

2016

PHARMACY
DEPARTMENT

VOLUME 17, ISSUE 12

PHARMACY BULLETIN

HOSPITAL CANSOLOR TUANKU MUHRIZ, PPUKM

BEAUTY AT A COST: COSMETICS PRODUCT WITH SCHEDULED POISON

BY PRP HALIM & MS IZYAN

A recent study published in 2015 by Prof Mohamed Azmi Hassali from University Science of Malaysia (USM) showed that the attitudes towards using cosmetics are changing among the population as Malaysian men also sees personal grooming as a necessity rather than a luxury. According to the Malaysian Department of Statistics, Malaysians spent **US\$407 million** alone on cosmetics and toiletry products in 2013. Consumer expenditure rates on cosmetics and toiletries increased during the last few years by 40% from Malaysian Ringgit (MYR) 1.4 billion in 1995 to MYR 1.9 billion in 2007, while the Malaysian **local cosmetics and toiletries market is valued at about MYR 3 billion, with a growth rate of 13% annually**. The study also reported that consumers are willing to pay premium prices for quality and good benefit products such as whitening, multi-functions and anti-ageing. Most of these products are sold through hypermarkets, Department Stores, Pharmacy/Personal Care Stores, Direct Sales/Marketing and Specialty Stores. Currently, there are more than 60,000 types of cosmetics available in the local market but not all are safe or works as how it claims to be.



In a recent press conference by the Director General of Health Malaysia, Datuk Dr Noor Hisham Abdullah, consumers must be educated and made aware of cosmetics products that were adulterated or tampered with scheduled poison such as

azelaic acid, hydroquinone, tretinoin and mercury. These substances are prohibited in cosmetic products as they are classified as pharmaceuticals products which requires registration with Drug Control Authority and close supervision from certified healthcare professional as unsupervised use may impose detrimental risk to the consumers.

Hydroquinone is commonly added in cosmetics as skin whitening agent, to treat blemishes and uneven skin tone. It works as a skin-bleaching agent to lighten areas of darkened skin such as freckles, chloasma (also known as melasma), age spots, and acne scars. Hydroquinone inhibits the pigmentation process (depigmentation) which reduces the skin's ability to be protected from harmful UV rays, hence increasing the risk of skin cancer, skin rash, skin discoloration and hypersensitivity.

Tretinoin is marketed to reduce acne and wrinkles. Unsupervised usage can cause redness to the skin, discomfort, stinging, peeling and sensitivity to sunlight. **Azelaic acid** on the other hand, is promoted as anti-acne treatment. It may cause burning sensation, itching, skin reddening and feeling of tingling/numbness.

Inorganic **mercury** is a common ingredient found in skin lightening soaps or creams while the organic form is found in mascaras and eye make-up remover. It displays its whitening effect by inhibiting the formation of melanin, resulting in lighter skin tone. Exposure to mercury can cause damage to the kidneys and the nervous system (anxiety, depression, psychosis or peripheral neuropathy). It may also interfere with the development of the brain in unborn children. Risk of exposure to the danger of mercury is not limited to the person using the product, but also to children as mercury enters their bodies through breathing (mercury vapors) or orally (hands into the mouth). Products containing mercury may cause skin rashes, irritation and other changes to the skin.

Below are the list of products that were recently withdrawn from the market as they contained scheduled poison. Companies have been instructed to **immediately halt the sale and supply** as well as remove all physical stocks from the market within **72 hours**. Sellers are reminded that possession of these cosmetic products is an offence under the Control Of Drugs and **Cosmetics Regulations 1984**; *any individual who commits an offence under these Regulations can be fined up to a maximum of RM25,000 or to imprisonment for a term not exceeding 3 years or both, and for a second or subsequent offence he shall be liable on conviction to a fine not exceeding RM50,000 or to imprisonment for a term not exceeding 5 years or to both*. A company found guilty can be fined up to RM50,000 for the first offence and fined up to a maximum of RM100,000 for a subsequent offence.

In conclusion, as health care professionals, pharmacists are instrumental in educating consumers on information about cosmeceutical products (products that can be sold as cosmetics over the counter without prescription but have drug like actions and benefits). We can provide expertise, knowledge and advice to consumers on the accurate information of the ingredients used in such products, as well as the hazardous risk of adulterated ones with scheduled poison.

Table 1: Cosmetic products that contain scheduled poison

No	Product Name	Notification Number	Scheduled poison detected	Name of Product Notification Holder
1.	Melan: Off Intensive Mask and Melan: Off Maintenance Cream 	NOT140703507K NOT140703508K	Azelaic Acid	Horizon Pharmaceuticals (Asia) Sdn. Bhd
2.	Afrina Night Cream Afrina Daily Cream 	NOT140404269K NOT140404269K	Mercury	Afrina Skin Care
3.	Krim Herba Kemboja 	NOT141005910K	Mercury	Warisan insan Enterprise
4	Day Pinky Cream 	NOT14040269k	Mercury	Eniq world enterprise
5	Night Glow Cream 	NOT140802979K	Hydroquinone and tretinoin	Eniq world enterprise
6	Debella Nadien Glow Night Cream 	NOT150604563K	Hydroquinone and tretinoin	Bella-Z Mutiara marketing (M) Sdn. Bhd
7	Mekar Semilu Scrub Muka Mutiara beauty Collection & Mekar Semilu Cream Mekarsutra 	NOT131203244K	Mercury	Mekar Semilu Collection

Consumers are advised to contact the National Pharmaceutical Regulatory Agency (NPRA) at 03-78018496/ 78835537/ 78835532 should they see the product sold in the market or experience any allergic reactions or adverse events from use of cosmetic product.

References :

- 1) <https://kpksehatan.com/2016/10/21/kenyataan-akhbar-kpk-21-oktober-2016-pengguna-dinasihatkan-untuk-mengelakkan-dari-mengguna-produk-kosmetik-yang-dikesan-mengandungi-racun-berjadual/>
- 2) Hassali MA, AL-Tamimi SK, Dawood OT, Verma AK, Saleem F (2015) Malaysian Cosmetic Market: Current and Future Prospects. Pharmaceut Reg Affairs 4: 155. doi:10.4172/2167-7689.1000155
- 3) http://www.who.int/ipcs/assessment/public_health/mercury_flyer.pdf

A publication of Drug Information Centre,
Pharmacy Department, HCTM, PPUKM

IZYAN DIYANA IBRAHIM

izyandi@ppukm.ukm.edu.my
03-91455415

MICHELLE TAN HWEE PHENG

hptan@ppukm.ukm.edu.my