



## World Pharmacists Day 2019

“Safe and Effective Medicine for All”



### *Inside this issue:*

**Highlight:** *Jerebu*

Page 3

**Medication Safety:** Adulteration of Traditional Products with Corticosteroids & Risk of Psychiatric Disorders

Page 4

**Know Your Medicine:** Brexanolone

Page 5

**Adverse Drug Reaction:** Lamotrigine & Brugada-Type ECG

Page 6

**Counselling Points:** Fentanyl Patch

Page 7

**Pharmacy Activities** from May - November 2019

Pages 8-11

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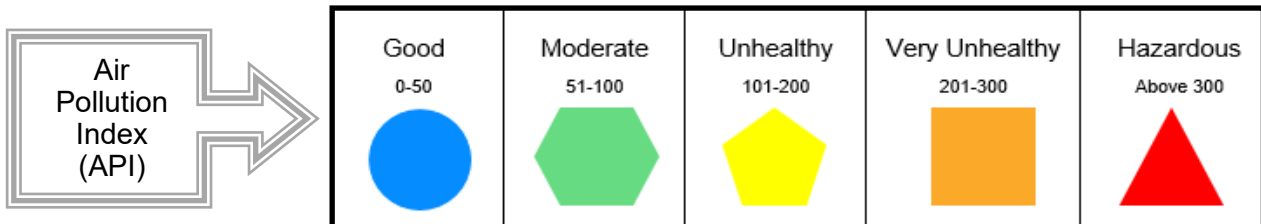
# HIGHLIGHT: *Jerebu*

Article by Liew Yi Ling

Jerebu ialah satu fenomena yang disebabkan oleh kewujudan banyak partikel-partikel kecil yang tidak boleh dilihat oleh mata kasar dan terapung-apung di udara.

Apabila partikel-partikel ini wujud dalam kuantiti yang banyak dan berkelompok, ianya boleh menyekat pancaran cahaya matahari ke bumi dan mengurangkan jarak pandangan mata kasar.

Penyakit berkaitan dengan jerebu termasuklah **penyakit asma**, **konjuntivitis** dan **jangkitan saluran pernafasan**.



## Golongan yang Berisiko Tinggi

- ⇒ Kanak-Kanak
- ⇒ Orang Tua
- ⇒ Perokok
- ⇒ Pekerja yang sentiasa terdedah kepada udara Luar
- ⇒ Pesakit Asma, Bronkitis, Radang Paru-Paru dan Sakit Jantung

## Tanda Dan Gejala Kesan Jerebu Kepada Kesihatan

- ⇒ Terasa gatal-gatal di bahagian kerongkong dan batuk
- ⇒ Hidung berair dan kerap bersin
- ⇒ Terasa sukar untuk bernafas atau sesak nafas
- ⇒ Mata terasa pedih dan berair
- ⇒ Kulit badan terasa gatal-gatal
- ⇒ Terasa sakit dada

## Langkah Pencegahan Dan Tindakan Semasa Jerebu

- ⇒ Kurangkan aktiviti di luar rumah dan cuba berada di dalam bangunan.
- ⇒ Pakai topeng muka yang sesuai seperti P100 dan N95 jika keluar rumah.
- ⇒ Banyakkan minum kosong air sekurang-kurangnya 8 gelas sehari.
- ⇒ Pastikan udara di dalam rumah / bangunan sentiasa bersih. Kurangkan sumber pencemaran dalaman seperti asap rokok.
- ⇒ Apabila memandu, gunakan penghawa dingin, pilih mode kitaran udara dalaman.
- ⇒ Basuh muka dan tangan dengan air bersih dan sabun setelah melakukan aktiviti luar.
- ⇒ Dapatkan rawatan di fasiliti kesihatan terdekat sekiranya tidak sihat.



