



MARKET ANALYSIS OF ANTIPSYCHOTICS IN REPUBLIC MACEDONIA

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INTRODUCTION

Antipsychotics are drugs mainly used in therapy of symptoms of psychosis such as schizophrenia, manic psychosis, depression etc. The treatment of the patients with psychotic conditions is directly connected with physical and financial availability of safe, effective and drugs with good quality. The analysis of the market of antipsychotics implies analysis of all antipsychotics registered in Republic of Macedonia, their status as regards the reimbursement, financial and physical availability, compared with the recommendations for the treatment of these diseases in evidence-based medicine and other therapeutic guides, as well as the analysis of the consumption of antipsychotic products dispensed and reimbursed by the Health Insurance Fund (HIF) in pharmacies in Macedonia.

METHODOLOGY

For this purpose, we used relevant data from primary, secondary and tertiary literature, recommendations from Evidence-based Medicine, official data from world and national drug registers and published reports from the HIF of Republic of Macedonia for consumption of antipsychotics from the Positive List for the period 2011-2015. For data processing we used the descriptive method and presented the obtained results in tabular form.

Table 1. Market analysis of antipsychotics determined by number of issued prescriptions in 2015

Generic name	Total number of released recipes	Total amount reimbursed by HIF
Clozapine 100 mg	5.278	4.987.710
Clozapine 25 mg	10.221	3.799.638
Levomepromazine 100 mg	3.758	1.334.610
Levomepromazine 25 mg	14.973	3.170.259
Fluphenazine 1 mg	3.386	140.362
Fluphenazine 2,5 mg	2.020	655.972
Fluphenazine 5 mg	53	33.867
Haloperidol 10 mg	8.736	1.342.082
Haloperidol 2 mg	21.971	1.288.377
Olanzapine 10 mg	26.098	16.455.020
Olanzapine 5 mg	39.393	12.622.051
Risperidon 1 mg	31.447	1.717.033
Risperidon 2 mg	44.609	3.726.708
Risperidon 3 mg	5.935	687.251
Risperidon 4 mg	2	110

Table 3. Antipsychotics indicated for treatment of various diseases according to EBM

Disease	Therapies according to EBM	Registered antipsychotics in the world	Registered antipsychotics in R.Macedonia	Antipsychotics in R.Macedonia reimbursed by HIF
Acute psychosis	Risperidone Quetiapine Aripiprazole Olanzapine Ziprasidone	Risperidone Quetiapine Aripiprazole Olanzapine Ziprasidone	Risperidone Quetiapine Aripiprazole Olanzapine	Risperidone Olanzapine
Bipolar disorder	Olanzapine	Olanzapine	Olanzapine	Olanzapine
Delusional disorder	Risperidone	Risperidone	Risperidone	Risperidone
Psychosis in elderly patients	Risperidone Quetiapine Olanzapine Haloperidol Aripiprazole Ziprasidone	Risperidone Quetiapine Olanzapine Haloperidol Aripiprazole Ziprasidone	Risperidone Quetiapine Olanzapine Haloperidol Aripiprazole	Risperidone Olanzapine Haloperidol
Treatment of dementia	Risperidone Quetiapine	Risperidone Quetiapine	Risperidone Quetiapine	Risperidone
Schizophrenia	Chlorpromazine Perphenazine Risperidone Olanzapine	Chlorpromazine Perphenazine Risperidone Olanzapine	Risperidone Olanzapine	Chlorpromazine Risperidone Olanzapine

RESULTS AND DISCUSSION

-The market of antipsychotics in Republic of Macedonia is characterized with high presence of generic drugs, high consumption determined by the number of issued prescriptions and also by the financial amount. Innovative drugs hardly enter the market and even more difficult on the Positive List, due to the financial constraint of the Health Insurance Fund and complicated procedures. These important factors significantly limit the possibility of doctors’ choice to introduce new therapy in these patients, to monitor the effects of treatments and also to gain experience with innovative drugs and treatment.

Table 2. Consumption growth of antipsychotics in period 2011-2015

Generic name	Total number of issued recipes in 2011	Total number of issued recipes in 2012	Total number of issued recipes in 2013	Total number of issued recipes in 2014	Total number of issued recipes in 2015	Consumption growth 2011/2015
Clozapine 25 mg	7.823	4.435	4.826	9.495	10.221	30.65%
Clozapine 100 mg	3.840	7.924	8.957	5.080	5.278	37.44%
Levomepromazine 25 mg	15.464	15.543	13.675	14.776	14.973	3.18% H.
Levomepromazine 100 mg	3.769	3.815	4.156	3.707	3.758	0.30% H.
Fluphenazine 1 mg	4.659	4.337	3.785	3.281	3.386	27.33% H.
Fluphenazine 2,5 mg	1.565	1.667	1.806	1.934	2.020	29.07%
Fluphenazine 5 mg	111	83	63	48	53	47.74 H.
Haloperidol 10 mg	7.108	7.554	7.964	8.339	8.736	22.90%
Haloperidol 2 mg	20.593	21.214	20.587	21.076	21.971	6.69%
Olanzapine 10 mg	14.804	18.030	20.405	23.631	26.098	76.29%
Olanzapine 5 mg	14.239	19.249	25.334	33.795	39.393	76.65%
Olanzapine 7,5 mg	/	/	1	/	/	
Risperidon 1 mg	21.244	22.711	25.070	27.431	31.447	48.02%
Risperidon 2 mg	35.223	36.119	38.728	40.105	44.609	26.64%
Risperidon 3 mg	4.858	5.219	5.374	5.550	5.935	22.16%
Risperidon 4 mg	652	79	19	2	2	
Lithium carbonate 300 mg	924	/	/	/	/	
Вкупно	156.876	167.979	180.730	198.250	217.880	

CONCLUSION

Obtained results clearly show that it is necessary to improve health and drug policies in order to improve the possibility of effective treatment of these patients in accordance with the recommendations and clinical guidelines.