VACCINATION IN CHILDHOOD
MYTHS VS FACTS

A vaccine is a biological preparation that improves immunity to a particular disease. A vaccine is usually made from weakened or killed forms of the microbe, its toxins or one of its surface proteins. The agent stimulates the body's immune system to recognize the agent as foreign, destroy it, and "remember" it, so that the immune system can more easily recognize and destroy any of these microorganisms that it later encounters.

Ministry of Health Malaysia has come out with an immunization schedule for all the newborn babies. These babies should be vaccinated according to their age. This schedule is constantly updated by the Ministry of Health Malaysia based on current outbreaks in the country.

A Diphtheria outbreak happened in Kedah on 28 June 2016, as reported by the The Sun Daily newspaper with a total of 8 cases were reported. During the outbreak, the Kedah Health Director advised parents to check their children's health card to ensure that the children received complete immunization. A mortality case was reported where a 2 year old boy died due to diphtheria in Kuala Muda in June 2016. After investigation, it was found that his siblings were not vaccinated unlike him. Communities depend on high immunization rates to keep vaccine-preventable diseases from spreading. When more people are immunized, there is less risk for everyone. The more parents that choose to not vaccinate their children, the greater the risk that infection will spread in the community.
**MYTH 1:** SOMY VACCINES ARE NOT HALAL

**FACT 1:** Some vaccines use porcine based enzymes in their production. The Islamic fatwa committee has allowed the usage of these vaccines. Based on the crucial need of these vaccines in disease prevention in which there are no other purely halal alternatives, Islamic scholars ruled that the use of these vaccines fulfills the concept of ‘dharurah (emergency)’. In accordance to that, the use of these vaccines are allowed.

**MYTH 2: VACCINES CAUSE AUTISM**

**FACT 2:** An article by a British surgeon, Andrew Wakefield, in The Lancet (1998) mentioned that the measles, mumps and rubella vaccines increase autism incidences among British children. This article created a widespread fear among the public. However, up until now none of the numerous subsequent studies conducted were able to prove that the claim was true. There is no scientific evidence to prove any possible link between vaccines and autism.

**MYTH 3: VACCINATION CAN CAUSE MANY SIDE EFFECTS**

**FACT 3:** Just like all other medications, vaccines also have its own side effects. Most of them are mild and tolerable such as fever, flu, pain and redness at the injection side. Recently, they have improvised the production of vaccines, in which they only took the antigenic part of the pathogen or pathogen specific DNA materials that produce less side effects.

**MYTH 4: INFANT IMMUNE SYSTEMS CAN’T HANDLE SO MANY VACCINES.**

Based on the number of antibodies present in the blood, a baby would theoretically have the ability to respond to around 10,000 vaccines at one time. Even if all 14 scheduled vaccines were given at once, it would only use up slightly more than 0.1% of a baby’s immune capacity. The immune system could never truly be overwhelmed because the cells in the system are constantly being replenished.

2) https://www.publichealth.org/public-awareness/understanding-vaccines/vaccine-myths-debunked/
MANAGING ALLERGIC REACTIONS

WHAT IS ALLERGY?

Allergy is an overreaction or hypersensitivity of the body immune system to normally harmless substances, called allergens. An allergic reaction occurs when the body immune system responds to allergen as if substance were disease causing. Subsequent exposures to this substance can result in physical symptoms that ranges from mild to life threatening.

Who Gets Allergies?

The tendency to develop allergies is thought to be inherited, because they commonly develop in those who have a family history of allergies. It is possible for anyone to develop allergies at any age. Environmental factors can make our immune systems overly sensitive. This could then trigger allergies in people with no family history or hasten the onset in those with a family history.

ANAPHYLAXIS

Anaphylaxis is a life threatening reaction. The onset of this medication may occur within seconds or minutes of exposure. Symptoms may include red rashes over most of the body. Skin becomes warm to touch, intense tightening and swelling of the airways make breathing difficult, and there is a drop in blood pressure. Breathing can stop and the body may slip into shock. If medication is not administered quickly, heart failure and death can results within minutes in the most severe reactions. Allergen in insect venom and medications such as antibodies are more likely to cause anaphylaxis than are any other allergens.
WORKFLOW ON PROCESSING ALLERGY CARD AND ADR REPORTING

1. Get registration number for the allergy card from MO 14.4 Kad Allergi

2. Fill the ALLERGY CARD FORM (a) and ADR FORM (b)

3. Get countersign from the doctor for ADR form and Allergy form. NOTE: If PRP, please get countersign by FRP (according to the column)

