CONCLUSIONS: Increased monocyte/lymphocyte ratio associates with infectious hospitalization in incident dialysis patients. However, there was no relation of infectious hospitalization to Neutrophil/lymphocyte ratio or to monocyte, neutrophil and lymphocyte counts. These results may suggest that an increased circulating number of monocytes might play a role in the development of atherosclerosis, perhaps because of dysfunction of microcirculation linked to removal of pathogenic microorganisms with chronic inflammation.

INTRODUCTION AND AIMS: Patients with end-stage renal failure are prone to polypharmacy. Non-adherence is often reported. Poor adherence is a risk factor of drug-related problems (DRP) in haemodialysis patients. In general, there is one DRP for every 16.3 medications reviewed and cardiovascular medications are usually involved. Similar data is seldom reported in peritoneal dialysis (PD) patients. The aim of this study was to evaluate medication adherence (MA), medication knowledge (MK) and DRP in ambulatory PD patients with hypertension and to determine the proportion of DRP that would need an intervention.

METHODS: A prospective cross-sectional study was conducted in the Renal Clinic of the United Christian Hospital. Adult patients who had undergone PD for ≥3 months and taking ≥1 antihypertensive medications were enrolled. Old-aged home residents were excluded. MA & MK were assessed by Morisky medication adherence scale (MMAS-8) and a validated questionnaire (MKAQ) respectively. MKAQ covered 4 areas including name, indication, dose and frequency of each medication. Patients were randomly selected by renal pharmacists for medication review. Pharmacist would decide if an intervention was needed for the identified DRP. Data was reported in descriptive statistics.

RESULTS: Over an 18-month period, 90 patients of age range from 23 to 80 years were recruited. Fifty-eight of them were male (64.4%). Mean duration of PD was 23.1 months. On average, each patient was taking 11 chronic medications. Most patients (74.4%) managed medications by themselves. Over 50% of patients had received secondary or above education. Only 46.7% of them received drug education before the interview. Proportion of patients of high adherence (≥8 points in MMAS-8), average adherence (6-7 points), poor adherence (<6 points) were 33.3%, 41.1% and 25.6% respectively. Mean MKAQ score was 66.4±11.4. The knowledge about the dose & frequency of medications was the highest. Forty-three patients were selected for medication review. There were 93 DRP identified among 497 prescribed medications, which included subtherapeutic dosage (40.9%), adverse drug reaction (20.4%) and overdosage (17.2%). The drug classes most commonly involved were cardiovascular (31.2%), bone & mineral metabolism disorder (28.9%) and anaemia (17.2%). Fifty-four recommendations were made by pharmacists and 70.4% were implemented by nephrologists.

CONCLUSIONS: A considerable portion of our cohort had poor MA. Their MK was generally fair. DRP were common and often required change in regimen. Current results could help target appropriate strategies on enhancing medication management in PD patients.