## Drug utilization study of eye drops at tertiary care teaching eye hospital

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## Abstract

**Objective:** The aim of this study was to evaluate the utilization of eye drops based on data obtained from IT department at tertiary care teaching eye hospital during the period of 33 months (From July 2012 to March 2015).

**Methodology:** The data that was obtained include only quantities and brand names of eye drops utilized and dispensed at main pharmacy of the hospital. The data was reorganized and rearranged by taking help from Pharmaguide Pakistan (23<sup>nd</sup> Edition, 2014-15) for active ingredients, company name and drug group. All of the data was finally divided into eight groups. The anti-infectives were further analyzed for average per month and percent utilization.

**Results:** Our results showed that total 1060137 eye drops were utilized during 33 months. The average per month utilization was 32125.4 eye drops. Amongst them Anti-infective (Including all types of Anti-infective e.g. Antibacterial, Antifungal etc) were utilized in highest number, 299211 eye drops (average 9067/month), followed by Steroids in combination with Antibacterial, 203005 (average 6151.7/month), then Antiglaucoma and Miotics 149211 (average 4521.5/month). The data showed the highest percent utilization of eye drops for Anti-infective (28.2%), followed by Steroids in combination with antibacterials (19.1%), Antiglaucoma / Miotics (14.1%), Steroids (10.6%) and Antiallgics, Cycloplegic / Mydriatics (Including non steroidal anti-inflammatory drugs) and Artificial tears showed 8.4%, 9.6% and 8.2% utilization respectively. The lowest percent utilization was showed by miscellaneous group (1.8%). The total number of anti-infective (Including all types of anti-infective e.g. antibacterial, antifungal etc) utilized were 299211 eye drops during 33 months. The average per month utilization of anti-infectives was 9067 eye drops.

**Conclusion:** It was concluded that anti-infective were the mostly utilized group of eye drops. This study indicated the clear guidelines for the allocation of budget for the purchase of eye drops and to maintain inventory level of each eye drop to overcome the problems of unavailability and shortage of most commonly prescribed eye. *Al-Shifa Journal of Ophthalmology 2015; 11(2): 67-75.* © *Al-Shifa Trust Eye Hospital, Rawalpindi, Pakistan.*