PHARMACY BULLETIN

back, musculoskeletal injuries.

stimulation to reduce pain.

Evaluation methodology Injuries.

patients with type 2 diabetes.

Opioids, including tramadol, to treat such pain

SGLT2 inhibitor to be stopped before surgery

Shifa International Hospitals Ltd. شفا انثر نيشنل هسيتال لميثد

WORLD PHARMACIST DAY EDITION

Family Physicians calls for topical NSAIDs to be used as a first-line

Based on the most up-to-date evidence about benefits and harms,

the guideline recommends topical NSAIDs with or without

satisfaction for patients. The guideline, published in Annals of

The guideline does not address noninvasive treatment of low back pain.

NSAIDs should be used as first-line therapy for acute musculoskeletal pain

Oral NSAIDs to improve pain and physical function, or oral acetaminophen to alleviate pain.

Recommendations were based on a network meta-analysis of over 200 trials with roughly

33,000 patients using the Grading of Recommendations Assessment, Development and

Reference: https://www.jwatch.org/fw116946/2020/08/17/guideline-calls-topical-nsaids-first-line-therapy-acute

Specific acupressure to improve pain and physical function, or transcutaneous electrical nerve

ISSUE 08, September, 2020

Patron in Chief:

Dr. Nayer Mahmood Chairman P&TC **Editor in Chief:**

Salwa Ahsan (Chief of Pharmacy)

Editor & Co-Editors:

Rehan Anjum (Clinical Pharmacist) Anum Butt (Clinical Pharmacist) Sundus Maria (Clinical Pharmacist) M. Awais (Clinical Pharmacist) M. Gulzaib (Clinical Pharmacist) Javeria Khalid (Clinical Pharmacist)

Published by

Drug and Poison Information Centre, Department of Pharmacy Services, Shifa International Hospital H-8 /4, Islamabad Pakistan Tel: +92-51-846-3492, 3005, 3977 Email: drug.information@shifa.com.pk

For Comments/Feedback:

Please contact on above extension or email

Inside this issue

- ٥ NSAIDs should be used as first-line therapy for acute musculoskeletal pain
- ٥ SGLT2 inhibitor to be stopped before surgery
- ٥ **Clarithromycin Linked To Increased Hemorrhage Risk In Patients Treated** With Direct Oral Anticoagulants .
- ٥ Do Not Let "Depo-" Medications Be a **Depot for Mistakes**
- ٥ **Antimicrobial Stewardship and Pharmacy Role**
- **Fentanyl Patch Safety and perquisite** ٥

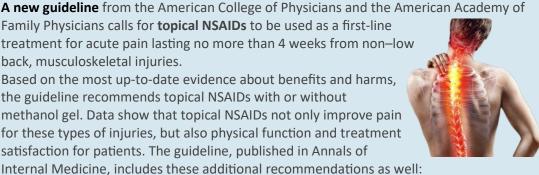
"The SGLT2 inhibitor may be restarted once the patient's oral intake is back to baseline and any other risk factors for ketoacidosis are resolved," the agency added.

https://www.medscape.com/viewarticle/927047

and much more.....



Muneeba Aftab staff Pharmacist



Muhammad Zulgarnain (Inpatient Staff Pharmacist)

Clarithromycin Linked To Increased Hemorrhage Risk In Patients Treated With Direct Oral Anticoagulants

Hira Farrukh (Inpatient Staff Pharmacist)

Shayan Majeed Charge Inpatient Pharmacist

Concurrent use of clarithromycin and direct oral anticoagulants poses a significant drug-drug interaction. Older adults taking direct

oral anticoagulants (DOACs) are more likely to be admitted to hospital for hemorrhage after receiving clarithromycin compared with azithromycin, a study published in *JAMA Internal Medicine* (8 June 2020) has suggested, although the risk of major hemorrhage was less than 1.0% for both drugs. Unlike azithromycin, clarithromycin is a potent inhibitor of the cytochrome P450 enzyme CYP3A4 and P-glycoprotein cell transporters that are involved in the hepatic metabolism of DOACs. While DOACs carry warnings against co-prescribing strong CYP3A4 inhibitors, there are limited data available on the risk of bleeding, the authors explained.

