

# Morbidity and disability in dementia in Belarus for 2016-2023

## Abstract

**Relevance:** Dementia states lead to severe medical and social consequences. Most researchers consider Alzheimer's disease to be the most frequent cause of cognitive impairment in elderly people, the second place is occupied by vascular dementia. In the Republic of Belarus, vascular dementia has the largest share in the structure of morbidity of dementia of various genesis among different age groups. The aim of this study was to investigate the epidemiology of dementias in the Republic of Belarus, including dementia with Alzheimer's disease and vascular dementia, characterization of morbidity and disability due to this pathology in dynamics for the period from 2016 to 2023.

**Research materials and methods:** The study of indicators of primary and general morbidity, data on patients under dispensary supervision, treated in psychiatric hospitals, disability in dementia was carried out according to the data from the forms of state statistical reporting approved by the National Statistical Committee of the Republic of Belarus for 2016-2023. To calculate intensive indicators, data from the National Statistical Committee of the Republic of Belarus on the number and sex and age structure of the population were used. Indicators of dementia morbidity were studied in dynamics.

**Results:** At the end of 2023, the number of persons with disabilities due to dementia in the Republic of Belarus was 8,424, or 9.16 per 10,000 of population, of whom 1,573, or 1.71 per 10,000 of population, were due to dementia due to Alzheimer's disease; 3,600, or 3.91 per 10,000 of population, were due to vascular dementia. In the structure of disability due to dementia, the proportion of women, on average over three years, was 58.9 per cent, for dementia due to Alzheimer's disease - 69.5 per cent, for vascular dementia - 66.3 per cent. 10% of the total number of disabled due to dementia, 99.7% of patients were disabled of group I or II. The data obtained show that women are more often in need of psychiatric care for dementia.

**Conclusion:** Prevention, early diagnosis, treatment and rehabilitation of patients with dementia is the key to success in providing specialized care for these patients. Given the severity of the disease, the high level of disability and the increase in morbidity, it is necessary to focus efforts on the introduction of screening diagnostic tools to identify signs of dementia at an early stage. It is also necessary to inform the population about the problems of dementia and encourage patients and their relatives to seek specialized medical care as early as possible.

**Keywords:** Alzheimer's disease, vascular dementia, morbidity, disability

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## Introduction

Over the past decades, an increase in the absolute and relative number of elderly people has been observed in many countries of the world, including the Republic of Belarus. If in 1998 1,332,336 people aged 65 and over lived in the Republic of Belarus, or 13.2% of the total population, in 2023 there were 1,517,148 people in this age group, which was 16.5% of the total population. This creates serious social, economic and medical problems, as the prevalence of organic mental disorders, including dementia, increases as the age group increases.

Most researchers consider Alzheimer's disease to be the most common cause of cognitive impairment in the elderly, with vascular dementia taking the second place.<sup>1</sup> In the Republic of Belarus, vascular dementia has the highest proportion in the structure of the incidence of dementia of various origins among different age groups.<sup>1-4</sup>

The purpose of this study was to study the epidemiology of dementia in the Republic of Belarus, including dementia in Alzheimer's disease and vascular dementia, and to characterize the incidence and disability rates due to this pathology in dynamics over the period from 2016 to 2023. The study of indicators of primary and

general morbidity, data on patients under medical supervision, treated in psychiatric hospitals, and disability with dementia was carried out according to data from the state statistical reporting forms approved by the National Statistical Committee of the Republic of Belarus (form 1-psychiatry (Ministry of Health)) for 2016-2023

To calculate the intensive indicators, data from the National Statistical Committee of the Republic of Belarus on the number and age structure of the population were used. In the period from 2016 to 2023, an average of 19500 patients per year applied to healthcare organizations providing psychiatric care in outpatient settings for dementia (ICD 10 code: F00-F03) (Table 1). Of these, 15.2% were referrals for dementia in Alzheimer's disease (2968 referrals per year), 49.1% were referrals for vascular dementia (9566 referrals per year). The majority of those who applied were women: 62.7% of those who applied for dementia in general, 69.3% of those who applied for dementia in Alzheimer's disease, 66.6% of those who applied for vascular dementia. In the structure of treatment for dementia, the proportion of the urban population was 77.0%, the rural population accounted for 33.0%, including 83.6% of patients with Alzheimer's disease and 76.1% of patients with vascular dementia.

