What is Depression?
Depression is a common mental disorder, characterized by persistent sadness and a loss of interest in activities that you normally enjoy, accompanied by an inability to carry out daily activities, for at least two weeks. Depression can lead to suicide. Fortunately, depression is treatable, with talking therapies or antidepressant medication or a combination of these.
(Word Health Organisation, 2018)

Depression Symptoms

<table>
<thead>
<tr>
<th>EMOTIONS</th>
<th>PHYSICAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sadness</td>
<td>Chronic Fatigue</td>
</tr>
<tr>
<td>Anxiety</td>
<td>Lack of energy</td>
</tr>
<tr>
<td>Guilt</td>
<td>Sleeping too much or too little</td>
</tr>
<tr>
<td>Anger</td>
<td>Loss of motivation</td>
</tr>
<tr>
<td>Mood swings</td>
<td>Substance abuse</td>
</tr>
<tr>
<td>Irritability</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>THOUGHTS</th>
<th>BEHAVIOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-criticism</td>
<td>Withdrawal from others</td>
</tr>
<tr>
<td>Impaired memory</td>
<td>Neglect of responsibilities</td>
</tr>
<tr>
<td>Indecisiveness</td>
<td>Changes in personal appearance</td>
</tr>
<tr>
<td>Confusion</td>
<td></td>
</tr>
<tr>
<td>Thoughts of death and suicide</td>
<td></td>
</tr>
</tbody>
</table>

Depression is a common illness, with more than 300 million people affected worldwide. Depression is different from usual mood fluctuations and short-lived emotional responses to challenges in everyday life. In long-lasting and with moderate or severe intensity, depression may become a serious health condition. At its worst, depression can lead to suicide. Close to 800,000 people die due to suicide every year and is the second leading cause of death in 15-29-year-olds.

Although there are known, effective treatments for depression, fewer than half of those affected in the world (in many countries, fewer than 10%) receive such treatments. Barriers to effective care include a lack of resources, lack of trained health-care providers, and social stigma associated with mental disorders. Another barrier to effective care is inaccurate assessment. In countries of all income levels, people who are depressed are often not correctly diagnosed, and others who do not have the disorder are too often misdiagnosed and prescribed antidepressants.

The burden of depression and other mental health conditions is on the rise globally. A World Health Assembly resolution passed in May 2013 has called for a comprehensive, coordinated response to mental disorders at country level.

Statistics: Mental Health in Malaysia

Prevalence of Mental Health problems among adults

Four out of every 10 Malaysians will fall victim to some form of mental health issue in the course of their lives and psychologists believe that the numbers will continue to rise.

More than 18,000 Malaysians suffer from depression.

By the year 2020 major depression is projected to be the second largest contributor to the global burden of disease, after heart disease.

The Star Online (2017). Depression: 40% of Malaysians will suffer from mental health issues in their lifetime.
The Stars online (2018). 29% of Malaysians have mental problems due to stress, says Lam Thye.
National Health and Morbidity Survey 2015.
Antidepressant:
- Selective-Serotonin Reuptake Inhibitors (SSRI)
- Tricyclic Antidepressants (TCA)
- Serotonin-Noradrenaline Reuptake Inhibition (SNRI)
- Reversible Monoamine Oxidase Inhibitor (MAOI)
- Serotonin Modulators

New Antidepressant Approved By FDA in 2019

Spravato (esketamine) nasal spray is a non-competitive N-methyl D-aspartate (NMDA) receptor antagonist.
Spravato is specifically indicated for use, in conjunction with an oral antidepressant, for the treatment of treatment-resistant depression (TRD) in adults.
Spravato is supplied as a spray for intranasal administration.
**Company:** Janssen Pharmaceuticals
Approved March 2019

Zulresso (brexanolone) is a neuroactive steroid gamma-aminobutyric acid (GABA) A receptor positive modulator.
Zulresso is specifically indicated for the treatment of postpartum depression (PPD) in adults.
Zulresso is supplied as an intravenous administration.
If excessive sedation occurs at any time during the infusion, stop the infusion until the symptoms resolve. The infusion may be resumed at the same or lower dose as clinically appropriate.
**Company:** Sage Therapeutics
Approved March 2019

