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# The prevalence of polypharmacy and its negative outcomes: A survey of leading health care settings of Pakistan

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## Introduction

- The simultaneous use of several medications by a patient is called as polypharmacy
- It is often defined as the use of four or more regular medications
- It sometimes alternatively refers to purportedly excessive or unnecessary prescriptions
- The complex diagnosis and management of side effects from multiple medications present two different sets of problems: short-term and long-term side effects

## Scope

Identify the prevalence of polypharmacy in Pakistan

Identification of Negative outcomes occurred due to polypharmacy

Role of Pharmacist in dealing polypharmacy

Significance of economic condition associated with it

## Polypharmacy

### Factors of Polypharmacy

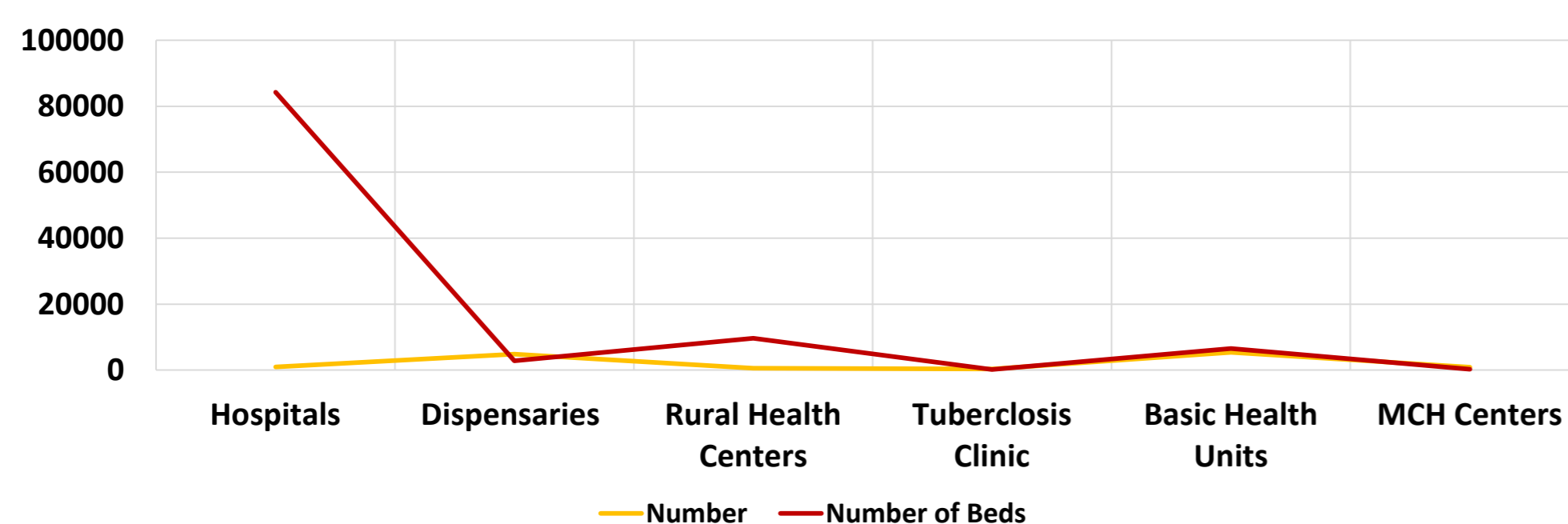
Necessity

Inappropriate Prescription

Excess Consumption

## Pakistan's Health Care System

Health Facilities in Pakistan

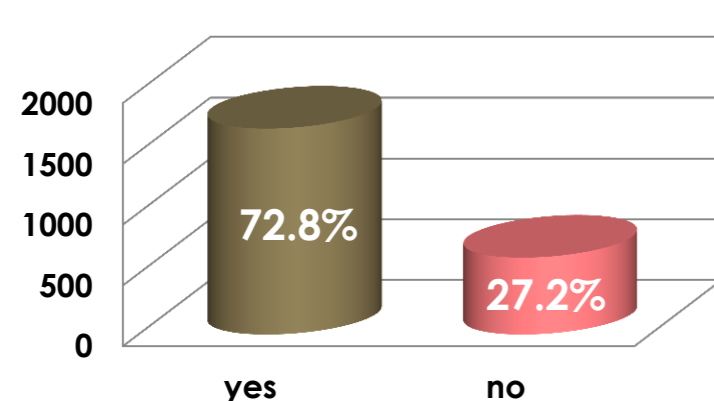


## Methodology

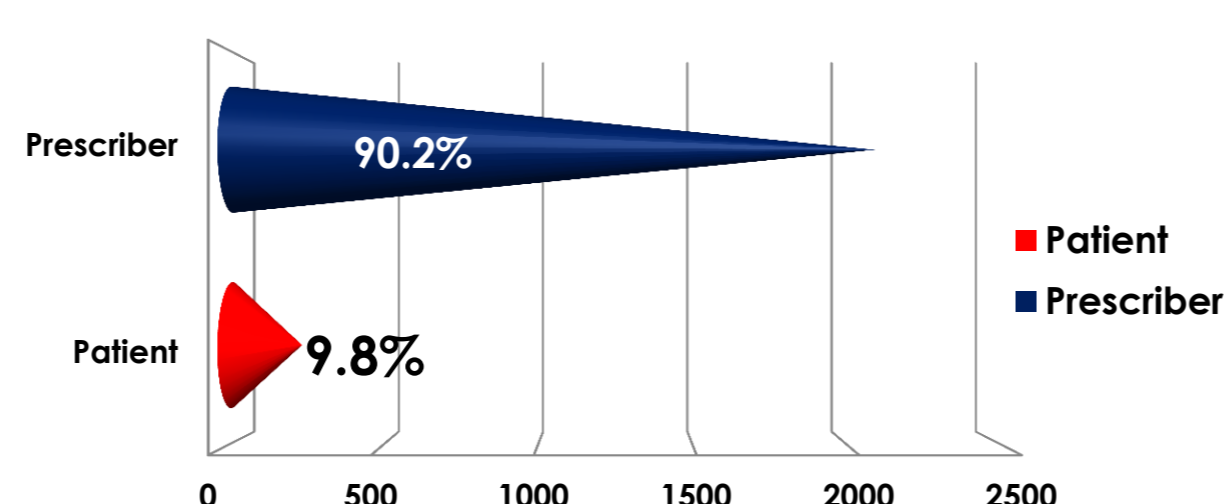
- The study was designed as quantitative cross-sectional survey, targeting pharmacist working in any health care setting across Pakistan.
- The survey includes the basic demographic information of pharmacists
- The relation of dependent variables over the prevalence of polypharmacy and the negative outcomes of polypharmacy
- The Chi-square test was used to test the importance of association between the independent variables the dependent variables

## Results & Findings

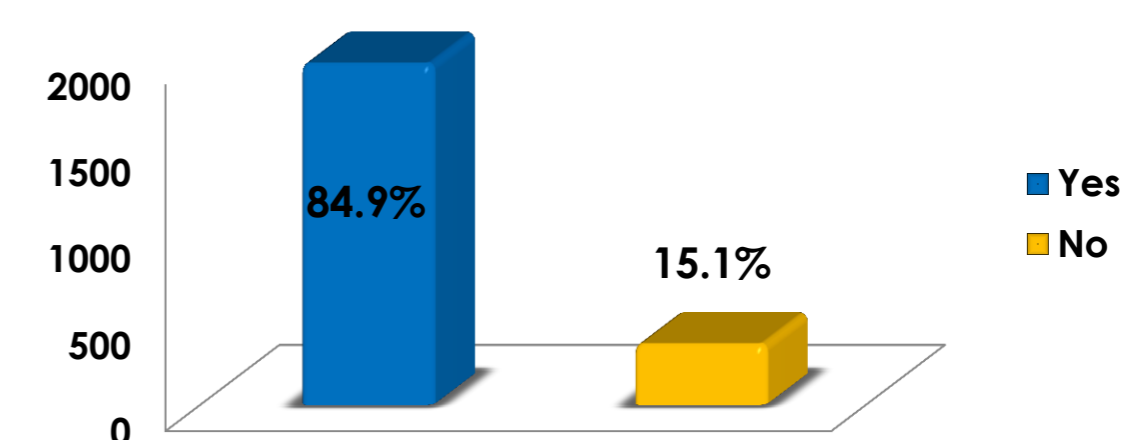
