

HEARTTALK

Sarawak Heart Foundation (383498-P)

No.11, 1st Floor, Lot 2343, Block 10 KCLD Bormill Estate Commercial Centre,

Jalan Tun Ahmad Zaidi Adruce 93150 Kuching

Tel: 082-258 212

Fax: 082-258 303

Email: sarawakheartfoundation8@gmail.com

Website: sarawakheartfoundation.org.my

Facebook: SarawakHeartFoundation

Dari Hati Ke Hati

YAYASAN JANTUNG SARAWAK
SARAWAK HEART FOUNDATION

Volume 11

KDN No.: PPK434/04/2013 (032273)

June 2015



CHAIRMAN

TYT Tun Pehin Sri Haji Abdul Taib Mahmud

DEPUTY CHAIRMAN

YB Tan Sri Datuk Amar Dr. James Jemut Masing

BOARD OF TRUSTEES

YABhg Datin Patinggi Dato Hajjah Jamilah Anu

YB Senator Datuk Prof Dr Sim Kui Hian

YB Dr Annuar Rapaee

YBhg Dato Sri Empiang Jabu

YBhg Dato Anne Teng

YBhg Datuk Dr Stalin Hardin

YBhg Datuk Fong Joo Chung

YBhg Datuk Prof Dr Chew Peng Hong

YBhg Dato Haji Abdillah Haji Abdul Rahim

Dr Mohd Hirman Ritom

Ms Pauline Kon Suk Khim

Mr Eric Lim Swee Khoon

ADVISOR

YBhg Datuk Patinggi Tan Sri Dr. Wong Soon Kai

MEDICAL ADVISOR

Dr. Yii Kie Sing

EDITOR

Mr. Eric Lim Swee Khoon

EDITORIAL BOARD

Ms Jennifer Goh

Content

Pg	
1	Message from Editor - Mr. Eric Lim Swee Khoon is also a Trustee of the Foundation
2	Activities of 1st half of 2015
3	Sibu Heart Week
4	The Role of Echocardiography in the Management of Patients with heart disease <i>by Dr. Oon Yen Yee, Cardiologist, SGH Heart Centre</i>
5-6	Understanding Generic Drugs <i>By Yanti Nasyuhana San, Senior Pharmacist, Clinical Research Centre, Sarawak General Hospital</i>
7	Miri Heart Week
8-9	Activities of 1st half of 2015
10	Upcoming Events/Friends/Donation



Message From Editor

Happy New Year 2015, Gong Xi Fa Chai and Selamat Hari Gawai!!

How time flies! We are already in the second half of 2015 and have celebrated 2 major festivities ie. the Chinese New Year on 19-20 February 2015 and the harvest festival, Hari Gawai on 1-2 June 2015.

The Foundation started the Year 2015 with a visit to the Sarawak General Hospital Heart Centre on 15 January 2015 to bring Chinese New Year cheers to the patients there to lift up their spirits. The Foundation also donated one unit of Philip ECG machine to the Emergency Unit at the Heart Centre.

This was then followed by a back to back Heart Week; the first one being the Sibu Heart Week 2015 on 20-21 March 2015 at Star Megamall and Miri Heart Week 2015 on 25-26 April 2015 at Bintang Megamall. The Sibu Heart Week was held in collaboration with Yayasan Jantung Malaysia. As usual, there were public health screening, poster exhibitions, Zumba, belly dancing, healthy cooking and various activities to liven up the atmosphere. The key message to drive home is of course to promote healthy living.

Apart from the Heart Weeks, the Foundation also conducted various public health screenings at Transformation Centre, Hills Shopping Mall and CityOne.