## Rujukan

1. Jerebu: Panduan Kesihatan Untuk Anda, Kementerian Kesihatan Malaysia, 2019
2. Kenyataan Akhbar Ketua Pengarah Kesihatan Malaysia Situasi Terkini Penyakit Berkaitan Jerebu di Malaysia, Kementerian Kesihatan Malaysia, 2019
3. Infografik Jerebu, Kementerian Kesihatan Malaysia, 2019

# MEDICATION SAFETY: Adulteration of Traditional Products with Corticosteroids : Risk of Psychiatric Disorders

Article by Muhammad Lutfi

## Facts about Corticosteroids

Corticosteroids, often known as steroids, are an anti-inflammatory medicine prescribed for a wide range of conditions. They include betamethasone, prednisone, prednisolone, dexamethasone, hydrocortisone and cortisone. Corticosteroids seem to be a preferred adulterant among products maybe because of its rapid onset of action to relieve symptoms. Thus, some may have mistakenly believed the product to be effective in relieving their pain and discomfort.

## Medical Conditions for which Corticosteroids are Commonly Used

- ◆ Acute Adrenal Insufficiency
- ◆ Addison's Disease
- ◆ Asthma
- ◆ Inflammatory Bowel Disease
- ◆ Multiple Sclerosis
- ◆ Organ Transplant
- ◆ Rheumatoid Arthritis
- ◆ Systemic Lupus Erythematosus



## Psychiatric Events with Corticosteroids

Corticosteroids had been reported associated with a spectrum of psychiatric symptoms since the introduction of corticosteroids in 1950's (Cottencin et al.,2010). Side effects of corticosteroid use induced psychiatric symptoms are known but unpredictable (Redzuan, 2018). The psychiatric symptoms are mania and hypomania (35%), depressive symptoms (28%), and psychotic reactions (24%) (Zagaria, 2016). The mechanism by which the corticosteroid induces symptoms such as mania, depression, and psychosis is not clear and may be influenced by confounding factors and concurrent medications used (Redzuan, 2018). The onset of psychiatric symptoms emerges from 3 to 4 days to a median of 11 days after a patient starts corticosteroid therapy. The depressive symptoms persist approximately 4 weeks, mania 3 weeks, and delirium a few days after discontinuation of corticosteroids. Approximately one-half of patients with steroid psychosis improve in 4 days and one-half within 2 weeks (Cerullo, 2018).

## References

1. Cottencin, O., Legru, H., Vaiva, G., Thomas, P., & Consoli, S. M. (2011). Corticosteroid-induced psychiatric episodes in consultation liaison psychiatry. Personality and temperament assessments. *La Presse Médicale*, 40(2), 203–209.
2. Redzuan, N. A. (2018). Adulteration of Traditional Products with Corticosteroids: Risk of Psychiatric Disorders. MADRAC Newsletter, Vol. 25 (01/2018). Page 7, Retrieved from [https://www.npra.gov.my/images/Publications/Newsletter\\_MADRAC\\_Bulletin/2018/MADRACBulletin012018.pdf](https://www.npra.gov.my/images/Publications/Newsletter_MADRAC_Bulletin/2018/MADRACBulletin012018.pdf)
3. Zagaria, M. A. E. (2016, July 14). Systemic Corticosteroid–Associated Psychiatric Adverse Effects. Retrieved from <https://www.uspharmacist.com/article/systemic-corticosteroid-associated-psychiatric-adverse-effects>.
4. Cerullo MA. Corticosteroid-induced mania: Prepare for the unpredictable. *Current Psychiatry*. June 2006. Available at: [www.currentpsychiatry.com/index.php?id=22661&tx\\_ttnews\[tt\\_news\]=171412](http://www.currentpsychiatry.com/index.php?id=22661&tx_ttnews[tt_news]=171412).

# KNOW YOUR MEDICINE: Brexanolone

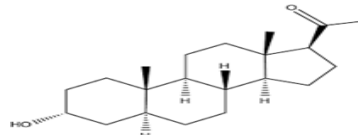
Article by Nor Syahirah

## Indication

- \* Brexanolone is the first drug approved by Food and Drug Administration (FDA) in March 2019 to relieve the symptoms of Postpartum Depression among adult women.

