Shaukat Khanum Memorial Cancer Hospital and Research Center

Pharmacy Newsletter

Volume IX, Issue # 1, 2019

Issued By:

Clinical Pharmacy & Drug Information Center SKMCH&RC

P&TC Updates:

Following drugs are approved by P&TC

1. **Etanercept Inj.** Approved as regular formulary item
2. **Mycophenolate Tab & Inj.** Approved as regular formulary item
3. **Anti-thymocyte globulin (ATG).** Approved as regular formulary item
4. **Budesonide Oral Cap.** Approved as regular formulary item
5. **Cis-atracuirum Inj.** Restricted by service (Anaesthetist consultant only) – 20 patients / month
6. **Clonazepam Tab.** Approved as regular formulary item
7. **Zolmitriptan Tab.** Approved as restricted by service
8. **Abiraterone Tab.** Approved as restricted by cost
9. **Pertuzumab Inj.** Approved as regular formulary item (for indigent patients – 4 slots / month)
10. **Ketoprofen Patch.** Approved as regular formulary item

Availability:

1. **Paclitaxel (Protein Bound)** is available at SKMCH & RC after import on patient need basis.
2. **Atezolizumab** is now available in Pakistan.

1st International Symposium on Medication Safety 2019 Pharmacy SKMCH & RC

The quality of patient's life is conjoint with safe use of medications as it aims to treat the ailment without causing harm to the patient. The pyramid of patient care involves medication safety as the backbone of the treatment modality. The department of pharmaceutical services SKMCH & RC proudly presents the highlights of 1st international symposium on "Medication Safety, Safe and Evidence Based Medicines Practices". In an auspicious event held on 16th March 2019 at Faletti's Hotel Lahore, the speakers presented their talks on global practices of safe medication use. The role of innovative technologies in supporting medication safety was highlighted. Exigency of medication safety in the field of oncology was spotlighted for the insight of the audience.

The Look Alike Sound Alike (LASA) Puzzle

In a recent update by Institute for safe medication practices ISMP, a potential error of dispensing vecuronium instead of vancomycin was averted. The root cause analysis identified that vecuronium was stocked next to vancomycin. Vecuronium is not a formulary item at SKMCH & RC; however our practices towards safe medication dispensing and administration are focused towards gaps and ways of improvement. The LASA puzzle appears with new episodes requiring prompt action to keep the ride of safe medication practices. Recently six new LASA combinations have been identified in our formulary. Preventive stacking measures & LASA tagging have been done along-with education to avoid errors. It is an important consideration during formulary inclusion of products with the intention to avoid LASA combinations in the formulary; however, this may be unavoidable in occasional circumstances.

