

PHARMACY BULLETIN

Cholera is a diarrheal disease caused by the infection of intestine with the bacterium *Vibrio cholerae*. Both adults and children can be infected. Cholera is usually transmitted through faecally contaminated water or food. Cholera has spread widely since 1961 and now remains an ever-present risk in many countries, included Malaysia. Outbreaks can happen from time to time in any part of the world, especially in over-populated communities and characterized by poor sanitation, unsafe drinking water and food, as well as increased person-to-person transmission. Incubation period for cholera is very short; it is about 2 hours to 5 days. Therefore, the number of cases can boost extremely fast.

Most cholera infections are mild. Patient may have no symptoms or mild diarrhea. In some severe cases, patients may develop severe watery diarrhea and vomiting. As a result, patients will lose large volume of fluid and salts. Patients become thirsty, stop urinate, weak and dehydrated. Patients with severe cholera often complain of cramps in the stomach, arms or legs. Cholera infections should be treated immediately. If treatment is delayed or inadequate, death from dehydration and circulatory collapse may follow very shortly.

Do you wash your hands?



Are you sure that you wash your hands properly?



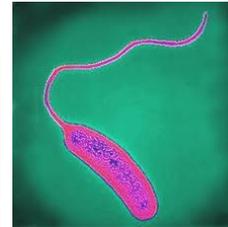
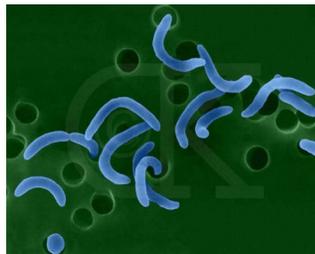
- Areas most frequently missed during hand washing
- Less frequently missed
- Not missed

(Adapted from Taylor L (1978). An evaluation of hand-washing techniques - I. Nursing Times, 12 January, pp 54-55)

References:

Cholera Outbreak: Assessing the Outbreak Response and Improving Preparedness. World Health Organization, 2004.

CHOLERA



Vibrio cholerae

Preventing Cholera

Protection against cholera epidemics are: Safe water supply, sanitation and food safety.

(1) Safe Water Supply

Contaminated water is a common cause of cholera infection. Water supply must be of good quality, affordable and available, continuously and sufficient for all domestic purposes, like safe drinking water, safe water for food preparation and bathing.

Tips: To make water safe for drinking, boil the water, and keep it boiling for 1 minute. This can kill or inactivate *Vibrio cholerae* and most other organisms that cause diarrhea.

(2) Good Sanitation

Good sanitation can markedly reduce risk of transmission of intestinal pathogens, including *Vibrio cholera*. Main concern should be given to observe the basic principles of sanitary human waste disposal to ensure the accessibility of safe water supplies. Lack of good sanitation may lead to contamination of water sources. People need to be taught how to use toilets, dangers of defecating on ground, or in or near water, as well as the importance of correct way of hand-washing.

(3) Food Safety

Food can be a vehicle for disease organisms to ensure food safety, there are some controls on the handling and processing of food:

- ◆ Washing hands before preparing, eating food or feeding children
- ◆ Handling and preparing food in a way to prevent or reduce risk of contamination
- ◆ Cook food until it is hot throughout
- ◆ Eating food while it is still hot; or reheat thoroughly before eating
- ◆ Wash and thoroughly dry all cooking utensils and serving utensils after use

Inside this issue:

Cholera	1
Management of Cholera	2
7 Steps to Wash Your Hands Properly	2
Statistic MTAC Warfarin	3
Statistic Outpatient Pharmacy	3
New Services in Pharmacy	4
New Staff in Pharmacy	4

A Publication of Drug Information Service (DIS), Pharmacy Department, Hospital Labuan.

ADVISOR

Pn Soo Bee Kuan

EDITOR

Cik Cheah Soong Yee

Any comment, recommendation or query, kindly contact

DIS Pharmacy.
087-596888
EXT: 4185



Management of Cholera

Management of patient with Cholera

Early diagnose of cholera case is important in order to provide treatment as early as possible and to prevent further spreading of the disease. It can also help to identify infected household contacts.

Rehydration Therapy

Cholera can cause loss of water and salts through diarrhea dan vomiting. Rehydration therapy consists of replacing water and salts in proportions lost.

Different rehydration therapy should be given according to dehydration stage. In mild cases, oral rehydration salts (ORS) solution can usually treated patient adequately, without intravenous therapy. Intravenous electrolyte solution should be used only for the initial rehydration of severe dehydrated patients. ORS solution must be given

at the same time to replace missing electrolytes. Monitoring during and after rehydration is essential until the diarrhea stops.