Food That May Improve Depression

- Eggs are a good source of Zinc, Vitamin D and Vitamin B12, its deficiency is linked to depression and other mental health problems
- Salmon is an excellent source of omega-3 fatty acids which play an important role in brain and behavioral function.
- Banana contains high amounts of tryptophan, a precursor to the neurotransmitter serotonin that influences mood.
- This versatile green veggie is also beneficial for people suffering from depression. Asparagus helps raise low folic acid levels that are linked to depression.
- Green tea is bursting with antioxidants and amino acids which may help to overcome depression in natural way.
- Almond is a good source of magnesium which may influence production of serotonin. Magnesium deficiency is associated with symptoms of depression.
- The high levels of omega-3 fatty acids in avocados, particularly EPA and DHA is said to increase the volume of gray matter in the parts of the brain responsible for regulating emotions.
- Spinach is filled with folic acid, magnesium, and zinc. The folate in spinach aids serotonin regulation.
- Dark Chocolate may increase serotonin levels and slows down production of stress hormones which improve depression disorder.
- Blueberries are full of antioxidants that support proper brain functioning and improve cognitive function.

Ref: Clinical Practise Guidelines: Management of Major Depressive Disorder, 2007
FDA approves new nasal spray medication for treatment-resistant depression; available only at a certified doctor’s office or clinic. (2019). Retrieved from https://www.fda.gov/news-events/press-announcements/fda-approved-new-nasal-spray-medication-treatment-resistant-depression-available-only-certified
Influenza virus infection is a highly contagious, acute, febrile respiratory illness that causes outbreaks annually and is responsible for approximately 36,000 deaths annually in the world.

Influenza A, B, and C viruses are human pathogens, although influenza C infection is rare.

In the spring of 2009, infection of humans with a novel influenza A virus (H1N1) was identified, and this virus caused a worldwide pandemic.

Outbreaks caused by influenza B viruses are generally less severe than those caused by influenza A viruses; however, it is impossible to clinically differentiate between influenza A and B virus infection.

Serious illness and death are highest among children younger than 2 years and adults older than 65 years.

There are 4 types of influenza virus which are Influenza virus A,B,C,D.

**High risk population**
- Young children under age 5, and especially those under 2 years
- Adults older than age 65
- Residents of nursing homes and other long-term care facilities

**Clinical features**
- Sudden onset of fever
- Cough which can last 2 weeks or more
- Headache, muscle and joint pain, severe malaise

**Treatment**
- The prevention of influenza is best accomplished with a broad-based immunization program. Patients at highest risk should be given priority to receive influenza vaccine
- Zanamivir and oseltamivir are newer agents indicated for the treatment of both influenza A and B
- For antiviral agents to be effective, they must be used within 48 hours of the onset of influenza symptoms.
- Use of amantadine or rimantadine is appropriate if influenza virus A is known to be the predominant agent.

Ref: Clinical Signs and Symptoms of Influenza | CDC. Retrieved from https://www.cdc.gov/flu/professionals/acip/clinical.htm
Vaccination is the most effective way to prevent infection and severe outcomes caused by influenza viruses.

Most of the current seasonal influenza vaccines include 2 influenza A strains and 1 influenza B strain. Trivalent inactivated vaccines (TIV) and live attenuated influenza vaccines (LAIV) are available. A quadrivalent LAIV for intranasal application containing 2 influenza A strains and 2 influenza B strains was licensed in the USA in 2012.

Recent updated: Jul 2019 - Influenza epidemic that involved 9 Johor Darul Ta’zim Football Club squad (JDT) players, 8 of them were diagnosed with influenza B while 1 was diagnosed with Influenza A. PFS vaccine were given to 31 people including players and coaches as prophylaxis.

Ketogenic diet is a specific type of low carbohydrate diet that is generally composed of **70% fat, 25% protein** and **5% carbohydrates** with the primary goal of reaching ketosis.

