

RATIONAL CHOICE OF PHARMACOTHERAPY FOR SENILE DEMENTIA

¹Pogosov Artur Kolobovich, ²Shernazarov Farrux Farhod o'g'li, ³Sharapova Dilfuza
Nematillayevna, ⁴Turayev Bobir Temirpulotovich

¹Kursk State Medical University, Russian Federation city of Kursk

²608 group students of Samarkand State Medical University Faculty of Medicine

³Samarkand State Medical University Clinical ordenator in the direction of psychiatry

⁴Assistant of the department of psychiatry, medical psychology and narcology, Samarkand State
Medical University, Samarkand, Republic of Uzbekistan

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Abstract. *A popular name for dementia is senile marasmus or senile dementia. Most often, this disease occurs against the background of aging of the body and associated changes. Usually dementia develops after 65 years of age, but against the background of certain diseases, intoxication or injuries, it can also appear at an early age. Damage to the central nervous system is irreversible, properly selected treatment allows only to stop the process, but not to reverse it.*

Keywords: *psychopharmacotherapy, dementia of old age, Alzheimer's disease.*

Introduction. Dementia affects 5% of people aged 65-69, with age doubling every 10 years [1]. In the total "burden" of diseases in the world due to dementia, the so-called quality life years (DALY) reach 1% [2] associated with a late onset of the disease. More than 90% of advanced-stage dementia patients identify behavioral and psychopathological symptoms [3], violations that aggravate the economic burden [4] and the subjective burden of caregivers [5] are associated with grief [11], which in turn increases the risk of hospitalization and placement in boarding schools [6]. Out-of-community patient care time is a major (70%) part of dementia costs [7]. Thus, patients with AD (Alzheimer's disease) require informal caregivers an average of 60 hours per week [8]. At the same time, a complex biopsychosocial approach in the form of targeted psychosocial work against the background of rational therapy with antidementia [9] scientifically proven has the potential to save resources. The opposite is also true: inadequate therapy leads to the waste of limited medical costs. Although in our country it is devoted to the study of models of pharmacotherapy and the burden of dementia, only special Works [10], pharmacoepidemiological audit with secondary value analysis at the level of a separate psychiatric institution helps to identify and solve the problems of the quality of therapy. Generalized data from population studies in Europe show that dementia and AD frequency (prevalence) of 65 years and older are 6,4 and 4,4%, respectively [11-14]. In the United States, the AD rate for 70 and older is 9,7%. Worldwide dementia rates for residents aged 60 and older are 3,9% and regional rates range from 1,6% (for Africa) to 6,4% (for North America) [9, 13-15]. According to the International a ot iation (Alzheimer's DiseaseInternational) of the World Health Society, in 2013, the total o of patient who are Con idered with Demen ion in the world accounted for 44,5 million, by 2030 it amounted to 75,5 million, and by 2050 it accounted for 50-70% of 135,5 million [15-19]. The extrapolation of the gender and age indicators of ad, determined by a study of the population conducted in a limited area of Russia, into the sexual and age composition of the country's population, made it possible to determine that the number of patients with AD is 1 million 248 thousand people, according to forecasts, this will increase by 1 million 354 thousand people by. The diagnosis, treatment and