Antibiotics Use

Antibiotics use is beneficial for patients who are severely dehydrated. Indiscriminate use of antibiotics in mild cases can quickly use up medication supplies and hasten the development of antibiotic resistance.

There is no advantage in using injectable antibiotics. For adult patients, doxycycline is preferable because only a single dose is needed. For children, paediatric preparations of trimethoprim-sulfamethoxazole (TMP-SMX) are recommended. Besides, erythromycin is another effective alternative for adult and children. Choice of antibiotic should take into account of local patterns of antibiotic resistance.

No antidiarrheal, anti-emetic, antiparasitic, cardiotoxic or corticosteroid drugs should be used to treat cholera. Blood transfusions and plasma volume expanders are not necessary.

7 STEPS TO WASH YOUR HANDS PROPERLY



1 Wet your hands and lather hands with soap.



2 Rub both palms together.



3 Rub in between fingers.



4 Rub palms with finger nails.



5 Rub back of hands and in between fingers.

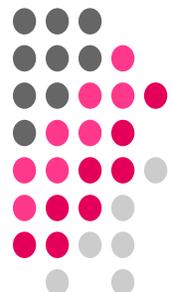


6 Wash hands thoroughly with water.

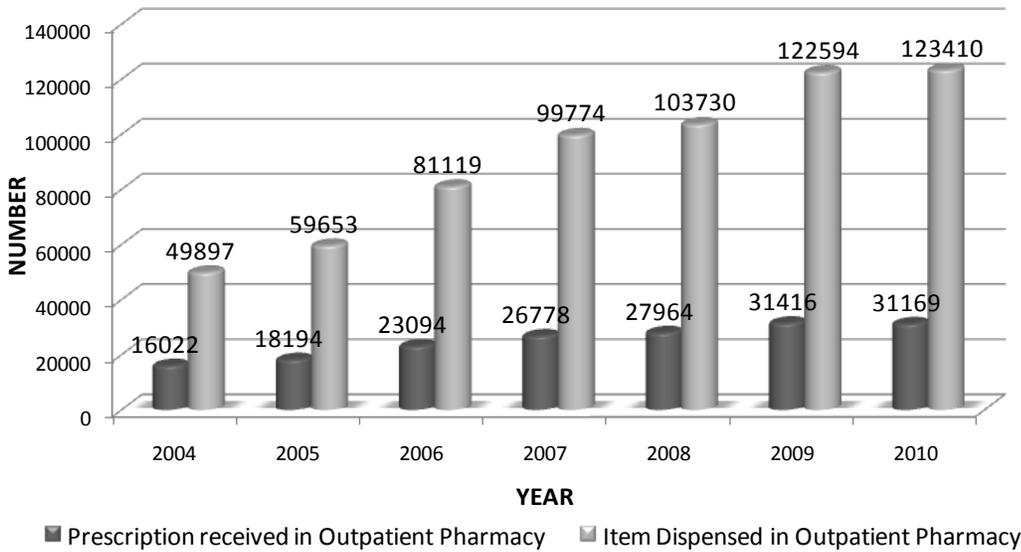


7 Dry hands with clean towel or tissue paper.

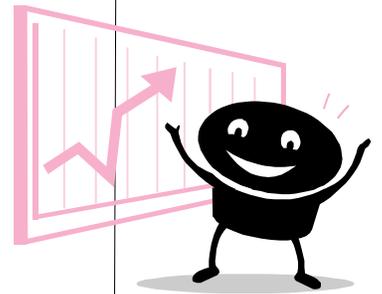
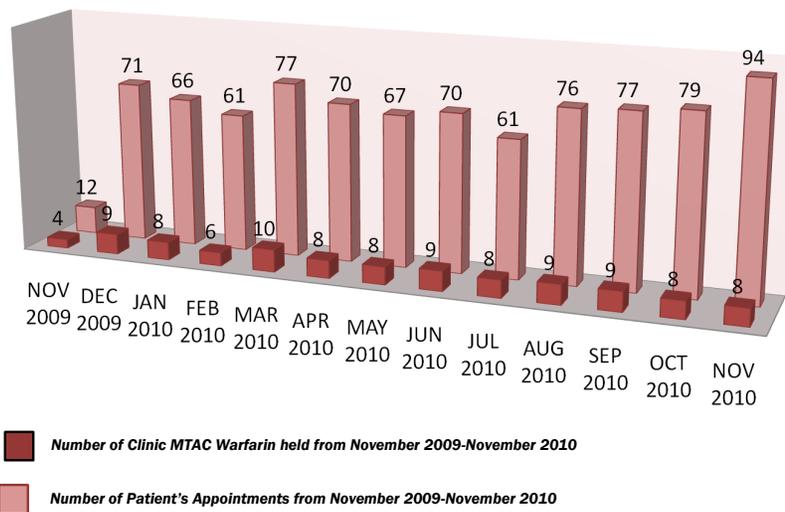
Wash your hands properly!



