deterioration of cognitive activity, but doctors do not examine the problem comprehensively. Causes are not fully explored. Often, could be observed the situation when an older woman (widowed and abandoned) having deteriorated memory comes to see the doctor, while being already inuntreated stage.

And it often happens in the clinic that the grandmother's memory has completely deteriorated after the grandfather died, or she was left alone, the children all parted. And see a doctor in later stages.

DISCUSSION

Many researchers have investigated how various factors influence the development of mixed anxiety-depressive disorders in the elderly population (Hellwig and Domschke, 2019; Suradom et al., 2019;Beghi et al., 2021; Van der Heide et al., 2021; Alexopoulos, 2019). However, few studies have focused ondetermining the factors that might mediate the development of mixed anxiety-depressive disorders among the elderly with pre-existing cognitive disorders of a non-dementialevel.Due to a problematic of this knowledge gap, attention of the researchers was focused on identifying the socio-psychological characteristics that might mediate the development of mixed anxiety-depressive disorders in elderly patients with cognitive deficits of a non-dementia level.

Research results showthat in elderly patients with anxiety-depressive disorders, the loss of a spouse, breakdown of family relations, and unfavorable, especially conflicting, relationships with other relativesstrong predictors of depressive disorder development in elderly patient with cognitive impairment non dementia. Notably that the single patients in the cohort were nearly six times more likely to

have depressive disorders than married patients. It also found that patients who had conflicting relationships with close relatives had a three-fold higher risk of developing depression than patients with benevolent and/or formal relationships.Previous studies have identified thatelderly people in social isolation, living alone, and with health stressorsas having more frequent occurrences of depression (Sinyor et al., 2016). The latter is possibly a protective factor;however,the role of protective factors was not investigated in this study and this would be an interesting area of future research.

The nature of relationships with loved ones is the most significant factor in the development of anxiety and depression.More elderly people may be alone nowadays as the extended family model, in which an elderly person remains in demand for a long time and is not alone, has gradually lost its relevance. Many have reported that social isolation, bereavement, psychological pain, lack of significant social contacts, a sense of one's own invisibility, meaninglessness of existence, cumulative suffering, and a "painful life" contribute to increased suicidal activity among the elderly (Wand et al., 2018; Conejero et al., 2018; Pilania et al., 2019; Conejero et al., 2016; Shah et al., 2016).

While manyhave investigatedthe effects of psycho-traumatic factors on dementia, few have examined the personality traits that determine increased sensitivity to stressors (Mosazadeh et al. 2023). An examining the aspects of character and temperament in in the elderly cohort,who already show cognitive deficits, was in focus. In those with mixed anxiety-depressive disorders, those with the personality accentuations of anxiety, dysthymia, and "stuckness" were XX times more likely to have experienced negative emotional experiences than those in without anxiety-depressive disorders. The premorbid personality traits of passivity, insecurity, and isolation also prevailed in this group of elderly patients with mixed anxiety-depressive disorders. All of these personality traits determined the increased vulnerability of these patients to stressful situations and increased the risk of developing psychogenic mixed anxiety-depressive disorders. Others have consistently reported that patients with higher rates of anxiety, negative emotions, hostility, pessimism, hopelessness, and susceptibility to limitations had a 20–30% increased risk of dementia and a 10–20% increased risk of cognitive impairment no dementia (CIND) (Sutin et al., 2018a). Higher susceptibility to dementia in patients with a high neurotic score has been reported in meta-analyses (Terracciano et al., 2014).

In Kazakhstan, elderly people with cognitive deficits receive antidementia therapy typically in the form of donepezil (and other cholinesterase inhibitors) and memantine; however, this treatment does not affect the social and psychological factors that worsen the cognitive deficits. With a more thorough examination of the patient, including their socio-psychological status, it might be possible to provide more comprehensive assistance and reduce the risk of mild cognitive impairment converting to dementia.

CONCLUSIONS

During this research the main reasons of the likelihood of patients with cognitive deficits developing a depressive disorder were found. Among such medical features could be listed patients' personal characteristics (gender, marital status, and the nature of the patients' relationship with relatives), premorbid personality patterns (isolation, insecurity, and passivity), and the pathological personality properties of stuckness, dysthymiaand anxiety.

The study was based on the observation and analysis of data from old persons, who were selected according to specific characteristics and divided into two groups. A six-months study of the preconditions for depression in old age revealed that women are more likely to develop such diseases in old age than men are.

In summary, the analysis of the clinical features of elderly patients with cognitive deficits suggests that their likelihood of developing mixed anxiety-depressive disorders is, to a certain extent, determined by their personal characteristics, premorbid personality, pathological personality traits and negative emotional experiences. While many of findings in this research are supported by data conducted in other cohorts, the study itself is one of the first in this medical area, and there was no similar research conducted previously in Kazakhstan. Going forward, it is desirable to implement a greater coverage of the individuals studied to create diagnostic tools to identify risk groups among the elderly population in Kazakhstan.In the Republic of Kazakhstan, the elderly not only from the nursing home, but also look at the groups of the elderly who live with their families could be covered. In general, it could be an effective step for prevention such disease in a way of introducing some criteria for risk groups among the elderly. Current situation in Kazakh hospitals: if you are 40 and you are a woman, then you will definitely be screened for breast cancer. What can be implemented in the future: if you are 60 you are taking a test for MILD cognitive impairment, if you have lost your spouse / live alone / you have a conflict relationship in the family, then the identification of anxiety-depressive symptoms (this can be a short 5-minute screening questionnaire). There is a strong belief that in doing so, it will not only be possible to more accurately diagnose and treat affected individuals, but also establish preventive measures for the elderly with cognitive and mixed anxiety-depressive disorders.

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Corresponding author
Madina Kassymzhanova
Department of Psychiatry and Narcology
Kazakh National Medical University named after S.D. Asfendiyarov
050000, 94 Tole bi Str., Almaty, Republic of Kazakhstan
e-mail: madinakassymzhanovapsy@gmail.com