care of patients with dementia will be a huge economic burden on the state budget [20-24]. In developed countries, only direct costs for the treatment and care of patients reach 38 thousand dollars. as for one patient per year, the total worldwide costs for dementia patients exceed \$ 600 billion each year [25-27], and regional spending is much higher than the spending portion of the budget of many countries. The cost of treating and caring for patients with AD is constantly growing: in particular, in the United Kingdom, such financial costs in 2010 amounted to about £ 20 billion, and by 2016 their growth was £ 27 billion [28-30]. The world community's awareness of the socio-economic significance of the ad problem is associated with an increase in the population at risk of developing the disease, its duration and a constant increase in the patient's severe disability and the costs of their maintenance and treatment, in particular, in specialized institutions for the mentally [31]. In this regard, in economically developed countries, special attention is paid to the organization of medical and social services for patients with dementia in the conditions of various forms of outpatient care (memory clinics, Alzheimer's centers, university clinics operated by the community, etc.). In addition, special studies have been carried out to analyze the pharmacoeconomic aspects of AD [32]. In 2005, the cost of caring for patients with dementia with a mathematical modeling method (not counting the cost of drug therapy) is estimated to be 74,8 billion rubles in the Russian Federation per year [33]. In recent years, all measures to improve local psychiatric care for dementia patients have mainly focused on expanding forms of inpatient care (creating wards with additional nursing care in psychiatric hospitals, increasing the number of seats in neuropsychiatric boarding schools) and have practically no effect community service to elderly patients [34]. According to the WHO Expert Committee on issues of medical support for the elderly, including leading experts, the focus on the development of psychiatric care for the elderly and the elderly should be on non-community forms [35]. This is determined by both economic expediency and a modern humanistic attitude to the Prevention of social adaptation and hospitalization phenomena, which inevitably occur with long-term stasionization of elderly patients. Assessing the situation with special outpatient care, which can be described as critical to elderly patients with dementia, we tried to create different models of specialized care for the elderly. In particular, an outpatient-counseling unit for elderly patients with memory and dementia has been established by the Alzheimer's Disease Research Unit and related staff and continues to operate successfully to this day, in which the Department's researchers conduct a consultation-diagnostic reception [36]. It is an outpatient counseling department, which also interacts with sections I to address the cases of late-age pathology that are the most difficult from the point of view of differential diagnosis. In addition, information and, if necessary, psychological and therapeutic and diagnostic assistance is provided to individuals who care for patients with dementia on an outpatient basis [37]. At the request of patients and caregivers, the vast majority of patients who seek help in the first place remain under constant outpatient supervision of employees of the Alzheimer's disease and related diseases department [38]. During the analysis, the long-term outpatient follow-up cohort included 394 patients. This contingent of AD patients attempted to study some pharmacoeconomic aspects of ad [39]. The task of pharmacoeconomic analysis was to compare the financial costs of providing modern medical care to patients with AD on an outpatient basis with the economic costs of providing inpatient care to a similar contingent of patients [40]. Studies on the economic feasibility of using long-term ad pathogenetic therapy on an outpatient basis are based on the available evidence that AD patients who did not receive pathogenetic therapy were admitted to psychiatric institutions in

the early stages of the disease compared to those who were actively treated on an outpatient basis [41]. Since the cause of hospitalization is often psychotic and/or behavioral disorders that develop in severe stages of dementia, the delay in the development of the disease as a result of the use of pathogenetic therapy can help delay hospitalization [42].

The purpose of this study: 1) determination of methods for rationalizing the treatment of patients with senile dementia (e) in everyday practice; 2) assessment of the safety, clinical and resource-saving effects of antidemental therapy on the example of the original acatinolamemantine (M); 3) prediction of the clinical and economic effects of long-term antidemental therapy B. Alzheimer's (ad).

Materials and methods. The work consisted of three logically related stages. In the first (I) – Pharmacoepidemiological study (according to >500 patients) and cost analysis of D therapy was carried out in HDPE. In the latter, a 6 – month comparative study of naturalistic multicenter (II) - M and "simple" ba and vascular D therapy was carried out, in the third (III) a mathematical model of a -5-year M ba therapy was built. Statistical analysis used Microsoft Excel 2000, Statistics 6.0 for Windows. Descriptive statistics methods have been used. 95% confidence interval (CI) limits are specified for the selected average. Descriptive statistical methods, the Kolmogorov-Smirnov test, are used to check the distribution form. When comparing stocks, the χ^2 criterion is used for Z-statistics or conjugacy tables of properties. When comparing the values of constant values, the student criterion is used, as well as the Mann-Whitney non-parametric U criterion.

Results and their discussion. Every fourth patient with AD gets the attention of Psychiatrists. The latter serves as a permeable "filter" for individuals with the most severe mental disorders. Behavioral and mental manifestations are divided into the following groups-levels. "Mild" mental and behavioral disorders (Group I) are characterized by moderately expressed depressive (usually incomplete) syndrome, anxiety-prone, apathetic disorders (no more than 5%). For comparison, they were reported in 30% of dementia patients.