Do you think polypharmacy is a problem in Pakistani Health care system?



Who is the major inducer of polypharmacy in Pakistan?



Adverse Drug Reaction (ADR) Reported Due to Polypharmacy



## Discussion & Conclusions

- Polypharmacy is a widespread issue; physicians, pharmacists and patients are all involved.
- Physicians appear less aware of the pharmacological interactions of the drugs than pharmacists. Therefore, more number of orientation programs, continuing medical educations, etc. should be attended by the medical practitioners as a routine practice.
- Physicians need to be aware of the frequency of dosing and the total number of medications a patient has to take, and their bearing on compliance. Attention has to be given to the mechanism of action of the drugs, to avoid prescribing drugs with duplicate actions.
- This study proved that the Pakistani health care system is deeply affected by polypharmacy and is negatively affecting patients in terms of adverse drug reactions. The need is for the prescriber to motivate the need for adding or subtracting drugs based on patient needs. Other issues are the economic problems faced by the patients due to polypharmacy.
- Polypharmacy is not always the fault of the prescriber, patients also contribute to the problem by self-medicating, failing to follow prescribed directions. It is important to remember that the consequences of inappropriate polypharmacy can be particularly significant to an elderly patient's well-being, financial security and ability to adhere to prescribed therapy. It is recommended to eliminate all medications without therapeutic benefit, goal or indication

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