Xavene vs Danset

Tranexamic Acid vs Ondansetron

Mazenil vs Xavene

Flumazenil vs Tranexamic Acid

Adicovil vs Ranax

Pheniramine vs Ranitidine

Mazenil vs Danset

Flumazenil vs Ondansetron

Metomide vs Precidex

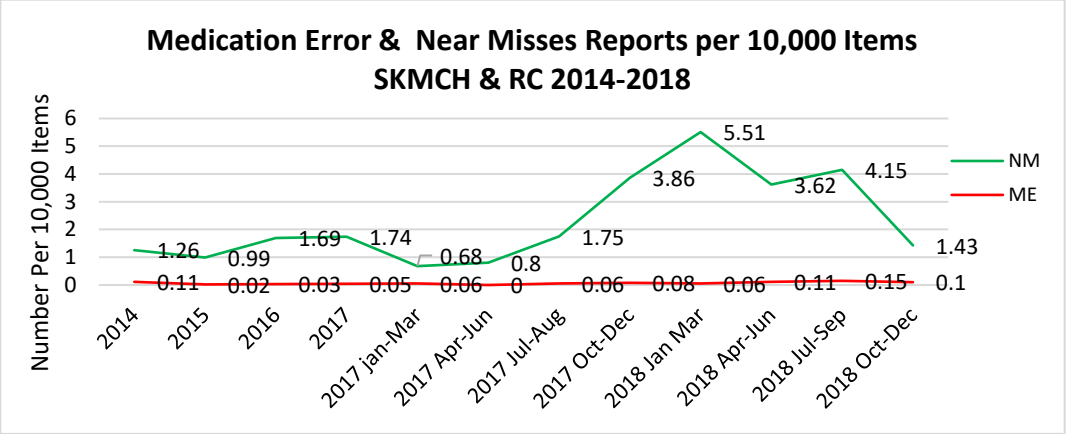
Metoclopramide vs Dexmedetomidine

Hypozam vs WFI

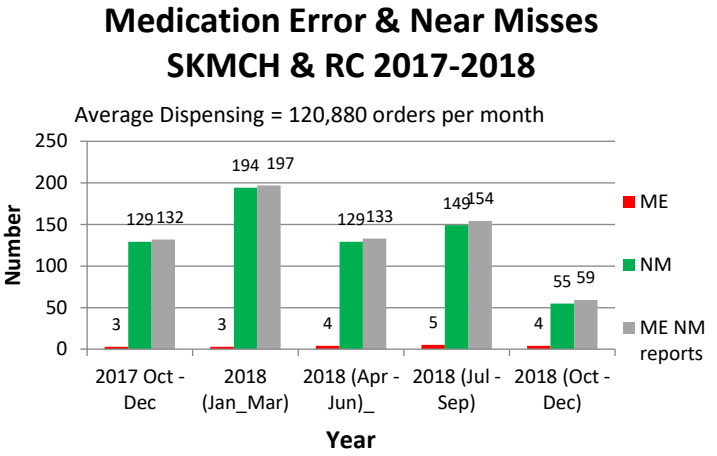
Midazolam vs Water for Injection

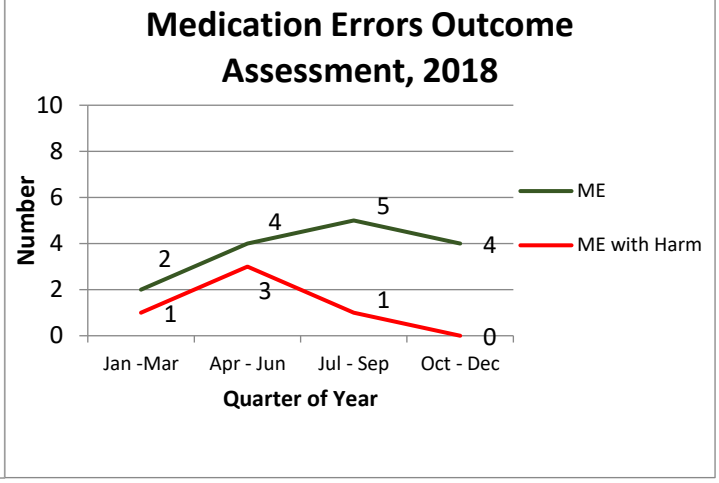
Tracking Medication Error (ME) and Near Misses (NM) at SKMCH & RC

Medication errors (ME) & near miss (NM) update as of year 2018 has been presented below. Data with near miss reports per 10,000 dispensed items has dropped from 5.51 in 1st quarter of 2018 to 1.43 in the last quarter.



