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information, the management planned was altered and the intercostal drain placement aborted.
Discussion: Sonographic evaluation of the lungs is well described in medical literature and has been used in patients to assess for pneumothorax, pleural effusion, pulmonary oedema, and lung consolidation. Even in settings where advanced imaging options are available, emergency sonography has several features that make it an attractive option for the acute care provider. In the resource-limited setting, the utility of emergency sonography is enhanced, especially when other imaging modalities are unavailable or cost prohibitive. Focused point-of-care sonography is a useful adjunct to clinical examination that may augment clinical decision-making and safely avoid unnecessary invasive procedures.

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Workplace violence in emergency medicine

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Background: Workplace violence (WPV) has increasingly become commonplace in the India, and particularly in the health care setting. Assaults are one of the leading causes of occupational injury-related deaths in health care setups. Among all health care settings, Emergency Departments (EDs) have been identified specifically as high-risk settings for WPV.
Objective: This article reviews recent epidemiology and research on ED WPV and prevention; discusses practical actions and resources that ED providers and management can utilize to reduce WPV in their ED; and identifies areas for future research. A list of resources for the prevention of WPV is also provided.
Discussion: ED staff faces substantially elevated risks of physical assaults compared to other health care settings. As with other forms of violence including elder abuse, child abuse, and domestic violence, WPV in the ED is a preventable public health problem that needs urgent and comprehensive attention. ED clinicians and ED leadership can: (1) obtain hospital commitment to reduce ED WPV; (2) obtain a work-site-specific analysis of their ED; (3) employ site-specific violence prevention interventions at the individual and institutional level; and (4) advocate for policies and programs that reduce risk for ED WPV.
Conclusion: Violence against ED health care workers is a real problem with significant implications to the victims, patients, and departments/institutions. ED WPV needs to be addressed urgently by stakeholders through continued research on effective interventions specific to Emergency Medicine. Coordination, cooperation, and active commitment to the development of such interventions are critical.

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Assessing the reliability and accuracy of nurse triage ratings when using the South African Triage Scale in the Emergency Department of District Headquarter Hospital of Timergara, Pakistan

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Objective: To assess inter and intra-rater reliability, as well as accuracy of nurse triage ratings when using the South African Triage Scale (SATS) in the Emergency Department (ED) of District Headquarter (DHQ) Hospital of Timergara, Pakistan.
Methods: This is a cross-sectional study using 42 previously validated paper based vignettes. Fifteen ED nurses assigned triage ratings to each of the 42 vignettes under classroom conditions. Validation of the SATS was done using the vignettes as a reference standard. Graphical displays portrayed rating distribution and validation measures of sensitivity, specificity, overtriage and undertriage across different acuity levels.
Results: The estimated Quadratically weighted Kappa (QWK) and Interclass Correlation was found to be substantial at 0.77(CI 0.69–0.85). Intra-rater reliability with exact agreement was shown to be 87% (CI 67–100) with one category discrepancy showing 100% agreement. An average sensitivity, 70%; specificity, 97%; overtriage, 14.7% and undertriage, 21.6% was shown. The Graphical displayed showed that Very Urgent, Urgent and routine acuity levels had acceptable levels of overtriage and undertriage.
Conclusion: The SATS has been shown to be a reliable triage scale for a developing country such as Pakistan. With accuracy being acceptable in the context of Timergara, we would suggest further validation studies looking at simple ways of validating the triage scale bearing in mind the challenges facing a developing country ED.

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Neonatal necrotizing entero-colitis: A clinico-surgical study

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Objective: Necrotizing enterocolitis (NEC) is most common gastrointestinal emergency among neonates admitted to the intensive care units. Aim of this study is to assess incidence, management, outcome and prognostic factors favouring survival of NEC cases.
Methods: A prospective study on 52 cases, age between 1 and 30 days (11 full-term and 41 preterm) with NEC among neonatal intensive care unit (NICU) admissions. According to modified Bell's classification, cases were classified into 3 groups (stage I, 12), (stage II, 20) and (stage III, 20). Stages I and II treated medically, while stage III treated surgically (peritoneal drainage and/or laparotomy). All results were statistically analysed using chi-square and ANOVA tests by SPSS, v16.
Results: Incidence of NEC in our study was 8.5% with mean presenting age (8.9 days), mean birth-weight (2200 grams) and mean gestational-age (34.9 weeks). The commonest presenting feature was abdominal distension (82.7%), followed by respiratory distress (76.9%) and neonatal sepsis (61.5%). Thrombocytopenia and hyponatraemia were present in all cases, metabolic-acidosis in 92.3% and CRP was positive in 78.9%. Free fluid was present in 73.1%, pneumo-peritoneum in 38.5% and pneumatosis-intestinalis in 15.4%. Medical treatment was sufficient in 20 out of 32 cases of stage I and II (62.5% survival). Between the 20 cases of stage III; 6 cases subjected to immediate Laparotomy (33.3% survival), 14 cases treated with peritoneal drainage, 4 survived, 2 cases were in need for subsequent laparotomy and survived. Stoma formation was done in 4 cases; resection with primary anastomosis was done in 1 case while primary repair was done in 3 cases. The overall survival in the study was 53.85%.

