PHARMACY BULLETIN BIL 1/2023
(JANUARY - APRIL)

SPECIAL TOPIC

SCABIES

PUBLISHED BY: JABATAN FARMASI HOSPITAL TENGKU AMPUAN AFZAN, KUANTAN, PAHANG

IN THIS ISSUE:

EDITORIAL BOARD

HTAA PHARMACY STAFF UPDATES 2023

TRANSFERRED IN

ZUHAINI BINTI MUKRIM

POSITION: KETUA JABATAN FARMASI
FROM: HOSPITAL SULTANAH NUR ZAHIRAH, KUALA TERENGGANU
TO: JABATAN FARMASI HTAA
DATE REPORTED DUTY: 17/4/2023

ROSLINA BINTI JUSOH

POSITION: PEGAWAI FARMASI UF54
FROM: KLINIK KESIHATAN PAYA BESAR
TO: FARMASI AMBULATORI
DATE REPORTED DUTY: 1/3/2023

QUAH JOO EAN

POSITION: PEGAWAI FARMASI UF52
FROM: HOSPITAL PEKAN
TO: FARMASI SATELIT
DATE REPORTED DUTY: 20/3/2023

NORLAILA KARTINA MALINI BINTI MAMAT

POSITION: PEGAWAI FARMASI UF52
FROM: HOSPITAL SULTANAH NUR ZAHIRAH, KUALA TERENGGANU
TO: FARMASI WAD
DATE REPORTED DUTY: 9/1/2023

HTAA PHARMACY STAFF UPDATES 2023

TRANSFERRED IN

MUHAMMAD NASRI BIN YUSOFF

POSITION: PEGAWAI FARMASI UF48
FROM: HOSPITAL SULTAN HAJI AHMAD SHAH, TEMERLOH
TO: FARMASI WAD
DATE REPORTED DUTY: 25/4/2023

SITI NURUL ASYIQEEN BINTI ABDUL HALIM

POSITION: PEGAWAI FARMASI UF48
FROM: KLINIK KESIHATAN NENASI
TO: FARMASI KLINIK PAKAR
DATE REPORTED DUTY: 27/3/2023

MARYAM ASIAH BINTI RADZUAN

POSITION: PEGAWAI FARMASI UF48
FROM: HOSPITAL SULTAN AHMAD SHAH, TEMERLOH
TO: FARMASI MTAC
DATE REPORTED DUTY: 16/1/2023

ADAWIYAH BINTI KHAIRUL FADZIL

POSITION: PEGAWAI FARMASI UF48
FROM: KLINIK KESIHATAN SUNGAI BULOH, SELANGOR
TO: FARMASI LOGISTIK
DATE REPORTED DUTY: 16/1/2023

HTAA PHARMACY STAFF UPDATES 2023

TRANSFERRED IN

NURUL HUDA BINTI MOHAMMAD FAKHRUDDIN

POSITION: PEGAWAI FARMASI UF41
FROM: HOSPITAL SULTAN AHMAD SHAH, TEMERLOH
TO: FARMASI KLINIK PAKAR
DATE REPORTED DUTY: 16/1/2023

MIMI SHAFURA NURAYU BINTI ABU BAKAR

POSITION: PENOLONG PEGAWAI FARMASI U32 (KUP)
FROM: HOSPITAL SULTAN AHMAD SHAH, TEMERLOH
TO: FARMASI PENGELUARAN
DATE REPORTED DUTY: 13/2/2023

MUHAMMAD ZULKIFLY BIN DARMAWAN

POSITION: PENOLONG PEGAWAI FARMASI U29
FROM: KLINIK KESIHATAN PERWIRA JAYA, ROMPIN
TO: FARMASI BEKALAN WAD
DATE REPORTED DUTY: 13/2/2023

ZAINAL BIN OTHMAN

POSITION: PEMBANTU PERAWATAN KESIHATAN U11
FROM: HOSPITAL SEGAMAT, JOHOR
TO: FARMASI BEKALAN WAD
DATE REPORTED DUTY: 15/3/2023

HTAA PHARMACY STAFF UPDATES 2023

TRANSFERRED OUT

ASMARUL AKRAM BIN ABDULLAH ZAWAWI

POSITION: PEGAWAI FARMASI UF54
FROM: FARMASI AMBULATORI
TO: HOSPITAL PEKAN
DATE REPORTED DUTY: 25/1/2023

NURBAIZURAH BINTI MOHD ALI

POSITION: PEGAWAI FARMASI UF52
FROM: FARMASI KLINIK PAKAR
TO: JKN PAHANG
DATE REPORTED DUTY: 17/4/2023

EMY LEE POOI VERN

POSITION: PEGAWAI FARMASI UF48
FROM: FARMASI MAKMUR
TO: KLINIK KESIHATAN KURNIA
DATE REPORTED DUTY: 3/4/2023

YEW JIE MIN

POSITION: PEGAWAI FARMASI GRED UF48
FROM: FARMASI WAD
TO: HOSPITAL KUALA LUMPUR
DATE REPORTED DUTY: 30/1/2023

HTAA PHARMACY STAFF UPDATES 2023

TRANSFERRED OUT

QUEK XIN WEI

POSITION: PEGAWAI FARMASI UF48
FROM: FARMASI SATELIT
TO: HOSPITAL PUTRAJAYA
DATE REPORTED DUTY: 25/4/2023

CHIA CHEOK IIAN

POSITION: PEGAWAI FARMASI UF48
FROM: FARMASI LOGISTIK
TO: HOSPITAL SELAYANG
DATE REPORTED DUTY: 16/1/2023

SAYIDAH NAFISAH BINTI HAMZAH

POSITION: PEGAWAI FARMASI UF44
FROM: FARMASI KLINIK PAKAR
TO: KLINIK KESIHATAN BESERAH
DATE REPORTED DUTY: 3/4/2023

NUR UMAIRAH BINTI SALLEH

POSITION: PEGAWAI FARMASI UF44 (K)
FROM: FARMASI KLINIK PAKAR
TO: KLINIK KESIHATAN SENTUL, KUALA LUMPUR
DATE REPORTED DUTY: 5/5/2022

