Joshua, I. B., P. R. Passmore, R. Parsons and V. B. Sunderland (2013). “Appropriateness of prescribing in selected healthcare facilities in Papua New Guinea.” *Health Policy Plan*.doi: 10.1093/heapol/czt012 First published online: March 14, 2013

The objective of this study was to evaluate the level of appropriateness of prescribing to outpatients in selected healthcare facilities in Papua New Guinea (PNG), using health department guidelines as the benchmark.

A prospective study was carried out at Losuia Health Centre (LHC), Alotau Provincial Hospital (APH) and Port Moresby General Hospital (PMGH) in PNG. At each setting >300 consecutive prescriptions were evaluated in 2010. Diagnosis and prescribing data were collected from written prescription orders, patient health books and by patient interview. The appropriateness of prescribing was evaluated with respect to the relevant PNG Health Department guidelines. Differences in prescribing indices were evaluated using chi-squared tests as appropriate.

There were 1090 patients (748 adults; 341 children) enrolled in the study with 356 at LHC, 318 at APH and 416 at PMGH. A total of 2495 medicines were prescribed. The most common were amoxicillins (355), paracetamol (344), artemether/artesunate (186) and chloroquine (162). The average number of drugs prescribed per patient was 2.3 (range: 1–7). The most common diseases treated were malaria (23.2%), acute soft tissue injuries (10.4%), anaemia (8.9%), respiratory problems (8.7%) and cough (5.9%). Overall, inappropriate prescribing was 33.4% in adults and 39.9% in children, the difference mainly arising from inappropriate drug dosage. There were statistically significant differences observed for the level of inappropriate prescribing by prescriber category on drug selection (P < 0.0001), drug dosage (P < 0.0001) and drug duration (P < 0.0001).

The level of inappropriate prescribing was as high as 53.8% in the selected locations in PNG, which is of great concern with respect to the quality of PNG healthcare delivery. Appropriate interventions such as review/upgrade of the guidelines, supervision/oversight of compliance to guidelines and/or publication of ongoing supervision/audit oversight reports need to occur to address the underlying causes.