Conclusion: Early diagnosis and intensive medical and surgical treatment were mandatory to minimize both morbidity and mortality from NEC. Surgical management should be determined according to the special circumstances of each case. However, the optimum choice between peritoneal drainage and laparotomy remains controversial. Gestational age, birth weight, age at admission, and treatment modality are definite prognostic factors as regard morbidity and mortality of patients with NEC.

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The use of open source electronic medical records in an urban ED in Kumasi-Ghana

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Introduction: In a busy emergency department (ED), missing patient medical records is a common complaint to contend with. Electronic medical records (EMR) may be one useful way of ensuring patient record integrity and confidentiality. KATH ED sees 28,000 patients a year and integrity of patient records is a major challenge. This study sought to improve the integrity of medical records within the ED and efficiency of patient flow within the ED
Methods: Regular panel meetings of emergency physicians, IT specialists and biostatisticians were held from February, 2012 to February, 2013. Open source software, Openemr was adapted in the creation of electronic medical records for the ED of KATH in February, 2012. Changes were made to the software included registration and patient search, triage board, doctor's notes whiteboard to reflect the pattern of practice in KATH ED.
Results: The EMR allows registration, triage and the entire medical records to be stored on patients. 12,000 Patient demographics have been migrated on to the EMR. Emergency physicians and charge nurses are able to monitor patient flow in the ED.
Conclusion: Open source medical records may be the most appropriate and cost-effective software to adapt for keeping patient records electronically in a low resource setting. Further studies need to be conducted to demonstrate how EMR may affect the pace of work in the ED.

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Comparative trend analysis of gunshot injuries and motor vehicle crashes at the KATH Emergency Department

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Introduction: Motor vehicle crashes are a major cause of morbidity and mortality in developing countries. Injuries resulting from fire arms were the second leading cause of death in the US in 2003. In Ghana, motor vehicle crashes (MVC) are a common cause of injury and mortality whiles firearm related injuries (FAI) have not featured highly. However, with increase in commercial and industrial activities in Ghana, firearm related injuries have been on the increase. This study seeks to compare FAI and MVC admissions in the ED.
Methods: A retrospective cross-sectional review of all admissions resulting from FAI and MVC from May, 2009 to December, 2012. The trends in rate of admissions per month and yearly was assessed and compared. Analysis was done using Stata 11.0
Results: There were 409 FAI and 11,195 MVC admissions over years. Men were more involved in both MVC and FAI than women. FAI and MVC admissions occurred mostly between June and August, and November and December each year. FAI admissions have increased by seven-fold in four years whereas MVC admissions increased by 1.8 in 2011 and declined by 11.5% by the end of 2012. In 2009, FAI constituted 0.8% of all injuries in the ED in 2009 and at the end of 2012 contributed 5% to the injury pool.
Conclusion: MVC continue to be a major cause of injury admissions, however the rising FAI admissions cannot be overlooked. FAI may have gained public health significance in Ghana and requires attention as MVC.

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Emergency medicine task shifting: Quick dash outcome scores of upper extremity injury management

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Study Objectives: This is a pilot study using the Quick DASH Survey (disabilities of arm, shoulder and hand), a validated outcome measurement tool. Our primary objective was to assess functional outcomes of patients with acute upper extremity injuries who were cared for by non-physician clinicians as part of a task-shifting program. Secondarily, we determined if the Quick DASH can be successfully utilized in a non-traditional low-resourced setting.
Methods: This pilot was administered by the Global Emergency Care Collaborative (GECC) at the Karoli Lwanga Hospital Emergency Department (ED) in Uganda. Patients were identified retrospectively by querying the ED quality assurance database. An initial list of all patients who sustained traumatic injury (RTA, Assault or Accident) between March 2012 and February 2013 was narrowed to patients with upper extremity trauma, those 18 yrs and older, and those with cellular phone access. This subset of patients was called and administered the Quick DASH. The results were subsequently analyzed using the standardized DASH metrics. These outcome measures were further analysed based upon injury type (simple laceration, complex laceration, fracture, subluxation), laceration location (finger, palm, wrist), age at presentation (18–69), and time from initial presentation to follow up (1–11 months).
Results and conclusions: There were a total of 25 initial candidates, of which only 17 were able to complete the survey. Using the Quick DASH Outcome Measure, our 17 patients had a mean score of 29.5 (range 5.0– 56.8). When compared to the standardized Quick DASH outcomes (no work limitation at 27.5 vs. work limited by injury at 52.6) the non-physician clinicians appear to be performing upper extremity repairs with good outcomes. The key variable to successful repair was the initial injury type. Although accommodations needed