HTAA PHARMACY STAFF UPDATES 2023

NEWLY APPOINTED

NUR NABILA FATINI BINTI AB MUIB

POSITION: PEGAWAI FARMASI UF41 (K)
TO: FARMASI KLINIK PAKAR
DATE REPORTED DUTY: 9/1/2023

HAZIRAH HIDAYAH BINTI CHE MOHAMAD AZMI

POSITION: PEGAWAI FARMASI UF41 (K)
TO: FARMASI SATELIT
DATE REPORTED DUTY: 9/1/2023

NUR AIN BINTI ZAIDAN

POSITION: PEGAWAI FARMASI UF41 (K)
TO: FARMASI MAKMUR
DATE REPORTED DUTY: 9/1/2023

NURAINAFIFA BINTI MUSTAFA

POSITION: PEGAWAI FARMASI UF41 (K)
TO: FARMASI KLINIK PAKAR
DATE REPORTED DUTY: 1/3/2023

HTAA PHARMACY STAFF UPDATES 2023

INTERNAL RESHUFFLE (OUT)

ROSLI BIN DOLLAH

POSITION: PEMBANTU PERAWATAN KESIHATAN U11
FROM: FARMASI BEKALAN WAD
TO: UNIT FISIOTERAPI
DATE REPORTED DUTY: 15/3/2023

Happy Retirement

4 APRIL 2023

PN. HJH. SAMEHAH ALMUNA BINTI HJ. ISMAIL

KETUA JABATAN FARMASI

Your contribution is irreplaceable.
Your dedication is immeasurable.
Your guidance is invaluable.
And your absence is unacceptable.
Wishing you a happy retirement!
May it bring you joy, happiness and many happy memories!

Scabies

By Nurnajmul Ummah binti Abu Ishak

BACKGROUND [3,4,5,6]

Scabies is an infective skin condition caused by a parasite known as *Sarcoptes scabies*. It is a highly pruritic and contagious parasitic disease associated with poverty and overcrowded areas. Approximately 300 million cases of scabies are reported worldwide each year. In Malaysia, Kaur & Nadeswary (1980) reported the prevalence was 11.6%, and high among children and teenagers, the worst affected being those in the 5 to 9 years old age group (24%). In another report by M Zayyid et al (2010), the prevalence rate for scabies was 31% among children at welfare homes in Pulau Pinang. Besides that, in a study that included 944 students of secondary boarding schools in Kuching, Sarawak, Yap et al. found 8.1 % cases of scabies.

PATHOPHYSIOLOGY [3]

1. *Sarcoptes scabies* burrows into the upper layer of the skin - the stratum corneum.
2. The female lays eggs in the tracks of the burrows.
3. The eggs and mite proteins produce an allergic reaction that causes itching and rash.

Scabies is normally acquired from **skin-to-skin contact** with another individual who has scabies. It is sometimes transmitted from beddings. The incubation period for those **without** previous exposure to scabies is **2 to 6 weeks.** Individuals who have been previously infested with scabies develop symptoms within **1 to 5 days** of re-exposure.

TYPES [2,3]

Scabies Type	
Classical	**Crusted (Norwegian)**
Infection	
• Little evidence of infection exists during the first month (typically 10-15 mites live on the host). • Delayed hypersensitivity reaction occur after 4 weeks and with subsequent infections	• Highly contagious with hundreds to millions of mites infest the host . • More common in immunocompromised and neurologically impaired individuals.
Presentation	
Small erythematous papulovesicular lesions and its associated with intense pruritus	• Pruritus may be minimal or absent, or the host may be physically incapable of scratching. • Characterized by diffuse hyperkeratosis, associated with variable degree of underlying erythroderma.

SIGNS AND SYMPTOMS [2,3]

- Severe itchiness during night time
- Severe itchiness when sweating
- History of itch among family members within the same period
- Burrows

COMMON SITES

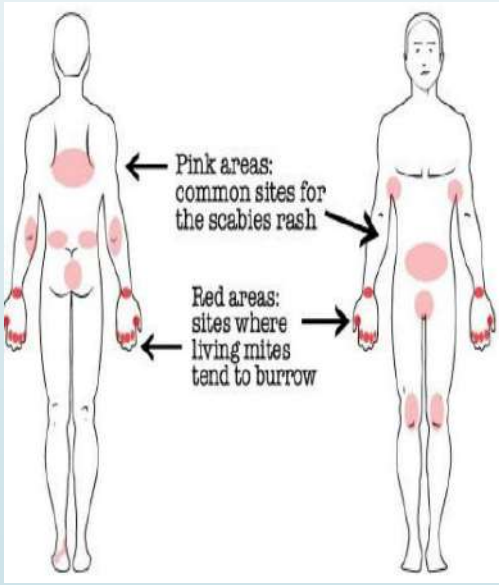


Figure 1 : Scabies rashes & burrows location[8]

Population	Location/presentation of scabies [2,3]
Infant and children	Face, scalp, neck, palms and soles
Adult	1-3mm erythematous papules and vesicles (discrete lesions filled with clear fluid)
Geriatric	At the back, often appearing as excoriations

PHARMACOLOGICAL TREATMENT FOR SCABIES [1,2]

