Supplementary Table S-I: Demographic indicators of multiple sclerosis patients by economic regions (prevalence day 31.12.2022)

Region	Indicator		N	Min.	Max.	Me	Mean±SD (95% CI)	SE	p-value
Central Aran Economic Region	Age at diagnosis	Men	47	18	56	38.00	37.62±7.97 (35.28-39.96)	1.16	p=0.076
		Women	73	15	49	35.00	34.95±8.01 (33.08-36.81)	0.94	
		Urban	58	15	56	35.00	34.34±8.41 (32.13-36.56)	1.10	p=0.030
		Rural	62	18	55	38.00	37.53±7.48 (35.63-39.43)	0.95	
		Total	120	15	56	36.00	35.99±8.07 (34.53-37.45)	0.74	pANOVA=0.800
	Age on the prevalence date	Men	46	27	73	44.00	44.41±10.10 (41.41-47.41)	1.49	p=0.394
		Women	70	24	67	43.00	42.80±9.83 (40.46-45.14)	1.17	
		Urban	55	24	62	42.00	42.49±10.18 (39.74-45.24)	1.37	p=0.330
		Rural	61	27	73	45.00	44.30±9.69 (41.81-46.78)	1.24	
		Total	116	24	73	43.00	43.44±9.92 (41.61-45.26)	0.92	pH=0.463
	Age at the probable first attack	Men	47	17	50	32.00	30.70±7.58 (28.48-32.93)	1.11	p=0.436
		Women	73	14	49	31.00	29.52±8.40 (27.56-31.48)	0.98	
		Urban	58	14	49	32.00	29.67±8.31 (27.49-31.86)	1.09	p=0.685
		Rural	62	16	50	30.50	30.27±7.91 (28.26-32.28)	1.00	
		Total	120	14	50	31.00	29.98±8.08 (28.52-31.44)	0.74	pH=0.850
	Diagnostic delay (years)	Men	47	00	35	5.00	6.91±7.05 (4.85-8.98)	1.03	pU=0.282
		Women	73	00	23	4.00	5.42±5.36 (4.17-6.68)	0.63	
		Urban	58	00	24	3.00	4.67±5.41 (3.25-6.10)	0.71	pU=0.007
		Rural	62	00	35	6.00	7.26±6.46 (5.62-8.90)	0.82	
		Total	120	00	35	4.00	6.01±6.09 (4.91-7.11)	0.56	pH=0.738
	Disease Duration (years)	Men	47	04	38	12.00	13.85±7.28 (11.71-15.99)	1.06	pU=0.435
		Women	73	05	26	12.00	14.30±6.10 (12.88-15.73)	0.71	
		Urban	58	04	27	12.00	14.12±6.18 (12.49-15.75)	0.81	pU=0.752
		Rural	62	05	38	12.50	14.13±6.95 (12.36-15.89)	0.88	
		Total	120	04	38	12	14.13±6.56 (12.94-15.31)	0.60	pH=0.096

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Region	Indicator		N	Min.	Max.	Me	Mean±SD (95% CI)	SE	p-value
Mil-Mughan Economic Region	Age at diagnosis	Men	19	25	53	39.00	39.84±8.80 (35.60-44.08)	2.02	p_t=0.036
		Women	40	19	54	34.00	34.65±8.62 (31.89-37.41)	1.36	
		Urban	30	20	54	37.00	36.80±9.52 (33.25-40.35)	1.74	p_t=0.680
		Rural	29	19	51	36.00	35.83±8.44 (32.62-39.04)	1.57	
		Total	59	19	54	37.00	36.32±8.94 (33.99-38.65)	1.16	pANOVA=0.800
	Age on the prevalence date	Men	18	28	59	44.50	45.11±10.08 (40.10-50.12)	2.37	p_U=0.114
		Women	39	24	62	39.00	40.41±10.44 (37.03-43.80)	1.67	
		Urban	30	24	62	42.50	42.97±11.77 (38.57-47.36)	2.15	p_t=0.420
		Rural	27	28	58	39.00	40.70±8.89 (37.19-44.22)	1.71	p_U=0.481
		Total	57	24	62	39.00	41.89±10.47 (39.12-44.67)	1.39	p_H=0.463
	Age at the probable first attack	Men	19	22	46	33.00	33.16±7.92 (29.34-36.97)	1.82	p_U=0.093
		Women	40	15	45	29.00	29.30±8.18 (26.69-31.91)	1.29	
		Urban	30	19	45	30.50	30.83±8.29 (27.74-33.93)	1.51	p_t=0.785
		Rural	29	15	46	29.00	30.24±8.30 (27.09-33.40)	1.54	
		Total	59	15	46	30.00	30.54±8.23 (28.40-32.69)	1.07	p_H=0.850
	Diagnostic delay (years)	Men	19	00	18	5.00	6.68±4.87 (4.34-9.03)	1.12	p_U=0.891
		Women	40	00	16	4.00	5.35±3.99 (4.07-6.63)	0.63	p_U=0.336
		Urban	30	00	18	4.00	5.97±4.72 (4.21-7.73)	0.86	
		Rural	29	00	15	5.00	5.59±3.89 (4.11-7.06)	0.72	
		Total	59	15	18	5.00	5.78±4.30 (4.66-6.90)	0.56	p_H=0.738
	Disease Duration (years)	Men	19	06	28	11.00	12.84±6.08 (9.91-15.77)	1.39	p_U=0.520
		Women	40	03	29	11.00	11.55±5.54 (9.78-13.32)	0.88	
		Urban	30	03	28	11.00	12.13±6.10 (9.86-14.41)	1.11	p_U=0.921
		Rural	29	06	29	10.00	11.79±5.35 (9.76-13.83)	0.99	
		Total	59	03	29	11.00	11.97±5.70 (10.48-13.45)	0.74	p_H=0.096