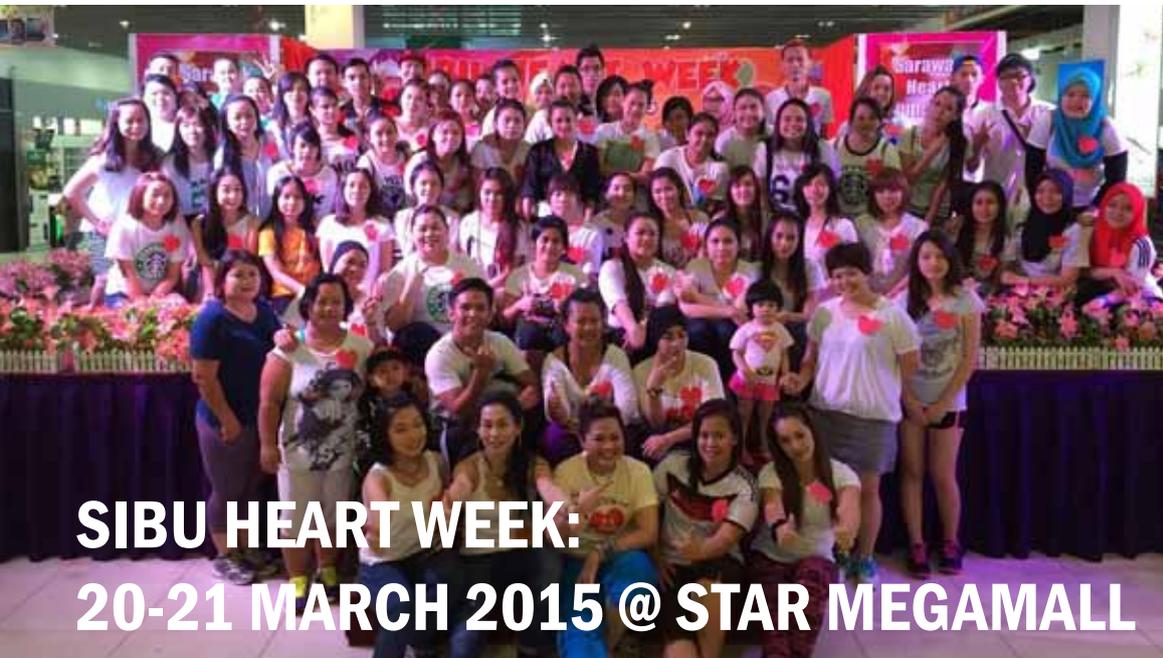
I would like to take this opportunity to thank all our corporate sponsors and donors, the staffs and nurses from the various public hospitals and friends of the Foundation for their support in all our events and hope that they will continue to support our cause. I also hope that other new corporations will step forward and adopt some of the future events of the Foundation as part of their Corporate Social Responsibility (CSR) Programme.

Eric Lim Swee Khoon
Editor



15/1/15
**DONATION OF 1 PHILIP
TC20 ECG MACHINE TO
EMERGENCY UNIT,
SGH HEART CENTRE**

15/1/15 CHINESE NEW YEAR'S VISIT TO SGH HEART CENTRE



SIBU HEART WEEK: 20-21 MARCH 2015 @ STAR MEGAMALL



The Sarawak Heart Foundation in collaboration with Yayasan Jantung Malaysia had organized the Sibu Heart Week from 20/3/15 to 22/3/15. The event which carries the theme "Heart-Healthy Environments" was held at Star Megamall daily from 10.00 am to 9.00 pm.





SIBU HEART WEEK: 20-21 MARCH 2015 @ STAR MEGAMALL



The launching ceremony was officiated by the Guest-of-Honor, YABhg Datin Patinggi Dato Hajjah Jamilah Anu, Board of Trustee, Sarawak Heart Foundation.

Several activities had been organized in conjunction with the Heart Week which included health screening, health talk, blood donation, demonstration of healthy cooking for the heart, mini fun games and physical activities like zumba, aerobic, belly, flash mob and fun modern dances. Poster exhibitions in related to heart disease were also displayed for knowledge of the public.



The Sarawak Heart Foundation also distributed obesity books for children in English, Bahasa Malaysia and Chinese languages to 26 primary schools in Sibul. These obesity books were to educate the children the right food and importance of physical activity and exercise they need.

The Heart Week campaign was supported by PANSAR, Star Megamall, Sibul Divisional Health Office, Sibul Hospital and Fitness Centres in Sibul.

The Role of Echocardiography in the Management of Patients with Heart Disease

Dr. Oon Yen Yee *Cardiologist, PJHUS*

Echocardiography is an examination using ultrasound waves to visualise the moving heart. It is usually performed by trained sonographers but can also be performed by the treating doctor. The examination can be carried out in clinics, wards, emergency department and operating theatre. During the examination, the patient is required to lie on his left side. The sonographer will then put a probe and move it over the patient's chest to capture the image of the heart. The examination takes about fifteen to thirty minutes, depending on the complexity of patient's heart problem.



Fig.1 - A sonographer performing echocardiography

Echocardiography is used to visualise the structure of the heart. When a patient is found to have a heart murmur, this test is ordered to look for any heart valves problem or congenital heart disease. During the examination, the severity of the underlying heart problem is assessed. The information gained from the examination helps the treating doctor to decide on the most appropriate treatment for his patient. Patient with severe heart valve problem or congenital heart disease often requires surgery. After surgery, echocardiography is used to monitor the function of the replaced/ repaired heart valve or to check for any residual shunt in the heart. In patients with mild structural heart disease, echocardiography can be repeated to monitor disease progression.

Echocardiography can be used to evaluate patient who has chest pain. During the examination, the sonographer will look carefully at how well the heart muscles are contracting. In patients with heart vessel blockage, the heart wall or a section of the heart muscles may not contract well. The sonographer will also look for other potential causes of chest pain such as tearing of the wall of the aorta (aortic dissection) or clot in the main

pulmonary vessel (pulmonary embolism). When a patient is confirmed to have heart attack, echocardiography is used to check on how well the heart is pumping and to look for complications such as ruptured heart wall and malfunctioning valve. The examination can also be used to guide treatment strategy. For example, a patient with poor heart function due to non-viable heart muscle may not be a candidate for angiogram or bypass surgery.