**Table 1** The total incidence of dementia in the Republic of Belarus, depending on gender and place of residence, people

Nosolo-gical form	Gender, location	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Demen-tia	in total	19647	19231	18793	19783	19036	19759	20045	19709	19500,4
	men	7463	7234	7016	7265	6923	7161	7719	7424	7275,6
	women	12184	11997	11777	12518	12113	12598	12326	12285	12224,8
	city	13262	12722	12886	16205	15591	16199	16622	16610	15012,1
	village	6385	6509	5907	3578	3445	3560	3423	3099	4488,3
Alzhei-mer's disease	in total	2640	2692	2892	3132	2961	3021	3217	3186	2967,6
	men	842	832	890	944	884	902	1011	984	911,1
	women	1798	1860	2002	2188	2077	2119	2206	2202	2056,5
	city	1997	1986	2318	2742	2548	2623	2809	2815	2479,8
	village	643	706	574	390	413	398	408	371	487,9
Vascu-lar demen-tia	in total	9076	9360	9235	9767	9478	9929	9833	9846	9565,5
	men	2977	3070	3086	3160	2983	3138	3627	3539	3197,5
	women	6099	6290	6149	6607	6495	6791	6206	6307	6368,0
	city	6061	6164	6278	7824	7662	8017	7986	8234	7278,3
	village	3015	3196	2957	1943	1816	1912	1847	1612	2287,3

The incidence rates of dementia were studied in dynamics. On average, for the period 2016–2023, the total incidence of dementia was 207.84 per 100,000 population. Over the past 8 years, the incidence has increased by 3.6%: from 206.78 per 100,000 population in 2016 to 214.21 in 2023 ( $p < 0.001$ ), mainly due to its increase in the urban population (from 179.57 per 100,000 urban population in 2016 to 230.30 in 2023, an increase of 28.2%,  $p < 0.001$ ), while in rural areas this indicator decreased by 48.3% (from 301.73 per 100,000 rural population in 2016 up to 155.87 in 2023,  $p < 0.001$ ) (Table 2). The overall incidence of dementia in Alzheimer's disease increased by 24.6% from 2016 to 2023 (from 27.78 per 100,000 population in 2016 to 34.63 in 2023,  $p < 0.001$ ). In vascular dementia, during the study period, there was an increase in the overall incidence from 95.52 to 107.01 per 100,000 population, or by 12.0% ( $p < 0.001$ ) (Table 1).

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**Table 2** Total incidence of dementia in the Republic of Belarus, depending on gender and place of residence, per 100000 population

Nosolo-gical form	Gender, loca-tion	year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Demen-tia	in total	206,78	202,47	198,17	209,00	202,94	212,40	217,22	214,21	207,84
	men	168,71	163,52	158,78	164,66	159,67	166,54	181,01	174,67	167,12
	women	239,94	236,43	232,52	247,70	240,14	251,82	248,32	248,17	243,09
	city	179,57	171,77	173,65	217,95	213,81	223,24	230,15	230,30	204,84
	village	301,73	311,17	286,35	176,22	165,00	173,97	170,65	155,87	218,55
Alzhei-mer's disease	in total	27,78	28,34	30,50	33,09	31,57	32,47	34,86	34,63	31,63
	men	19,03	18,81	20,14	21,40	20,39	20,98	23,71	23,15	20,93
	women	35,41	36,66	39,53	43,30	41,18	42,36	44,44	44,48	40,89
	city	27,04	26,81	31,24	36,88	34,94	36,15	38,89	39,03	33,84
	село	30,39	33,75	27,83	19,21	19,78	19,45	20,34	18,66	23,76
Vascu-lar demen-tia	in total	95,52	98,54	97,38	103,18	101,05	106,73	106,56	107,01	101,95
	men	67,30	69,39	69,84	71,62	68,80	72,98	85,05	83,26	73,45
	women	120,11	123,96	121,41	130,74	128,76	135,74	125,03	127,41	126,63
	city	82,07	83,22	84,60	105,23	105,07	110,48	110,57	114,16	99,31
	village	142,48	152,79	143,35	95,70	86,98	93,43	92,08	81,08	111,37