The study investigated the records of 6,592 people prescribed clarithromycin and 18,351 people prescribed azithromycin while taking a DOAC, such as dabigatran, apixaban or rivaroxaban, between 29 June 2009 and 31 December 2016. The researchers found that, in the 30 days after prescription, clarithromycin use was associated with a small but increased risk of admission

to hospital for hemorrhage compared with azithromycin (0.77% vs. 0.43% respectively, adjusted hazard ratio 1.71; 95% confidence Interval 1.20–2.45). **"Clinicians need to consider the risk of hemorrhage, the indication and microbial susceptibility of the infection being treated, and whether viable alternatives (either anticoagulant or antimicrobial) are readily available."** *References: Hill K, Sucha E, Rhodes E et al. JAMA Intern Med 2020.*

Fentanyl Patch Safety and Perquisite

Despite warnings from the FDA, manufacturers, and various patient safety agencies, fentanyl transdermal patches continue to be prescribed inappropriately to treat acute pain in opiate-naïve patients, sometimes in large doses or in combination with oral or intravenous opiates or under some other contraindicated circumstances. Unfortunately, pharmacists have often filled these



prescriptions without question, and nurses caring for patients have applied the patches without recognizing the prescribing error. ISMP has added this assessment prior to start of fentanyl patches in 2020-2021 ISMP Targeted Medication Safety Best Practices for Hospitals (and previous years as well).

In this regard Shifa pharmacy department has developed a **<u>pre-requisite</u>** form for prescribing fentanyl patches which help prescriber to rule out whether the patient is opiate-naïve or opiate tolerant (patients who have been taking, for a week or longer, at least 60 mg of morphine daily, or at least 30 mg of oral oxycodone daily, or at least 8 mg of oral hydromorphone daily or an equianalgesic dose of another opioid). (The form is available at intranet portal among pharmacy forms).

If pharmacy receives a new prescription for an opiate-naïve patient or the drug is intended to treat short-term pain, intermittent pain, or post-operative pain, the prescriber is called to verify/rectify the order.

• Patients who are using a fentanyl patch and their caregivers should be educated about how to use the patch safely. For this Shifa Pharmacy has developed an education booklet containing pictorials and all the necessary information in Urdu as well as in English.

STOP

Do not use fentanyl patches to treat short-term pain after surgery!

Fentanyl patches should **ONLY** be used by people with long-term chronic pain who have been taking high doses of prescription pain medicine (opioids) for 7 or more days without relief. Otherwise, the medicine can cause you to breathe too slowly or stop breathing.

DO YOU KNOW?

- Patches esp. that of Fentanyl must NOT be cut in order to give reduced dose. It will cause an abrupt release of drug leading to overdose and death.
- Patch must be removed while going for MRI
- Secondary exposure may occur if someone sits/sleeps close to person wearing the patch



REDMAN SYDNDROME IS PREVENTABLE

(Vancomycin Rapid Administration Rate Reaction)

The most common adverse reaction to Vancomycin is "Redman syndrome" (RMS) also known as Red Neck syndrome. Red man syndrome is an infusion-related reaction peculiar to

Vancomycin. RMS is an idiopathic infusion reaction which is not a true reaction but an administration rate dependent reaction. RMS is a form of pseudo allergic drug reaction, which is an adverse drug reaction with sign and symptoms that mimic immunologic drug allergies.

	0	Flushing	
	0	Ertythema	
	0	Pruritus	
	•	Pain	
	Ø	Muscle Spasm	
	6	Dyspnea	
	0	Hypotension	

How to Prevent: Empiric premedication to prevent RMS is not usually necessary for patients

who are receiving Vancomycin for the first time at standard rates of infusion 10 mg/min. slower rates of infusion are required to avoid such reaction usually 500 mg over 1 hour and 500 mg to 1 gram administer over two hours. However we advise even slower rates of infusion for patients who are also receiving opioids or other medications that predispose to mast cell activation.

Reference: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC270616/ Kamran Waheed Resident pharmacist

Antimicrobial Stewardship and Pharmacy Role

Muhammad Gulzaib (Clinical Pharmacist Pediatrics)

orting

Antibiotic

stewardship

Reassessing

ture result

interdisciplin

Educating staff

MR and HAIs a

Know Your Role! Report ADR @ 3977,3005

Antimicrobial stewardship is a coordinated program that promotes the appropriate use of antimicrobials (including antibiotics), improves patient outcomes, reduces microbial resistance, and decreases the spread of infections caused by multidrug-resistant organisms.

Pharmacy department of SIH has incorporated multiple roles to enhance the effectiveness of this program.

