

P053

P053 -Improving the recognition and management of Acute Kidney Injury in a large teaching hospital: A Unique Nurse Led Service.

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Introduction: Acute Kidney Injury (AKI) is widely recognised as both a prevalent and serious problem amongst hospitalised patients. It has been found to be associated with worsening of morbidity and to be an independent predictor of increased mortality. The National confidential enquiry into patient outcome and death (NCEPOD) report in 2009 highlighted this and stated that only 50% of patients who died, after a diagnosis of AKI, received good standard of care. The areas of inadequacy of care included delay in recognition of AKI and management of its complications.

Method: We describe the AKI service we have developed in our institute (teaching hospital serving a 1.2 million population); in response to recommendations of NCEPOD report and NICE guidelines. Our AKI team consists of a lead clinician (Consultant Intensivist/Nephrologist) and two dedicated Band 6 specialist nurses working autonomously to deliver specialist care, appropriate to the needs of patients who develop AKI outside the renal ward. We have implemented an e-Alert system, which integrates with the laboratory information system, using an NHS endorsed algorithm, to identify patients with AKI (based on biochemical criteria) in real time. A list of all patients with AKI is forwarded daily to the AKI team, where the AKI specialist nurses review, all patients with AKI stages 2 & 3. They assess them clinically, using a pre-designed proforma, devising management plans including referral for long term follow up or renal replacement therapy as appropriate. We retrospectively collected data on all AKI patients presenting at our institute between February 2016 to October 2017, including the patients' demographics and their long term outcomes. We aim to describe our unique specialist nurse delivered service and present our patients' outcomes.

Results: We analysed the data of 2948 patients presenting with AKI at our hospital between February 2016 to October 2017. The overall survival was calculated on the first of October 2018. 52.8% of the patients were males, mean age was 72.5 (SD15.5). 1752 (59.4%) were AKI Stage 2 with 1196 (40.6%) AKI Stage 3. Mean Serum Creatinine was 274.6µmol/L (SD201.9). Of the e-Alerts received; 40.2% represented community-acquired AKI, while 59.8% were hospital-acquired AKI. A total of 46 patients (1.6%) required acute renal replacement therapy during the episode. Overall survival was 47.2% at the end of the observation period, with 54.1% of the patients surviving for one year, from the date of their AKI episode.

Conclusion: We deliver a unique service at our institute, with our specialist nurses receiving daily automated report enlisting all the patients with AKI followed by them, reviewing all these patients autonomously. Our unique service, enables our institute to provide excellent quality care through delivery of timely recognition and management of every patient with AKI stage 2/3, and its subsequent complications. Future work includes expanding the service to include providing follow up clinics for patients with AKI.