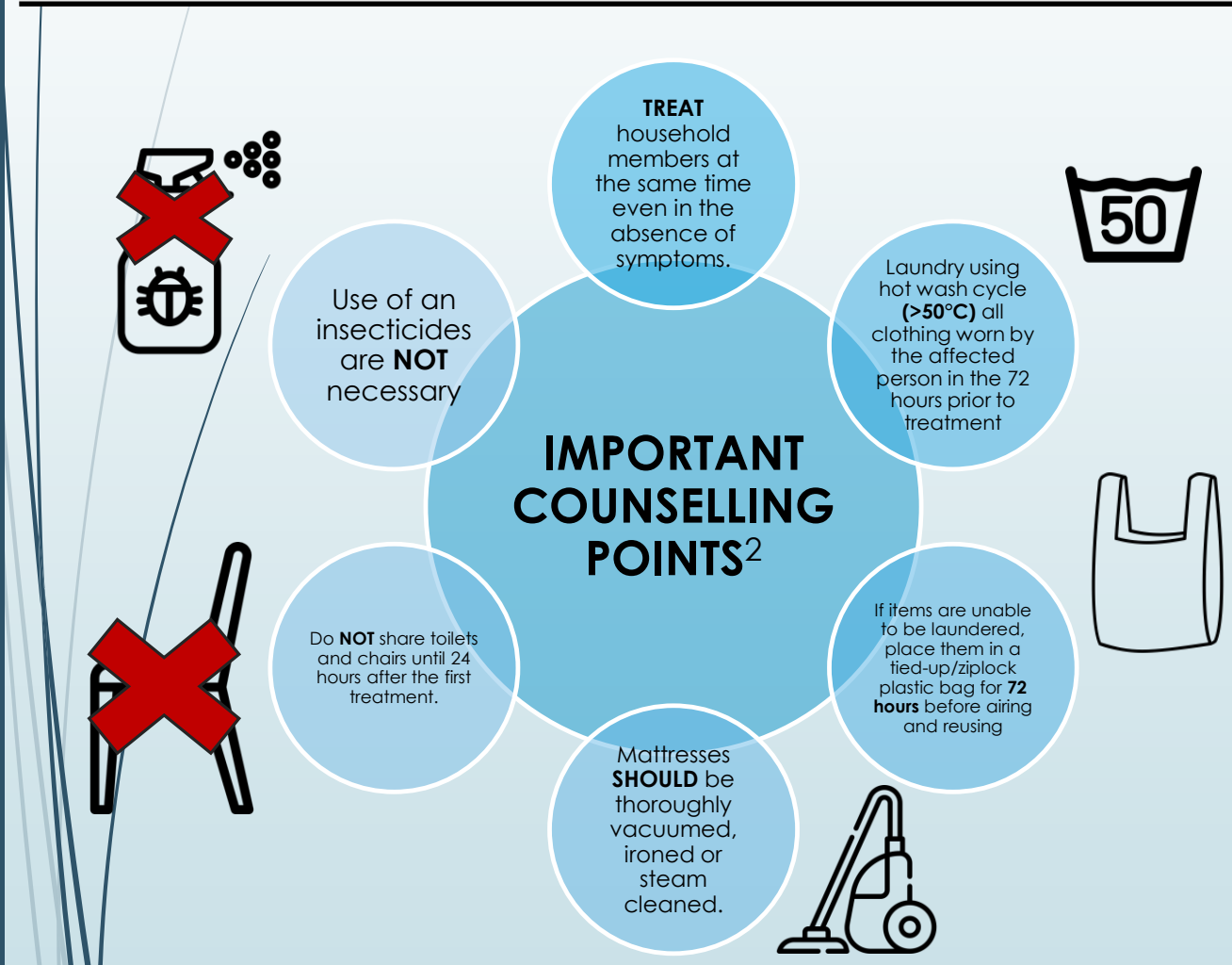
Drug	Mode of action	Instructions	Side effects
Permethrin 5% Cream /lotion	Pyrethroid insecticide	• Apply over whole body include face, neck, scalp and ears in infants & HIV patients who has scabietic lesions on the head. Otherwise in normal adults, apply from neck to soles. • Wash off after 8 - 12 hours • Repeat 1 week later	• Itching • Burning/ stinging sensation
Benzyl Benzoate 12.5% – 25% lotion	• Toxic effects on the nervous system of the parasite, resulting in its death. • Toxic to mite ova • In vitro, it kills the *Sarcoptes* mite within 5 minutes	• Apply from neck to soles, avoid head and face area. • Apply on the skin surface continuously for 24 hours for 2-3 days. • Rinse off after 24 hours and then reapply, with a bath taken in between each application. • A third application may be required in some cases (HIV/ immunocompromised) • Wash off thoroughly after the recommended time period • **Contraindicated** in pregnancy, breast feeding woman and infant	• Skin irritation • Burning sensation. • Conjunctivitis if exposed to eyes. • Worsen/ cause post-scabetic eczematous reaction.
6% sulphur in calamine/ petrolatum	Parasiticidal	Rinse off after 24 hours and then reapply every day for the next 3 days (with a bath taken in between each application)	• Skin irritation
Crotamiton 10% Ointment	Scabicidal agent	**Classical scabies**: Rinse off after 24 hours and reapply for 5-7 additional days **Nodular scabies**: Apply to the nodules 3 times a day for 7-14 days • Bathe and dab dry before applying crotamiton. • Apply over whole body except face and scalp. • **Avoid** any contact with eyes or mucous membrane • **Avoid** massive, prolonged use in pregnant woman and infant	• Burning • Itching • Rash • Redness • Stinging • Swelling • Numbness

