

DEPRESCRIBING TO IMPROVE POLYPHARMACY

BACKGROUND

The concurrent use of multiple medications (Polypharmacy) has been shown to increase admissions to the hospital, and mortality due to interactions. Several components contribute to polypharmacy e.g. multiple prescriptions from different prescribers, as well as self-medication. This results in duplication of therapy, drug-drug interactions and disease-drug interactions.

HYPOTHESIS

De-prescribing will minimise drug-drug and drug-disease interactions and will improve compliance.

LITERATURE REVIEW

One of the potential signs that one is probably taking too many medicines or is experiencing adverse effects they may start developing new symptoms. The common drug-drug interactions include weakness, cognitive changes, gastrointestinal upset, heart palpitations, skin problems, severe constipation, pinpoint pupils, difficulty in breathing, drowsiness, extreme tiredness, sedation, confusion, depressive mood, etc.

AIM

To improve patient safety.

To improve compliance

To minimize pharmaceutical wastage

METHODOLOGY

Study Design. This was an observational study at a public hospital. Medscape's Interaction checker was used to verify interactions.

Study population. Patients on chronic medication serviced by the hospital.

Sample Size. 250 prescriptions were randomly selected over 3 years.

RESULTS

The following drug interactions were observed:

- a. Trepiline and Indapamide: both increase QTc interval. This may increase risk of sudden death in elderly population.
- b. Perindopril and Allopurinol: There is a high risk of developing an anaphylaxis and Stevens Johnson Syndrome.
- c. Perindopril and Pregabalin: Co-administration results in additive risk of developing angioedema of the face, neck and mouth.

CONCLUSION

The study found numerous drug-drug interactions, disease-drug interactions and unused medicines returns.

RECOMMENDATIONS

Periodic review of prescriptions with an intent to de-prescribe.