4. Endorse Allergy Card to the patient

5. Register ADR in PHIS

6. Send both forms to DIS

EXAMPLE OF ADR REPORTING FORM AND ALLERGY CARD REQUEST FORM
WHAT IS HFMD and what causes HFMD?
Hand, foot and mouth disease (HFMD) is caused by enteroviruses known as Coxsackievirus A16. It can affect both children and adults, but children are more prone to get HFMD. (1, 3)

What are the symptoms of HFMD?
Common symptoms are fever, reduced appetite, malaise, sore throat, weakness of limb and painful mouth, hand and feet sores. (1, 3, 5)

Is HFMD contagious?
HFMD is highly contagious. The contagious period is between 2 days to 2 weeks. It is most contagious during the first week and remain contagious once the symptoms start to appear up until the second week. (1, 3)

How does HFMD get transmitted?
Through nose and throat secretions (such as saliva, sputum, or nasal mucus), Blister fluid, Faeces, Personal contact (hugging infected person), Contact with contaminated objects (door knobs or toys). (3, 4)

How can HFMD be treated?
HFMD is treated with medications that help relieve the symptoms. Paracetamol for fever and pain relief, Cetirizine for itchy throat and rashes. (3)

What are other treatment option without using medications?
Children can feel better by using salt water to reduce soreness of mouth ulcer, vaseline to reduce soreness and retain moisture, diaper cream for rashes and drinking lots of fluid. (1, 3)

Any HFMD vaccines in Malaysia? What are the preventative measures taken?
There is currently no vaccine available in Malaysia. As preventive measure, children should maintain personal hygiene, avoid sharing things, and drink enough fluids to prevent dehydration. (1, 3)

References:
FLUCONAZOLE: CAUTION TO BE USE IN PREGNANCY

Overview
Fluconazole is a triazole antifungal used for treatment and prevention of various fungal infections. While vaginal candidiasis occurs commonly during pregnancy, the use of oral fluconazole has been associated with increased risk of spontaneous abortion.

Background of safety concern
A study was conducted in Denmark on the possible association between oral Fluconazole exposure during pregnancy and the risk of spontaneous abortion and stillbirth. In this study, it was found that 147 spontaneous abortions occurred in 3,315 pregnancies exposed to Fluconazole in weeks 7 through 22 (hazard ratio 1.48; 95% CI, 1.23-1.77), compared to 563 spontaneous abortions in 13,246 unexposed matched control pregnancies (hazard ratio 1.49; 95% CI, 1.27-1.75). A total of 21 stillbirths occurred in 5,382 pregnancies exposed to fluconazole from week 7 to birth (hazard ratio 1.32; 95% CI, 0.82-2.14), while 77 stillbirths occurred in the 21,506 unexposed matched pregnancies (hazard ratio 1.44; 95% CI, 0.94-2.21). The study concluded that the use of oral Fluconazole in pregnancy was associated with a statistically significant increased risk of spontaneous abortion compared with risk among unexposed women and those with topicalazole exposure in pregnancy. While the increased risk of stillbirth was not statistically significantly, further investigation was recommended. EMA has completed a review on this safety issue and recommended an update to the product information for all formulations of fluconazole containing products with information on the risk of spontaneous abortion.

Local Scenario In Malaysia
There are currently 40 registered products containing fluconazole. Fluconazole was first registered in 1989 and is approved for the treatment of cryptococcosis, systemic candidiasis, mucosal candidiasis, genital candidiasis, dermatomycosis and prevention of fungal infections in patients with malignancy.

Advice for Healthcare Professionals
⇒ Use caution in prescribing oral fluconazole in pregnancy.
⇒ Consider alternative treatment options, such as clotrimazole for uncomplicated candidiasis.
⇒ Please report any ADRs related to fluconazole use to the NPRA, particularly use in pregnancy.

References:
IVABRADINE: RISK OF CARDIOVASCULAR EVENTS

Background of Safety Issue

A review into the safety of Ivabradine was triggered by the preliminary results of the SIGNIFY clinical trial. The results of this trial showed a small but significant increase (3.4% vs 2.9% yearly incidence rates) in the combined risk of cardiovascular death or non-fatal heart attack with Ivabradine compared with placebo, in patients with symptomatic angina. The study also revealed an increased risk of bradycardia (17.9% vs 2.1%) and AF (5.3% vs 3.8%) in participants taking Ivabradine compared with placebo.

