The Impact of Term Unexpected Admissions on a Tertiary Neonatal Unit in the West Midlands

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Myself

- Medical student at UoB.
- Active interest in paediatrics.
  - 3 weeks in BWH NNU.
  - Felt it would new and interesting to experience Neonates.
- Approached Drs Ewer and Rasiah.
Introduction

- Higher proportion of admissions are ‘unexpected’.
- Some unexpected admissions can be preventable:
  - Neonatal hypoglycaemia and hypothermia.
Aims

1. Assess the NNU workload.
2. Define the categories of these admissions.
3. Identify the potentially preventable admissions.
Methods

- Retrospective analysis.
- BADGER neonatal.net system at BWH.
- Carried out between 01/04/09 and 31/03/13.
Data collection using admission summaries and discharge letters with the following inclusion criteria:

1. Term babies (gestation of ≥37+0 weeks).
2. Admitted to the NNU/TC.
Results

Out of a total of 23,559 live births over 3 years, 1,711 were identified as unexpected admissions (7.3%).
Reasons for Unexpected Admission over 3 years

- Signs of respiratory distress: 501
- Suspected infection: 424
- Failed pulse Oximetry: 177
- Hypoglycaemia: 128
- Jaundice: 110
- Hypothermia: 77
- Hypoxic ischaemic encephalopathy: 47
- Biliious Vomiting: 47
- Low birth weight: 31
- Poor feeding: 24
- Others: 164

Legend: Reasons for Unexpected Admission over 3 years
Unexpected admissions due to potentially preventable hypothermia and hypoglycaemia amounted to **205** admissions (12%) over 3 years.
Over 3 years:

92.9% of babies went home.
6.5% were transferred to another hospital.
0.6% died.
Conclusion

- The main reason for term unexpected admission is because of signs of respiratory distress.
- **Failed pulse oximetry** contributed to approximately 10% of unexpected admissions over 3 years.
Conclusion (cont.)

- Unexpected admissions due to potentially preventable hypothermia and hypoglycaemia amounted to 12% over 3 years.
- We need to strive to reduce these unexpected admission through education and training of midwifery staff.
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