G76

WORKING TOGETHER TO IMPROVE THE CARE OF YOUNG PEOPLE WITH MENTAL HEALTH PROBLEMS IN HOSPITAL

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Aims To reduce variability in the management of young people with mental health problems in hospital by improving communication and joint working between Paediatrics, Child and Adolescent Mental Health Services (CAMHS) and Emergency Medicine (EM) teams within our region.

Method In order to identify the problems affecting the management of young people with mental health problems in hospital, a series of meetings was held with doctors, nursing staff and allied health professionals from the Paediatrics, CAMHS and EM teams in two hospitals in our region. 17 different issues were raised at these meetings. Using a structured questionnaire, teams identified the three most important of these to be: 1. Management of young people with acute behavioural disturbance; 2. Poor communication between teams; and 3. Insufficient training of hospital staff. Three interventions were then developed to address these problems. First, multidisciplinary team debriefs were introduced at each hospital, providing all three teams with an opportunity to discuss challenging cases. Second, an interprofessional study day on the management of acute behavioural disturbance was developed and delivered by members of the CAMHS, Paediatrics and EM teams. Third, a group of Paediatric nurses visited the local CAMHS inpatient unit to discuss nursing issues with the specialist CAMHS nursing team.

Results Feedback from debriefs was universally positive, and they will now run six-monthly at each hospital. The study day has run twice, with a total of 75 attendees. Pre- and post-course feedback forms showed a marked improvement in confidence managing acute behavioural disturbance across all staff groups attending. This course will now run three times per year. Additionally, all those who visited the inpatient unit reported that it would lead to a positive change in their practice.

Conclusion These efforts to bring teams together have been highly valued by all involved, and we are receiving ongoing support from our deanery to continue this work. Several further joint-working initiatives are now being developed within our region as a result of this project, showing the positive and far-reaching repercussions of these relatively simple interventions.

G77(P)

SOCIOECONOMIC AND MATERNAL REPRODUCTIVE FACTORS AFFECTING LOW BIRTH WEIGHT BABIES IN CENTRAL NEPAL

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Introduction Low Birth weight is one of the most sensitive and reliable predictors of health and also an essential determinant of mortality, morbidity and disability in infancy and

childhood. Globally, about one sixth of all newborns are low birth weight (LBW<2500 grams), which is the single most important underlying risk factors for neonatal deaths. It is estimated that 18 million babies are born with Low Birth Weight and half of them are born in south Asia. Over three – quarters of newborns death in Nepal occur in LBW babies. The estimates of prevalence of LBW in Nepal have ranged from 14% in community based studies to 32% in hospital based ones, overall being 27%. Objectives were to study the various socioeconomic and maternal reproductive factors related to low birth weight babies in Central regional part of Nepal.

Material and Methods Cross-sectional and observational study was undertaken from October 2012 to September 2014 comprising of 350 singleton live born baby admitted in NICU of Tertiary Care Teaching Hospital, Chitwan.

Results The common risks factors for LBW were significantly associated with low socio- economic status, maternal age, maternal education, occupation of mother, maternal smoking, maternal alcohol intake, number of ANC visit with significant p-value of <0.05.

Conclusion LBW mostly associated with maternal factors can be addressed directly by improving the socioeconomic factors (maternal age, educational level and economic status) and health status of pregnant women by supplementations, family planning services and female education.

G78(P)

FACTORS AFFECTING BOLUS IV FLUID PRESCRIPTIONS IN PAEDIATRICS

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Aims Bolus administration of 0.9% sodium chloride solution has been associated with hyperchloraemia, acidosis, acute kidney injury and increased mortality. Such adverse effects are believed to be less likely with balanced electrolyte solutions, such as Plasma-Lyte 148. Despite this, 0.9% sodium chloride solution remains a popular choice for intravenous fluid boluses in paediatrics. This project aims to establish current practice and to collect testimony from prescribers to help understand why decisions to prescribe specific fluids were made.

Method Paediatric patients in critical care areas (PICU and PHDU), the Emergency Department (PED) and in general ward areas who had been administered intravenous fluid boluses were identified using a pragmatic data collection technique and the dose, type of fluid, indication and patient's weight were recorded. Where possible, the prescriber was identified and asked to be interviewed. Prescribers were asked what factors had affected their decision to prescribe the type and dose of fluid administered.

Results More than 30 individual episodes of intravenous fluid bolus administration were identified. Most fluid boluses were administered in PICU and PHDU, where balanced electrolyte solutions, specifically Plasma-Lyte 148, were the most popular choice. On general wards and in PED, 0.9% sodium chloride solution remained the most commonly administered fluid bolus solution. While some prescribers were able to give confident explanations of the factors involved in fluid selection, others referred to clinical guidelines. Individual prescribers described how their prescribing practice would vary according

to the clinical setting; with senior clinicians and nursing staff being less accepting of balanced electrolyte solutions in general ward areas. Significant lack of knowledge of intravenous fluid physiology was demonstrated by some prescribers.