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Region	Indicator		N	Min.	Max.	Me	Mean±SD (95% CI)	SE	p-value
Shirvan-Salyan Economic Region	Age at diagnosis	Men	25	20	51	38.00	37.48±7.53 (34.37-40.59)	1.51	p_t=0.072
		Women	37	18	47	33.00	33.92±7.50 (31.42-36.42)	1.23	
		Urban	41	18	51	34.00	34.59±8.26 (31.98-37.19)	1.29	p_t=0.272
		Rural	21	25	49	35.00	36.86±6.22 (34.03-39.69)	1.36	
		Total	62	18	51	37.00	35.35±7.65 (33.41-37.30)	0.97	pANOVA=0.800
	Age on the prevalence date	Men	24	28	58	45.00	43.92±8.57 (40.30-47.54)	1.75	p_t=0.121
		Women	36	24	63	40.00	40.22±9.11 (37.14-43.30)	1.52	
		Urban	39	24	63	41.00	40.74±9.38 (37.70-43.79)	1.50	p_t=0.266
		Rural	21	29	58	46.00	43.48±8.20 (39.75-47.21)	1.79	
		Total	60	24	63	42.00	41.70±9.01 (39.37-44.03)	1.16	p_H=0.463
	Age at the probable first attack	Men	25	16	44	32.00	31.48±8.24 (28.08-34.88)	1.65	p_t=0.115
		Women	37	17	44	27.00	28.24±7.51 (25.74-30.75)	1.23	
		Urban	41	17	44	28.00	29.34±7.94 (26.83-31.85)	1.24	p_t=0.776
		Rural	21	16	44	28.00	29.95±8.03 (26.30-33.61)	1.75	
		Total	62	16	44	28.00	29.55±7.91 (27.54-31.56)	1.00	p_H=0.850
	Diagnostic delay (years)	Men	25	00	17	5.00	6.00±5.24 (3.84-8.16)	1.05	p_U=0.857
		Women	37	00	15	5.00	5.68±3.74 (4.43-6.92)	0.62	
		Urban	41	00	15	4.00	5.24±4.04 (3.97-6.52)	0.63	p_U=0.186
		Rural	21	00	17	6.00	6.90±4.87 (4.69-9.12)	1.06	
		Total	62	00	17	5.00	5.81±4.37 (4.70-6.92)	0.56	p_H=0.738

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Region	Indicator		N	Min.	Max.	Me	Mean±SD (95% CI)	SE	p-value
Shirvan-Salyan Economic Region	Disease Duration (years)	Men	25	06	22	11.00	12.84±5.65 (10.51-15.17)	1.13	p_U=0.948
		Women	37	05	29	12.00	12.46±5.10 (10.76-14.16)	0.84	
		Urban	41	05	29	11.00	12.15±5.24 (10.49-13.80)	0.82	p_U=0.285
		Rural	21	06	22	13.00	13.52±5.39 (11.07-15.98)	1.18	
		Total	62	05	29	11.00	12.61±5.29 (11.27-13.96)	0.67	p_H=0.096

Note: N:number of patients, Min.:minimum value, Max.:maximum value, Me:Median, Mean:average value, SD:standard deviation, CI:confidence interval, SE:standard error, P:statistical significance of differences (within-region comparison by p; Student's t-test and PU:Mann-Whitney U test for comparison by gender or place of residence; between-regions comparison by pANOVA:one way ANOVA and p_H:Kruskal-Wallis H-test)

