

On 12<sup>th</sup> May 2015, the Annual Scientific Meeting On Antimicrobial Resistance was held at Putrajaya, where the National surveillance of Antibiotic Utilization was presented, highlighting usage of Antibiotic groups: *Cephalosporins, Fluoroquinolones, Carbapenems, Polymyxins and Glycopeptides*.

#### 1) Cephalosporins

PPUKM was NOT in the top 5 users of Cephalosporins. However, from the past 5 years usage of Ceftriaxone, it had increased from 64.13 ( year 2011) to 86.72 DDD per 1000 patient days in year 2014. Comparing year 2013 and 2014, ceftriaxone usage increased by 7% in Medical wards; otherwise it was maintained or decreased in Surgical, Orthopaedic wards and ICU.

#### 2) Fluoroquinolones

PPUKM was the highest user of Fluoroquinolone attributing to the usage of ciprofloxacin though this was maintained at 23 DDD per 1000 patient days in year 2013 and year 2014. Usage in other disciplines had decreased but 50% increment was noted in Orthopaedic wards (32 to 48 DDD per 1000 patient days )

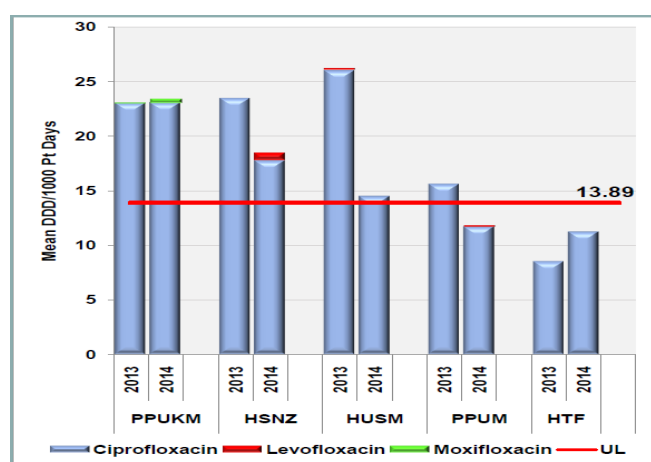


Fig 1: Top 5 hospitals with highest Fluoroquinolone utilization for 2014

#### Carbapenems

As one of top 3 users of Carbapenems in Malaysia, PPUKM usage in 2014 had increased from 55 to 58 DDD per 1000 patient days, attributing to rise in Meropenem usage from 31 to 35 DDD per 1000 patient days (13 % increment). Increment in Meropenem use was observed in Medical wards (26%), Orthopaedic wards (17%) with accompanying decrease in Imipenem and Ertapenem usage. However, in Surgical wards, usage of all 3 carbapenems increased; Meropenem use (27%), the use of Imipenem (27%) and Ertapenem (77%).

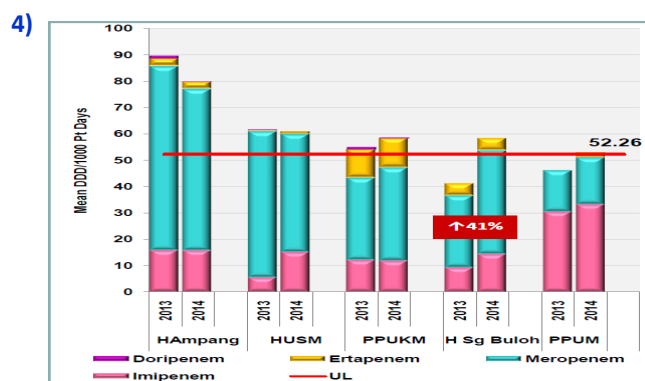


Fig 2: Top 5 hospitals with highest Carbapenems utilization for

#### 4) Polymyxins

The usage of Polymyxins in PPUKM had dropped from total 3.7 to 2.6 DDD per 1000 patient days.

