Midwife led Obstetric Triage
Reducing waiting time in maternity emergency department

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Obstetric triage is a brief, thorough and systematic maternal and fetal assessment performed when a pregnant woman attends for care, to determine priority for full evaluation (AWHONN).

A major factor in the development of obstetric triage was the introduction of the Emergency Medical Treatment and Active Labour Act (EMTALA), which took effect in 1986.
Obstetric triage units were created due to:

- Increased patient volume in obstetrics
- Due to need of heightened assessment of fetal and maternal surveillance
- Allow more rapid response to obstetric emergencies
- Prevent unnecessary admissions
- Improve utilization of obstetric bed capacity
- Decrease waiting time
Obstetric triage

It is fundamental to ascertain if:

- The patient problem is **due to** the pregnancy (Hyperemesis, PET)
- The patient problem is **unrelated to, but affected by** the pregnancy (Anemia, Heart disease)
- The patient problem is something that **affects the pregnancy** (Diabetes)
- Gynaecological problems as oppose to general problems (Right sided lower abdominal pain – Ovarian cyst / appendicitis/ ectopic pregnancy)
Common presentations to emergency department

- Attend for obstetric and non obstetric causes (problems unrelated to pregnancy)
- Antenatal – Vaginal bleeding, Miscarriages, Abdominal pain, Ectopic pregnancy, UTI, Hyperemesis, Fall, RTA, Itch / Rash in pregnancy, Hypertension, Absent or Reduced Fetal movements, Pyrexia, Retained products of conception
- Postnatal – Episiotomy infections, Caesarean scar infection, Endometritis, Retained placenta, mastitis, pyrexia, UTI
- Gynae – Dysfunctional uterine bleeding, Infection, Pelvic pain, UTI, Post colposcopy bleeding and infections, Bartholin's abscess, Ovarian cyst, Torsion, Post operative complications
Obstetric triage system

- Patients are seen and triaged according to their clinical presentation.
- Patient details and presenting complaints, along with their time of admission are logged for number and nature of presentations in a shift, for clinical handover, audit, follow up of outcomes and for legal purposes.

- **Policies and guidelines – examples**
  - Women over 20 weeks attending with pains and bleeding are brought to delivery ward.
  - Collapsed patient is brought straight to recovery bypassing emergency department.
  - Ambulance control is advised to contact a specific number with patients details prior to arrival.
  - Neonatal emergency presentations are seen in Baby emergency department.
<table>
<thead>
<tr>
<th>Level</th>
<th>Type</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>Resuscitation</td>
<td>see patient immediately</td>
</tr>
<tr>
<td>II</td>
<td>Emergency</td>
<td>within 15 minutes</td>
</tr>
<tr>
<td>III</td>
<td>Urgency</td>
<td>within 30 minutes</td>
</tr>
<tr>
<td>IV</td>
<td>Less Urgency</td>
<td>within 60 minutes</td>
</tr>
<tr>
<td>V</td>
<td>Non Urgency</td>
<td>within 120 minutes</td>
</tr>
</tbody>
</table>

- **Level 1** – Imminent birth, active bleeding with or without pain, seizure activity, abnormal CTG, no fetal movements, cord prolapse, sepsis, severe respiratory distress
- **Level 2** – Suspected preterm labour < 37 weeks, bleeding > than spotting, BP > 160/100 with symptoms, decreased fetal movements, abnormal CTG/scan, major trauma, ruptured ectopic, SOB
- **Level 3** – signs of active labour > 37 weeks, BP – 140/90 with or without signs and symptoms, abdominal pain, flank pain, bleeding – miscarriage
- **Level 4** – signs of early labour, PPROM, PV spotting, minor trauma, nausea, vomiting
- **Level 5** – Discomforts of pregnancy, blood tests
Emergency Attendances

- Walk in service is facilitated in OPD Monday to Friday between the hours of 8 am – 4 pm with attendances ranging from 450 – 550/ month.

- Out of hours walk in service is provided from the hours of 4 pm – 8am in FAU with numbers ranging from 550 – 800/ month. Service is provided on a 24 hour basis on weekends and bank holidays.

- Daily numbers range from 40 – 50, monthly numbers from 1000 – 1300 and yearly numbers range from 13000 – 15000

- Development of a dedicated 24/7 obstetric emergency department will be an important innovation within the hospital for late 2015
EMERGENCY ROOM ATTENDANCES
BY MONTH

<table>
<thead>
<tr>
<th></th>
<th>JAN</th>
<th>FEB</th>
<th>MAR</th>
<th>APR</th>
<th>MAY</th>
<th>JUNE</th>
<th>JULY</th>
<th>AUG</th>
<th>SEP</th>
<th>OCT</th>
<th>NOV</th>
<th>DEC</th>
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<tbody>
<tr>
<td>2013</td>
<td>1044</td>
<td>998</td>
<td>1115</td>
<td>1162</td>
<td>1254</td>
<td>1128</td>
<td>1127</td>
<td>1212</td>
<td>1163</td>
<td>1148</td>
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<td>1233</td>
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<tr>
<td>2014</td>
<td>1229</td>
<td>1148</td>
<td>1210</td>
<td>1164</td>
<td>1254</td>
<td>1136</td>
<td>1211</td>
<td>1183</td>
<td>1187</td>
<td>1226</td>
<td>1091</td>
<td>1180</td>
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</table>
Number of scans performed in emergency room
Admission to emergency department