Supplementary Table S-II: Prevalence of multiple sclerosis by economic regions at the end of 2022

Region	Indicator	Population	N	Prevalence±SE, Crude (95% CI)	Prevalence±SE, WSt (95% CI)	Prevalence±SE, EuSt (95% CI)	Prevalence±SE, AzSt (95% CI)	p-value
Central Aran Economic region	Men	354,060	46	12.99±1.92 (9.24-16.75)	12.00±1.84 (8.39-15.61)	13.76±1.97 (9.90-17.63)	13.56±1.96 (9.73-17.40)	0.035¹; 0.041²; 0.057²; 0.049⁴
	Women	362,127	70	19.33±2.3 (14.80-23.86)	17.91±2.22 (13.55-22.26)	19.56±2.32 (15.00-24.11)	19.56±2.32 (15.00-24.11)	
	Urban	294,070	55	18.70±2.52 (13.76-23.65)	17.41±2.43 (12.64-22.18)	18.73±2.52 (13.78-23.68)	19.38±2.57 (14.35-24.41)	0.174¹; 0.189²
	Rural	422,117	61	14.45±1.85 (10.82-18.08)	13.45±1.78 (9.95-16.95)	15.45±1.91 (11.70-19.20)	14.78±1.87 (11.12-18.45)	0.301³; 0.148⁴
	Total	716,187	116	16.20±1.50 (13.25-19.14)	14.99±1.45 (12.15-17.82)	16.68±1.53 (13.68-19.67)	16.59±1.52 (13.61-19.57)	—
Mil-Mughan Economic Region	Men	259,701	18	6.93±1.63 (3.73-10.13)	6.21±1.55 (3.18-9.24)	7.02±1.64 (3.80-10.24)	7.18±1.66 (3.92-10.44)	0.006¹; 0.011²
	Women	260,504	39	14.97±2.40 (10.27-19.67)	13.11±2.24 (8.71-17.50)	13.55±2.28 (9.08-18.02)	14.76±2.38 (10.10-19.43)	0.020³; 0.009⁴
	Urban	133,162	30	22.53±4.11 (14.47-30.59)	19.91±3.87 (12.33-27.49)	21.27±4.00 (13.44-29.10)	22.41±4.10 (14.37-30.45)	<0.001¹; 0.001²
	Rural	387,043	27	6.98±1.34 (4.34-9.61)	6.18±1.26 (3.70-8.65)	6.48±1.29 (3.95-9.02)	7.06±1.35 (4.41-9.70)	<0.001,⁴
	Total	520,205	57	10.96±1.45 (8.11-13.80)	9.72±1.37 (7.05-12.40)	10.35±1.41 (7.59-13.11)	11.06±1.46 (8.20-13.91)	—
Shirvan-Salyan Economic Region	Men	242,967	24	9.88±2.02 (5.93-13.83)	9.32±1.96 (5.48-13.16)	10.40±2.07 (6.34-14.45)	10.38±2.07 (6.33-14.43)	0.142¹; 0.180²
	Women	248,294	36	14.50±2.42 (9.76-19.24)	13.40±2.32 (8.85-17.95)	13.80±2.36 (9.18-18.42)	14.65±2.43 (9.89-19.41)	0.278³; 0.180⁴
	Urban	230,180	39	16.94±2.71 (11.63-22.26)	15.76±2.62 (10.63-20.89)	16.35±2.67 (11.13-21.58)	17.26±2.74 (11.89-22.62)	0.006¹; 0.008²
	Rural	261,081	21	8.04±1.76 (4.60-11.48)	7.54±1.70 (4.21-10.87)	8.35±1.79 (4.84-11.85)	8.38±1.79 (4.86-11.89)	0.013³; 0.007⁴
	Total	491,261	60	12.21±1.58 (9.12-15.30)	11.39±1.52 (8.41-14.38)	12.12±1.57 (9.04-15.20)	12.55±1.60 (9.42-15.68)	—

Note: N:number of patients; Prevalence:crude prevalence per 100,000 population; SE:standard error of the mean; CI:confidence interval; WSt:World Standard Population (using the world population as the standard); EuSt:Eur-open Standard Population (using the European population as the standard); AzSt:Azerbaijan Standard Population. Statistical significance of differences: p: determined by Student's t-test. 1:applicable to WSt; 2:applicable to EuSt; 3:applicable to EuSt; 4:applicable to AzS