Fig. 2 - Echocardiogram of a dilated aorta and tearing of its wall

In patients with heart failure, echocardiography can provide information regarding its severity and cause. Other uses of echocardiography include detection of blood clots and masses in heart chambers, fluid in the covering of the heart (pericardial effusion) and disease involving the heart muscle (cardiomyopathy).

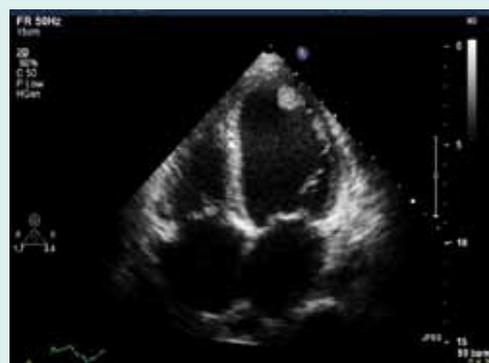


Fig. 3 - Echocardiogram of a dilated heart and a clot in the left heart chamber

Over the last few decades, there are many advances in cardiac imaging. However echocardiography remains an invaluable test to cardiologists in the assessment of heart structure and function. This is because it is simple to perform and under good hands, it can provide detailed and accurate information comparable to that provided by newer imaging modalities.

Understanding Generic Drugs

Yanti Nasyuhana Sani

*Senior Pharmacist, Clinical Research
Centre, Sarawak General Hospital*

If you were asked by your pharmacist to choose between a generic and a branded drug, which one would you pick? Many people assume that generic drugs have lower quality and are less efficacious. We think the innovators (i.e., original inventors of the drugs) are superior and expensive brands are always "better"! How true is this? Let the pharmacist correct these misconceptions.

What are generic drugs?

The United States Federal Drug Authority (U.S. FDA) defines a generic drug as one which is identical (or bioequivalent) to an innovator drug in terms of the active ingredient (the substance that produces the drug effect), dosage, how it works, labeled strength, route of administration, performance characteristics and intended use [1]. This means that the generic medicine should theoretically have the same quality as the innovator drug. To get a better understanding, let me illustrate with a drug called clopidogrel.



Your doctor may prescribe clopidogrel, a drug used to prevent heart attack and stroke in someone diagnosed with heart disease or previous stroke. Clopidogrel was originally manufactured under the brand name PLAVIX by a global pharmaceutical company called Sanofi-Aventis. Therefore, PLAVIX is the innovator drug. A 'new' drug like PLAVIX is protected by a patent that gives the company the sole right to sell the drug for a certain period of time. Once the patent expires, other drug companies can start manufacturing and selling clopidogrel. Because they are marketed under different brand names, they are easily identified as generic clopidogrel. An example of generic clopidogrel is CLOPIVID. CLOPIVID is manufactured by a local pharmaceutical company, Hovid Bhd. CLOPIVID has the same active ingredient (clopidogrel), identical strength per tablet (75mg), mechanism of action (P2Y12 Inhibition), dosage formulation (tablet), route of administration (oral), and more importantly same prescribing indications as the original PLAVIX. The only difference between PLAVIX and CLOPIVID is the inactive ingredient used in the tablet formulation. In a nutshell, generic drugs are copies of innovator drugs manufactured after patents have expired.

How do we test the quality of generic products?

Before any generic drug can be marketed, the drug company is required to conduct a bioequivalence (BE) study to prove that the generic product is as 'good' as the innovator drug. The BE study compares the amount of generic and innovator drug absorbed into the body. When a generic product passes a BE study, it means that the concentration of the generic drug in the bloodstream is approximately the same or within an acceptable range, compared to the concentration of the innovator drug. In other words, the qualities of the two drugs are expected to be similar. In our country, the National Pharmaceutical Control Bureau (NPCB) is a national drug regulatory body that is responsible for ensuring all generic drugs planned for registration and marketing in Malaysia undergo BE studies. NPCB also regularly evaluates the safety of generic drugs after approval by monitoring adverse events reports. Whenever there is any concern that patient's safety might be jeopardized, the drug will be de-registered and no longer allowed to be marketed in Malaysia.

Many people are not aware that BE studies have been conducted in the Land of the Hornbills since 2013! The research team from the Clinical Research Centre, Sarawak General Hospital, led by a cardiologist Dr Alan Fong Yean Yip have taken proactive steps to help ensure Malaysians are prescribed the best medicines by conducting BE studies on generic products. The clinical phases of BE studies are carried out in a world-class facility, CRC Research Ward, Level 6, Sarawak General Hospital Heart Centre. Up till date, the centre has conducted a total of 15 BE studies covering a broad spectrum of pharmaceutical compounds ranging from antihypertensives to antibiotics. The Centre was also listed in the NPCB Compliance Programme for BE Centres in 2013, a programme established by NPCB to guarantee the quality of studies conducted in BE Centres.