According to the average annual data for 8 years, the overall incidence of dementia among men was 1.5 times lower than among women (167.12 per 100,000 male population versus 243.09

per 100,000 female population,  $p < 0.001$ ), and among the urban population it was 6.7% lower than among rural (204.84 per 100,000 urban population against 218.55 per 100,000 rural population,

$p < 0.001$ ). In Alzheimer's disease, the incidence among men was 2.0 times lower than among women (20.93 per 100,000 male population versus 40.89 per 100,000 female population,  $p < 0.001$ ), the incidence rates among the urban population were 42.4% higher than among the rural population (33.84 per 100,000 urban population versus 23.76 per 100,000 rural population,  $p < 0.001$ ). In vascular dementia, the average

annual incidence rates among men were 1.7 times lower than among women (73.45 per 100,000 male population versus 126.63 per 100,000 female population,  $p < 0.001$ ), and among the urban population – 12.12% lower than among rural (99.31 per 100,000 urban population versus 111.37 per 100,000 rural population,  $p < 0.001$ ) (Table 3).

**Table 3** Primary incidence of dementia in the Republic of Belarus, depending on gender and place of residence, people

Nosolo-gical form	Gender, location	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	5061	4948	4786	5042	4436	4756	4627	4604	4782,5
	men	1609	1565	1426	1525	1374	1369	1438	1342	1456,0
	women	3452	3383	3360	3517	3062	3387	3189	3262	3326,5
	city	3806	3722	3991	4181	3699	3937	3922	3986	3905,5
	village	1255	1226	795	861	737	819	705	618	877,0
Alzheimer's disease	in total	852	642	679	796	697	762	714	701	730,4
	men	202	195	166	180	182	183	207	152	183,4
	women	650	447	513	616	515	579	507	549	547,0
	city	702	508	583	693	579	671	632	623	623,9
	village	150	134	96	103	118	91	82	78	106,5
Vascular dementia	in total	2813	2989	2815	2920	2517	2616	2350	2254	2659,3
	men	844	892	792	850	750	684	683	583	759,8
	women	1969	2097	2023	2070	1767	1932	1667	1671	1899,5
	city	2078	2269	2331	2419	2094	2120	1994	1960	2158,1
	village	735	720	484	501	423	496	356	294	501,1

An analysis of the primary incidence of dementia in the Republic of Belarus showed that more than 4,700 people were diagnosed with this disease for the first time every year: the average annual value for 2016-2023 was 4,783 cases per year, of which, on average, 730 cases per year (15.3%) were diagnosed with Alzheimer's disease, 2,659 cases (55.6%) – vascular dementia (Table 3). Among those who

applied for the first time, the proportion of women with dementia was 69.6%, with Alzheimer's disease – 74.9%, with vascular dementia – 71.4%. In the structure of treatment for dementia, the proportion of the urban population was 81.7%, including 85.4% for dementia in Alzheimer's disease and 81.2% for vascular dementia (Table 4).