CHOICE OF TREATMENT FOR SCABIES [1]

Category	Recommended Therapy
Newborn to 2 months of age	• Crotamiton 10%
Children (2 months to 2 years old)	• Permethrin 5% • Crotamiton 10% • 6% sulphur in calamine / petrolatum
Children (2-12 years old)	• Emulsion benzyl benzoate 12.5% • Permethrin 5%
Adult	• Emulsion benzyl benzoate 25% • Permethrin 5%
Pregnant women	• Permethrin 5% • 6% sulphur in calamine/ petrolatum

TREATMENT FOR SPECIFIC CONDITIONS [2]

Specific conditions	Treatment
Infection in scabies	• Antibiotics can be started concurrently with scabicides or delayed for 48 hours to allow partial healing of the erosions. • Use antiseptic soaks/bath KMnO4 (1:10,000) in impetiginized scabies • Topical antibiotic is **NOT** indicated in patients who are already treated with systemic antibiotics
Nodular Scabies	• Topical anti-inflammatory agents; Apply topical corticosteroids of mid potent to potent[7] for a short duration of 2 weeks. (Betamethasone Valerate 1:2, 1:4, 0.1% Cream/Ointment, Mometasone Furoate Cream, Clobetasone Butyrate Cream/Ointment) • Crotamiton cream : Apply twice daily for 7 to 14 days
Itch in scabies	• Antihistamines: Chlorpheniramine, Loratadine • Emollients: regular application of emollients for dry and eczematous skin (Aqueous Cream, Emulsifying ointment)



References

1. Topical Preparations Counselling Guide for Pharmacist 1st Edition 2018 Pharmaceutical Services Programme, Ministry of Health Malaysia
2. Guideline for Management of Scabies in Adults and Children, Ministry of Health Malaysia, February 2015.
3. Scabies, Retrieved from Medscape 15/2/23 https://emedicine.medscape.com/article/1109204-overview#a4
4. Kaur & Nadeswary, Field trials on the management of scabies in Jengka triangle, Pahang, Medical Journal Malaysia, 35(1):14-21, (1980)
5. M Zayyid et al, Prevalence of scabies and head lice among children in a welfare home in Pulau Pinang, Malaysia, Tropical Biomedicine 27(3): 442–446 (2010)
6. Yap et al., Prevalence of Scabies and Head Lice Among Students of Secondary Boarding Schools in Kuching, Sarawak, Malaysia, The Pediatric Infectious Disease Journa,l 29(7) : 682-683 (2010)
7. Katalog Ubat HTAA 2022
8. Prof Dr. Athar Khan, Scabies and Its Prevention, Department of Community Medicine, Liaquat College of Medicine & Dentistry, Karachi (2019)

#kekalsihat

TIP MUSIM PANAS

PAKAI TOPI ATAU PAYUNG

Lindungi diri daripada cuaca panas terik

#kekalsihat

TIP MUSIM PANAS

MINUM AIR KOSONG SEKURANG-KURANGNYA

8 gelas sehari

#kekalsihat

TIP MUSIM PANAS

KEKAL BERADA DI DALAM RUMAH / PREMIS

Pasang kipas atau penyaman udara bagi menyejukkan udara di dalam rumah

#kekalsihat

MUSIM PANAS

Segera dapatkan rawatan jika anda mengalami:

KESAN CUACA PANAS

Pendedahan kepada cuaca panas dan gelombang haba boleh menyebabkan pelbagai masalah kesihatan

Kejang otot *(heat cramp)* dan kelesuan haba *(heat exhaustion)*

Gejala lebih **serius.** Jika tidak dicegah boleh meningkatkan risiko kejadian strok haba

Selaran matahari *(sunburn)* dan Ruam

Gejala **ringan**

Strok haba *(heat stroke)*

Satu keadaan **kecemasan** yang perlu dirawat dengan segera bagi mengelakkan komplikasi dan kematian

SEGERA DAPATKAN RAWATAN DI FASILITI KESIHATAN JIKA TIDAK SIHAT

KEMENTERIAN KESIHATAN MALAYSIA | Agenda Nasional Malaysia Sihat | MyHEALTH for life | MyHEALTHKKM | sihatmilikku | SCAN ME

Non-Steroidal Anti-Inflammatory Drugs (NSAIDs); How Safe Are They?

By : Siti Aisyah bt Mohamad Yusof

Introduction

Over-the-counter (OTC) medicines are medicines that can be bought without a prescription. They are safe and effective when the directions on the label are followed or used as directed by health care professionals. Many Non-steroidal anti-inflammatory drugs (NSAIDs) are widely used worldwide for their analgesic (painkiller), antipyretic and anti-inflammatory effects for multiple medical conditions. Commonly used NSAIDs include Acetylsalicylic Acid (Aspirin), Diclofenac, Ibuprofen, Mefenamic Acids and Naproxen.

Mechanism of Actions

NSAIDs reduce pain and inflammation by inhibiting enzymes, called cyclooxygenases (COX). By inhibiting COX, NSAIDs help to prevent and/or reduce pain and inflammation. COX enzyme inhibition is also responsible for many of the side effects of NSAIDs. There are two main types of NSAIDs, nonselective and selective. The terms nonselective and selective refer to different NSAIDs' ability to inhibit specific types of COX enzymes; the primary types are COX-1 and COX-2. [1]

Types of NSAIDs [1]

- Nonselective NSAIDs – Nonselective NSAIDs inhibit both COX-1 and COX-2 enzymes to a significant degree. E.g., Aspirin, Ibuprofen & Naproxen.
- Selective NSAIDs – Selective NSAIDs inhibit COX-2 only, an enzyme found at sites of inflammation, more than COX-1, the type that is normally found in the stomach, blood platelets, and blood vessels. Selective NSAIDs are as effective as none selective NSAIDs in relieving pain and inflammation and are less likely to cause gastrointestinal injury. E.g., Celecoxib, Etoricoxib, Parecoxib.