From 2017 to 2022, an analysis of the activities of this outpatient counseling unit showed that patients often turn on the recommendation of a neurologist (48,7 %) or psychiatrist (33,3%), rarely independent (12,8 %) or therapist (5,2%). To solve the task, a team of 100 AD patients was formed in the outpatient counseling department, who were observed for two or more years. During the observation, 41% of these patients took courses of pathogenetic cholinergic (rivastigmine, galantamine, ipidacrine), glutamatergic (acatinol memantine), as well as neurotrophic (cerebrolysin) or neuroprotective (nitzergoline, tanakan) therapy in different sequences, 20% - cholinergic or glutamatergic therapy in different sequences, 15% of patients - pathogenetic cholinergic (rivastigmine, galantamine, ipidacrine). glutamatergic and neurotrophic or other neuroprotective therapy in different sequences and 4% - cholinergic and neurotrophic or neuroprotective therapy in different sequences. 6% of patients underwent monotherapy with cholinergic drugs; glutamatergic monotherapy - in 8% and neurotrophic or neuroprotective therapy - in 6% of patients. The average duration of glutamatergic therapy during the observation period was $16,3 \pm 9,8$ months; cholinergic – $14,6 \pm 9$ months and neurotrophic or neuroprotective therapy – $26,6 \pm 12,3$ months. Because of the addition of psychotic and behavioral disorders to dementia syndrome, 36% of patients received antipsychotics for $19 \pm 8,3$ months and 12% received antidepressants for $17,7 \pm 9,1$ months.

Such problems (poorly defined and slightly treated against the background of dramatic manifestations of dementia) cause more cognitive impairments, increase patient dependence, and

serve as an additional source of stress for informal caregivers. In this group alone, patients (20%) were treated in a day hospital. In 55% of patients, moderate mental and behavioral disorders (Group II) are characterized by agitation (screaming, crying, verbal and insignificant physical aggression, sexual disinhibition, night walks against the background of confusion), anxiety depression, periodic hallucinatory-paranoid and confabulatory disorders. For comparison, 20% of people with dementia fall into this category. For a quarter to a third of patients, the context of the development of dementia is typical: loneliness, insufficient family support, disability due to many somatic diseases. Management of such diseases can be an important component of the model of effective output groups. In 40% of patients, severe mental and behavioral disorders (Group III) are represented by physical aggression, negativism, delirium-related arousal, hallucinatory-paranoid psychosis, cruel exposure. Home care is difficult and patients need a controlled hospital psychoherontology unit for 24 hours. In our sample, such patients are hospitalized only once a year, on average 55 days, half of them were alone. In general, more than 1% of people with dementia do not correspond to this level, but among 2/3 of the dement population of nursing homes, 15-20%, psychosis – 15%, 20% suffer from depressive disorders. There are less than 5% of patients in need of dementia in inpatient social service facilities or nursing homes. Of the 36 patients with moderate to severe dementia, only one can be placed in a inpatient Social Service Institution for the elderly and disabled, and the main burden of caring for such patients in the Russian Federation falls on the shoulders of relatives. 75% of patients with confirmed dementia duration 1-2 years were identified in Group I; Group II includes 60% of patients with dementia duration 2-4 years; Group III 80% of patients with dementia duration over 5 years

Conclusion: 1. The main burden of insufficiently treated D falls on psychiatric services (due to the burden on the resource-intensive psychiatric unit, which performs the function of archaic patronage and shelter in the absence of forms of inpatient replacement assistance) and indirectly on close patients. 2. Half - year treatment m, improving performance, regulating patient behavior D, facilitate the burden of caring for them by formal and informal caregivers. 3. Long-term (lifelong) treatment with clinically proven efficacy (m) anti-cement agents has the potential to save resources from the point of view of psychiatry and social services, the patient and his loved ones, in addition to the traditional humanistic message. The effect of anti-treatment enhances targeted psychosocial work with the patient and his loved ones.

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