

COST – CONSEQUENCE ANALYSIS OF MAJOR DEPRESSIVE DISORDER TREATMENT – COULD HETEROCYCLIC ANTIDEPRESSANTS OFFER OPTIMAL VALUE FOR MONEY IN A MIDDLE INCOME SETTING ?

M. Jakovljevic¹, T. Yamada², C.H.E.N. Chia Ching³, D. Stevanovic⁴, M. Jovanovic⁵, K. Nikic Djuricic⁵, N. Biorac⁶, G. Mihajlovic⁵, S. Jankovic¹

¹Pharmacology and Toxicology, Faculty of Medical Sciences University of Kragujevac, Kragujevac, Serbia ; ²Economics Center for Children and Childhood Studies, Rutgers University the State University of New Jersey, New Jersey, USA ; ³Epidemiology & Community Health School of Health Sciences & Practice, New York Medical College, New York, USA ; ⁴Psychiatry, General Hospital Sombor, Sombor, Serbia ; ⁵Psychiatry Clinic, University Clinical Center Kragujevac, Kragujevac, Serbia ; ⁶N/A, Primary Care Facility, Svilajnac, Serbia

Introduction: There is paucity of published literature on antidepressants in a cost-consequence study design.

Objectives: Measuring clinical outcomes of pharmacotherapy.

Aims: Costs and consequences determination in depressive episode acute medical care.

Methods: Cost-consequence analysis; Setting-Serbian tertiary university clinic(2010-2012). Patient visits to attending psychiatrists: baseline, 3, 8 weeks. HDRS-17 and Q-LES-Q-SF scale were applied in each of control visits. Resource use patterns and costs were evidenced for up to 14 weeks from study entry. Micro-costing approach allowed for most direct and indirect costs measurement. Costs were expressed in national currency-Central Serbian Dinar(1€≈115.85CSD;2012). Societal perspective and 14 weeks time horizon were adopted. Random selection of 65 depressive patients was based on clinical criteria and their assignment to either one of three different treatment protocols. 5 patients were lost to follow up.

Results: There was no statistically significant difference in terms of therapeutic response by the HDRS scores before and after introducing treatment groups($\chi^2=4.339$; $p=0.362$). QALY value increased by 11.77(SSRI group); 8.93(SNRI) and 12.54 (heterocyclics). Mean cost per QALY was 9,937.51 CSD for SSRI; 7,138.27 CSD in SNRI; and 6,164.96 CSD for heterocyclics. There were 28.69 depression with free days in SSRI, 21.78 days in SNRI, and 30.59 days in heterocyclic group. Cost-effectiveness assessment was 346.38 CSD per day(SSRI); 327.74 CSD(SNRI), and 201.54 CSD(heterocyclics).

Conclusions: Heterocyclic antidepressants provide highest 'value for money' in terms of QALY in depressive episode treatment and its treatment is most cost effective. Cost-consequence evaluations have heavier impact to clinical decision making with regards to major depressive disorder treatment in the absence of clear clinical superiority of any major pharmacological protocol.