Dose & Therapeutic Response

The response to NSAIDs differ between patients, and individual patients differ in their response to different NSAIDs.[2] NSAIDs rarely cause toxic effects, however, do use lowest effective dose possible for therapeutic use.[2] People taking one type of NSAID should not take a second NSAID at the same time. If low doses of NSAIDs are not fully effective, clinicians may recommend using a higher dose of the NSAID on a regular basis for several weeks to improve the anti-inflammatory benefits of these drugs.[2]

Common Side Effects

The most frequently reported side effects of NSAIDs are gastrointestinal (stomach and gut) symptoms, such as feeling bloated, heartburn, stomach pain, nausea, vomiting, diarrhea and/or constipation.

Use of NSAIDs In Chronic Disease Patient

Trivia

Ringing in the ears (tinnitus) is common in people who take high doses of Acetylsalicylic Acid (Aspirin) although it is very uncommon for this to occur in people who take other NSAIDs. The ringing usually resolves when the dose is decreased.[1]

Cardiovascular Disease

NSAIDs may affect the cardiovascular system where blood pressure may rise by the addition of either selective or nonselective NSAIDs. Anyone who is at risk for or who has cardiovascular disease (coronary artery disease) may have a further increase in risk of heart attacks when taking an NSAID. [1]

This includes people who have experienced a heart attack, chest pain (angina), procedures to widen clogged arteries and stroke. As a result, people who have or who are at high risk for coronary artery disease are generally advised to avoid NSAIDs or, if that is not possible, to take the lowest possible dose of NSAID for the shortest possible time.[1]

Although Aspirin is an NSAID, the recommendation to avoid or limit the use of NSAIDs does **NOT** apply to people who have been advised to take low-dose aspirin (75- 150mg/day) to treat or prevent heart attacks or strokes. There is also some concern that nonselective NSAIDs may reduce the cardiovascular benefits of low-dose aspirin.

Gastrointestinal Ulcers & Bleeding Risk

NSAID may affect gastrointestinal system where short-term use of NSAIDs can cause stomach upset (dyspepsia). Long-term use of NSAIDs, especially at high doses, can lead to peptic ulcer disease & stomach bleeding. Those who have had a stomach or intestinal ulcer are at an increased risk of another ulcer while taking an NSAID. People being treated for ulcers should consult their health care provider about the safety of taking NSAIDs. People over 65 years of age have an increased risk of developing ulcers when taking NSAIDs. However, the use of any dose of aspirin plus an NSAID is associated with an increased risk of bleeding. There is also an increased risk of bleeding when NSAIDs are used in patients taking other drugs that reduce clotting, such as anticoagulants (eg, warfarin) or antiplatelet agents (eg, Clopidogrel).

Kidney Disease

Long-term NSAID use can lead to chronic kidney disease (CKD). In patients without renal diseases, young and without comorbidities, NSAIDs are not greatly harmful. However, because of its dose-dependent effect, caution should be exercised in chronic use, since it increases the risk of developing nephrotoxicity.[3] NSAIDs 8have long been regarded as dangerous for use in patients with Chronic Kidney Disease (CKD) because of their risk for nephrotoxicity. NSAID use has been associated with acute kidney injury, progressive loss of glomerular filtration rate in CKD, electrolyte derangements, and hypervolemia with worsening of heart failure and hypertension.[4]

Conclusion

Even though NSAIDs are generally safe and can be bought without doctors' prescription, they still need to be used with caution. Long term use are not recommended. If pain is not resolved by NSAIDs, seek medical advice for alternative options.

References:

1. Uptodate: Patient education: Nonsteroidal antiinflammatory drugs (NSAIDs) (Beyond the Basics)
2. Uptodate:NSAIDs: Therapeutic use and variability of response in adults. https://www.uptodate.com/contents/nsaids-therapeutic-use-and-variability-of-response-in-adults?search=nsaid&source=search_result&selectedTitle=2~147&usage_type=default&display_rank=1.
3. Lucas GNC, Leitão ACC, Alencar RL, Xavier RMF, Daher EF, Silva Junior GBD. Pathophysiological aspects of nephropathy caused by non-steroidal anti-inflammatory drugs. J Bras Nefrol. 2019 Jan-Mar;41(1):124-130. doi: 10.1590/2175-8239-JBN-2018-0107. Epub 2018 Sep 21. PMID: 30281062; PMCID: PMC6534025.
4. Megan Baker and Mark A. Perazella. NSAIDs in CKD: Are They Safe?. Am J Kidney Dis. 76(4):546-557. Published online May 30, 2020. doi: 10.1053/ j.ajkd.2020.03.023

DRUG UPDATES

RAVIDASVIR TABLET 200MG

A. DESCRIPTION

Ravidasvir (RDV) is a new generation of pan-genotypic non-structural protein 5A (NS5A) inhibitor that emerged as a successful direct-acting antiviral drug that is used to treat Hepatitis Virus C (HCV).

B. REGISTRATION NUMBER

MAL 21066002ACZ

C. PRICE

RM 436.80 / pack of 28's

D. DEPARTMENT

Medical Department (Gastroenterology)

E. PRESCRIBER CATEGORY

A/KK (Consultant/specialists/family physician specialists)

F. INDICATION IN FUKKM

To be used with combination of other medicinal products for the treatment of chronic hepatitis C virus (HCV) infection in adult.