## Dose

- \* Zulresso is administered as a continuous iv infusion over a total of 60 hours (2.5 days).
- \* The dosing is done sequentially ;
  - 0-4 hours: Initiate at 30 mcg/kg/hr
  - 4-24 hours: Increase to 60 mcg/kg/hr
  - 24-52 hours: Increase to 90 mcg/kg/hr (if not tolerated, consider reducing to 60 mcg/kg/hr)
  - 52 to 56 hours: Decrease to 60 mcg/kg/hr
  - 56 to 60 hours: Decrease to 30 mcg/kg/hr



## Mechanism of Action

- \* Mechanism of action for the treatment of PPD is not fully understood
- \* It is believed to be related to positive allosteric modulation of both synaptic and extrasynaptic GABA-A receptors

## Side Effects

- \* Sedation
- \* Somnolence
- \* Dizziness
- \* Presyncope
- \* Vertigo
- \* Dry mouth
- \* Loss of consciousness
- \* Flushing
- \* Tachycardia
- \* Diarrhea
- \* Oropharyngeal pain
- \* Dyspepsia

## BLACK BOX WARNING!!

- \* Patients treated with brexanolone are at risk of excessive sedation or sudden loss of consciousness during administration
- \* Because of the risk of serious harm, monitor patients for excessive sedation or sudden loss of consciousness and have continuous pulse oximetry monitoring
- \* Patients must be accompanied during interactions with their child(ren)
- \* Because of these risks, brexanolone is available only through a restricted program under a Risk Evaluation and Mitigation Strategy (REMS) called the Zulresso REMS
- \* Patients must enroll in REMS before receiving drug; healthcare facilities and pharmacies must be registered and certified in the REMS programme.

## References

1. Zulresso (brexanolone) dosing, indications, interactions, adverse effects, and more. (2019, October 9). Retrieved from <https://reference.medscape.com/drug/zulresso-brexanolone-1000299>

# ADVERSE DRUG REACTION: Lamotrigine & Brugada-Type ECG

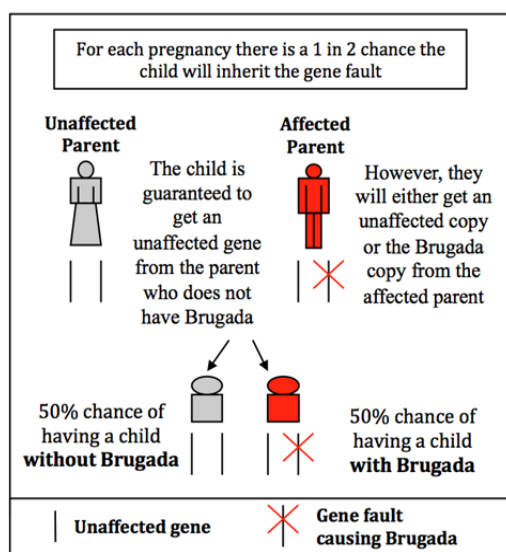
Article by Fatin

- **Brugada Syndrome** is a genetic disease that results in abnormal electrical activity within the heart.
- ECG abnormalities which may lead to arrhythmias (abnormal heart rhythm) can be triggered by lamotrigine, a phenyltriazine anticonvulsant agent.
- There is conflicting evidence and/or divergence of opinion about lamotrigine use, but the weight of evidence or opinion is in favour of a potentially arrhythmic effect in Brugada Syndrome patients.
- In regards to the safety risk, the Ministry of Health Malaysia has taken necessary actions by enforcing all products containing lamotrigine to update the packaging and product information

## Information on Product Leaflet

### Before you Use Lamotrigine

*Talk to your healthcare provider before taking lamotrigine if you have a condition called Brugada Syndrome (a genetic disease that affects the heart)*



## Signs & Symptoms of Brugada Syndrome



Fainting

© www.medindia.net



Palpitations



Seizures



Difficulty in breathing

## Warnings and Precautions on Product Packaging

### Brugada-type ECG

*A very rare association with Brugada-type ECG has been observed, although a causal relationship has not been established. Therefore, careful consideration should be given before using lamotrigine in patients with Brugada Syndrome.*