**Ketosis:**
A metabolic state in which liver converts fats into ketones for fuel instead of carbohydrates.

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**KETO DIET**

**shopping list**

<table>
<thead>
<tr>
<th>CARBS (5%)</th>
<th>PROTEIN (20%)</th>
<th>FATS (75%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>asparagus, kale, lettuce, broccoli, spinach, cucumber, cabbage</td>
<td>eggs, bacon, turkey, salmon, shrimp, duck, sardines</td>
<td>avocados, walnuts, cheese, yogurt, butter, olive oil, hazelnuts</td>
</tr>
</tbody>
</table>

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**Benefits of Being Keto**

- **Burning BODY FAT**
- **Enhanced COGNITION AND MENTAL CLARITY** (lowered brain fog)
- **Increased PHYSICAL ENERGY**
- **Reduced hunger, LESSENED FEELINGS OF DEPRIVATION**
- **Stable BLOOD SUGAR LEVELS** (no refined carbs)
- **Better CHOLESTEROL AND TRIGLYCERIDE LEVELS**
- **Improved HORMONE REGULATION, leading to reduced PMS symptoms**

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Avoid:

- People with liver or kidney disorders
- Pregnant and breast feeding women
- People on hypoglycemic medications
New products in Hospital Kulim

1. **Inj ROPIVACAINE 0.75% (150mg/20ml)**
   - **Indication:** surgical anaesthesia including obstetric; acute pain management
   - **Pregnancy category:** B

2. **Tiotropium 2.5ug/Olodaterol 2.5ug (SPIOLTO RESPMAT)**
   - **Indication:** Chronic obstructive pulmonary disease
   - **Dosing:** 2 puffs once daily

3. **T Sacubitril 24mg/ Valsartan 26mg (ENTRESTO 50MG)**
   - **Indication:** Chronic Heart failure, Class II to IV
   - **(Two strengths of ENTRESTO to be purchased in 2020)**

4. **Ointment Dexamethasone/ Neomycin/ Polymyxin B sulfate**
   - **Indication:** Treatment of ocular inflammation when concurrent use of antimicrobial is needed
   - **Dosing:** Apply 3-4 times daily

5. **Eye Drop Bimatoprost 0.01% (LUMIGAN)**
   - **Indication:** Lower ocular pressure in ocular hypertension; open angle glaucoma patients

6. **Phosphate Solution containing Sodium Acid Phosphate 1.936g/15ml (SANDOZ PHOSPHATE)**
   - **Indication:** Supplemental ionic phosphorus for correction of hypophosphatemia

7. **Zincofer (Providing Iron: 115mg)**
   - **Indication:** Iron deficiency anemia, nutritional deficiency anemia and anemia associated with pregnancy
   - **Reserved:** Departments other than Klinik Pakar O&G
Outpatient

T. Trimetazidine 20mg
T. Medroxyprogesterone 5mg

T. Chlorpheniramine 4mg
T. Bromhexine 8mg

T. Atorvastatin 40mg
T. Gliclazide MR 60mg
Inpatient

- IV Amoxicillin/Clavulanate (Augmentin) 1.2g
- IV Vancomycin 500mg
- Ipratropium bromide 0.025% Nebulising solution (250mcg/ml)
- Ipratropium bromide 0.5mg/Salbutamol 2.5mg Nebuliser solution
- IV Salbutamol 0.5mg/ml
- IV Triamcinolone 40mg/ml
Deferiprone is an iron-chelator that removes excess iron from the body in patients with thalassemia major when treatment with other iron chelators are inadequate or contraindicated.

A safety review was initiated by Health Canada when two published cases of neurological disorders including difficulty walking or difficulty with the coordination of movement were observed in children treated with deferiprone at recommended doses. Health Canada has concluded that these neurological adverse events may occur with deferiprone even at recommended doses. Following this, product manufacturers of deferiprone are required to update the package insert with this information.

Among the neurological disorders observed with the standard dose are hypotonia, instability, inability to walk, and hypertonia with inability of limb movement. These neurological disorders were found to gradually subside with discontinuation of deferiprone.

