

IMPACT OF HEALTH POLICY CHANGES ON TRENDS OF PHARMACEUTICAL MARKET IN TURKEY

Esra Safak Yilmaz¹, Guvenç Kockaya*², Fatma Betul Yenilmez³, Mete Saylan², Mehtap Tatar³, Elif Hilal Vural¹, Ismail Mert Vural¹, Akif Akbulat¹, Gursoz Hakki¹, Guven Artiran¹, Saim Kerman¹

¹Turkish Ministry Of Health Turkish Medicines and Medical Devices Agency ²Health Economics and Policy Manager, Ankara, Turkey
³Hacettepe University, Hacettepe Faculty of Economics and Administrative Sciences Ankara, Turkey

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. Total pharmaceutical market reached US \$ 8 billion in last 10 years. HTP improved health coverage and access to health services, additional policies are implemented by MoH for controlling this increasing trend on pharmaceutical consumption.

The aim of this analysis is to understand the impact of selected 5 major policy changes to total pharmaceutical consumption in between 2002-2012.

Methodology

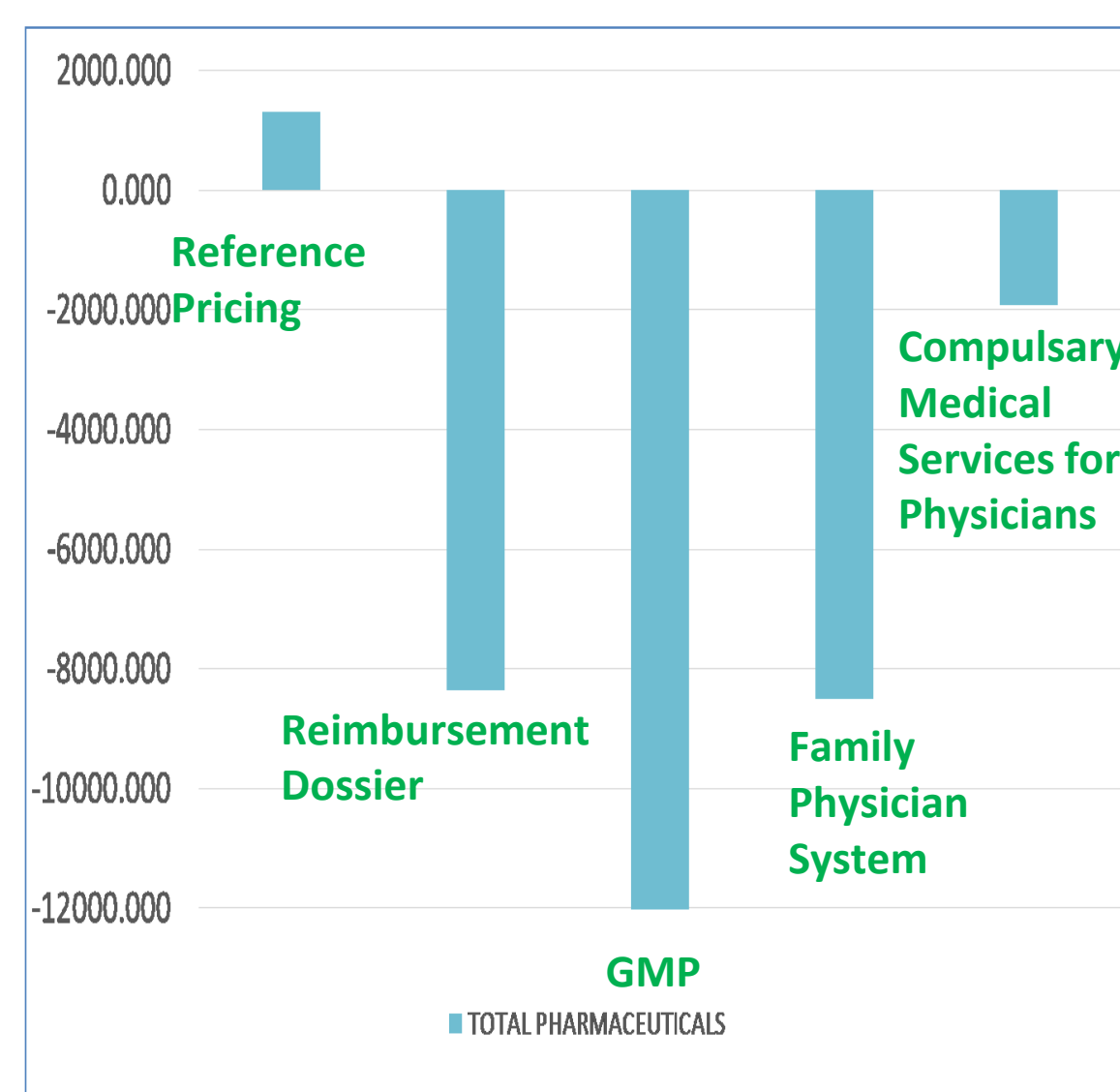
132 months sales data with segmented regression analysis for interrupted time series were used. International reference pricing of pharmaceuticals(RF), mandatory reimbursement dossier submission for new molecules, new indications and line extensions with medical and economic evaluations(MRDS), auditing 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.