PRESCRIPTION RECEIVED AND ITEM DISPENSED IN OUTPATIENT PHARMACY 2004 - 2010



STATISTIC MTAC WARFARIN NOVEMBER 2009-NOVEMBER 2010



from MADRAC Newsletter...

PROPYLTHIOURACIL: NEW BOXED WARNING ON SEVERE LIVER INJURY

BOXED WARNING

Severe liver injury and acute liver failure, in some cases fatal, have been reported in patients treated with propylthiouracil. These reports of hepatic reactions include cases requiring liver transplantation in adult and paediatric patients.

Propylthiouracil should be reserved for patients who cannot tolerate carbimazole/methimazole and in whom radioactive iodine therapy or surgery are not appropriate treatments for the management of hyperthyroidism.

Because of the risk of fetal abnormalities associated with carbimazole/methimazole, propylthiouracil may be the treatment of choice when an antithyroid drug is indicated during or just prior to the first trimester of pregnancy (see Warnings and Precautions).



The MADRAC has proposed for the *Boxed Warning* to be included in the package inserts of all propylthiouracil products. This proposal was approved by the DCA in its 228th meeting on 27 May 2010.



**NEW
SERVICES IN
PHARMACY**



**UBAT MELALUI
POS-1MALAYSIA
(UMP-1MALAYSIA)**

UMP-1MALAYSIA is a new service of Outpatient Pharmacy Hospital Labuan. This service started on November 2010.

UMP-1MALAYSIA is a service of supplying medication to patient via Poslaju Malaysia to the location chosen by patient.

(Terms and conditions applied. Please refer to Outpatient Pharmacy Hospital Labuan.)

**MEDICATION THERAPY
ADHERENCE CLINIC (MTAC)
RENAL**

MTAC Renal started on November 2009, with patients from Hemodialysis Unit Hospital Labuan. Pharmacist will counsel and educate patients on drug administration and related to their disease.

MTAC Renal is on every Tuesday, 11am at Hemodialysis Unit Hospital Labuan.

**THERAPEUTIC DRUG
MONITORING (TDM)**

TDM started on 24th November 2010, with cooperation with Laboratory Department Hospital Labuan.

Recently, three drugs are included in this service, there are gentamicin, carbamazepine and valproic acid.

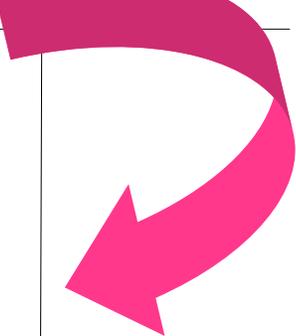
This service is catered for patients from all wards and specialist clinics from Hospital Labuan, as well as patients from Klinik Kesihatan Labuan.

**UNIT OF DOSE
(UOD)**

Unit of Dose is a service of supply medications to patient admitted in ward for the use of not more than 24 hours.

This service helps to prevent medication errors and reduce wastage of medications.

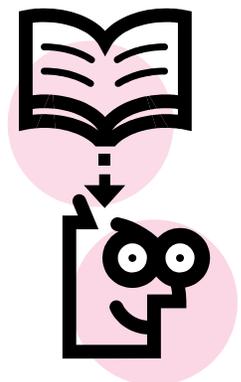
UOD has started on 1st December 2010 in Ward 4. Soon, the service will extend to other wards in hospital.



New services provided by Pharmacy Hospital Labuan.

Outpatient Pharmacy:
- UMP-1MALAYSIA
- MTAC Renal
(EXT: 887)

Inpatient Pharmacy:
- TDM
- UOD
(EXT: 868)



NEW STAFF AT PHARMACY

TAN SUET YIN	WARD PHARMACIST U44 (EXT: 984)
CHIEW CHUN WEI	STORE PHARMACIST U41 (EXT: 954)
MICHELLE LEE CHENG FUNG	STORE PHARMACIST U41 (EXT: 958)

