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Short communication

DRUG INTERACTION A COMMON DRUG THERAPY PROBLEM IN THE CLINICAL SETUP: SCENARIO OF KHYBER PAKHTUNKHWA, PAKISTAN.

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Dear Editor,

The more drugs a patient requires, the increased risk of a drug–drug interaction. Unfortunately it is impractical to just stop possibly offending drugs, however the drug interactions need to be overseen as securely as could be expected under the circumstances⁽¹⁾. Drug-drug interactions (DDIs) in a small extent produces clinically important pharmacokinetic changes and produces potential unfavorable outcome⁽²⁾.

The problem of DDIs needs more consideration in the case of hospitalized patients due to severity of medical condition, multiple drug therapies, co-morbidities, prolonged diseases, complex therapeutic regime, and regular modification in therapy. Prevalence of potential DDIs (pDDIs) in hospital settings has been assessed in some current studies to be in the range of 27.8 to 51.4 %. Old age, taking increased number of medications, length of hospital stay, comorbidities and gender have been described as common risk factors for DDIs⁽³⁾.

Poly pharmacy remains to be a big issue in health care setting regardless of a continues efforts to decrease their occurrence ,inappropriate use of medication is extremely essential issue in every department of clinical setup especially in low income countries and may jeopardize the patient health.⁽²⁾

For instance in province Khyber Pakhtunkhwa, Pakistan the incidence of drug–drug interaction varies from 45% to 77%⁽⁴⁻⁶⁾. The least amount of drug-drug interactions observed in Pulmonology (45%)⁽⁴⁾, and mostly significant in cardiology patients (77%)⁽⁶⁾ And at least one potential Drug–drug interaction (pDDIs) was observed in regardless of type of severity. Similarly in general medicine and psychiatry ward the prevalence of DDIs were found to be 58 % and 68.4% respectively in province.^(3, 5)

On the basis of these statistical data it is foreseen that population of Khyber Pakhtunkhwa, Pakistan are at high risk of DDIs and concurrent use of multiple drugs for the treatment of different or the same diseases can increase the risk of decreased treatment efficacy and further increases drug associated toxicity ,the outcomes of DDIs may alter anticipated therapeutic response or a unique response that does not occur with either agent alone , Integration of pharmacists in multidisciplinary teams and close monitoring of each prescription by the pharmacist using computer based DDIs software as part of the clinical decision making ,further cautious selection of drugs before administration to patients is recommended in order to avoid the unfavorable outcomes of DDIs.

REFERENCES:

1. PoINTERS P. clinically important drug–drug interactions and how to manage them. Fam Pract Manag. 2000;7:12-3.
2. Bhagavathula AS, Sarkar BR. Drug interaction a common problem in the clinical setting:

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Scenario of developing countries. Archives of Pharmacy Practice. 2014;5(3):137.

3. Ismail M, Iqbal Z, Khattak MB, Javaid A, Khan MI, Khan TM, et al. Potential Drug-Drug Interactions in Psychiatric Ward of a Tertiary Care Hospital: Prevalence, Levels and Association with Risk Factors. Tropical Journal of Pharmaceutical Research. 2012;11(2):289-96.
4. Ismail M, Iqbal Z, Khattak MB, Javaid A, Khan TM. Prevalence, types and predictors of potential drug-drug interactions in pulmonology ward of a tertiary care hospital. African Journal of Pharmacy and Pharmacology. 2011;5(10):1303-9.
5. Ismail M, Iqbal Z, Khattak MB, Khan MI, Arsalan H, Javaid A, et al. Potential drug-drug interactions in internal medicine wards in hospital setting in Pakistan. International journal of clinical pharmacy. 2013;35(3):455-62.
6. Ismail M, Iqbal Z, Khattak MB, Khan MI, Javaid A, Khan TM. Potential drug-drug interactions in cardiology ward of a teaching hospital. HealthMed. 2012;6(5).



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