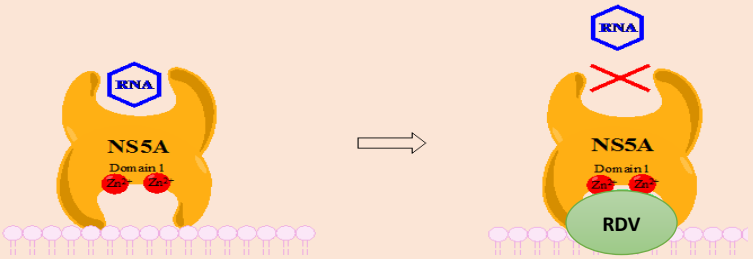
G. DOSE AND ADMINISTRATION

- 200 mg once daily, to be taken orally with or without food.

Condition	Regimen
Without Cirrhosis	Ravidasvir + Sofosbuvir for **12 weeks**
With Compensated Cirrhosis	Ravidasvir + Sofosbuvir for **24 weeks**

H. MECHANISM OF ACTION

Ravidasvir is an inhibitor of NS5A, a multifunctional protein that is an essential component of the HCV replication complex. Ravidasvir inhibits replication of variant HCV replicons encoding resistance mutations for the other major classes of HCV direct-acting antiviral (DAA). HCV variants with reduced susceptibility to ravidasvir remain fully susceptible to other classes of HCV inhibitors.



I. ADVERSE REACTIONS

Common:

- **Psychiatric disorders:** Insomnia
- **Gastrointestinal disorders**: Nausea, dyspepsia, abdominal pain, diarrhea, vomiting, constipation
- **Skin and subcutaneous tissue disorders:** Rash, dermatitis, pruritus

Uncommon:

- **Investigation needed:** Increased INR
- **Cardiac disorder:** Palpitations
- **Vascular disorder:** Hot flush
- **Metabolism and nutritional disorders:** Decreased appetite

J. CONTRAINDICATION

- **Hypersensitivity** towards the active ingredients
- Co-administration with potent **P-glycoprotein transporter** such as:
  - Carbamazepine
  - Phenobarbital
  - Phenytoin
  - Rifampicin
  - Rifabutin
  - St. John's Wort

Will decrease Ravidasvir plasma concentration and could result in loss of efficacy of Ravidasvir.

K. USE IN SPECIFIC POPULATION

- **Elderly more than 65 years old:** Limited clinical studies on usage of Ravidasvir in this population. Treatment should be given according to the dosage with assessment of the potential benefits and risks should be done.
- **Renal impairment (ESRD):** No studies have been conducted for this population. Treatment should be given according to the dose with assessment of the potential benefits and risks should be done.
- **Hepatic Impairment:** No dose adjustment should be done for patients with mild hepatic impairment. The safety and efficacy of Ravidasvir been assessed in patient with compensated cirrhosis but not in patient with decompensated cirrhosis.
- **Liver transplant patients:** Treatment of HCV in patients who are post-liver transplant have not been assessed. Treatment should be given according to the dose with assessment of the potential benefits and risks should be done.
- **Patients co-infected with HIV:** Safety and efficacy have been assessed and no significant differences were obtained with patients without HIV.

L. PRECAUTION

- Ravidasvir should not be administered as monotherapy. It should be combined with other medicinal products such as Sofosbuvir for the treatment of chronic HCV infection.
- Precautions in genotype-specific patients (limited data on genotypes 2 and 6 and no data on genotype 4 or 5).
- HCV/Hepatitis B virus (HBV) co-infection (risk of reactivation).
- Pregnancy and lactation.
- Hepatic impairment, liver transplant patients.
- Not recommended in pediatric population, under 18 years of age.
- Diabetic patients might experience symptomatic hypoglycemia after initiation of HCV.
- Interactions with medicinal products (co-administration with moderate P-glycoprotein inducers is not recommended).

M. STORAGE

Store below 30°C. Store the tablets in their original packaging.

N. PHARMACIST ROLE

- Counsel patient/caregiver to report if an adverse reaction occurs to the patient.
- Advise patient to inform doctor if pregnant or breastfeeding before starts the regimen.
- Advise patient to avoid driving or operating any machinery as the medication may cause dizziness, lethargy, somnolence and blurred vision.
- Advise patient to always take Ravidasvir with the combination medications given for the treatment.

O. REFERENCES

Product information leaflet, FUKKM, QUEST3+, MIMS Gateway.

By: Che Ku Afina Haida

DRUG UPDATES

Sofosbuvir 400mg & Velpatasvir 100mg film coated Tablet

A. DESCRIPTION

Sofosbuvir/Velpatasvir is an oral combination of Sofosbuvir, a nucleotide analog NS5B polymerase inhibitor and Velpatasvir, an NS5A replication complex inhibitor. It is used in the management of hepatitis C viral infections by inhibiting HCV RNA replication.

B. REGISTRATION NUMBER

MAL 18046002AZ

C. PRICE

RM 344.30 / pack of 28's

D. DEPARTMENT

Medical Department (Gastroenterology).

E. PRESCRIBER CATEGORY

A* (Consultant/Specialist for specific indications only),

A/KK (Consultant/Specialist/Family Physician Specialist).

F. INDICATION IN FUKKM

For the treatment of chronic hepatitis C virus (HCV) infection in adults.

