Purpose The aim of this study was to assess medication adherence and knowledge of type 2 diabetes mellitus (DM) patients upon completion of the proposed programme.

Material and methods This study was conducted from November 2016 – August 2017 and obtained IRB from the Rayong Hospital. The questionnaires were using for evaluating medication adherence and knowledge by pretest-post-test design. There were 30 purposively selected patients. The education programme was developed by the hospital team which contained topic pathology of type 2 DM, medication management, the important of medication, side effects, ADR, management of drug-related problems and diet control.

The process of the programme was that at first visit, patients came to consult a doctor at the Rayong Hospital, Tapong branch. If patients had HbA1C $\geq$ 8 mg%, the staff asked them to join the programme. When patients came to the pharmacy department, pharmacists gave them a pre-test, dispensing medicine and advice. The second visit was class education. On the third visit, patients saw the doctor again. After that, the pharmacist gave them the post-test.

Results When comparing the pre-test and post-test medication adherence levels among those patients with high medication adherence scores, 53.33% of patients had improved significantly. When comparing the pre-test and post-test knowledge levels among those patients with high knowledge scores, 73.33% of patients had improved significantly. After attending the programme, patients had improved their medication adherence and knowledge statistically significantly ($p < 0.01$). The patients' HbA1C values reduced 2.72% on average after attending the programme, so this study can reduce their HbA1C clinically significantly.

Conclusion This study result shows that medication adherence and knowledge of patients is effect to HbA1C control. Pharmacists' intervention can help patients understand their pathology and medication management, and can improve their medication adherence and contribute to increased blood-sugar control.

REFERENCES AND/OR ACKNOWLEDGEMENTS

This research was advised by Dr Benjarath Pupacdi Javed, the Chulabhorn Research Institute and Ms Chonticha Ponchai, Na Tung Mang School.

No conflict of interest.

4CPS-256 LINEZOLID USAGE AND COST ANALYSIS AFTER A HOSPITAL TRANSFER

E Lázaro López, A Rodríguez Ferreras, A Pieras López*, L Velasco Rocas, A Lozano Blázquez. *Hospital Universitario Central de Asturias, Hospital Pharmacy, Oviedo, Spain*

10.1136/ejhp-pharm-2019-eahpconf.405

Background Linezolid is a broad-spectrum antibiotic active against gram-positive bacteria and its use must be controlled. The definite daily dose (DDD) is a statistical measure of drug consumption: the assumed average maintenance dose per day for a drug used for its main indication in adults. In June 2014, the hospital was transferred to the new utilities and e-prescribing, with clinical decision support systems implemented.

Purpose To quantify and analyse the use of linezolid and its cost, after a hospital transfer and e-prescribing implementation.

Material and methods Observational, retrospective study of linezolid usage from January 2013 to December 2016. We established two study periods: pre-transfer and post-transfer. Oral linezolid (suspension and tablets) and intravenous (IV) doses dispensed were reviewed in hospitalisation units (HU) and intensive care units (ICU). Data were obtained from Pharmacy Management Application: the number of doses dispensed and their cost. We determined the number of DDD/100 stays using a linezolid DDD value of 1.2 g (600 mg/12 hour).

Results During the pre-transfer period a total of 6310 doses were dispensed for the HU (mean of 350 per month): 69.27% IV, 30.52% tablets, 0.21% suspension. In the ICU 3,236 units (179 units/month): 92.49%, 7.23% and 0.28%, respectively. The total cost was € 549,954.6 (€ 30,553.03/month). During the post-transfer period: a total of 29 239 doses were dispensed for the HU (mean of 974 per month): 36.67% IV, 63.08% tablets, 0.25% suspension. In the ICU 4,931 units (164 per month): 92.94%, 7.00% and 0.06%, respectively. The total cost of linezolid was € 1,968,369.75 (€ 65,612.33/month). The number of DDD/100 stays for linezolid in the HU was 0.99 (2013), 1.21 (2014), 2.33 (2015) and 2.49 (2016) and in the ICU: 7.73 (2013), 8.1 (2014), 8.1 (2015) and 7.9 (2016).

Conclusion After the transfer, linezolid usage has increased (x3) in the HU, remaining stable in the ICU. The number of DDD/100 stays confirms these results. In the HU there was an increase in the use of oral versus parenteral linezolid. This may be related to the inclusion of sequential therapy protocols as clinical decision support systems in the computerised provider order entry, after the hospital transfer. DDD/100 stays is a valid and useful indicator to quantify the use of antibiotics and identify usage changes, and it is used frequently in antimicrobial stewardship programmes. A deeper analysis is needed to identify the causes of the increase in use of linezolid and to implement measures to control it.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-257 DETERMINING FACTORS AFFECTING PATIENTS' CLARITY ON DISPENSED MEDICATION INSTRUCTIONS: A CASE STUDY AT COPPERBELT UNIVERSITY HEALTH FACILITY IN KITWE, ZAMBIA

K Ponshano. *The Copperbelt University, Health Services, Kitwe, Zambia*

10.1136/ejhp-pharm-2019-eahpconf.406

Background According to the Institute of Medicines, it is estimated that nearly one-half of all adults in the United States have problems in complying with medication instructions. This has become a challenge worldwide to achieve a comprehensive healthcare delivery to patients. A study to establish factors why some patients misunderstand medication instructions was conducted at the Copperbelt University clinic.

Purpose To determine the factors that influence patients from getting medication instructions from the dispensary clearly. To identify the more prevalent factors that cause misunderstanding between dispenser and patient when medication instructions or information is being given.

Material and methods A semi-structured interview with patients was used. Regarding patients understanding of the instructions given by the dispenser when medicines were supplied to them, an exit interview was carried out by the researcher to