Conclusion Our findings demonstrate an increase in the administration of balanced electrolyte solutions, such as Plasma-Lyte 148, as fluid boluses; this is in keeping with other international surveys of fluid administration (1,2). Similarly, we have also found significant differences in fluid bolus administration practice across different clinical areas as demonstrated by Jonsson and Perner in 2017.

We have demonstrated the importance of on-going multi-disciplinary educational efforts in continuing the evolution of intravenous fluid bolus administration practice to reflect current best practice.

G79(P) PHYSICIAN AND PARENTAL DECISION-MAKING PRIOR TO ACUTE MEDICAL ADMISSION

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Background There is a rising number of acute medical paediatric emergency hospital admissions in England and Scotland, and the rise is explained by increased short-stay admissions. Our objective was to undertake qualitative interviews with parents and clinicians to better understand what factors, other than the health status of the child, may influence decision-making leading to an admission.

Methods Semi-structured interviews were conducted with parents, clinicians working in general practice, out-of-hours or accident and emergency (referring clinicians) and doctors working in acute medical paediatrics (receiving clinicians) within 24 hours of a child being admitted to hospital

Results Ten parents (including one caregiver), seven referring clinicians and ten receiving clinicians were interviewed. Parents described erring on the side of caution when seeking medical opinion and one mentioned anxiety. Among themes seen among referring clinicians, 'erring on the side of caution' was also identified as was managing 'parental anxiety' and acting on 'gut instinct'. Among receiving clinicians, themes included managing parental anxiety and increasing parental expectations of the health service.

Conclusions The study of parent and referring clinician decision-making prior to a hospital admission can identify 'teachable moments' where interventions might be delivered to slow or even arrest the rise in short-stay acute medical admissions. Interventions might, for example, assure parents or referring clinicians that hospital referral is not required and help clinicians understand what they interpret as 'parental anxiety'.

G80(P) HARMONISING ANTIBIOTIC USE WITHIN THE OXFORD ACADEMIC HEALTH SCIENCES NETWORK

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Antibiotic resistance is a very pressing concern to the future of paediatric infections and antibiotic use. We have a duty to

our patients to try and stop further antimicrobial resistance from occurring.

One way we thought we could try and tackle this very pressing concern is to establish a common guideline for antibiotic use for the common paediatric infections in the Oxford Academic Health Sciences Network (AHSN).

A total of 5 hospitals are included in the Oxford AHSN, four district general hospitals and one tertiary level hospital. This project involved a multidisciplinary team of professionals from within each hospital. The multiprofessional team included microbiology consultants, pharmacists, general paediatric consultants as well as infectious disease consultants.

Initially, in this multidisciplinary forum, the group looked at the positive microbiology culture and sensitivity results of all the sterile fluid samples sent to the laboratories, in all 5 hospitals, in the 2 years prior to the start of this project. That is looking at the years 2013–2015, within the region. The sterile fluid samples included were urine samples, blood culture samples and cerebrospinal fluid samples. This was an important initial step as we needed to know if a common guideline was plausible depending on the positive microbiology culture results. This work showed us that the organisms cultured in these samples were very similar, with similar resistance patterns within the whole region. Therefore allowing us proceed to harmonise practice of antibiotic prescribing throughout the network.

The group then looked at all the guidelines for antibiotic prescribing that were present within each hospital at the time. Looking at the similarities and differences at that time. With the results from the microbiology as stated previously and looking at the guidelines presented a consensus was reached within the group.

This project from start to finish took about 18 months to complete.

This guideline has the first line empiric antibiotic therapy recommended for the common paediatric infections including sepsis, meningitis and pneumonia. Also included in the guideline is urinary tract infections, joint infections, soft tissue infections, Ear nose and throat infections and abdominal infections.

This guideline is now embedded in practice in all of the four district general hospitals within the region as well as the tertiary level hospital.

G81(P) BRIDGING THE GAP: GP HUB CLINICS AND MDT TEACHING SESSIONS

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Aims Despite the fact that children account for 20%–25% of the caseload of GPs, training in Paediatrics is not compulsory. Public expectation is that parents should have access to specialist care immediately. Several studies have concluded that substantial numbers of children referred to secondary care can be successfully managed in primary care. These were the main drivers for setting up a GP hub clinic and Multi-disciplinary team (MDT) teaching sessions in our area.

Methods GP hub clinics were set up and evaluated over a period of 7 months between February and October 2017. Each clinic had capacity to see 5 new patients and took place