PRESCRIBER CATEGORY A/KK:
i. Non-cirrhotic patients who are treatment naïve to NS5A inhibitor,
PRESCRIBER CATEGORY A*:
ii. With decompensated liver cirrhosis who are treatment naïve to NS5A inhibitor,
iii. For direct-acting antiviral (DAA) experienced patients who failed to achieve sustained virological response (SVR) due to virological failure (preferably based on resistant associated substitution (RAS) report),
iv. Uninfected recipients of liver and non-liver grafts of HCV-viremic donors who are treatment naïve to NS5A inhibitor,
v. HCV-infected recipients post-liver transplant who are treatment naïve to NS5A inhibitor.

G. DOSE AND ADMINISTRATION

One tablet, taken orally, once daily with or without food.

H. MECHANISM OF ACTION

Sofosbuvir is a pan-genotypic inhibitor of the HCV NS5B RNA-dependent RNA polymerase, which is essential for viral replication. Sofosbuvir is a nucleotide prodrug that undergoes intracellular metabolism to form the pharmacologically active uridine analogue triphosphate (GS-461203), which can be incorporated into HCV RNA by the NS5B polymerase and acts as a chain terminator. GS-461203 (the active metabolite of sofosbuvir) is neither an inhibitor of human DNA and RNA polymerases nor an inhibitor of mitochondrial RNA polymerase.

Velpatasvir is a HCV inhibitor targeting the HCV NS5A protein, which is essential for both RNA replication and the assembly of HCV virions. In vitro resistance selection and cross-resistance studies indicate velpatasvir targets NS5A as its mode of action.

I. ADVERSE REACTIONS

Common:

- **Gastrointestinal disorder**: Nausea (8% to 15%).
- **Neurologic:** Headache (10% to 22%).
- **Other:** Fatigue (15% to 32%).

Serious:

- **Cardiovascular:** Bradyarryhtmia.
- **Hepatic:** Liver failure, reactivation of hepatitis B viral hepatitis.

J. PRECAUTION

- **Cardiovascular:** Bradycardia and fatal cardiac arrest have been reported during concurrent use of amiodarone, with some cases requiring pacemaker intervention; monitoring recommended and discontinuation may be necessary.
- **Cardiovascular:** Increased risk of bradycardia during concurrent amiodarone among patients with concomitant beta blocker use, underlying cardiac comorbidities and advanced liver disease; monitoring recommended.
- **Concomitant use:** Use with amiodarone not recommended.
- **Concomitant use:** Use with P-glycoprotein inducers or moderate to potent CYP2B6, CYP2C8 or CYP2A4 inducers not recommended; therapeutic effect of sofosbuvir/velpatasvir may be reduced.

K. USE IN SPECIFIC POPULATION

- **Renal impairment**: Safety data are limited in patients with severe renal impairment (eGFR < 30 mL/min/1.73 m2) and ESRD requiring haemodialysis. Sofosbuvir/velpatasvir can be used in these patients with no dose adjustment when no other relevant treatment options are available.
- **Diabetic patient:** Diabetics may experience improved glucose control, potentially resulting in symptomatic hypoglycaemia, after initiating HCV direct-acting antiviral treatment. Glucose levels of diabetic patients initiating direct-acting antiviral therapy should be closely monitored, particularly within the first 3 months, and their diabetic medication modified when necessary.
- **Pregnancy:** Not recommended for use in pregnancy. There are limited data from the use of this drug in pregnant women.
- **Lactation:** Available pharmacokinetic data in animals have shown excretion of velpatasvir and metabolites of sofosbuvir in milk. Therefore, it should not be used during breast-feeding.

L. CONTRAINDICATION

- Hypersensitivity to the active substance or to any of the excipients.
- Use with potent P-glycoprotein and potent CYP inducers (e.g. rifampicin, rifabutin, St. John's wort, carbamazepine, phenobarbital and phenytoin).

M. STORAGE

Store below 30 °C

N. PHARMACIST ROLE

- Counsel patient that the drug needs to be swallow as a whole. Due to the bitter taste, it is recommended that the film-coated tablet is not chewed or crushed.
- Counsel patient/caregiver to report any symptoms of bradycardia such as shortness of breath, chest pain, dizziness, confusion and tiredness.
- Advise patient to separate timing taking antacid and drug administration by 4 hours.
- Counsel patient to avoid taking proton-pump inhibitors. If unable to avoid co-administration, take drug with food and 4 hours before taking proton-pump inhibitor.
- Advice patient not to stop taking the medication, exceed the dose recommended or change the dosage without checking with a doctor or pharmacist.

O. REFERENCES

Product information leaflet, FUKKM, QUEST3+, MIMS Gateway, Micromedex

By: Siti Nur Nadzirah Binti Mohd Aziz

PSYCHOMETRIC PROPERTIES OF KNOWLEDGE AND ATTITUDE AMONG HEALTHCARE PROVIDERS ON TOPICAL CORTICOSTEROIDS

Authors:
Mimi Nurul Syafilla Mohd Zain, Nuratikah M. Nordin, Aisyah Shafiqah Roslan, Nor Ameerah Izzati Mohd Nor, Hospital Tengku Ampuan Afzan. Ruzmayuddin Mamat, Klinik Kesihatan Bandar Kuantan.

INTRODUCTION

Knowledge in topical corticosteroids (TCS) use is an important concept in health education towards patient. Lack of patient education by healthcare providers (HCP) on TCS may lead to negative impact on the treatment they received.

OBJECTIVE

This study aims to provide a validated tools by examining the psychometric properties of the Knowledge and Attitude among Healthcare Providers on Topical Corticosteroid questionnaire.

METHODOLOGY

This is a cross-sectional study, divided into 3 phases; (1) questionnaire development, (2) content and face validity and (3) construct validity and reliability testing. The 24-item questionnaire was divided into 3 parts; knowledge, attitude and demographic backgrounds. Convenience sampling method was applied. Face validity, content validity, item analysis and EFA were used for psychometric evaluation. ICC and Cronbach's alpha value of the developed questionnaire were also included. All data were analyzed using Microsoft Excel 2016 and SPSS version 23 for Windows.

