PHARMACY BULLETIN

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and much more.....

Happy World Pharmacist Day 25th September

Taimoor Shah. COO SIH

This year's World Pharmacist Day theme is 'Pharmacy united in action for a healthier world'. Shifa pharmacy has taken multiple initiatives in areas like home medicines delivery, drug information, monitoring drugdrug interactions, medication reconciliation and many other tasks, to ensure that we also united for a healthier environment. Happy World Pharmacist Day!

Dr. Zeeshan Bin Ishtiaque, Medical Director, SIH

Pharmacists have an important role in the healthcare. They play an important role in reducing medication errors by answering medication related queries and through appropriateness review of prescriptions.

Pharmacist have come a long way but as we always say that, this is a journey not a destination we will continue to grow. We salute all the pharmacists for the wonderful work that you are doing.

Abdul Wahab Hassan (Director Quality, SIH)

Medication management is at the heart of care continuum and patient safety. The role of pharmacist starts from invention of drugs till production, storage, dispensing, administration and monitoring. I Thank all the pharmacists at Shifa as well across the globe for making a patient care a safer journey. Happy WPD!

world pharmacist day to all!

Salwa Ahsan Chief of Pharmacy, SIH



This year's theme means that, Pharmacy is united within its profession, on a single platform for a common objective i.e. safe and effective medication management and also with other healthcare professionals. So, let's put our efforts together for a safer and healthier world. Happy WPD!

Dr. Monette B. Brombuela, Chief Nursing Officer

This day is appreciation day for all the pharmacists across the world. Pharmacists have created a powerful impact to all the facets of our healthcare system. They have provided us with all the necessary services, strategies, and efforts to improve healthcare, involving medication administration by the nurses and others. I would like to commend all the

pharmacists, that have created a positive impact on the patients of the world. Happy





Terlipressin Newly Approved FDA Drug For Hepato-renal Syndrome

Ahsan Shahzad (Transplant Clinical Pharmacist)

Do you know Terlipressin is approved by the FDA for the treatment of hepatorenal syndrome (HRS) in September 2022?

Terlipressin is a synthetic vasopressin analog with greater selectivity for V1 receptors. Terlipressin causes vasoconstriction, which decreases portal pressure and increases effective arterial blood volume and blood flow to the kidney.

- Its relatively specific effects on splanchnic circulation make it a more desirable option for hepatorenal syndrome treatment than norepinephrine.
- Norepinephrine is a systemic vasoconstrictor without selectivity on the portal vein, and it can
 increase the risk of systemic side effects such as myocardial injury at high doses.



• In addition, it is normally administered in a monitored environment via a central line.

CONFIRM trial: Terlipressin showed statistically significant result in improving the reversal of HRS compared to placebo. There was a higher incidence of <u>respiratory failure</u> with terlipressin, so <u>oxygen saturation (SpO2) monitoring</u> is needed before initiation and throughout the therapy and it is <u>contraindicated</u> in those with hypoxia or worsening respiratory symptoms.

Terlipressin is notable as it is the only drug currently FDA approved for the treatment of hepatorenal syndrome.

Reference: https://www.fda.gov/drugs/news-events-human-drugs/fda-approves-treatment-improve-kidney-function-adults-hepatorenal-syndrome

Considerations for Pediatrics Drug Safety

Dosing Designation on prescription containers labels for oral liquid medications

Milliliter (mL) should be the standard unit of measure

Dosing directions in terms of teaspoon (tsp) and tablespoon (tbsp) alone should be avoided

Concentration should always appear on the label

Doses should always include **leading zeros** in front of the decimal point (i.e. write 0.5 mL, not .5ml)

Doses should never use **trailing zeros** after decimal points (i.e. write 5 mL, not 5.0ml)

Dosing devices with numeric graduations/units corresponding to the dose should be dispensed with every oral liquid Rx medication (dropper, oral syringe, measuring cup/spoon etc.)

