

Trend analysis of Anti-Allergic medicines in Iran (2006-2017)

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Conclusion: Generally with upward trend of Anti-Allergic medicines we can conclude that incidence of Rhinitis Allergic in Iran during past 12 years has increased and policy makers should follow this trend concerning better supply chain.

Background: Up to 40% of global and 7.4- 41.3% of Middle East population are affected by Rhinitis Allergic (1). Patients with Rhinitis Allergic (RA) versus control group experience approximately twofold pharmaceutical expenditures and 1.8 fold number of visits (2). Since drug utilization can show various times of developing a disease in a country, it is used as an alternative for prevalence (3). In this study we tries to examine and explain consumption of anti-allergic medicines during past 12 years to have a prospective view of these kinds of medicines.

Method: In this descriptive and cross-sectional study which investigates anti-allergic medicines over a 12-year period (2006–2017) we used Iranian pharmaceutical statistical datasheet published by the Iranian Ministry of Health (4). According to treatment guideline of rhinitis allergic (5) and WHO ATC code, we categorized anti allergic medicines into 5 groups (antihistamines, Beta 2 agonists, Corticosteroids, Fixed dose and others), Then DIDs for these groups were calculated and analyzed.

Result: Based on our finding, cetirizine, Loratadine and Inhaled Salbutamol got the highest DID among all of 5 groups, with 99.2, 65.4 and 57.6 retrospectively. Generally based on 3rd level of ATC code (second generation anti-histamines, respiratory system drugs for obstructive airway disease, respiratory system nasal preparation and corticosteroid for systemic use) are faced with ascending market sales (figure 1). Second generation anti-histamines due to higher safety and efficacy, and lower interaction with other medicines are going to find their place instead of first generation (figure2)