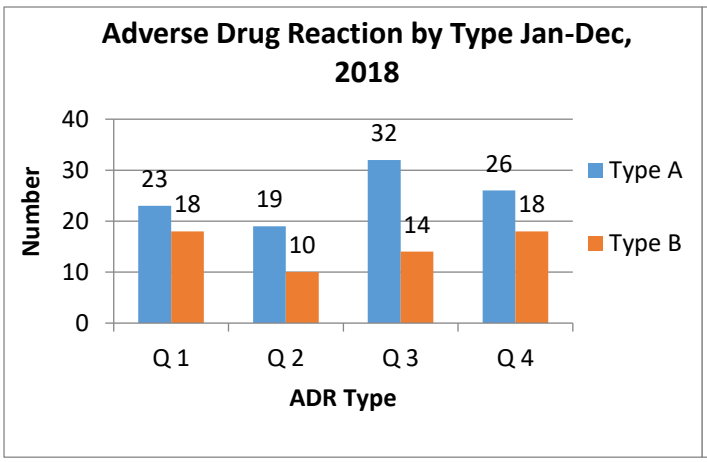
Medication errors with harm are reported to assess patient safety level during the incident. No harm cases were observed during the last quarter of 2018.

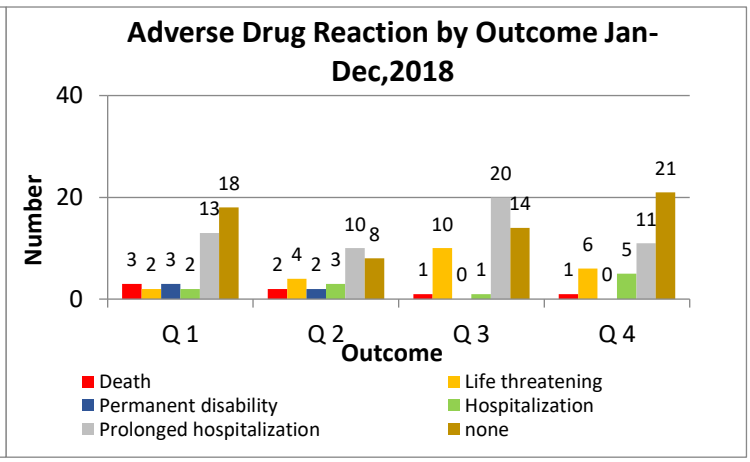




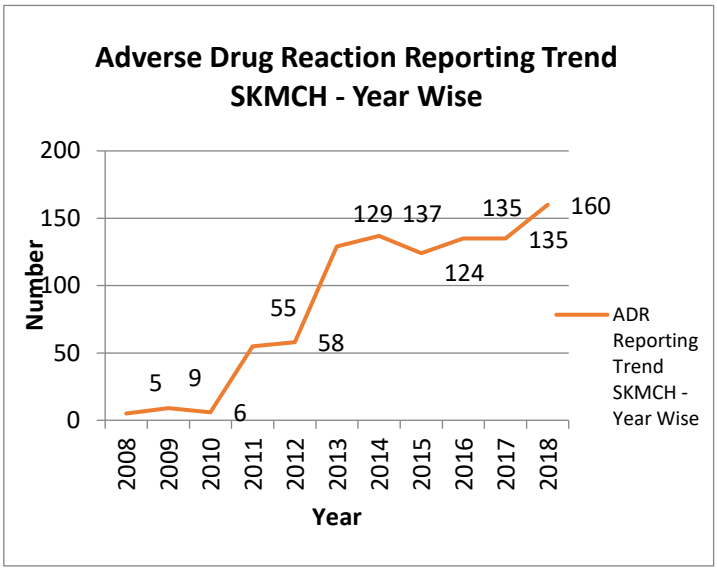
Adverse Drug Reaction (ADR) & Pharmacovigilance

