Safer Handling of Non-Antineoplastic Medications

The Problem

To date, non-antineoplastic medications have not demonstrated an occupational risk to health care workers. However, National Institute for Occupational Safety and Health (NIOSH) on behalf of the CDC has identified certain medications that require special handling. These medications have the following toxicity profile in patients actively receiving treatment:

- Cause cancer (carcinogenic)
- Damage a developing fetus (teratogenic)
- Cause organ damage at low doses
- Damage and/or mutate DNA (genotoxic)
- Affect fertility

Aim/Goal

- To promote a safe workplace for health care workers at BIDMC by utilizing precautions that minimize potential exposures to certain medications.
- To raise awareness and provide education to staff in order to promote a safe working environment.

The Team

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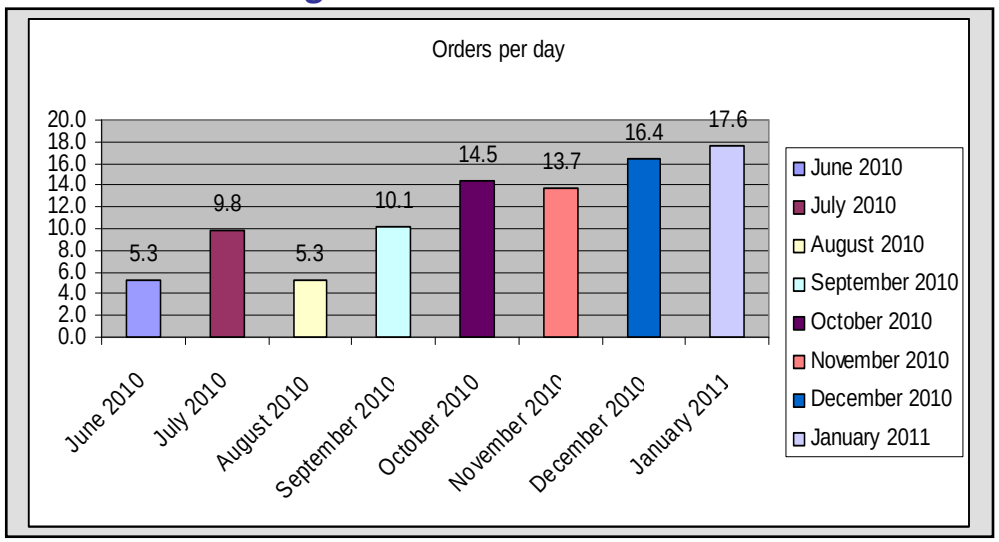
The Interventions

- Reviewed NIOSH alerts pertaining to the safe handling of non-antineoplastic medications.
- The team researched other medical institutions' policies and procedures regarding the safe handling of non-antineoplastic medications
- Developed a list of non-antineoplastic medications requiring special handling at BIDMC and deemed them medications needing "Admin/Prep Precautions".
- Developed and implemented a new policy (NPN 100-39) which addressed the following;
  - Pharmacy will prepare parenteral medications and oral doses that need to be cut or crushed.
  - Nursing will don exam gloves when administering.
  - Clinicians will be alerted that a medication requires "Admin/Prep Precautions" by:
    - Medication administration record (MAR) label
    - Omnicell dispense alert
    - Pink auxiliary label placed on medication package by pharmacy
- Developed an online competency for nursing.

The Results/Progress to Date



Lessons Learned

- The term "hazardous" has many meanings and interpretations among regulatory bodies (NIOSH/CDC, OSHA, EPA, etc.) and professional organizations (ONS).
- Health care workers were not aware of the potential complications these medications but they were receptive to implementation of the new policy.
- Procedural changes did not interrupt patient care
- Additional impact on pharmacy services was minimal **~7.9 doses/day**

Next Steps/What Should Happen Next

- Address non-formulary agents and other non-antinoplastic medications not included in BIDMC's policy
- Address medication orders that require formulations that do not currently exist such as; Efavirenz,,Tenofovir, Sublingual Tacrolimus
- Develop approach for patients with Speech and Swallow concerns
- Ensure glove locations are available in close proximity to Omnicells

Beth Israel Deaconess Medical Center | A teaching hospital of Harvard Medical School | The Silverman Institute For Healthcare Quality and Safety

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