Some salient features are:

- 1. Antibiotic stewardship toolkit and Guidelines
- 2. Antibiotic stewardship committee (ASC)
- 3. Antibiotic Stewardship weekly rounds
- 4. Auto DC policy of orders in online order entry
- 5. TDM of antibiotics like Amikacin and Vancomycin
- 6. DDD (defined daily dose) indicator
- 7. Drug Utilization Reviews (DURs) and Feedback to physicians
- 8. Switching IV antibiotic to oral, renal dose adjustment (dose optimization)
- 9. Daily monitoring of patients on Colistin
- 10. Antibiotic daily report for patients where antibiotics are used for more then 10 and 15 days
- 11. Clinical pharmacists lead follow up of culture sensitivity reports and de-escalation accordingly.
- 12. Restricted use of last resort antibiotics only after ID consultation like IV Fosfomycin, Tigecycline etc.
- 13. Yearly Antibiotic Awareness week and much more!

FROM THIS WORLD PHARMACIST DAY onwards... We are open to all healthcare professionals to join monthly CE sessions

Department of Pharmacy, Shifa conducts CE sessions for its pharmacists on monthly basis. These are contemporary topics tailor-made to our practice, concerns and learning needs. Now its time that YOU

These sessions will be online, free and do not require registration for each session

Joining links will be shared to the provided email addresses.

If you want to stay informed about upcoming events like pharmacy bulletin, updated guidelines, Protocols and CE session. Please register your self at https://tinyurl.com/y55aotgn Or write to us at drug.information@shifa.com.pk

Pharmacy is a Knowledge Based Profession so come let's Learn and Grow together!



Prescribin

Prescribing

appropriate tibiotic(s) with

ntibiotics wh they are truly

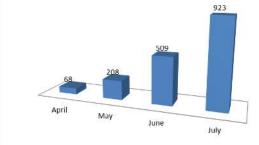
Transforming Global Health



Telemedicine & Home Healthcare Services during Covid-19 A success story from Pharmacy Department - Shifa International Hospitals Ltd. Islamabad

Telemedicine or home health services emerged as s critical tool to bring the medical care to patients while attempting to maintain distance so that patients and healthcare providers both can remain safe. The most worth mentioning benefit and objective of telemedicine during the Covid-19 era was to provide continuity of health care to patients who need it without exposing them to risk of disease contraction. Other benefits were cost effectiveness, time saving, improve access from remote locations including specialized needs of elderly patients and those with disabilities. It allows care to patients in comfort and privacy at their homes. Moreover health care providers, provide care without fear of getting exposed.

Shifa International Hospital (SIH) started telemedicine services during peak of Covid-19 in early 2020 with aim to provide access to those who cannot easily come to good standard facility and are in need of healthcare service. Being high in demand and such a patient friendly service, its role and scope quickly expanded to various new areas during Covid-19 pandemic. It was initially started in Rawalpindi/Islamabad which then expanded to all over Pakistan in a matter of few weeks.



No of patients through e-Pharmacy

It is managed and run by a dedicated group of experts including Physicians, Pharmacist, Nurses and Paramedics; backed-up by support services like hospital administration, IT, finance, HR, Quality department and patient support services.

	Medicine Home Delivery: Need a refill or want to buy medicines? SIH is providing medicine at your door step. Online prescription is shared using email or WhatsApp which is then reviewed by pharmacists. Medicines and surgical supplies are now supplied securely and safely through riders and courier nationwide.
	Home Vaccination: Don't have to worry about missed vaccination anymore! Because Shifa Home Vaccination provides primary & catch-up immunization, plus other routine and travel vaccination at home. Pharmacy fills prescriptions, labels them and securely hands over to qualified nursing staff for home vaccination while maintaining cold chain. Patients receive shot securely and observed for any sings of reaction.
	Compounding Services and Home delivery: Fulfill specialized patient needs by compounding tailor-made medi- cine in ready to use dosage forms and delivering them at your door step
C CTOTAL C	Home based Chemo: provides admixture cytotoxic medicine under aseptic environment against valid physician orders. Patient get dose at home by team of experts and technology ensures online monitoring during dose administration.
	Home Peritoneal Dialysis (PD): Provides all necessary PD supplies at home.
	Home Surgical services: Facilitated patients for minor procedures like IV cannulation, catheterization, wound dressing etc.at home. Moreover facilitated for oxygen supply at home too

Services rendered are:

SIH HHC e-Pharmacy services has served approximately 2000 patients from April-to July-2020. In April-2020 number of patients were 68 only which increased to 208 in May 2020, In June-2020 it was raised to 509 and in July -2020 up to 923. The patient volume exponentially grew at the rate of 144% across the months.