Education should be provided to parents and caregivers on the appropriate administration and instruction on the proper use of dosing devices

Muhammad Gulzaib (Pediatrics Clinical Pharmacist)

International Pediatric medication safety strategies to prevent ADEs

PN / complex electrolyte solutions are made with **automated compounding devices** (or outsourced), prescribed ingredients entered into software as ordered (no unit conversions necessary)

Dispense **patient-specific doses** of liquid oral/enteral medications in cups or specially designed oral/ enteral syringes

The patient's **weight in kg or gm is entered/verified** in the pharmacy computer before entering/verifying medication orders

Pharmacists verify components of pediatric/neonatal sterile preparations prior to adding to the solution

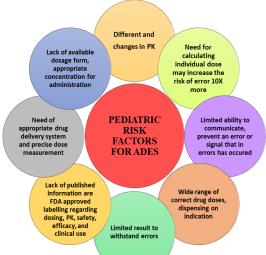
Metric units of measure should be the standard nomenclature for pediatric **weights** documented on medical records and prescriptions

The volume of **liquid** pediatric medication doses should be expressed using **metric units** only

Concentrations / strengths of high-alert drugs are standardized and limited

Prescribers include both the mg/kg or mg/m2 dose and the calculated amount per dose for pediatric drug orders

Use weight-based dosing for pediatrics unless the dose or dose per day exceeds the recommended adult dose for the indication



References: Cowley E et al. Curr Ther Res. 2001; 62:627-40. Mueller B et al. Pediatrics. Institute for Safe Medication Practices (ISMP). Medication safety alert! Acute care. Volume 25 Issue 11 June 4, 2020 2019; 143(2):e20183649



GLIMPSE OF ANNUAL MEDICATION MANAGEMENT CONFERENCE 2022

Shifa Center of Professional Excellence (SCOPE) in collaboration with Shifa International Hospital hosted the 2nd International Annual Medication Management Conference at Margalla Hotel Islamabad on 22 September 2022.

This hybrid conference was conducted under the theme of "*Pharmacy united in action for a healthier world*," a theme coined for this year's World Pharmacist Day celebrations by the International Pharmaceutical Federation – FIP.

Chief Guest, Dr. Manzoor H. Qazi (CEO, Shifa International Hospitals Ltd) welcomed the conference attendees

by appreciating pharmacists for their tireless work and said that "pharmacists are truly making a difference and impact on the patient's health". Speakers of the conference were distinguished names from the field of Pharmacy and Healthcare; Keynote speaker was **Mr. Asim Rauf** (CEO, Drug Regulatory Authority of Pakistan), speakers included: **Mr. Matthew Grissinger** (Director Education, Institute for Safe Medication Practices (ISMP), USA), **Dr. Syed Mairajuddin Shah** (COO, Aga Khan University Hospital, Secondary Hospitals Pakistan), **Mr. Abdul Latif Sheikh** (President/ CEO, Pakistan Society of Health System Pharmacists), **Dr. Ayaz Ali Khan** (Consultant Pharmaceutical, Regulatory, Pharmacy Academia, International Accreditations), **Mr. Robert J. Moss** (President, Hospital Pharmacy Section, FIP, Netherlands, Europe), **Dr. Sadaf Faisal** (Clinical Pharmacist, Thames Valley Family Health System, Canada), **Dr. Ejaz Cheema** (Professor and Founding Dean, School of Pharmacy, University of Management and Technology, Lahore),

In her closing remarks, Chairperson - Annual Medication Management Conference Shifa 2022, **Ms. Salwa Ahsan** (Chief of Pharmacy, SIHL & eShifa - Home Healthcare services) stated that "knowledge and life-long learning is the key to success and the lessons learned today should be taken with each one of us, to bring the desired change in the profession of pharmacy."



This successful event was attended by more than 300 pharmacists and pharmacy students across Pakistan. The event enhanced knowledge of the pharmacists on various contemporary pharmacy practice topics.

- Awards of distinction were also distributed among top performing pharmacy staff of Shifa at the event.
- Oral and Poster presentation competition was also held to promote the research. The top 3 winners in each category were awarded cash prizes. Participants lauded the event, provided their valuable feedback and shown their commitment to join the next year conference too.