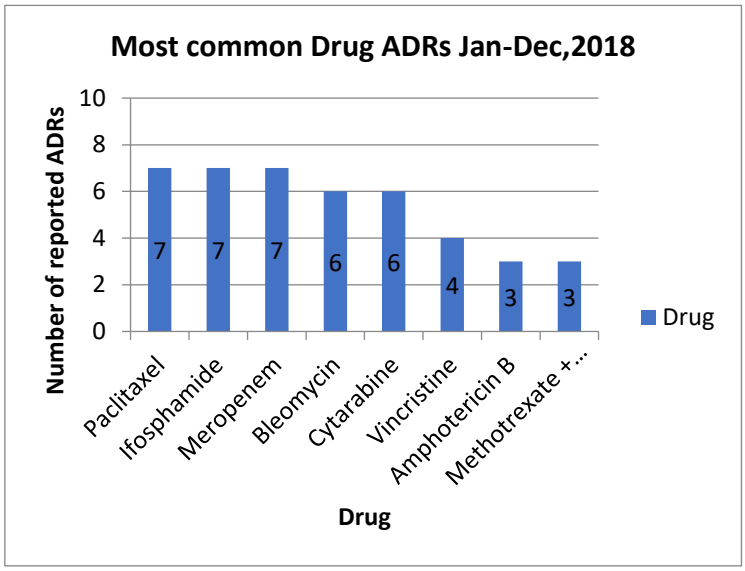
Adverse drug reaction (ADR) reporting data for the year 2018 has been presented here. ADRs are categorized by type as Type A – the extended side effects of a drug or Type B – bizarre, unexpected adverse effects.





In terms of severity, five major categories (death, permanent disability, life threatening event, hospitalization and prolonged hospitalization) are reported.





Most common drugs involved in ADRs were Paclitaxel, Ifosfamide and Meropenem for the year 2018.

News & Updates

Polymyxin Antibiotics, Updates in Clinical Practice Guidelines:

American college of clinical pharmacy (ACCP) in consensus with other societies has come up with first ever recommendations for polymyxin-B and colistin therapy. The steady state plasma concentration for both should be 2mg/L and is the maximum tolerable concentration beyond which risk of nephrotoxicity increases; says the guidelines. Polymyxin B is preferred for systemic infections considering its better pharmacokinetic profile and colistin is more appropriate for lower urinary tract infections. No dose adjustment of polymyxin B, but for colistin in case of decreased GFR and dialysis dose reduction is recommended. Recommended loading dose for colistin is 9 MIU and maintenance dose is 9-10.9 MIU/day in two divided doses. For polymyxin B, loading dose is 2-2.5mg/kg and maintenance dose is 1.25 to 1.5mg/kg every 12 hourly. Colistin alone is not encouraged and a combination therapy is advised. Polymixin B is currently un-registered and unavailable in Pakistan.

Ref: Tsuji BT et al. "International Consensus Guidelines for the Optimal Use of the Polymyxins: Endorsed by the American College of Clinical Pharmacy (ACCP), European Society of Clinical Microbiology and Infectious Diseases (ESCMID), Infectious Diseases Society of America (IDSA), International Society for Anti-infective Pharmacology (ISAP), Society of Critical Care Medicine (SCCM), and Society of Infectious Diseases Pharmacists (SIDP); Pharmacotherapy. 2019 Jan;39(1):10-39. doi: 10.1002/phar.2209.

New Weapon against TNBC:

Recently FDA approved combination of protein bound Paclitaxel and Atezolizumab for adult patients with unresectable locally advanced or metastatic triple-negative breast cancers (TNBC) expressing PD-L1. 902 patients were enrolled in a multicenter, international, double blind placebo- controlled randomized trial. Randomization was (1:1) to receive either atezolizumab 840mg or placebo IV on days 1 & 15 plus protein bound paclitaxel (100mg/m^2) IV on days 1, 8 & 15 of 28 days cycle. Median progression free survival was 7.4 months in the atezolizumab group as compared to 4.8 months in the placebo group. Adverse event profile showed alopecia, peripheral neuropathies, fatigue, nausea, anemia, headache, neutropenia, vomiting, and decreased appetite among the most common ones.

Ref: Peter Schmid et al. Atezolizumab and Nab-Paclitaxel in Advanced Triple-Negative Breast Cancer; N Engl J Med 2018; 379:2108-2121 DOI: 10.1056/NEJMoa1809615