

IMPACT OF HEALTH POLICY CHANGES ON UNIT SALES OF 5 TOP SELLING ATC1 PHARMACEUTICAL GROUPS IN TURKEY

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Objectives

Turkish Ministry of Health (MoH) initiated Health Transformation Program (HTP) in 2003. HTP impacted all clinical and economic outcomes of health including pharmaceutical sales by improving access to health services. The objective of this study is to understand the differences in the impact of selected 5 policies on 5 top selling ATC1 groups in terms of unit sales (US) in the respective periods.

Methodology

132 months sales data with segmented regression analysis for interrupted time series were used. International reference pricing of pharmaceuticals (RF), mandatory reimbursement dossier submission for new molecules, new indications and line extensions with medical and economic evaluations (MRDS), auditing for good manufacturing practice (GMP), family physician system (FP) and compulsory medical service for physicians (CMS) were selected as five major policies that may affect cost, demand and supply of pharmaceuticals.

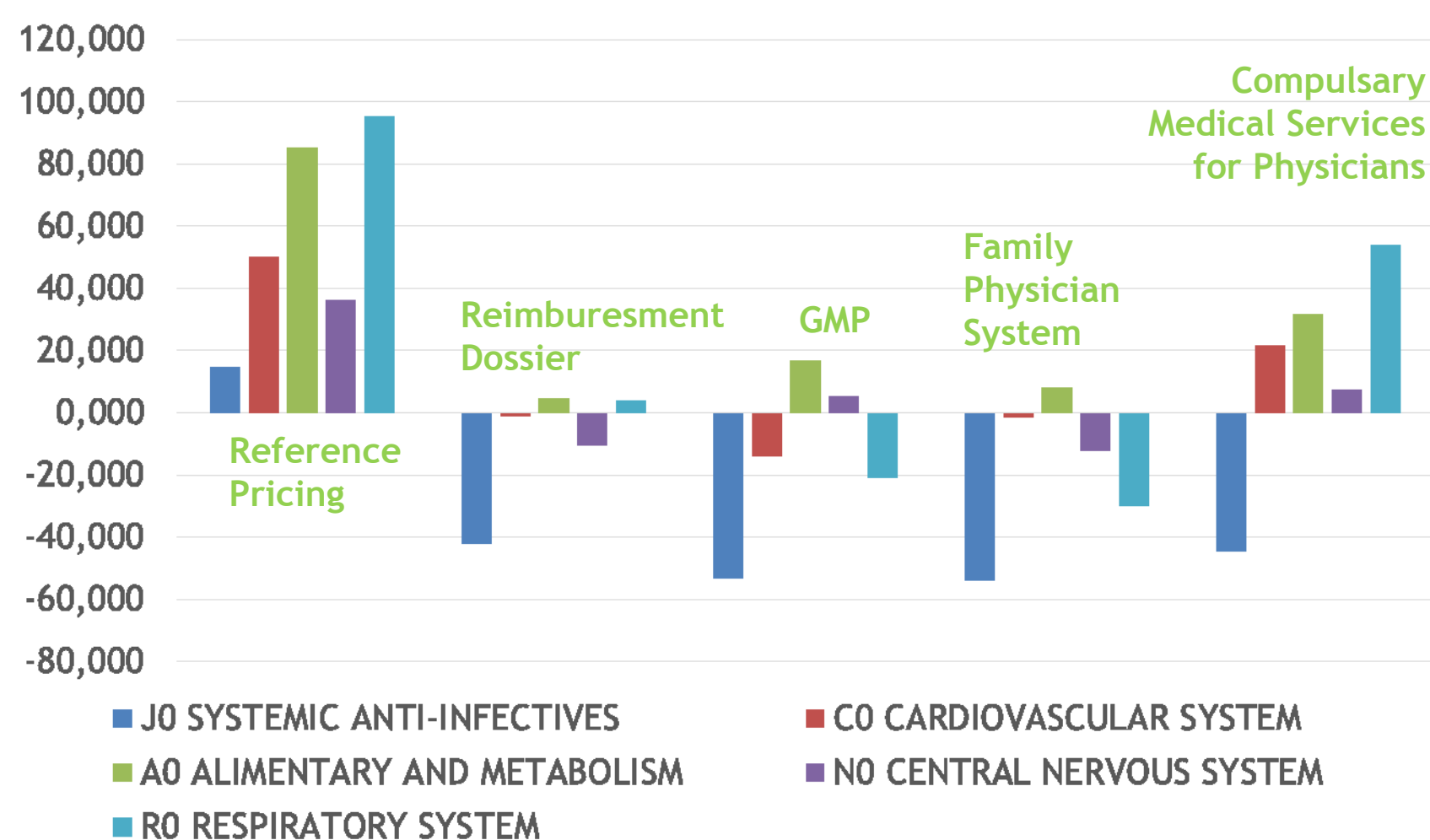
We analyzed possible breaks in trends prior and after the implementation of 5 selected policies of the HTP. The top 5 selling ATC1 groups were Systemic Antienfectives (J0), Cardiovascular System (C0), Alimentary and Metabolism(A0), Respiratory (R0) and Central Nerveous System (N0).

The Durbin-Watson d statistics of SPSS version 20.0 was used as a test for serial correlation of error terms. Shift in slope with $p < 0.05$ was considered as statistically significant.

Results

There was an increasing trend for all ATC1 groups prior the implementation of policies. The trends in J0 were negatively impacted from all policies except for RF. The C0 group was negatively impacted from all policies except for RF and CMS. The A0 group was positively impacted from all policies. The N0 was positively impacted from all policies except MRDS and FP. The R0 group was positively impacted from all policies except GMP and FP.

Impact of Health Policies for ATC1 Group (In Units)



Conclusion

As a consequence of improved access to health care in the beginning of 2000, there was an increasing growth trend in all ATC1 groups. MoH and payer (Social Security Institution) implemented policies for controlling trends on pharmaceutical consumption.

Policy changes were not sufficient to control unit growth of top selling pharmaceutical groups. The effect of other policies to control unit sales of these group should also be evaluated.

References:

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