AMMC-Shifa 2022, Post Conference Workshop Sterile Compounding Services in Hospital Pharmacy Ensuring Quality and Patient Safety

Day-2 of the conference comprised of the workshop, titled sterile compounding services in hospital pharmacies: ensuring quality and patient safety.

The aim of the workshop was to describe a quality sterile compounding services and steps in developing one in your hospital. We observed a house-full registration of the workshop well before the event. Participants from different hospitals including Shaukat Khanum Memorial Cancer Hospital (SKMCH) Lahore and Peshawar, Pakistan Kidney and Liver Institute (PKLI) Lahore, Rehman Medical complex (RMI) Peshawar, Kulsoom International Hospital (KIH) Islamabad, SIUT and South City hospital Karachi, Butch Hospital Multan and many others, along with various university students and technicians joined the event.

Each session was followed by a hands-on training about the topic (infrastructure, staff competency, USP standards, quality assurance, TPN/PPNs, hazardous drugs etc.) through structured activities followed by a discussion.

Participants highly appraised the event and provided recorded testimonials!



Oral and Poster Presentation AMMC

Total 27 abstracts were presented at AMMC, as posters and oral presentations. Researchers across Pakistan participated in the competition. The abstract review committee comprised of Dr. Mudassir (USA), Dr. Kashif Iqbal (Lahore University, Islamabad) and Dr. Waseem Ullah (SCPS, STMU Islamabad).

Oral poster presentation competition was judged by Dr. Ejaz

Cheema (Dean , UMT Lahore). While **Dr. Mairajuddin Shah** (COO, Aga Khan Secondary Hospitals, Karachi) distributed the awards



MANAGEMENT OF CHRONIC DAILY HEADACHE (CDH)

Naiha Tahir (Intern Pharmacist)

Chronic daily headache is an emerging phenomenon that has become rather common in the masses. The term Chronic Daily headache refers to prolonged headaches that persist for 15 or more days in a month extended over a span of more than three months in the absence of any organic pathology. By prolonged headaches we mean, head-aches that **last for four hours** or longer than that. There is a debate as to why a chronic daily headache can unfold whether the culprits are our deteriorating daily habits or underlying medical conditions. However, Chronic Daily Headache has been split into five subtypes as given by the 3rd edition of the International Classification of Headache Disorders (ICHD-3). These five subtypes are:

- Chronic migraine headache: Migraine is a well-known headache condition. It can transform into episodes of chronic migraine headache
- Chronic tension-type headache: This headache is characterized by non-throbbing, featureless and bilateral headaches with gradual onset and mild to moderate intensity.
- Medication overuse headache: This is a headache resulting from an analgesic rebound or a druginduced headache.
- Hemicranias continua: Strictly unilateral, continuous headache with superimposed exacerbations of varying intensity affecting the ipsilateral cranial autonomic features.
- New daily persistent headache: This is a new syndrome seen daily in individuals with no prior history of headaches. This headache emerges abruptly and does not remit from onset to up to 24 hours. Pain can be bilateral, pressing and intense.

MANAGEMENT:

Focus on prophylaxis than treatment: Avoid triggers that initiate headaches and focus on prophylaxis through pharmacotherapy, behavioral therapy or physical therapy. **Pharmacotherapy**: suitable agent according to the etiology of the headache. **Behavioral therapy** includes relaxation therapy or cognitive-behavioral therapy. **Physical therapy**: Manual cervical traction or stretching etc. are fruitful in some types of headaches like migraine.

Patient education: Educate the patient on possible causes of their headache and how to discontinue the triggers. Provide the patient with symptomatic bridge therapy and establish preventive therapy for the patient.