**Table 4** Primary incidence of dementia in the Republic of Belarus, depending on gender and place of residence, on 100,000 people

Nosolo-gical form	Gender, location	year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	53,27	52,09	50,47	53,27	47,29	51,13	50,14	50,04	50,97
	men	36,37	35,38	32,27	34,56	31,69	31,84	33,72	31,57	33,44
	women	67,98	66,67	66,34	69,59	60,70	67,70	64,25	65,90	66,15
	city	51,53	50,25	53,78	56,23	50,73	54,26	54,30	55,27	53,29
	village	59,31	58,61	38,54	42,41	35,30	40,02	35,15	31,08	42,70
Alzheimer's disease	city	8,97	6,76	7,16	8,41	7,43	8,19	7,74	7,62	7,78
	men	4,57	4,41	3,76	4,08	4,20	4,26	4,85	3,58	4,21
	women	12,80	8,81	10,13	12,19	10,21	11,57	10,21	11,09	10,88
	city	9,51	6,86	7,86	9,32	7,94	9,25	8,75	8,64	8,51
	village	7,09	6,41	4,65	5,07	5,65	4,45	4,09	3,92	5,19
Vascular dementia	in total	29,61	31,47	29,68	30,85	26,83	28,12	25,47	24,50	28,34
	men	19,08	20,16	17,92	19,27	17,30	15,91	16,02	13,72	17,45
	women	38,78	41,33	39,94	40,96	35,03	38,62	33,58	33,76	37,77
	city	28,14	30,64	31,41	32,53	28,72	29,22	27,61	27,18	29,45
	village	34,73	34,42	23,46	24,68	20,26	24,24	17,75	14,79	24,40

The rates of primary morbidity in dementia tend to decrease. Over the past 8 years, there has been a slight (6.1%) decrease in morbidity: from 53.27 per 100,000 population in 2016 to 50.04 in 2023 ( $p < 0.01$ ) (Table 4). On average, for the period 2016-2023, the primary incidence of dementia was 50.97 per 100,000 population. The primary incidence of dementia in Alzheimer's disease decreased by

15.0% in three years (from 8.97 per 100,000 population in 2016 to 7.62 in 2023,  $p < 0.01$ ), due to its decrease in rural areas (from 7.09 per 100,000 rural population in 2016 to 3.92 in 2023, a decrease of 44.7%,  $p < 0.001$ ). In vascular dementia, the primary incidence decreased by 17.3% ( $p < 0.001$ ): from 29.61 per 100,000 population in 2016 to 24.50 in 2023, with an annual average of 28.34 per 100,000 population. A

decrease in the primary incidence of vascular dementia was observed mainly in rural areas (from 34.73 per 100,000 rural population in 2016 to 14.79 in 2023, a decrease of 57.4%,  $p < 0.001$ ).

On average, the primary incidence of dementia among men during the study period was 2.0 times lower than among women (33.44 per 100,000 male population versus 66.15 per 100,000 female population,  $p < 0.001$ ) (Table 4). The primary morbidity rate among the rural population was on average 24.8% lower than among the urban population (53.29 per 100,000 urban population versus 42.70 per 100,000 rural population,  $p < 0.001$ ).

In Alzheimer's disease, the primary incidence among men was 2.6 times lower than among women (4.21 per 100,000 male population versus 10.88 per 100,000 female population,  $p < 0.001$ ), and among the urban population it was 1.6 times higher than among rural (8.51 per 100,000 urban population versus 5.19 per 100,000 of rural population,  $p < 0.001$ ). In vascular dementia, the average annual rates of primary

morbidity among men were 2.2 times lower than among women (17.45 per 100,000 male population versus 37.77 per 100,000 female population,  $p < 0.001$ ), and the rates among the urban population are 20.7% higher than among the rural population (29.45 per 100,000 urban population versus 24.40 per 100,000 rural population,  $p < 0.001$ ).

The number of those under medical supervision for dementia, according to the average annual data, was 10.2% of the total number of those under medical supervision for mental and behavioral disorders. At the end of 2023, 11,860 people, or 128.90 per 100,000 population, were under medical supervision for dementia; of these, 2018 people, or 21.93 per 100,000 population, for dementia in Alzheimer's disease; 5,609 people, or 60.96 per 100,000 population, for vascular dementia (Table 5, 6). In the structure of those under medical supervision for dementia, the proportion of women, on average for 8 years, was 61.6%, for dementia in Alzheimer's disease – 73.8%, for vascular dementia – 66.0% (Table 5, 6).

