were measured. According to a Clopper-Pearson interval 26–70% of the patients were underdosed and the exposure to piperacillin was too low. Only in 9 of 20 patients treated with ciprofloxacin 200 mg twice per day the calculated AUIC averaged ≥125 h and the Cmax/MIC ratio ≥10. Thereby 29–76% of patients treated with ciprofloxacin were underdosed. With regard to the total body clearance 29% of piperacillin and 16% of ciprofloxacin were eliminated by CRRT. Despite the moderate rate of ClCRRT the exposure of the patients to piperacillin and ciprofloxacin was revealed to be inadequate.

Conclusions In critically ill patients undergoing CRRT for piperacillin/tazobactam increased doses of 4/0.5g four times per day and for ciprofloxacin doses of 400 mg twice per day are recommended.

No conflict of interest.

PHC-022 PRACTICAL USE OF THERAPEUTIC DRUG MONITORING OF TEICOPLANIN

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Background The trough concentration of teicoplanin should be >10 mg/L for successful treatment, although it needs to be >20 mg/L for more severe staphylococcal infections, such as endocarditis and osteomyelitis.

Purpose To analyse the trough serum concentrations for teicoplanin by therapeutic drug monitoring (TDM) in current clinical practise in our hospital.

Materials and Methods Descriptive, analytical, observational study involving the first determination of trough serum concentration of teicoplanin, intravenously administered, from 2010 to 2012.

Results Trough serum concentrations of teicoplanin from 48 inpatients (56.3% female) were analysed. The mean age was 59.8 years (CI95%: 55.7–63.9). 58.3% of the inpatients received one single loading dose of 800 mg, the other 37.5% received 400 mg twice daily for the first day, one patient (2.1%) 400 mg twice daily for two days and another patient (2.1%) 400 mg each day. 70.8% of inpatients continued with 400 mg twice daily, 25% with 400 mg once daily and the rest with 200 mg once daily. The mean dose was 6.9 mg/kg/day (CI95%: 5.4–8.5 mg/kg/day). The number of doses received until the first determination was 4.7 (CI95%: 4.1–5.3 doses)

It was observed that the 37.5% of inpatients had a trough serum concentration of teicoplanin lower than 10 mg/L, 58.3% between 10–25 mg/L and 4.2% greater than 25 mg/L. 64.3% of the patients received 400 mg once daily and 26.5% had doses of 400 mg twice daily and had concentrations lower than 10 mg/L.

All patients with concentrations lower than 10 mg/L were readjusted in their dose and frequency to reach serum trough concentrations greater than 10 mg/L, in steady-state.

Conclusions We found out one problem in our setting. The current TDM of teicoplanin can help to solve it, diminishing the risk of treatment failure or micobiological resistance to teicoplanin.

No conflict of interest.

PHC-023 RATIONAL USE OF MEDICINE IN SWEDISH COMMITTEE FOR AFGHANISTAN HEALTH FACILITIES

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Background Medicine and medical commodities constitute essential and important inputs to health service delivery in all health systems. Irrational use of medicines is a multi-dimensional issue and requires interventions at several levels including Health Systems, Organization, Doctors, Dispensers, Patients and Community and it still remains a challenge in health facilities (HF) all over the country, including those managed by the Swedish Committee for Afghanistan (SCA).

Purpose To identify the factors that influence prescribers' behaviour and decision-making (Personal, Interpersonal, Workplace and Informational) while managing medicines and medical supplies.

To provide detailed information for improving the Rational Use of Medicine in SCA health facilities.

Materials and Methods Along with my teams I assessed 4 SCA projects through register books, stock cards, prescriptions, structured questioners and medical records. 28 were selected randomly from 123 HFs with a sampling interval of 5 (every 4th HF). This constituted 10 Comprehensive Health Centres, 9 Basic Health Centres, 5 Sub Centres, 2 District Hospitals and 2 Provincial Hospitals.

Results The average number of medicines per encounter was 2.1, ranging between 1.76 in Saripul and 2.49 in Wardak.

Prescription of antibiotics in health facilities visited averaged at 53.4%. It ranged from 48%.in Saripul and 60% in Samangan. In Wardak it was 56% and it was 49% in Laghman.

The average percentage of injectables prescribed was 7.8 percent. Laghman prescribed 10%, Saripul 6.22%, Samangan 8% and Wardak 7%.

Conclusions Irrational use of medicines is a complex issue and calls for multi-dimensional interventions.

RUM training for professional staff and health education and awareness programmes for people who are living in rural areas as well as distribution of standard treatment guidelines will play a significant role in promoting the rational use of medicine.

Abstract PHC-023 Table 1

Indicator	Wardak	Laghman	Samangan	Saripul	Total Average
Average number of medicines prescribed per encounter	2.49	1.94	2.24	1.76	**2.11**
Percentage of antibiotics prescribed per encounter	56%	49%	60%	48%	**53.4%**
Percentage of injectable prescribed per encounter	7%	10%	8%	6.22%	**7.8%**

No conflict of interest.

PHC-024 RENAL FUNCTION ESTIMATION BY DIFFERENT METHODS (CKD-EPI,COCKCROFT-GAULT AND MDRD4-IDMS) AND ITS EFFECT ON THE DOSE OF IV DEXKETOPROFEN

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Background The different methods that currently exist to estimate renal function take into account different parameters, which may affect the dose of some drugs, such as dexketoprofen.

The recommended dose of IV dexketoprofen is 50 mg every 8 hours if eGFR is >80 mL/min/1.73 m^2, 25 mg every 12 hours if eGFR is between 50–80 mL/min/1.73 m^2 and it is contraindicated if eGFR is <50 mL/min/1.73 m^2 – according to the summary of product characteristics.

Purpose To determine the differences in the estimates of renal function, using CKD-EPI, MDRD4-IDMS and Cockcroft-Gault (CG) to estimate the glomerular filtration rate (eGFR) and to assess their effect on the functional characterization of patients and the dose of IV dexketoprofen.

Materials and Methods Retrospective observational study performed in adults admitted to surgical units – general, trauma and obstetric – treated with dexketoprofen IV in a tertiary hospital from January to September 2011 (9 months).