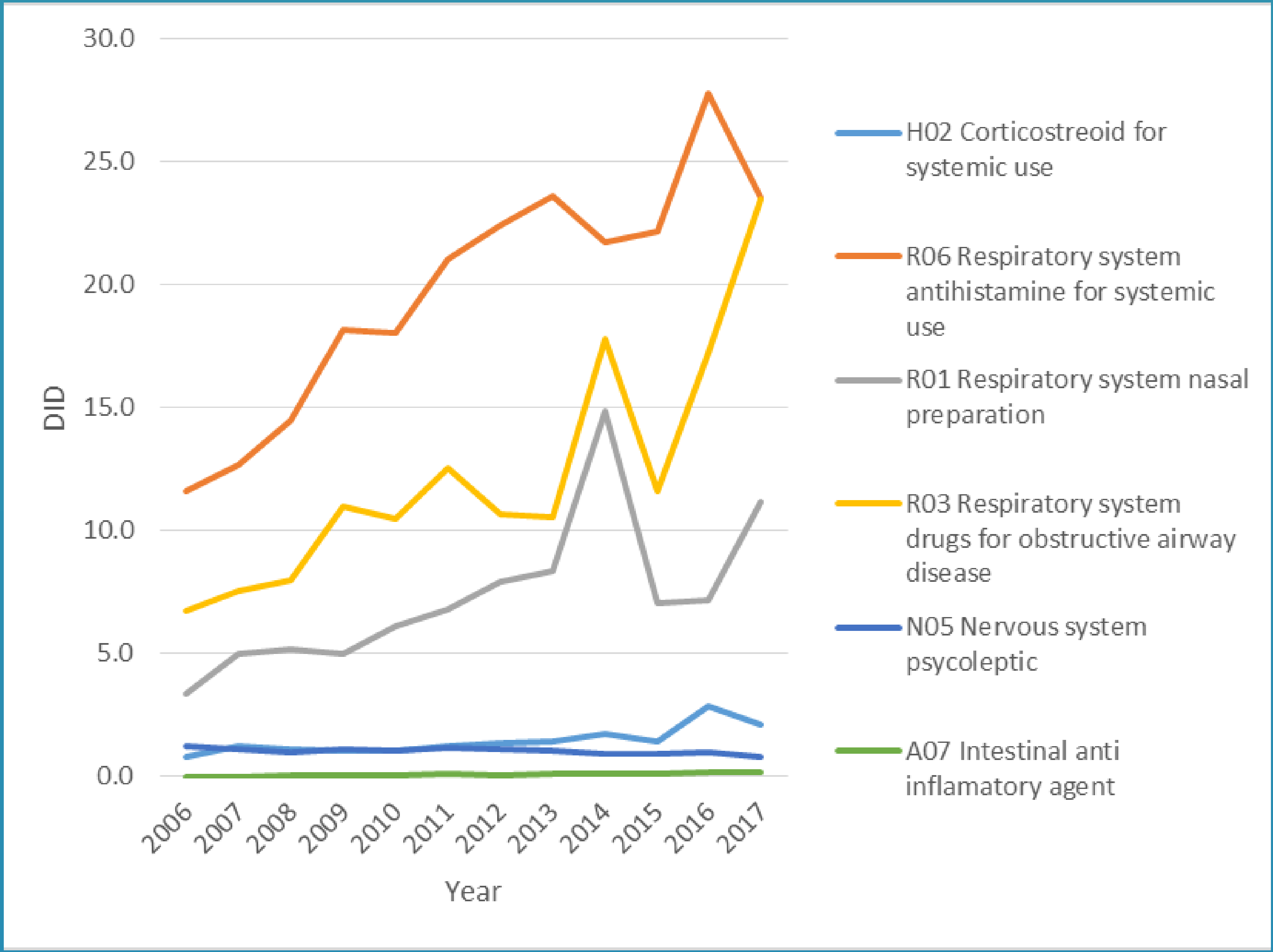


Figure1- Trend of Anti_Rhinitis based on ATC group 2006-2017

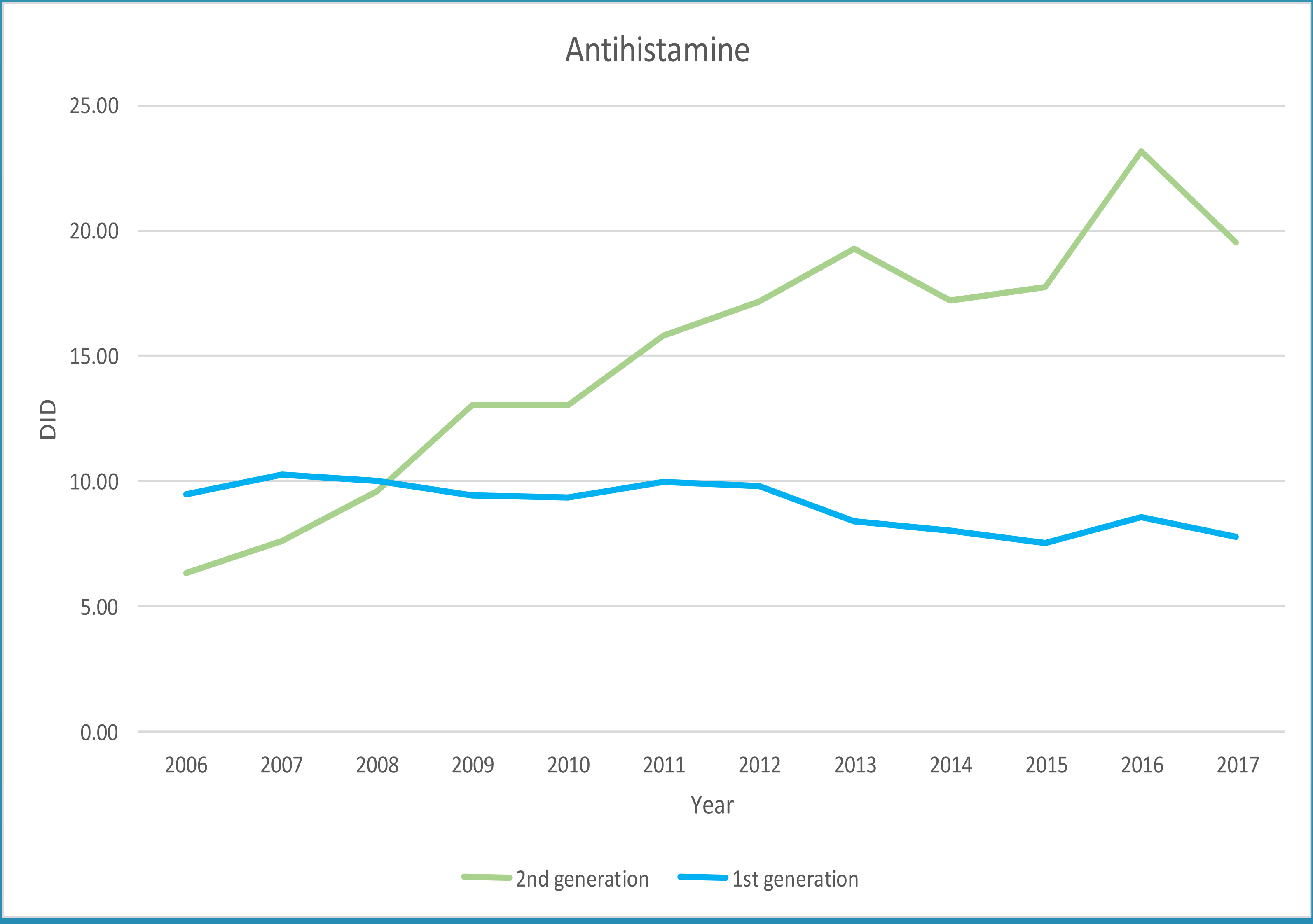


Figure2– comparative trend of 1st and 2nd generation of antihistamines

Discussion: According to our finding drug consumption of Anti-Rhinitis medicines are following guideline (5). Among 2nd generation Antihistamines, Cetirizine and Loratadine have higher amount of consumption. Lower price, long time presence in the market, new generation category with more efficacy and lower interaction should be considered. In 2014 and 2016 medicine consumption reached a peak which can imply supply fluctuation as a main reason and minor reasons such as exchange rate, sanction, domestic production and import. Since Drug utilization studies are powerful instruments for identifying problematic area in medicine consumption, and it shows various incidence times of diseases in a country and can be used as an alternative for prevalence of a disease (2).

Limitations: This study has some limitations such as sales report to pharmacies not distributors, reported statistical errors of companies, which did not affect result significantly.

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