P&TC Updates:
Following drugs are approved by Pharmacy & Therapeutics Committee (P&TC) during 2019 SKMCH&RC:

1. Etanercept Inj. Regular formulary item
2. Mycophenolate Tab & Inj. Regular formulary item
3. Anti-thymocyte globulin (ATG). Regular formulary item
4. Budesonide Oral Cap. Regular formulary item
5. Cis-atracurium Inj. Restricted by service (Anaesthesia consultant only) – 20 patients / month
6. Clonazepam Tab. Regular formulary item
7. Zolmitriptan Tab. Restricted by service
8. Abiraterone Tab. Restricted by cost
9. Pertuzumab Inj. Regular formulary item (for indigent patients – 4 slots / month)
10. Ketoprofen Patch. Regular formulary item
11. Empagliflozin Tab. Restricted by Service (Endocrinologist consultant only)
12. Sofosbuvir+Velpatasvir Tab. Regular formulary item
13. Immunoglobulin (IgG) – Formulary status changed from Regular to Restricted Formulary item by cost.
American Society of Health System Pharmacists (ASHP) Accreditation
Post graduate Year-1(Pg-Y1) Residency Program at SKMCH & RC

SKMCH & RC is a specialized cancer care hospital in the region and is considered as the state of the art institute in providing high-quality patient care. Hospital mission support education of health care professionals and provides frequent opportunities for trainings and advance education.

Department of pharmaceutical services has always been striving for the best care to the patients. Training and education is the mainstay to ensure high quality service in patient care areas. For this, department of pharmacy moved ahead and started a residency program in 2012, which until 2016 has been refined to such an extent that acquiring ASHP accreditation became a strategic goal of the hospital.

CEO approved our proposal which led to the preparation for accreditation. A residency task force formed for ASHP, which conducted work surveys to gauge the level of preparation for ASHP standards.

From the 3rd week of September, the official ASHP remote survey started and continued for five consecutive days. The development and execution of residency program, aim and objectives of this program, roles and responsibilities of preceptors in respective learning experiences, and overall learning, development and understanding of residents were discussed and evaluated. In addition, discussion with CEO, CMO, Physicians and Nursing Director were also conducted. Detailed presentations by Pharmacy head, Residency program director, Preceptors and Residents were given. A virtual tour of hospital was done which includes Pharmacy, ICU, EAR, and IPD IIA.

Pursuing ASHP accreditation can be a strategic goal for many international residency programs that seek higher standards of practice and training.

In Last, we are very much thankful to hospital leadership, physicians, nurses, MIS and technical departments for supporting us in making this audit process successful.
The theme of this year’s World Pharmacist Day, held on September 25, is “Safe and effective medicines for all,” according to the International Pharmaceutical Federation (FIP).
**Flu Vaccine**

**Get the Flu Shot**

Before the flu gets you

- Everyone 6 months of age and older
- Pregnant Women
- Residents of nursing homes

**Who should get vaccinated this season?**

People who have medical conditions including:

- Asthma
- Neurological disorder
- Chronic lung disease
- Heart disease & stroke
- Blood disorders
- Kidney disorders
- Liver disorders
- Metabolic disorders
- Weakened immune system due to disease or medication
- HIV/ AIDS
- Long term aspirin therapy

**Flu Vaccine is your first line of defence against influenza**

Flu Viruses are most common during the fall and winter months, seasonal flu viruses can be detected year-round, however, seasonal flu activity can begin as early as October and continue to occur as late as May.

**Recommended Dose**

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Dose</th>
<th>No. of Doses</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 to 35 months</td>
<td>0.25 ml</td>
<td>1* or 2 **</td>
</tr>
<tr>
<td>3 to 8 years</td>
<td>0.5 ml</td>
<td>1</td>
</tr>
<tr>
<td>≥ 9 years</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Children 6 to 35 months of age receive 0.25 ml dose

**Previously unvaccinated children 6 month to < 9 years of age require 2 doses of seasonal influenza vaccine with an interval of 4 weeks**

**Note:** Should not be administered to anyone with a history of severe allergic reaction to egg protein or any component of the vaccine

**How Flu Spreads:**

1. **Person to Person**
   - People with flu can spread it to others up to about 6 feet away. Most experts think that flu viruses spread mainly by droplets made when people with flu cough, sneeze or talk

2. **When Flu Spread**
   - People with flu are most contagious in the first three to four days after their illness begins
   - Most healthy adults may be able to infect others beginning 1 day before symptoms develop and up to 5 to 7 days after becoming sick
   - Symptoms can begin about 2 days (but can range from 1 to 4 days) after the virus enters the body.

