GLOBAL HEALTH SESSION 3

Chairs: Andrew Argent and Elizabeth Moulyneux

Rakesh Lodha

Highlighted challenges in moving from the "pathophysiological definitions of shock" through to actual clinical definitions. Highlighted how data from the FEAST study (particularly from those patients who did not have bolus therapy) may help to set rational definitions for Sepsis.

Derek Wheeler

Demonstrated the dramatic differences in both healthcare services (doctors, hospitals, CT scanners) across the world. Highlighted differences in utilization of critical care resources between Europe and the USA.
Demonstrated animal data regarding the impact of malnutrition and the intestinal microbiome.
Referred to the FEAST study and the implications of this study for clinical management across the world. However tension between the "clinical experience", the study results, the overall change in outcomes from sepsis in richer countries

E Molyneux

Need for very definite clinical guidelines, particular in the light of the confusion related to multiple definitions.
Provided an overview of the patients admitted to the FEAST study, and the context in which those patients were treated. Presented some of the data and commented on the "disbelief" that greeted the study from the international community. Reviewed the processes to move from these results through to development of clinical guidelines for implementation.
Presented the ETAT recommendations for management of very sick children.
Presented the GRADE review done by the WHO group in order to recommend therapy for critically ill children, and the subsequent recommendations. Perhaps a feature is the need for review of responses to therapy and overall trajectory of illness.
One of the challenges is the lack of clinical signs to predict what likely responses are expected from a fluid bolus.
Questions: should we abandon the term "shock" and use terms such as impaired or severely impared circulation. Possibly move away from the term "bolus"

N Kissoon

Consideration to move away from consideration of simply "death" as an outcome to "death and disability" – particularly in view of the drop in mortality in richer countries. Highlighted the need to address issues of maternal mortality together with paediatric (neonatal and under-5 mortality).

Presented data on systematic review of post-discharge mortality following severe sepsis. Then presented data from Wiens et al on the outcomes of patients admitted to hospital in Uganda with severe sepsis. Importantly there was nearly 5% post hospital mortality, and 2/3rds of these patients never returned to hospital. Most of the deaths happened within 30 days of hospital discharge

Referred to publications of Wiens et al (PLOS 1 2013). Development of prediction models for mortality on hospital discharge.. These children could have been flagged as high risk and increase the potential for follow-up.

Raised discussion of what we should consider as appropriate interventions for follow up of patients with severe sepsis and particularly with predicted high risk.

In fact the repeat illness had a very rapid onset. There were hesitations in parental healthcare seeking for a variety of reasons. Planned interventions included the development of a post-discharge "kit". Developed an "app" which used a small number of items to give a predicted risk of out of hospital mortality. Does appear as if there has been a drop in post-discharge mortality when looking at preliminary data.

A Argent

Retaining quality of care in isolation.

PICC is part of a system from which it must it be isolated. Isolation may be physical or medical – is Critical care seen as a priority in the health system? Do colleagues see CC as a priority?

Support is missing, both collegiate and technical: also the status of those who work in LIC is seen to be less than those in HICs.

Internet has made a great difference to a sense of remoteness.

Twinning can be challenging because they need time. The World Federation and meetings are a great forum to meet and share. Research initatives can build links. An example is when looking at the pre PICU pathway for patients it could be seen to be large and complicated. PICU is a cog in the process and relationships can be made throughout the pathwway to improve care and reduce isoltation.

Data networks lead to big data analyses but also local analyses and how they compare with other units. VON is a good example of how data sharing breaks down isolation. But are the programmes benefitting the LIC seetings equally with the HICs. The VON system has helped the Red Cross hospital to have good local data. This feedback is essential.

Data collection thus saves work rather making extra work there there are no extra hands available.
Training programmes: by expand the training team to include people from other departments or other health units helps to reduce isolation. This can include management.
Risks of isolation are that they get out of date, they cannot feed experience nito the larger CC community. Important head trauma research is needed – the numbers of cases are often where people work in isolation.
Quality needs to be relevant to the local situation.
Cooperation is helpful but needs to be respectful