**Table 5** The number of people under medical supervision for dementia at the end of the year, people

Nosolo-gical form	Gender	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	10152	10142	10529	11119	11021	11528	11432	11860	10972,9
	men	4018	3940	4062	4043	4092	4469	4457	4593	4209,3
	women	6134	6202	6467	7076	6929	7059	6975	7267	6763,6
Alzhei-mer's disease	in total	1680	1609	1693	1861	1872	1932	1945	2018	1826,3
	men	464	428	442	494	482	478	498	539	478,1
	women	1216	1181	1251	1367	1390	1454	1447	1479	1348,1
Vascular dementia	in total	4559	4612	4859	5157	5121	5452	5363	5609	5091,5
	men	1520	1500	1579	1489	1694	1976	2026	2081	1733,1
	women	3039	3112	3280	3668	3427	3476	3337	3528	3358,4

**Table 6** The number of people under medical supervision for dementia at the end of the year, per 100,000 population

Nosolo-gical form	Gender	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Demen-tia	in total	106,81	106,85	111,12	118,12	117,88	124,55	124,25	128,90	117,21
	men	90,77	89,11	91,99	92,91	94,70	104,45	104,86	108,06	97,00
	women	120,79	122,32	127,82	139,79	137,79	141,83	140,90	146,80	134,68
Alzhei-mer's disease	total	17,68	16,95	17,87	19,77	20,02	20,87	21,14	21,93	19,51
	men	10,48	9,68	10,01	11,35	11,15	11,17	11,72	12,68	11,02
	women	23,95	23,29	24,73	27,01	27,64	29,21	29,23	29,88	26,84
Vascu-lar de-mentia	total	47,97	48,59	51,28	54,78	54,77	58,91	58,29	60,96	54,39
	men	34,34	33,92	35,76	34,22	39,20	46,18	47,67	48,96	39,94
	women	59,84	61,38	64,83	72,46	68,15	69,84	67,41	71,27	66,87

In the period from 2016 to 2023, 3,523 patients with dementia were treated in psychiatric hospitals in the republic on average per year, the average duration of hospitalization was 45.9 days (Table 7). On average, 480 patients per year were treated for Alzheimer's

disease with an average duration of hospitalization of 37.8 days, and 1,471 patients per year for vascular dementia with an average duration of hospitalization of 44.1 days (Table 7).

**Table 7** Number of people treated for dementia in psychiatric hospitals in the Republic of Belarus in 2016-2018

Year	Dementia		Alzheimer's disease		Vascular dementia	
	Treated patients	average duration of hospitalization, days	Treated patients	Average duration of hospitalization, days	Treated patients	Average duration of hospitalization, days
2016	4393	44,7	588	32,6	1851	45,5
2017	4414	43,2	592	33,6	2056	40,6
2018	4086	43,0	600	37,9	1942	39,5
2019	3844	44,2	576	40,3	1700	44,9
2020	3238	47,7	450	39,8	1220	46,2
2021	2794	50,3	353	41,5	1094	47,0
2022	2620	48,3	351	39,1	978	43,3
2023	2796	49,8	331	42,4	925	51,5
Annual average value	3523,1	45,9	480,1	37,8	1470,8	44,1

Dementia-related conditions lead to severe medical and social consequences. At the end of 2023 the number of people with disabilities due to dementia in the Republic of Belarus was 8,424, or 9.16 per 10,000 population; 1,573 of them due to dementia in Alzheimer's disease, or 1.71 per 10,000 population; 3,600 due to vascular dementia, or 3.91 per 10,000 population (Table 8, 9). In the structure of disability due to dementia, the proportion of women,

on average for three years, was 58.9%, for dementia in Alzheimer's disease – 69.5%, for vascular dementia – 66.3%. Of the total number of people with disabilities due to dementia, 99.7% of patients were disabled in groups I or II, including 99.8% of people with disabilities due to dementia in Alzheimer's disease and 99.8% due to vascular dementia (Table 8,9).