Ref: [https://www.cdc.gov/](https://www.cdc.gov/)

**Reporting Makes Medicine Safer**

Enhancing Pharmacovigilance Capabilities

By Reporting Suspected Medicine Adverse Effects

**Report ADR**

1. **Online**
   - HIS - Clinical - Menu->Adverse Drug Reaction Reporting

2. **Inform Pharmacy**
   - Drug Information Centre | Call @ Ext; 3260
   - druginfo@skm.org.pk

For further information:

- Drug Information Centre | Call @ Ext; 3260
- druginfo@skm.org.pk

**Peak Month of Flu Activity**

1982-1983 through 2017-2018

**For further information:**

Drug Information Centre | Call @ Ext; 3260
druginfo@skm.org.pk
News & Updates:

FDA Updates on Medication Recall

US Food and Drug Administration (FDA) and European Medical Agency (EMA) warned public about ranitidine (Zantac) that it contains a nitrosamine impurity called N-Nitroso-N-methyl-4-aminobutyric acid (NMBA) at low levels, which is a probable human carcinogen. Although FDA and EMA are not calling for individuals to stop taking ranitidine at this time; however, patients taking prescription ranitidine, who wish to discontinue it, should talk to their health care professional about other treatment options. Later in Pakistan, Drug Regulatory Authority of Pakistan (DRAP) and Punjab Drug Control Unit (PDCU) issued the same warning.

New Weapon Against Resistant Tuberculosis: Pretomanid

Recently FDA has approved Pretomanid for treatment of resistant tuberculosis. The drug is from a non-profit organization, the Global Alliance for TB Drug Development, or the TB Alliance. The approval was based on a study of 109 patients with extensively drug-resistant tuberculosis, the 107 who were evaluable, 89 percent were successfully treated, which exceeds the historical success rate for the disease, according to the FDA. Pretomanid is meant to be taken in combination with two other drugs, bedaquiline and linezolid.


Medication Use Evaluation (MUE) of Dexmedetomidine in Intensive Care Unit

Sedation of mechanically ventilated patients has always been a challenge in intensive care units. Most commonly used drugs are benzodiazepines but these drugs have higher incidence of delirium and increased length of stay. Propofol or Dexmedetomidine is a suitable alternative to benzodiazepine in such patients according to latest evidence. Although there is less incidence of delirium but bradycardia and hypotension are common adverse effects of Dexmedetomidine. Bradycardia can be life threatening in some situation and require drug discontinuation. So we conducted MUE of Dexmedetomidine. Main objectives of this MUE include following; dose range and severity of adverse events with higher doses, adverse effects, time to extubating, requirement of additional sedatives, delirium.

A retrospective cross sectional non-experimental study was conducted in Shaukat Khanum memorial cancer hospital form April 2019 to August 2019. A simple descriptive analysis was performed. We enrolled 20 patients who were given Dexmedetomidine. The overall average dose and duration was 0.5mcg/kg/min and 4.77 days respectively. The median time to extubating was 5 days, with (n=1) patient was switched to another sedative because of severe bradycardia. In addition to this, (n=2) patient were on non-invasive ventilation while on continuous IV infusion (CIV)
Dexmedetomidine. It was found that 40% of patients required no additional sedatives, while 60% needed one or two additional sedatives and delirium was not observed in any of patients.

We concluded that although Dexmedetomidine is considered as safe drug, we suggest further studies for evaluation as in this study we have smaller population of patient. Bradycardia due to Dexmedetomidine requires continuous monitoring. In addition to this, bolus doses should be avoided.

Pharmacy Staff Capacity Building

Ms. Saba Mazhar
Senior Pharmacist Clinical Services
(ASHP Preceptor - Pediatric Oncology)

On passing US Board Certified Pharmacotherapy Specialist (BCPS) exam

P&TC Updates: (1st July 2019)
- High Alert Medication
- Look Alike Sound Alike List
- Hospital Formulary 8th Edition
- Parenteral Hand Book 5th Edition

Feed Back
To keep the Pharmacy Newsletter updated, please contact at druginfo@skm.org.pk