Telemedicine services swiftly evolved during pandemic, and due to its vast benefits and increasing demand, its scope is further expanding day by day adding various other services under its umbrella.

Pharmacists not only review the medications but also timely inform the patients about the laboratory monitoring required, any drug interactions and the dose adjustments. Shifa international hospital is determined to reach maximum number of patients with quality health care. Hopefully other institutes will follow the same practice to provide quality services to their patients.

For details please visit: <u>https://eshifa.org/</u>

Sara Yahya (Principal Outpatient Pharmacist)

25th September WORLD PHARMACIST DAY Transforming global health

A poison in safe hands is a medicine, a medicine in unsafe hands is a poison.



Salwa Ahsan, Chief of Pharmacy

Pharmacy; how flexible, adaptable, quick leaner and best implementer are we, we have proved this yet again during Covid-19 pandemic. There were tough times.... Supply chain was disrupted, shortage of medicines and PPEs, challenge of providing scarce resource to the most in need, human work force not available in lockdowns or retired hurt, evidence based usage etc. But still we can proudly state Alhamdolillah that we did not leave any stone unturned to manage our staff and patients with highest patient care and quality standards. *Pharmacy remains at the core of patient care! Well Done All*



Faisal Aziz Sandeela, Manager Pharmacy (Inpatient)

Pharmacist a true healthcare professional; can play a key role in ensuring safety of patients through interaction, continuity of care, effective counseling and educating the healthcare professionals on use of drugs.

This year we pharmacists have played our extensive role in providing safe pharmaceutical care to Covid-19 patients. Pharmacist should continue to serve the community in future with same zest and zeal.

Farhan Jillani, Manager Pharmacy (Outpatient)

Pharmacist needs to understand the importance of their profession. Only professional knowledge can help you to have recognition. Always keep studying and updating yourself with what's happening in the world.

Nabeel Alvi Asst. Manager Quality Assurance and Medication Safety

A very happy "World Pharmacist Day" to all fellow pharmacists. Special gratitude to all for your hard work and dedication to ensure good health of patients. It can only be possible by implementing the best pharmacy practices, Ensuring medication safety and continuous education.

"With so many medicines and so many prescriptions, Only a Pharmacist knows how to set things in right direction!"

Dr. Manzoor H. Qazi CEO, Shifa International Hospitals Ltd., Islamabad



I would like to appreciate, recognize and congratulate our pharmacist colleagues on their special day.

Clearly, because of their dedication, commitment, professionalism and knowledge, the pharmacists at Shifa International Hospital have attained a high position of respect, trust and recognition. You are trusted source of knowledge, advice and help for patients, doctors, nurses and students.

Happy World Pharmacist Day!

25th September 2020 We thank our senior leadership for their support and trust

Taimoor Shah, COO, Shifa International Hospitals Ltd. Islamabad



The focus in global health has transcended beyond the idea of restricting the pharmacist's work to a specific geographical location and widened it to the global level. All health systems pharmacists are now participating in global, national, regional, and institutional efforts to promote public health and to assimilate the objectives of such initiatives into their practices.

Since the initiation of Coronavirus (COVID-19) outbreak in December 2019, pharmacists are playing a key role and implementing advanced strategies to lessen the adverse impact of the pandemic worldwide. These professionals are committed to ensure that the community has access to healthcare services.

It is vital that pharmacists look at the diverse globally recognized health careers in medicine and use this as a framework to recognize the potential roles of the pharmacist within the global health practice and program delivery, research, and policy.

Thus, pharmacists are encouraged to contribute in the industry to shape their role in global health by varying their opinion towards the types of services they can provide at the global level.

Dr. Zeeshan Bin Ishtiaque Medical Director, SIH

World Pharmacist Day is an opportunity to acknowledge, how pharmacists are transforming healthcare. Pharmacists are responsible for appropriate use of medications, they provide authentic drug information to all healthcare professionals and counsel patients on safe and effective use of medications in order to get better treatment outcome and to reduce medication errors.

Wish you all a very Happy World Pharmacist Day!

Dr. Darakhshan Jabeen

Direct Post Graduate Medical Education, SIH

Pharmacists are a trusted source of knowledge and advice, not only for patients but for healthcare professionals too.

Pharmacists ensure that the right medicine is provided at the right dose and in the most suitable formulation. Pharmacists are charged with responsibility to ensure that when a patient uses a medicine, it will not cause harm. Happy Pharmacist Day!