Overview

Ivabradine is approved in Malaysia for [please refer to PI for full details]:
(i) treatment of chronic heart failure
(ii) symptomatic treatment of chronic stable angina in adults who are unable to take beta blockers, or in combination therapy for patients inadequately controlled with an optimal beta-blocker dose.

Advice to Healthcare Providers

- For the treatment of symptomatic angina: Ivabradine should only be started in patients with normal sinus rhythm and heart rate =70 bpm.
- Ivabradine use is contraindicated with Verapamil or Diltiazem (heart rate-reducing calcium channel blockers), and strong CYP3A4 inhibitors (for e.g. Clarithromycin, Ketoconazole, Ritonavir).
- If there is no improvement or only limited improvement in symptoms of angina after 3 months of starting treatment, discontinuation of Ivabradine should be considered.

• Closely adhere to the warnings and contraindications related to Ivabradine use.
• Monitor patients regularly for atrial fibrillation (AF). If AF develops during treatment, the benefit-risk balance of continued Ivabradine treatment should be carefully reconsidered.
• Please inform patients of signs and symptoms of bradycardia, AF, and other documented cardiac adverse events. Advise them to contact their healthcare professional if any are suspected. If resting heart rate decreases persistently below 50 bpm or if the patient experiences symptoms of bradycardia, down-titrate the dose. The dose can be reduced to 2.5 mg twice daily if required.
• Ivabradine should be stopped if the resting heart rate remains below 50 bpm or symptoms of bradycardia persist.
• Please report any ADR related to Ivabradine to the NPRA.


JUL – SEPT 2018 (VOL 3) HOSPITAL KULIM PHARMACY DEPARTMENT
Products containing Dexamethasone

JAMU AJAIB PLUS
JUS SKYLINE AT TAQWA
MAAJUN DUA ISTIMEWA

AIR HARUAN AJAIB
AIR IKAN HARUAN

PIL SURUT AYU
GARCINIA BURNER 15D
FIGURE UP SLIMMING PILLS

PRODUCTS CONTAINING SIBUTRAMINE

BANNE D!!!

BANNE D!!!
Quality Use of Medicine among Consumer (QUMC) is a program conducted by Pharmacy Department of Hospital Kulim. A team of pharmacists are involved under this program which aim to create awareness on medication related issues through various activities. Specific objectives include:

I. Educate the students and teachers on quality use of medicine and antibiotic resistance.
II. Increase awareness on a proper use of medication
III. Educate on the right way of medication storage
IV. Educate students and teachers on how to practice 5R in handling their medication

A talk on ‘Kenali Ubat Anda’ was delivered by Pharmacist Madam Najihah at SK Sri Kulim on 26th July 2018.

A talk on ‘Penggunaan Ubat Secara Berkualiti’ was delivered by Pharmacist Mr. Amir at SK Sungai Ular on 9 August 2018.

A talk on ‘Kenali Ubat Anda’ was delivered by Pharmacist Madam Aqilah at SMK Junjung on 25th September 2018.
The first speaker was representative from Norvatis corporation, Dr Rajendra Prasad giving talk on Breezehaler. He presented reliable studies on the efficacy of Breezehaler compared to other inhaler. The another speaker was Pharmacist Farah who presented on Lactation And Medication. She gave tips on how to manage the breastfeeding time and medication time. We also had two presentations by Provisional Registered Pharmacist which were Cik Munaqirah on Management of ST Elevation Myocardiac Infarction and Cik Lyinat Mary on Allergic-Hypersensitive reaction.

10TH NATIONAL PHARMACY R&D CONFERENCE WAS CONDUCTED FROM 9TH TO 11TH JULY 2018 AT ROYALE CHULAN SEREMBAN.

Mr Tang and team were involved in the conference with topic ‘The Effectiveness Of Gentamicin Local Application In Preventing Catheter-related Blood Stream Infections Among Haemodialysis Patients With Non-tunneled Central Venous Catheters (NTCVC) In Kulim Hospital’. His team managed to obtain second place in the conference.
Hospital Kulim organized Majlis Jamuan Aidilfitri Perdana which involves all departments and units on 12th July 2018. The event was held at Parking Dewan Asrama, starting around 1200 pm. Pharmacy team participated in opening booth joining together with Ward 4, 5 and 6, by serving Ketupat, Lemang and Rendang. Each booth was decorated by the respective team as part of the Booth Decoration Competition.

