RWD12 MEDICATION ADHERENCE AND QUALITY OF LIFE OF PATIENTS

WITH MULTIPLE SCLEROSIS IN BULGARIA –

A PILOT STUDY



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OBJECTIVES

✓ To evaluate medication adherence (MA) and quality of life of patients with relapsing remitting multiple sclerosis
 ✓ (RRMS) in Bulgaria and the determinants that influence MA.



✓ A pilot, cross-sectional, and prospective study among 18 patients with MS treated at the Clinic of Neurology in University Hospital Alexandrovska, Sofia, Bulgaria was initiated in April 2022.

 ✓ A questionnaire about patients' demographic, clinical characteristics, and standardized instruments (EQ-5D, VAS and Morisky test) to evaluate quality of life and to assess patient's MA were applied.
 ✓ Results were processed through statistical analysis using MedCalc software version 16.4.1

RESULTS

- ✓ This pilot study included 18 MS patients as most were female (72.2%, p=0,0593) and prevailed those in the age group 30-40 years (50,0 %). (Table 1.)
- ✓ The median years lived with MS were 5.5 (p=0.0113). (Table 1.)
- ✓ More than 80% of the observed patients were employed (p=0.0155) and around 44% were with reduced work capacity.
 (Table 1.)
- ✓ The largest was the number of patients treated with injectables 61,1 % (p=0.0155), 50 % were treated with interferons, 38,9 % immunosuppressants and 11,1 % immunomodulators (p=0.1146). (Table 1.)
- ✓ The median values for quality of life were 80 [95% CI 60-90, VAS-score] and 0,84 [95% CI 0.7359-1.00, EQ-5D test] and they were similar among different genders, age groups, MA level or types of therapy. (Table 1.)
- \checkmark High level of adherence was reported by 61,1 % of the patients (p=0.0302). (Figure 1.)
- ✓ At a sample level the odds for being adherent were 1.2 higher in women than in men [OR=1.1667 95% CI 0.0742-18.3469, p=0.9127] and 2 times higher in case of shorter duration of MS [OR=2.00 95% CI 0.09019-44.353, p=0.6611]. (Table 2.)

CONCLUSIONS

✓ At this stage of the study, we can conclude that MA among MS patients is high and depends on the duration of disease and gender. However, these hypotheses should be further confirmed by collecting more data.

Variable	Value	P value	0/ of notionto with a contain	Determinant	High level of	Low level of	OR, 95% CI, p
gender men women	27.8% <u>72.2%</u>	P = 0.0593	% of patients with a certain level of adherence to therapy 70,00% 61,10%		adherence (N)	adherence (N)	
Age 18-30 years old <u>30-40 years old</u> 40-50 years old 50-60 years old	11.1% <u>50%</u> 22.2% 16.7%		50,00% 40,00% 30,00% 20,00% 11,10% 0,00% high avarage low Figure 1.Percentage of patients with a certain level of adherence to therapy.	Gender Female Male	7 3	2 1	OR=1.1667 95% CI 0.0742-18.3469 P=0.9127
Professional status employed unemployed retiree Years living with the disease	<u>83.3%</u> 11.1% 5.6% Median = 5.5 years, 95% CI 4- 11.723	<u>P<0.0001</u>		Year lived with MS =10 years 10 years	6 3	1 1	OR=2.00 95% CI 0.09019-44.353 P=0.6611
Type of MS Relapsing – remitting MS (RRMS) Type of Therapy <u>immunosuppressants</u> <u>interferons</u> immunomodulators	11.723 100% 38.9% 50% 11.1%	P=0.1146		Type of therapy p.o. s.c.	2 8	1 1	OR = 0.25 95% CI 0.01044-5.9851 p=0.3922
Type of Therapy p.o. <u>S.c.</u> i.v. Quality of Life (VAS)	33.3% <u>61.1%</u> 5.6% Median = 80.00, 95% CI 60-90	<u>P=0.0155</u>		Туре of therapy Имуносупресори Интерферони	3 6	1 1	OR=0.5 95% CI 0.0225-11.0882 p=0.6611
Quality of Life (EQ-5D) Quality of Life (EQ-5D) and level of adherence Low level Avarage level High level	Median = 0.84, 95% CI 0.7359-1.00 0.895 0.76 1.00	P=0.140461 Kruskal-Wallis test		Age 18-40 years >40 years	6 4	2 1	OR=0.75 95% CI 0.0497-11.3114 p=0.8354

Table 1. Results from statistical analysis.

 Table 2. Characteristics of the determinants that influence MA.