Dr. Monette B.Brombuela Chief of Nursing, SIH



It is my pleasure to greet the entire Pharmacists a

"Happy World Pharmacist Day".

In this new generation all of you expanded your horizon to greater heights.

Your role in the hospital has created a valuable impact in the care of patient in terms of safe medication practices and management. It is in this regard that your contributions must be well applauded and recognized being one of the integral parts of the healthcare system in general.

Congratulations and warm salute to you all!

Do Not Let "Depo-" Medications Be a Depot for Mistakes

Yousaf Shahzad (Outpatient Staff Pharmacist)

Today, several longstanding medications are available on the market with names that begin with the prefix "Depo-," meaning they are administered via a depot injection that deposits the drug into localized tissue from which it is gradually absorbed by surrounding tissue. These injections, typically subcutaneous, intramuscular, or intra-articular, allow the active compound to be released consistently over a longer period of time. Misadministration of these medications by the intravenous (IV) route has been consistently reported throughout the years.

Examples of such medication include:

DEPO-PROVERA, DEPO-PROVERA Contraceptive Injection, and DEPO-SUBQ PROVERA

104 (medroxyPROGESTERone acetate): an intramuscular or subcutaneous progestin used as a

contraceptive, or to treat endometriosis or endometrial carcinoma.

DEPO-MEDROL (methylPREDNISolone acetate): an anti-inflammatory or immunosuppressive corticosteroid given via intramuscular or intraarticular injection. **FLUANXOL-DEPOT**: Flupenthixol—a long acting antipsychotic medicine

DEPO-TESTOSTERONE (testosterone cypionate): an intramuscular androgen used to treat male hypogonadism.

There are steps that can be taken to reduce the risk of potentially harmful mix-ups between these medications, strengths/container volumes, and routes of administration.

- ⇒ Clarify labeling: Address the look-alike labels and packages of drugs by labeling bold or differently from other product.
- Enhance warnings: Make warnings against IV use of depot products more prominent. The warnings should be clearly visible on the front label panel of cartons and vials. Set default routes in computer software so that such formulations can't be ordered with IV or other wrong routes.
- ⇒ Keep products apart: keep Depo formulations or "IM only" injections separate from rest of the IV injections.
- ⇒ Limit access: Attempt to limit inventory of Depo-Injections to a single strength and vial size. Also evaluate which "Depo-" medications need to be stocked in patient care units or in formulary (reduce unnecessary duplication).
- ⇒ Include auxiliary labels: Highlight or circle important information on labels to draw attention to it, or add an auxiliary label if necessary.
- ⇒ Express generic names safely. Use tall man letters when expressing the generic names of Depo injections (e.g., methylPREDNISolone, medroxyPROGESTERone) to prevent confusion.
- ⇒ Increase staff awareness: Assess staff understanding of the term "depot," and increase their understanding regarding why "Depo-" medications should not be administered IV. Be sure staff know the risk of confusion between "Depo" products with similar names, such as mix-ups between Depo-Provera and Depo-Medrol.

There are many LASA medications available in our pharmacy that could cause serious harm. Organizational policy must be followed to avoid the harm. (See policy: <u>http://sih-int-001.shifa.com.pk/dms/Documents/IPSG.3 - LASA_Medication1.pdf</u>)

	Formulary Updates (Visit Shifa Intranet Home Page—click Medication Updates for details)				
	Brand	Generic	Class	Indications	
FORMULARY UPDATES	Zandip 10 mg tablet	Lercanidipine	Calcium channel Blocker	Hypertension	
	Panadol Suppository	Paracetamol	Analgesic	Analgesia, Antipyretic	
	Omotil Injection 0.25 mg	Palonosetron	Antiemetic	CINV,PONV	
	Corticort Tablet 10 mg	Hydrocortisone	Corticosteroid	Anti-inflammatory, Immunosuppression, Adrenal Insufficiency	

Looking for Your Valuable Feedback

We want to bring to you valuable, updated and interesting information via Pharmacy Newsletter, so please spare some time to provide your valuable feedback in the form of comments or suggestions. Its your newsletter and with your help we'll make it better! Kindly send us your **comments/suggestions** via email at : **drug.information@shifa.com.pk** Thank you , we are looking forward for your valuable feedback.



Shifa International Hospitals Ltd.

ا هـ



SHIFA INTERNATIONAL HOSPITALS Ltd., DEPARTMENT OF PHARMACY, H-8/4 ISLAMABAD