## References

1. Postema, P. G., Wolpert, C., Amin, A. S., Probst, V., Borggreffe, M., Roden, D. M. Wilde, A. A. (2009). Drugs and Brugada syndrome patients: review of the literature, recommendations, and an up-to-date website ([www.brugadadrugs.org](http://www.brugadadrugs.org)). *Heart rhythm*, 6(9), 1335–1341. doi:10.1016/j.hrthm.2009.07.002
2. Arahan Pengarah Kanan Perkhidmatan Farmasi Bilangan 14 Tahun 2019: Direktif untuk semua produk yang mengandungi Lamotrigine. Pengemaskinian Sisip Bungkus dan Risalah Maklumat Ubat untuk Pengguna (RIMUP) dengan Penambahan Maklumat Keselamatan Berkaitan Risiko Brugada-Type ECG. (2019) Kementerian Kesihatan Malaysia.
3. Brugada syndrome (2017). Retrieved from <https://www.nhs.uk/conditions/brugada-syndrome/>

# COUNSELING POINTS: Fentanyl Patch

Article by Mohammad Zakwan

## Mechanism of Action

- ◆ Fentanyl belongs to a class of drugs known as opioid (narcotic) analgesics.
- ◆ A schedule 2 prescription narcotic analgesic, fentanyl is roughly 100 times more potent than morphine.
- ◆ The patch works by slowly releasing fentanyl through the skin into the bloodstream over 48-72 hours.
- ◆ Fentanyl binds to the body's opioid receptors, increasing dopamine levels in the CNS.
- ◆ The increase in dopamine produces a state of relaxation, relieves pain, decreases the perception of suffering, and promotes a feeling of euphoria.
- ◆ For continuous delivery, fentanyl can be administered through a transdermal patch that adheres to the skin.

## Counseling Points

- Remove the patch from package.
- Patches should be applied to a flat, non-irritated hairless skin on the region of upper body.
- Clean and wash application side with water prior to application and do not apply cream, oils, lotion or powder to the area of application
- Patches should never be cut and should be applied immediately after removing it from the package
- Apply the patch by slightly pressing it and may also be worn when taking a shower.
- After 72 hours, remove the patch & change the site of application with 7 days interval for each site.
- Residues on the skin can be removed water and soap,
- Used patches should be folded inwards & discarded.
- Avoid exposing patches to excessive heat as it release fentanyl from the patch and increases the absorption of fentanyl through the skin which can result in fatal overdose.



## References

1. Drugs & Medications. (2019). Retrieved 7 October 2019, from <https://www.webmd.com/drugs/2/drug-6253/fentanyl-transdermal/details>
2. Durogesic Dosage & Drug Information | MIMS.com Malaysia. Retrieved 7 October 2019, from <https://mims.com/malaysia/drug/info/durogesic/?type=brief>

# PHARMACY ACTIVITY: Kursus Medication Safety



**Tarikh:** 18 Jun 2019

**Tempat:** Bilik Seminar 1&2, Hospital Permai

**Objektif Kursus:**

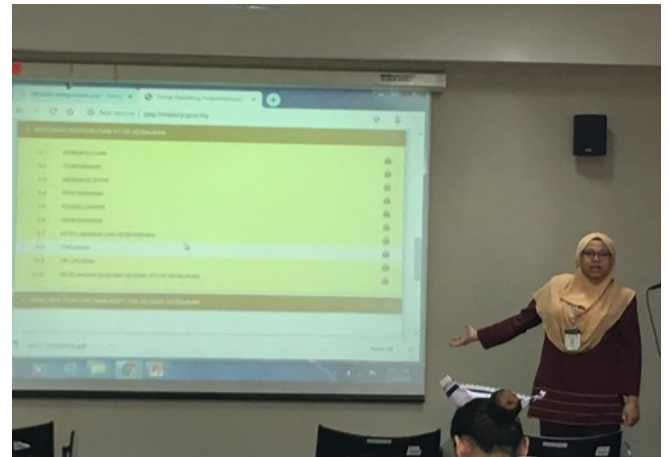
- ⇒ Memberi pendedahan kepada peserta tentang pelaporan *Medication Error*
- ⇒ Meningkatkan penjagaan pesakit melalui keselamatan pengubatan