CRC SGH BE Study Team

If generic drugs are as good as the innovators, why are they so cheap?

Although generic drugs are chemically identical to their branded counterparts, generics are usually 80-85% cheaper because generic drug companies do not need to repeat the costly clinical trials of new drugs. They also do not need to spend substantial funds on advertising and marketing. The situation is different for innovator drug companies. They have to carry out costly and extensive research to find the right molecule and conduct animal and human drug testing. They also need to spend a lot of money on marketing and promoting a new drug. If there is still any doubt, an analysis of the results of 38 clinical trials that compared the effectiveness of cardiovascular generic drugs to their innovator counterparts found no evidence that innovator cardiovascular drugs worked any better than generic ones [2]. Hence, cheaper does not necessarily mean lower quality.

Take home messages

1. Generic drugs are required to have the same active ingredients, strengths, dosage formulations and routes of administration as innovator drugs.
2. Generic drugs have to pass BE studies before they can be approved for clinical use, hence the efficacy and safety of generic drugs are expected to be similar to innovator drugs.
3. Malaysia's drug regulatory body conducts stringent evaluations for all generic drugs to ensure their quality and safety. When a generic drug is approved, it has met their rigorous standards with respect to its identity, strength, quality, purity and potency.
4. As far as price is concerned, the generic is always cheaper than the innovator drug, but cheaper does not mean lower quality.

Sources

[1] www.fda.gov

[2] Kesselheim et al. *Clinical Equivalence of Generic and Brand Name Drugs Used in Cardiovascular Disease: A Systematic Review and Meta-Analysis*. *JAMA*. 2008;300(21)2514-2526



25-26/4/15 **MIRI HEART WEEK @ BINTANG MEGAMALL**





28/3/15

HEALTH SCREENING @ TRANSFORMATION CENTRE WITH UCSI



29/3/15

HEALTH SCREENING @ HILLS SHOPPING MALL WITH LIONS CLUB OF KUCHING EMERALD





**GAWAI
VISIT TO
SGH HEART
CENTRE**



**21/6/15 HEALTH TALK @
CITY ONE WITH KUCHING**



Up-Coming EVENTS

DATE	EVENT
• 7/7/15	HARI RAYA VISIT AND DONATION OF ITEMS TO SGH HEART CENTRE, KOTA SAMARAHAN
• 16/8/15	HEALTH SCREENING AND HEALTH TALK AT EASTERN MALL, SIBURAN
• 19/9/15	WOMEN'S HEART DAY AT BOULEVARD SHOPPING MALL, KUCHING
• 27/9/15	WORLD HEART DAY 2015 AT RESERVOIR PARK, KUCHING



SARAWAK HEART FOUNDATION
(383498-P)

"FRIEND OF THE FOUNDATION" FORM

HOW CAN YOU HELP?

If you are someone who is caring and would like to help Sarawak Heart Foundation, you can register as a "Friend of the Foundation" (as a volunteer to help in the various projects undertaken by the Foundation from time to time and especially with fund-raising)



Please fill in the below and send to us.

Thank You.

Full Name :

IC/ No. :

Address :

Tel. No. : Fax No. :

E-Mail : H/P No.:

Date :

Please specify how you can help? (eg. driver, food runner, general worker, exercise instructor, dancer, mc, photographer etc.)

Sarawak Heart Foundation

No.11, 1st Floor, Lot 2343 Bormill Estate Commercial Centre , Jalan Tun Ahmad Zaidi Aduce, 93150 Kuching Sarawak
Tel: 082-258212 Fax: 082-258303 Email address: sarawakheartfoundation8@gmail.com



SARAWAK HEART FOUNDATION
(383498-P)

DONATION FORM

Full Name :

Address :

Tel. No. : Fax No. E-Mail

PAYMENT

[] Cheque No. For RM

[] Bank Draft For RM

For Direct Remittance, please bank into **RHB Bank A/C No. 21104350033342**
(Please fax or email the bank-in slip to Fax: 082-258303)
Email: sarawakheartfoundation8@gmail.com

All donations payable to:
Sarawak Heart Foundation
No. 11, 1st Floor, Lot 2343, Block 10 KCLD
Bormill Estate Commercial Centre
Jalan Tun Ahmad Zaidi Aduce, 93150 Kuching, Sarawak.
Tel: 082-258212 ; Fax: 082-258303
Website: sarawakheartfoundation.org.my

All donations are tax exempted.
Ref. JHDN 01/35/42.51/179-6.4381