A review of high dependency unit admissions in a busy maternity hospital

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Introduction:

Due to the Covid-19 pandemic, critical care demands on our health service have come into focus. In our stand-alone maternity hospital, patients requiring more than single organ support must be transferred to a general adult hospital for critical care, however those requiring single organ support or increased levels of monitoring are cared for in our high dependency unit. This is best practice for our patients but must be staffed appropriately. We sought to quantify our burden of HDU admissions, and to ascertain our reasons for admission.

Methods:

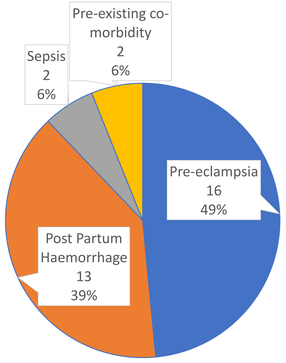
We retrospectively examined our high dependency admissions over a four-month period from July 2021 to October 2021. We separated our analysis into two groups- those admitted for obstetric reasons or those admitted for non-obstetric reasons (i.e. gynaecology patients).

Results:

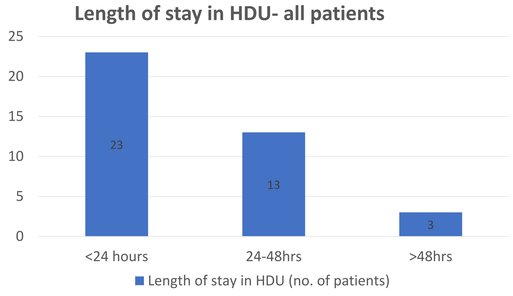
Over the four months we examined there were 2642 births, including 832 caesarean sections. In that time, 33 women were admitted to our HDU for obstetric reasons (1.2% of all births) and 6 women were admitted for reasons related to a gynaecological procedure.

The average age of obstetric admissions was 33.8 (range 22-45), and gynae admissions was 43 (range 31-75)

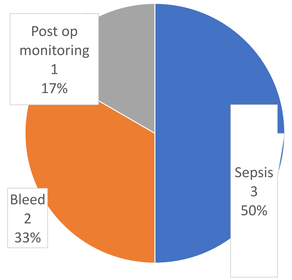
Obstetric admissions, total 33



Among our obstetric patients, pre-eclamptic toxaemia was the most common reason for admission (49% or 16/33), and post-partum haemorrhage was the second most common (39% or 13/33). Sepsis (6%) and management of a pre-existing medical co-morbidity (6%) made up the remainder of the admissions.



Gynae admissions, total 6



Post-operative sepsis was the most common reason for admission amongst our gynaecology patients (50%). 2 patients (33%) were admitted with a post-operative bleed, and 1 patient was admitted for monitoring post operatively because of pre-existing medical conditions.

Length of stay

59% of HDU admissions were discharged to ward level care within 24 hours, while only 3 women (7.6%) required stays of greater than 48hours.

Discussion:

The Health Service Executive guidelines for critically ill women in obstetrics in 2014 (1) recognised that quantifying high dependency care needs for obstetric patients is challenging, as most are managed within their local maternity HDUs and are not included in national data. Similar observations have been made in the UK, where the Intensive Care National Audit and Research Centre collects data on general intensive care admissions, but the critically ill women who are managed on maternity units are not included in national figures(2). The overriding principle in the care of sick postpartum women is to keep the woman and her baby together, if possible, to maximise bonding and ease psychological trauma (2). Therefore it is important that these patients are kept in their maternity hospital as far as is safe for them.

We hope that by auditing our hospital's critical care needs, we can ensure it is staffed appropriately, and more importantly that our staff receive the appropriate training in the management of the most common critical care issues.

References

1. Health Service Executive. Guidelines for the Critically Ill Woman in Obstetrics. Available at https://www.hse.ie/eng/services/publications/clinical-strategy-and-programmes/guidelines-for-the-critically-ill-woman-in-obstetrics.pdf. Accessed February 10, 2022
2. Royal College of Anaesthetists. Care of the critically ill woman in childbirth; enhanced maternal care. Available at https://www.rcoa.ac.uk/sites/default/files/documents/2019-09/EMC-Guidelines2018.pdf Accessed February 10, 2022