**Kandungan Kursus:**

- ⇒ Pengenalan *Medication Error Reporting*
- ⇒ Pelaporan *Adverse Drug Reaction (ADR)*
- ⇒ *High Alert Medication*
- ⇒ Panduan mengendalikan ubat *Look Alike, Sound Alike (LASA)*
- ⇒ *Allergic card*
- ⇒ *Dilution Guide on High Alert Medications*
- ⇒ Pelaporan *Medication Error* Hospital Permai



# PHARMACY ACTIVITY: Kursus Pengurusan Ubat di Wad & Stor



**Tarikh:** 2 Julai 2019

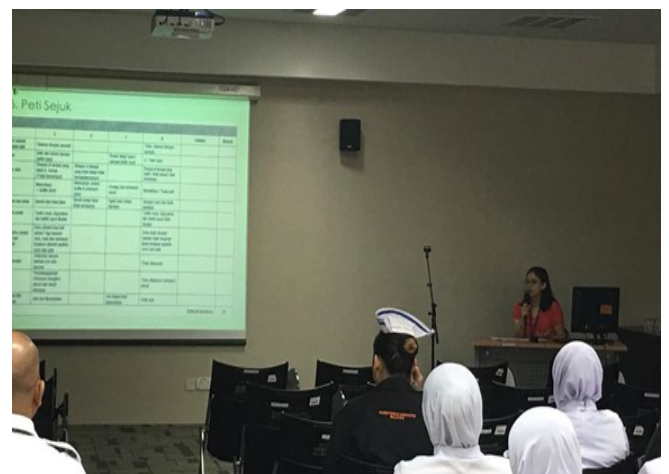
**Tempat:** Bilik Seminar 1&2, Hospital Permai

**Objektif Kursus:**

- ⇒ Memberi kefahaman tentang pengurusan ubat di wad
- ⇒ Memberi kefahaman tentang pengurusan sub-stor
- ⇒ Memberi maklumat terkini berkenaan farmasi

**Kandungan Kursus:**

- ⇒ Sistem bekalan ubat Farmasi Pesakit Dalam
- ⇒ Bekalan Dadah Berbahaya (DD) & Bahan Psikotropik
- ⇒ Pengendalian dan penyimpanan ubat-ubatan
- ⇒ Pengurusan dan pemesanan stok ubat, surgikal dan domestik di substor
- ⇒ Pemeriksaan wad/unit



# PHARMACY ACTIVITY: Minggu Sambutan Hari Farmasi 2019



## CME Sempena Sambutan Minggu Hari Farmasi

Tarikh: 23 September 2019

Tempat: Bilik Seminar 1&2, Hospital Permai



## Pameran Keselamatan Pengubatan Sempena Sambutan Hari Farmasi

Tema: 'Safe and Effective Medicine For All'

Tarikh: 22– 26 September 2019

Tempat: Ruang Menunggu Farmasi Pesakit Luar, Hospital Permai



# PHARMACY ACTIVITY: Bengkel Proposal & Pembentangan Kajian Pegawai Farmasi Provisional 2019

**Tarikh:** 27 Mei 2019 & 23 Oktober 2019

**Tempat:** Bilik Mesyuarat Farmasi Logistik, Hospital Permai

**Objektif Kursus:**

- ⇒ Memberi penerangan dan bimbingan secara proaktif kepada Pegawai Farmasi Provisional dalam melengkapkan Proposal Kajian
- ⇒ Memberi bimbingan kepada pegawai farmasi provisional dalam pengumpulan data kajian dan *Statistical Analysis* mereka.
- ⇒ Membentangkan hasil kajian yang telah lengkap



**Fasilitator Jemputan:**

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