**Recent Update:**

**Deferiprone: Risk of neurological disorders in children**

Deferiprone is an iron-chelator that removes excess iron from the body in patients with thalassemia major when treatment with other iron chelators are inadequate or contraindicated.

A safety review was initiated by Health Canada when two published cases of neurological disorders including difficulty walking or difficulty with the coordination of movement were observed in children treated with deferiprone at recommended doses. Health Canada has concluded that these neurological adverse events may occur with deferiprone even at recommended doses. Following this, product manufacturers of deferiprone are required to update the package insert with this information.

Among the neurological disorders observed with the standard dose are hypotonia, instability, inability to walk, and hypertonia with inability of limb movement. These neurological disorders were found to gradually subside with discontinuation of deferiprone.

**Advice for Healthcare Professionals**

- Monitor for any signs and symptoms of neurological disorders in patients taking deferiprone at any dose.
- Please report any adverse events suspected to be related to deferiprone to National Pharmaceutical Regulatory Agency (NPRA).

**References:**


**Adverse Drug Reaction Reports**

National Pharmaceutical Regulatory Agency (NPRA) has received 351 ADR reports suspected to be related to deferiprone. To date, no report related to neurological disorders such as difficulty in walking or difficulty in coordination of movement has been reported.
Quality Use of Medicines (QUMC)

QUMC is a program conducted by Pharmacy Department of Hospital Kulim in various community settings. The main objective of this programme is to:

1) Increase awareness on the proper use of medication.
2) Educate the public on the concept of 5Rights (5R) and rational use of antibiotics.

20th June 2019
SJKT Ladang Anak Kulim
Pharmacists:
Mdm Saravanapriya, Mdm Rathibaranesh & Mr Mathialagan
Participants: 30 students, 11 teachers

25th July 2019
SK Sri Limau
Pharmacists:
Mdm Fatin Iman, Mdm Nadiah Auni & Mdm Khairunnisa
Participants: 170 students, 10 teachers

31st July 2019
Majlis Perbandaran Kulim
Pharmacists:
Mdm Farah Natasya, Ms Marlina, Mr Muhammad Ashraf & Mr Afif Naim
Participants: 280 staff

In conjunction with Hari Raya Aidilfitri, a celebration was held in Pharmacy Department of Hospital Kulim on 25th June 2019. Apart from the Hari Raya celebration, a farewell party was also held for the pharmacists who completed their PRP attachment. We wish all the PRPs a happy and successful journey ahead and thank them for their contribution throughout their stay in Hospital Kulim. We also celebrated birthdays for our colleagues whose birthday falls on April, May, and June.

HARI RAYA CELEBRATION, AT HOSPITAL KULIM LEVEL, 27th June 2019

On 27th June 2019, Hospital Kulim held a celebration in conjunction with Hari Raya Aidilfitri. All staffs of Hospital Kulim were involved in this event. Pharmacy department contributed ketupat, lemak for this occasion. Besides that, a live band and melodious singing performances were held at the main stage. Our Pharmacy department was proud to receive second place for most beautifully decorated booth at the end of the event.
Staff Movement

TAN CHUN YING
PEGAWAJ FARMASI UF 41

TIME COMES AND GOES, BUT
GOOD MEMORIES LAST FOREVER

CHOW NGAN KUAN
PEGAWAJ FARMASI UF 48
7 Products Banned from Malaysia Market due to Mercury Components

1. Fjura - Face Polish Treatment
2. Dnars Golden Cream
3. Glow Glowing N Glowing
4. Apple Diamond Day Loose
5. 3rd Series Yanko Fade Out Cream Day Cream
6. 5th Series Yanko Fade Out Cream Day Cream
7. 7th Series Yanko Whitening Cream Day Cream

Source: Kementerian Kesihatan Malaysia, 6 Ogos 2019
Doctor: I've got very bad news - you've got cancer and Alzheimer's.

Patient: Well, at least I don't have cancer.

"We combined all your medications into ONE convenient dose."

Doctor, can you prescribe something to stop me from sleepwalking?

No, you need the exercise!

Q: What did the man say to the x-ray technician after swallowing some money?

A: Do you see any change in me?