CONCLUSION

This final 21-item questionnaire was found to be valid and reliable to assess Knowledge and Attitude among Healthcare Providers on Topical Corticosteroids.

RESULTS

A total of 129 HCP from HTAA were recruited and completed the questionnaire. Average I-CVI value were 0.94 (Knowledge) and 0.95 (Attitude) which showed good content validity. ICC value for test-retest were 0.912 (Knowledge) and 0.856 (Attitude), indicated good reliability (> 0.75). For Factor Knowledge, the difficulty index ranged from 0.48–0.89 (except for item 11) and a discrimination index of ≥ 0.19 were reported for the final retained 9 out of 12 items with acceptable Cronbach's alpha of 0.6. For Factor Attitude, EFA (KMO: 0.913) obtained showed factor loadings of > 0.3 for all 12 items with communalities ranging from 0.220 to 0.723. All Attitude items were retained as no deletion was required. Cronbach's alpha of 0.9 indicated good internal consistency reliability for Factor Attitude.

EVALUATION OF PRESCRIBING ERRORS: A RETROSPECTIVE CROSS SECTIONAL STUDY IN HOSPITAL TENGKU AMPUAN AFZAN (HTAA) 2020

Authors: Siti Aisyah Mohamad Yusof, Laow Kiet Yie, Nurbaizurah Mohd Ali, Hong Lee Cheng, Nur Farahin Sohaimi, Nurul Fazihah Malek Ribuan, Nurul Syahirah Asmaa Mohd Zain

BACKGROUND

In HTAA, total medication errors (ME) were increased yearly from 2017 (n= 4747 errors), 2018 (n=6548) and 2019 (n= 10,948). From these medication errors reported in 2019, 10,913 errors were from near missed errors while 35 are actual error. In 2019 (n=10,948), 10,132 (92.5%) are contributed by prescribing errors, followed by dispensing errors (n=809,7.38%) and administration errors (n=7, 0.06%).

OBJECTIVE

To evaluate prescribing errors in HTAA, Kuantan. The other purpose is to determine the pharmacological groups of medications that are frequently associated with prescribing errors and to evaluate which discipline or department that encounter more with prescribing errors.

METHODOLOGY

Single centre, retrospective, cross-sectional study was undertaken in HTAA over a period of one month, 1st until 31st of December 2019. All prescription slips obtained from Outpatient Pharmacy (Makmur, Specialist Clinic and Emergency) are included in this study. Using Raosoft Sample calculator, with population size of 34002 (total prescription slip) and 95% confidence interval, sample size required are 380 prescriptions slip with near missed prescription errors. All statistical analyses are performed using SPSS version 22.0. Categorical data will be expressed as frequency (n) and percentages (%).

RESULTS

34,002 prescriptions screened and 767 samples has been analysed. The result showed that inappropriate regime was the types of prescribing error with highest prevalence, n=460 (60%), followed by incomplete prescription with n=252 (33%), others with n=48 (6.0%) and inappropriate prescription with n=9 (1.0%). Emergency Department has the highest prevalence of prescribing error where n=428, 55.8% followed by Medical (n=81, 10.6%), and Ophthalmology and Orthopaedics (n=31, 4.0%). The highest prevalence of prescribing error are antiinfectives (n=145, 18.9%) followed by ENT item (n=144, 18.8%) and analgesic (n=111, 14.5%).

CONCLUSION

The most common prescribing error is inappropriate regime while the department with highest prevalence of prescribing error is Emergency and Trauma Department. Anti-infective contributed to highest percentage of prescribing error. Hence, data obtained may be used to implement preventive measures to reduce prescribing errors.

PHARMBOWL 2023

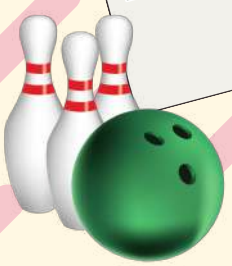
12th February 2023

Mega Lanes Bowling, Berjaya Megamall, Kuantan









PharmCare
Hospital Tengku Ampuan Afzan

PHARMBOWL 2023

PRIZE WINNERS

MALE CATEGORY

FEMALE CATEGORY

PHARMBOWL 2023

PRIZE WINNERS

BEST PLAYER

En. Muhammad Muhaimin bin Zainuddin

Cik Soh Shen-ni

PharmCare
Hospital Tengku Ampuan Afzan

Majlis Lambaian Kasih

Pn. Hjh. Samehah Almuna binti Hj. Ismail

12 Mac 2023

D'Persada Baroqah,
Batu 6 Jalan Gambang,
Kuantan

Lucky Draw & Kahoot Quiz Winners

Pn. Samehah was one of the lucky draw recipients

Majlis Lambaian Kasih

Performance

SINGING

PANTUN

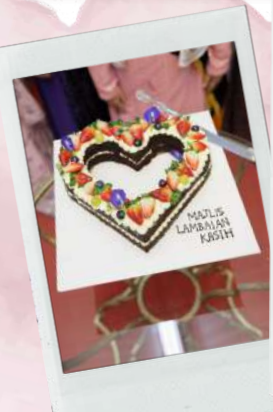
KAHOOT QUIZ

DIKIR BARAT

SINGING

Majlis Lambaian Kasih

Photography Session



Cake Cutting Session

PHARMACY BULLETIN BIL 1/2023

JANUARY - APRIL 2023
JABATAN FARMASI, HOSPITAL TENGKU AMPUAN AFZAN (HTAA)