

## Title

# HOW THE MEDICINE INVENTORY IS MANAGED BY PHARMACY RETAILERS: A CROSS SECTIONAL STUDY FROM PUNJAB ,PAKISTAN

## Authors

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## Abstract

### Background:

Effective Inventory Management(IM) plays an important role to ensure that medicine is supplied smoothly to patients, as many molecules and medicines have been registered in Pakistan. Managing such huge stock isn't an easy task in pharmacy practice. This study is undertaken to assess the practices of IM followed at retail pharmacies in Punjab, Pakistan.

### Method:

A cross-sectional study was conducted between February and March 2019. A pre tested, validated questionnaire was used to collect the data from systematically selected 407 retail pharmacies. The length of the survey and clarity of the questions was evaluated in a pilot study of 20 participants and its results were not included in final results. The rating method was applied for validation. The ratings of each item was analyzed by an item-objective congruence (IOC) score method. The average score of IOC > 0.5 will consider good for content validity. Reliability was assessed by using Cronbach's alpha value; a reasonable level of reliability and internal consistency above 0.70 was my benchmark. Chi square and one-way ANOVA was used to analyze the data.

### Results

From quantitative analysis, our research was answered by 96% of approached retail pharmacies. Participants mean age was  $22 \pm 0.64$  years. On average most of the participants manage their inventory on weekly basis (60.7% & 46.9%) and prioritized most prescribed medicine (69.8%). The overall affecting factors on IM was prescribing trend (50.9%) and financial constraint (52.1%). The most suggesting policy for effective IM practices was training of staff for specific scientific model (45.9%).

### Conclusion:

The findings from this study conclusive that IM practices are not standardized. The implementation of standardized system leads to meet the challenges.