**Table 8** The number of disabled persons due to dementia in the Republic of Belarus for the period 2016-2023

Nosological form	Gender	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	7933	8108	8570	8819	8734	8546	8068	8424	8400,3
	men	3391	3519	3636	3582	3656	3495	2987	3354	3452,5
	women	4542	4589	4934	5237	5078	5051	5081	5070	4947,8
Alzheimer's disease	in total	1270	1224	1387	1581	1634	1534	1586	1573	1473,6
	men	398	365	451	497	514	432	466	475	449,8
	women	872	859	936	1084	1120	1102	1120	1098	1023,9
Vasculuar dementia	in total	3515	3732	3882	3924	3823	3795	3557	3600	3728,5
	men	1209	1464	1334	1276	1301	1266	1031	1179	1257,5
	women	2306	2268	2548	2648	2522	2529	2526	2421	2471,0

**Table 9** The level of disability due to dementia in the Republic of Belarus for the period 2016-2018 (per 10,000 people)

Nosologicalform	Gender	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	8,35	8,54	9,04	9,37	9,34	9,23	8,77	9,16	8,97
	men	7,66	7,96	8,23	8,23	8,46	8,17	7,03	7,89	7,96
	women	8,94	9,05	9,75	10,35	10,10	10,15	10,26	10,24	9,85
Alzheimer's disease	in total	1,34	1,29	1,46	1,68	1,75	1,66	1,72	1,71	1,57
	men	0,90	0,83	1,02	1,14	1,19	1,01	1,10	1,12	1,04
	women	1,72	1,69	1,85	2,14	2,23	2,21	2,26	2,22	2,04
Vasculuar dementia	in total	3,70	3,93	4,10	4,17	4,09	4,10	3,87	3,91	3,98
	men	2,73	3,31	3,02	2,93	3,01	2,96	2,43	2,77	2,90
	women	4,54	4,47	5,04	5,23	5,02	5,08	5,10	4,89	4,92

In the period from 2016 to 2023, medical rehabilitation expert commissions of the Republic of Belarus established disability due to dementia in an average of 1779 cases per year during initial examination, including 338 cases per year for dementia with

Alzheimer's disease, and 958 cases per year for vascular dementia (Table 10). Women were diagnosed with disability more often (70.2%) than men (29.8%), including dementia with Alzheimer's disease – in 75.3% of cases, vascular dementia – in 71.3% (Table 10).

**Table 10** The number of people recognized as disabled for the first time due to dementia in the Republic of Belarus for the period 2016-2018

Nosologicalform	Gender	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	1720	1802	1580	1972	1564	1581	1879	2132	1778,8
	men	530	510	434	675	472	454	558	601	529,3
	women	1190	1292	1146	1297	1092	1127	1321	1531	1249,5
Alzheimer's disease	in total	345	286	250	355	269	398	366	434	337,9
	men	82	56	61	81	52	106	113	116	83,4
	women	263	230	189	274	217	292	253	318	254,5
Vasculuar dementia	in total	921	994	864	1149	910	754	999	1070	957,6
	men	290	264	204	427	262	195	269	284	274,4
	women	631	730	660	722	648	559	730	786	683,3

The level of primary disability due to dementia according to the average annual data for the period 2016-2023 was 1.90 per 1000 population, including due to dementia in Alzheimer's disease – 0.36 per 10000 population, due to vascular dementia – 1.02 per 10000 population (Table 11). Of the total number of patients recognized as

disabled due to dementia for the first time, 99.9% of patients were disabled in groups I or II, including 99.9% of those with disabilities due to dementia in Alzheimer's disease and 99.9% due to vascular dementia. The data obtained show that women are significantly more likely to need psychiatric care for dementia (Table 11).



