ASSESSMENT OF MEDICATION UTILIZATION IN EMERGENCY PATIENTS

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OBJECTIVES: To assess the utilization of medications prescribed for treating the patients suffering from commonly occurring emergency conditions

METHODOLOGY: The study protocol was approved by the hospital human ethical committee. The patients of either sex who were aged between 18 and 60 years and admitted within 72 hours of their onset of emergency conditions were enrolled prospectively as per our study criteria for six months. The patients clinical and medication data were collected from the case records. Further, the data was analyzed and compared against national essential medication list.

RESULTS AND DISCUSSION: Totally 100 emergency patients (Males 51%, Females 49%) were enrolled. Mean age of the patients was 36.3±1.1 years. Of these cases, most commonly found emergencies were Fever (33%) followed by Acute Gastroenteritis (22%), and Upper respiratory tract infection (11%) among others. On average, 3.9±1.5 drugs were prescribed per patient.

Anti-pyrets (80.66%), antibiotics (11.33%) and analgesics and anti-inflammatory drugs (8%) were found prescribed for patients suffering from fever. Acetaminophen (81%) was prescribed to treat high fever (over 100°F), Diclofenac (75%) was found prescribed for treating patients suffering from fever with body pain and Amoxicillin (60%) was found prescribed for treating the patients suffering from fever who are susceptible for infections. The results obtained in our study was similar to the results shown by Dhamija P et al.

Proton pump inhibitors (56%), Anti emetics (18.33%), Anti-diarrhoeals (7%) and Antimicrobials (%) were found prescribed for patients with Acute gastroenteritis. Pantoprazole (97.1%) was most extensively used Proton pump inhibitor. Ondansetron (71.4%) was used as Anti emetic. Loperamide (55.55%) was used for treating diarrhoea. Ofloxacin + Ornidazole infusion combination was used to treat gastroenteritis patients susceptible to infections. This study results were comparable to the study done by Pantanwala et al. All the prescribed drugs were utilized under nurse direct observation. The total number of drugs evaluated during the study was compared to the national list of essential medicines and was found to show 52.30% compliance to the NLEM 2011 which was better as shown in the study of Barot et al.[4]

CONCLUSION: The medications such as Acetaminophen, Diclofenac, and Amoxicillin are frequently utilized to treat emergency patients with fever while Pantoprazole, Ondansetron, Loperamide and Ofloxacin and Ornidazole combination was utilized to treat emergency patients with gastritis and these drugs were prescribed according to national essential drug list.

Keywords: Emergency department, Medication utilization