Methodology

We analyzed possible breaks in trends prior and after the implementation of 5 selected policies of the HTP. The analysis was conducted for cost (CS) and unit sales (US) for all pharmaceutical products.

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.

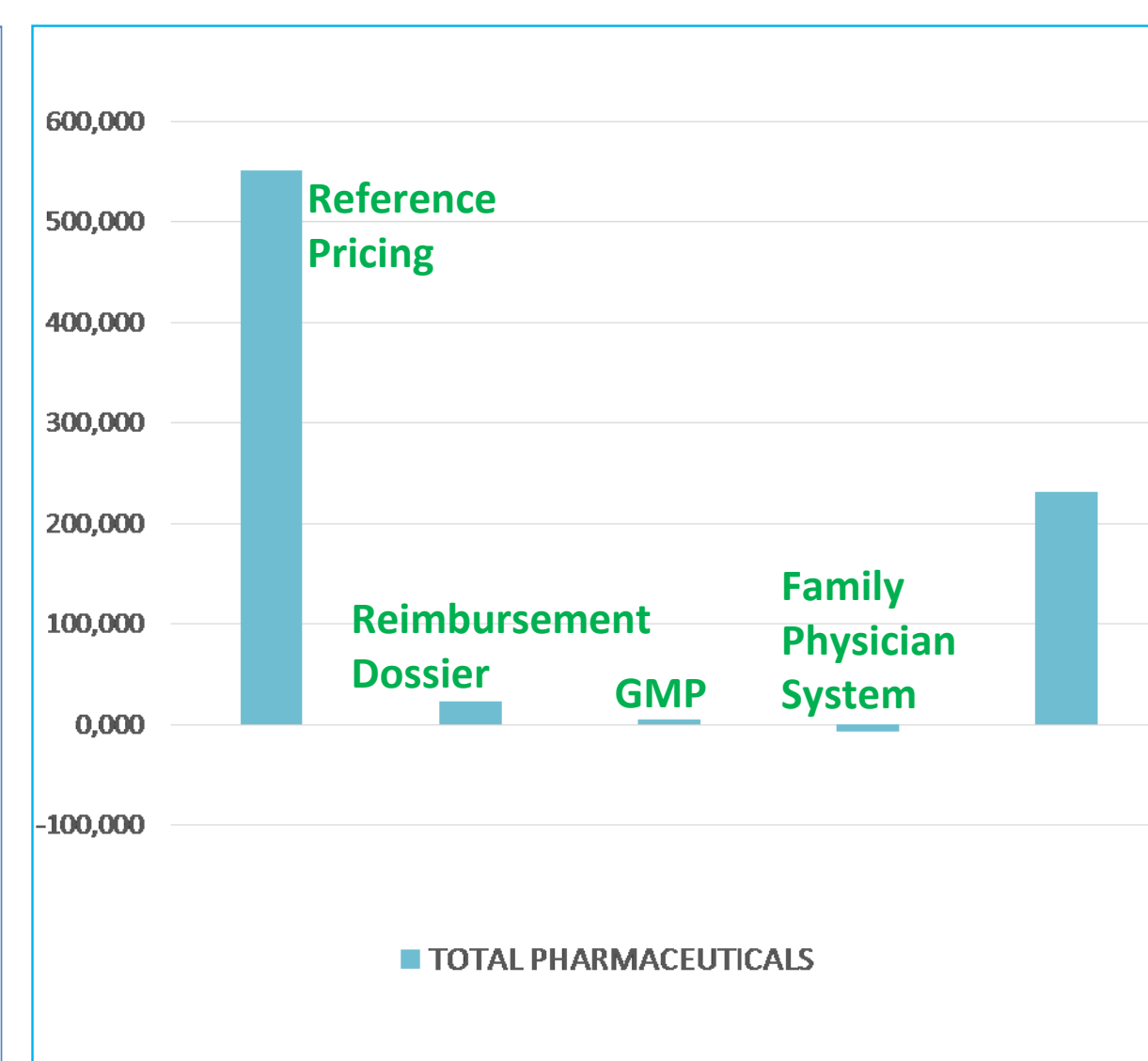
Graphic 1. Impact of Health Policy Trends of Pharmaceutical Market (Value)



Results

All, except for RF policy changes, had a negative impact on the trends for CS. RF policy did not reverse the trends in CS and US however it slowed positive trend in CS significantly down. All policies hindering impact on the increasing trend in US. However, only RF and CMS policies reached statistically significant level.

Graphic 2. Impact of Health Policy Trends of Pharmaceutical Market (Unit)



Conclusion

Policies within the HTP framework were successful to control pharmaceutical expenditures while improving access to healthcare. International reference pricing has a limited impact on controlling growth of pharmaceutical market.

References:

- <http://www.saglik.gov.tr/TR/belge/1-2906/saglikta-donusum-programi.html>
- IMS Health Datas

*Corresponding Author E-mail: guvenc.kockaya@sepd.org.tr