#### 5) Glycopeptide and MRSA

Similar to year 2013, PPUKM remained among the highest users of glycopeptides. Increase was observed in Medical wards (25.9 to 28.4DDD per 1000 patient days in year 2014)

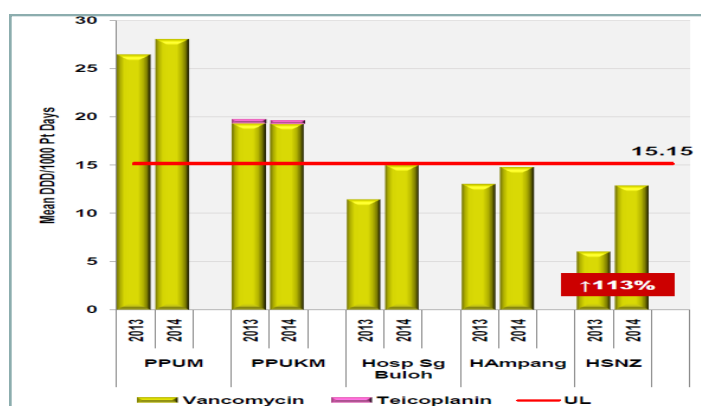


Fig 3: Top 5 hospitals with highest Glycopeptides utilization for 2014

#### MultiDrug Resistant Organisms (MDRO) & MRSA rate

PPUKM was reported to be among the hospitals having highest Multi Resistant Organism rate (1.83 per 100 admissions) and MRSA rate.

Widespread use of antimicrobials especially those of broad-spectrum was associated with the emergence of MDRO. One of the strategies in controlling MDRO included judicious antimicrobial use. Hence, a team of antimicrobial stewardship in PPUKM has been established since August 2015.

# Announcement from Pharmacy Department

## Shortage of Aciclovir [Zovirax®] 3% Eye Ointment Worldwide by PRP Syntiea & Izyan



### Problem Statement/Issues :




In October 2014, GlaxoSmithKline (GSK) has initiated a wholesale and retail level recall of Aciclovir (Zovirax® Ophthalmic Ointment 3% 4.5g) worldwide. This voluntary recall was made after metal particles ranging in size from 0.15 to 0.875 mm were found present in 3 different lots of the active ingredients, which was used in 11 batches of Zovirax Ophthalmic ointment. The 11 batches affected by this issue which have been supplied to 39 markets by GSK were : **3L942, 3M940, 4C910, 3M941, 4B909, 4E915, 4E916, 4F917, 4F918, 4F919 and 4F920.**

As a result of this recall, there will be a shortage of supply worldwide. Stock is expected to resume in **first quarter of 2016**. Zovirax® Ophthalmic ointment is used to treat herpes simplex virus infections of the cornea of the eye. Left untreated, the infection may damage the cornea and this can lead to permanent loss of vision. According to GSK, the main safety concern with ointments used to treat eye conditions is the risk for metal particulates to physically damage the eye. The risk of metal particles being present in the ointment is low.

### Management Options/Alternatives :

Drug Information Centre [DIC] has received many calls pertaining to treatment options available for Herpes simplex keratitis. Treatment options however are limited as most of the alternatives are **NOT** available in Malaysia (eg ganciclovir 0.15% eye gel , trifluridine 1% eye drops and vidarabine 3% ointment)<sup>1,2</sup>. Oral Aciclovir 400mg 5 times daily for 10-14 days is the preferred treatment in patients unable to tolerate topical medications and with good renal function<sup>2</sup>.

Alternatively, **Acivision® 30mg/g Aciclovir eye ointment** may be available as an imported medicine but approval for use would need to follow normal government procedures for unlicensed medicines. Currently, there are 3 hospitals that keep this preparation; Ampang Puteri Hospital, Sunway Medical Centre and Tun Hussein Onn National Eye Hospital :

- **Ampang Puteri Hospital**  **[03 - 4270 2500]**: Patients will need to register in Emergency Department. Medical Officer [MO] will need to endorse the prescription from Pusat Perubatan Universiti Kebangsaan Malaysia (PPUKM)'s doctor. A certain fee may be imposed for the prescription endorsement's procedure. Subsequently, the doctor will indent through their online system and patients can obtain the supply from their Outpatient Pharmacy after making full payment for the medication. Price is RM120/tube. Contact no : 03 - 4270 2500
- **Sunway Medical Centre**  **[03 7491 9191]** and **Tun Hussien Onn National Eye Hospital**  **[03-7718 1488]** **DO NOT** accept prescription issued from other hospitals. Hence, another way of getting the medication is by referral to their Ophthalmologists.

### References :

1. <http://www.tga.gov.au/alert/zovirax-ophthalmic-ointment>
2. <http://emedicine.medscape.com/article/1194268-treatment>
3. <http://www.medicinesresources.nhs.uk/en/Communities/NHS/SPS-E-and-SE-England/Medicines-Information/Discontinuation-Supply-Shortage-Memos/Shortage-of-Zovirax-eye-ointment-3/>