

A Study on Medicine Utilization Pattern in Outpatient Departments of Tertiary Care Centre in Kathmandu

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ABSTRACT

Objective: The main objective of this study is to analyze the prescribing pattern of medicine in outpatient departments of Tertiary Care Centre in Kathmandu.

Methodology: As per WHO consideration, 100 prescriptions were taken from each OPD including Orthopedics, Obstetrics and Gynecology, Surgery, Medicine, Ophthalmology, Otorhinolaryngology (ENT), Pediatrics, Dermatology and Psychiatry, i.e., 900 prescriptions were assessed using WHO drug use prescribing indicators.

Results: In total, 47.7% were male and 52.3% were female patients. Average medicine per prescription was 2.43 ± 0.039 . Number of prescriptions with single medicine was 188 (20.9%) and the polypharmacy (≥ 4) was 129 (14.3%). Number of medicines prescribed by generic name 76 (3.4%), antibiotics 416 (19%), Injection 34 (1.5%), from Essential Medicine List (EML) 1312 (60.1%) and Fixed Dose Combination (FDC) was 468 (21.4%). The average cost of medicine per prescription was NPR 404.72 ± 19.3 and duration of treatment was 16.43 ± 0.73 days. The prescribing drugs as tablets 1191 (54.5%), capsules 184 (8.4%), liquid suspension 365 (16.7%), injections 34 (1.5%) and topical was 409 (18.7%). Patient's age had positive correlation with number of medicines ($p=0.002$) and negative correlation with antibiotics ($p=0.988$). Cost of treatment had positive correlation with number of medicines prescribed ($p=0.00$), prescribed from EML ($p=0.00$) and duration of treatment ($p=0.00$). A positive correlation was found between cost and antibiotics ($p=0.33$) with no statistical significance difference. Average medicines, prescription from EML, antibiotic prescribed were high in ENT with statistical significance of difference between mean. Prescription with FDC and intravenous (IV) were significantly high in Obstetrics and Gynecology. Prescription with generic names was significantly high in Medicine department. Cost and duration of treatment were significantly high in Psychiatry department.

Conclusion: For rational prescription writing, healthcare facilities need to develop and implement specific guidelines and record them. Continuing medical education program are essential for more rational and safer drug prescribing and successful drug therapy.

Keywords: Essential medicine list (EML), Polypharmacy, Fixed dose combination (FDC), WHO drug use indicator, Medicine utilization

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