STAFF MOVEMENT

MR MUHD SYAHID B. MOHD NOOR
PEGAWAI FARMASI UF44

MDM NOOR ARFIQAH BT AHMAD
PEGAWAI FARMASI UF44

MISS HENG SOO TEING
PEGAWAI FARMASI UF44

MR MOHD ZULFADHLY
PEGAWAI FARMASI UF41

PN ROZITA BT ABD RAHMAN
PENOLONG PEGAWAI FARMASI U32
### OUTPATIENT

<table>
<thead>
<tr>
<th>Clonazepam 2mg</th>
<th>Prednisolone 5mg</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medroxypgesterone 5mg</td>
<td>Trimetasidene 20mg</td>
</tr>
<tr>
<td>Terazosin 2mg (BLUE)</td>
<td>Terazosin 5mg (GREEN)</td>
</tr>
<tr>
<td>Carbimazole 5mg (WHITE)</td>
<td>Trimetasidene 20mg (PINK)</td>
</tr>
</tbody>
</table>

### INPATIENT

<table>
<thead>
<tr>
<th>IV Azithromycin 500mg</th>
<th>IV Acyclovir 250mg</th>
<th>IV Pantoprazole 40mg</th>
<th>IV Lidocaine 2%</th>
</tr>
</thead>
</table>
DRUGS ON THE WAY TO HOSPITAL KULIM...

JARDIANCE®

TAB. EMPHAGLIFOZIN
- INDICATION: type 2 diabetes with known cardiovascular disease.
- Dose: 10 mg once daily, taken in the morning, with or without food, maybe increased to 25mg once daily
- MOA: sodium-glucose co-transporter 2 (SGLT2) inhibitor for reabsorption of glucose from the glomerular filtrate back into the circulation increasing glucose excretion.
- SIDE EFFECTS: dehydration, ketoacidosis, serious UTI, yeast infection (vaginal or penis)
- CONTRAINDICATED: Dialysis or severe renal problem

HARNAL OCAS ®

TAB. TAMSULOSIN 0.4MG
- INDICATION: Benign prostatic hyperplasia.
- Dose: 400 mcg once daily
- MOA: Blockage of alpha-1A and alpha-1B-adrenoceptors causes relaxation of smooth muscles in the bladder neck and prostate, and thus decreases urinary outflow resistance in men
- SIDE EFFECTS: angioedema, erectile dysfunction, dizziness, GI disturbance, tachycardia
- CONTRAINDICATED: history of micturition syncope, history of postural hypotension

VISANNE ®

TAB. DIENOGEST 2mg
- Dose: take one tablet every day, preferably at the same time. Continue to take the tablets also on days of menstrual bleeding.
- MOA: inhibition of gonadotropin secretion, reducing the endogenous production of estradiol and thereby suppressing the trophic effects
- SIDE EFFECTS: irregular bleeding, weight gain, depressed mood, back pain, breast discomfort
- CONTRAINDICATED: VTE, DM with vascular involvement, severe liver disease, vaginal unexplained bleeding
**JOKES AND FUN FACTS**

**Fun Body Fact...**
When you sneeze, all bodily functions stop... Even your heart.

**Fun Body Fact...**
It takes about 20 seconds for a red blood cell to circle the whole body.

**Fun Body Fact...**
The strongest muscle in the body is the tongue.

**The average healthy mouth produces about 600 ml (c.c.) of saliva each day.**

**Farting helps reduce high blood pressure and is good for your health.**

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**It is true that eating massive amounts of carrots can sometimes cause a person’s skin to turn yellowish orange.**

**Potatoes were the first food to be grown in space. In 1996, potato plants were taken into space with the space shuttle Columbia.**

**A popular science experiment in schools involves attaching electrodes to a lemon and using it as a battery to power a light. The electricity generated in this way can also power a small motor.**

**Mushrooms have their own immune system.**

**While cooking cabbage, it is advisable that utensils made of aluminum are not used, as aluminum cookware might cause chemical reaction that discolors the vegetables and also might alter the flavor.**

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**His Doctor said he has something called “phalenfronmetry?”**

Hmm I don’t know it says here “He has fallen from a tree?”

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“We combined all your medications into ONE convenient dose.”

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Scoop

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Dying your hair with beets is a great way to add a temporary reddish tint to your strands, without dealing with any nasty chemicals.