**Table 11** The level of primary disability due to dementia in the Republic of Belarus for the period 2016-2018 (per 10000 people).

Nosological form	Gender	Year								Annual average value
		2016	2017	2018	2019	2020	2021	2022	2023	
Dementia	in total	1,81	1,90	1,67	2,08	1,67	1,70	2,04	2,32	1,90
	men	1,20	1,15	0,98	1,53	1,09	1,06	1,31	1,41	1,22
	women	2,34	2,55	2,26	2,57	2,16	2,25	2,66	3,09	2,48
Alzheimer's disease	in total	0,36	0,30	0,26	0,38	0,29	0,43	0,40	0,47	0,36
	men	0,19	0,13	0,14	0,18	0,12	0,25	0,26	0,27	0,19
	women	0,52	0,45	0,37	0,54	0,43	0,58	0,51	0,64	0,51
Vascular dementia	in total	0,97	1,05	0,91	1,21	0,97	0,81	1,08	1,16	1,02
	men	0,66	0,60	0,46	0,97	0,60	0,45	0,63	0,67	0,63
	women	1,24	1,44	1,30	1,43	1,28	1,12	1,47	1,59	1,36

## Discussion

According to world statistics, Alzheimer's disease is the most common among neurodegenerative diseases and accounts for 60-80% of all cases. It is followed by vascular dementia of 20-40% and others, such as dementia caused by Lewy bodies, Parkinson's disease, and frontotemporal dementia, which account for less than 1%.<sup>5</sup> In the Republic of Belarus, vascular dementia has the highest proportion in the structure of the incidence of dementia of various origins among different age groups. The ratio between the incidence of Alzheimer's disease and vascular dementia is 3:1 (Table 1). This fact attracts attention and requires clarification to determine the reason for this discrepancy, an additional comparative study with foreign protocols is planned on the following aspects: standardization of psychological diagnostic tools, sample size, study of risk factors, comorbidity, and other aspects.<sup>6,7</sup>

In modern society, there is a high prevalence of dementia among the elderly, and numerous studies conducted in industrialized and non-industrialized countries have shown an age-standardized prevalence of dementia ranging from 5% to 7% in most countries.<sup>8</sup> Belarus is no exception. It should be noted that the level of primary morbidity in dementia tends to decrease. On average, the incidence of dementia regresses by 6.1%. This is due to the reduction of vascular damage (for example, by reducing smoking and treating high blood pressure). There is an active fight against many risk factors for dementia (for example, low education, hearing loss, hypertension, smoking, obesity, depression, physical inactivity, diabetes, excessive alcohol consumption, traumatic brain injury, air pollution, social isolation).<sup>9</sup>

Nevertheless, the number of patients with dementia in Alzheimer's disease and vascular dementia continues to increase, which is associated with an increase in life expectancy and the development of innovative therapeutic and preventive measures.<sup>1,10</sup> According to WHO data, as of March 2023, there were more than 55 million people with dementia worldwide. There are almost 10 million new cases of dementia every year. Dementia is recognized as one of the priority problems of public health. A comprehensive action program is being implemented under the auspices of the World Health Assembly to raise awareness of dementia and create favorable social conditions for people with dementia; reduce the risk of dementia; diagnosis, treatment and care; scientific research and innovation.<sup>11</sup>

## Conclusion

The development of interdisciplinary and interdepartmental cooperation in the prevention, early diagnosis, treatment and rehabilitation of patients with dementia is the key to success in providing specialized care to these patients.<sup>12, 13</sup> To better identify people with dementia, it is necessary to introduce screening diagnostic

tools aimed at this pathology at the level of the primary outpatient medical network, as well as inform the population about dementia problems and target patients and their relatives to seek specialized medical care as early as possible.

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## Conflicts of interest

Nothing to declare.

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