- NSAIDs: Throbbing or stabbing headaches respond well to Indomethacin (75 mg to 150 mg daily)
- Melatonin: Melatonin (3 mg to 12 mg daily) is responsive to patients who are intolerant or not responding to indomethacin
- Less Evident agents that can be used: There is limited evidence for the use of anticonvulsants like Lamotrigine, topiramate, gabapentin, carbamazepine, valproic acid, lithium and the use of glucocorticoids for short-lasting unilateral neuralgiform headaches

REFERENCE: Garza, J Schwedt (2022, March 28). *Chronic daily headache: Associated syndromes, evaluation, and management*, Uptodate. https:// www.uptodate.com/contents/chronic-daily-headache-associated-syndromes-evaluation-and management?search=management%20of%20chronic%, 20headache&source=search_result&selectedTitle=1~150&usage_type=default&display_rank=1#H1

World Pharmacist Day (WPD) - Weeklong activities in Shifa:

WPD is celebrated on 25th September every year. For many years, pharmacists have consistently been named among the top five **most trusted professionals** in national/international surveys. "*Pharmacy united for healthier world*" is the theme of this year's World Pharmacists Day 2022.

Department of Pharmacy Services, Shifa International Hospitals Ltd. (SIH) is among the best hospital and clinical pharmacy setups in the country, accredited by Joint Commission International (JCI) and ISO certified for its robust Medication Management, Antibiotic Stewardship Program, Homecare medication services, clinical pharmacy and medication safety. Our pharmacy residency program has the 'candidate' status from the American Society of Health-System Pharmacists (ASHP). It houses a large number of pharmacists (80+) that are managing an entire spectrum of hospital, clinical pharmacy and homecare services 24/7.

This year WPD weeklong activities were planned to create **awareness about medication use** among **public** and **healthcare staff**.

Information desks were established at different places within the hospital. Pharmacists, residents and intern pharmacists were involved in patient counseling, promoting medication safety, wellness and



drug related queries.

Gift and giveaways were also presented to those exhibiting correct medication related general knowledge, the kids especially loved it!

Patients and families visited pharmacy counters to seek information about their medicines and health. The response was very welcoming and people appreciated the efforts of SIH pharmacy through verbal and written testimonials.



I'm a pharmacist, What's your super power?

Pharmacy teams also visited different **patient care areas**, **clinics and wards** where nurses, doctors and other healthcare staff also joined fun-learning activities including general medication related quiz, promoting ADR reporting, creating awareness on key components of antibiotic stewardship and safe use of medications etc.



Camera Assisted Verification won the ISMP Cheers Award for 2022!!

Department of Pharmacy Services, Shifa International Hospital won the

Walk the Red Carpet with

Safety Stars

ISMP 25th Annual Cheers Award

Institute for Safe Medication Practices Cheers Award 2022 in recognition of implementation of medication safety strategies.

The ISMP Cheers Award honors individuals, organizations, and companies that have set a standard of excellence for others to follow in the prevention of

medication errors and adverse drug events. Winners are recognized for their positive examples and/or teamwork through their implementation of medication safety strategies.

This year, the award has been granted to Shifa International Hospital for setting up 'Camera Assisted Verification' to ensure concurrent, in-process verification of Oncology admixture for the right medicine, right concentration, dose, and right diluent'

Dr. Manzoor H Qazi, Chief Executive Officer, Shifa International Hospital congratulated the pharmacy team for achieving this award and reiterated that Shifa International Hospital will continue implementing the medication safety practices for its patients.

ISMP Cheers award official news Link: http://www.ismp.org/node/47585





Organizing Committee AMMC-Shifa is awaiting to welcome you next year too in the Conference and Workshop Keep following the link for latest updates: <u>https://scope.shifafoundation.org/ammc/</u>

Formulary Updates	(Visit Shifa Intranet Home Page—click Medication Updates for details)		
Brand	Generic	Class	Indications
Daptomycin	Daptomycin	Lipopeptide antibiotic	Gram + Bacterial infection
Tadalafil	Tadalafil	PDE-5 inhibitor	Erectile Dysfunction, LUTS
Levalbuterol	Levalbuterol	B2 agonist/bronchodilator	Asthma

Looking for Valuable Feedback

We want to bring to you valuable, updated and interesting information via Pharmacy Newsletter, so please spare some time to provide valuable feedback in the form of comments or suggestions. Its newsletter and with help we'll make it better! Contact us to get **e-copy or hard copy of newsletter** or to give **comments/suggestions** via email at : <u>drug.information@shifa.com.pk</u> Thank you.