- Self referral
- GP referral
- Private room referral
- Hospital transfer (in utero transfer)
- Hospital referral
- Ward transfer (? Ectopic, SROM, Twins)
- Clinic transfer (CTG, scan)
- Via ambulance
Quality and safety in Obstetric emergency department
Midwife led obstetric triage

- Patient is brought to the unit by admissions staff or by ambulance
- Assessment of the presenting problem, including vital signs is done to determine clinical urgency
- Physical examination
- Differential diagnosis is formulated
- Electronic fetal monitoring (CTG) is the most widely used modality for fetal heart rate evaluation and is done over 28 weeks
- Blood tests depending on presenting complaints
- IV cannulation and IV fluids is commenced for unstable patients, hyperemesis
- Documentation
- Formal ultrasound report is provided
Midwife led obstetric triage

- CTG is performed and interpreted
- Medicinal prescribing and prescriptions
- Advice and health education to patients and families
- Breaking bad news (miscarriages, intrauterine deaths)
- Counselling
- Follow up and referrals
- Follow up of lab reports
- BHCG follow up and scans
- Anti D follow up
- Breastfeeding support
- Ongoing teaching and supervision for new doctors and midwives
- Telephone triage
Case study - 1

- 40 year old woman attended the unit with history of light vaginal bleeding and mild lower abdominal pain. Unsure of LMP, irregular periods, did not use any form of contraception.

- History was taken, was clinically stable, physical examination revealed left iliac fossa discomfort.

- Ultrasound scan performed showed empty uterus, left sided live ectopic relating to 9 week pregnancy, and free fluid. She was transferred to theatre. Left salpingectomy was performed with an estimated blood loss of 1000mls.

- History, Vitals, Physical examination, Differential diagnosis, Ultrasound scan, Communication of results, IV cannulation, Bloods to lab, Involvement of multidisciplinary team, Informing OT, Preparing patient for OT, Transferring patient to OT.
Case study 2

- 30 year old woman, 1st pregnancy, 34 weeks pregnant attended with history of reduced fetal movements for 2 days, she reported a change in pattern and strength of movements.

- Uneventful antenatal period.

- Ultrasound scan performed revealed fetal demise, small for gestation baby with oligohydramnios. Formal ultrasound report was provided.

- History, vitals, scan, breaking bad news (communicating scan findings with patient and family), communicating findings with multidisciplinary team. Person centered, effective, safe, timely care was initiated in emergency department with available resources and information.
Case study - 3

- 37 year old woman, 3rd pregnancy attended emergency department at 11 weeks with bleeding. 2 previous scans confirmed viable intrauterine pregnancy.

- Scan revealed missed miscarriage. Formal ultrasound report generated.

- Patient was reviewed by doctor prior to discharge.

- History, vitals, physical examination, speculum examination, scan, communicating scan findings with couple, discussion of miscarriage management options with couple, communicating scan findings with doctor, arranging follow up and referrals.
Case study - 4

- 23 year old woman, 13 weeks pregnant attended with history of left flank pain, urgency, frequency and mild discomfort on micturition.

- Patient had low grade temperature, and high pulse. Urinalysis showed leucocytes, nitrites and protein. Findings were recorded in IMEWS. Physical examination showed generalised abdominal tenderness and left costovertbral angle tenderness. Left pyelonephritis was suspected.

- Patient was reviewed by the doctor and diagnosis was confirmed. Treatment was initiated in ED and patient was admitted to AN ward.

- History, vitals, Physical examination, Differential diagnosis, IV cannulation, Phlebotomy, Scan, Communicating findings, Prescribing medications, Communicating findings with multidisciplinary team, Securing bed allocation and verbal hand over to ward staff.
Case study - 5

- 26 year old woman, 6 days post SVD attended the unit with pain at episiotomy site. Postnatal check revealed episiotomy site infection. Wound swab was send to lab.

- Discussion with patient regarding clinical findings.

- Prescription for antibiotics and analgesia was given according to the hospital policy.

- Patient was advised to contact hospital after 48 hours for results.

- Patient was seen and discharged by the midwife from the emergency room.

- History taking, vitals, physical examination (postnatal checks), consent, wound swab to lab, health education and advice, prescribing medications, follow up.
Out of hours Emergency Department Audit

- Patient satisfaction survey and review of services was conducted to identify ways of improving services.

- Survey was done for a month.

- Questionnaires were given to patients on arrival to unit and were collected prior to leaving the unit.

- Out of the 694 patients who attended the unit 159 patients completed the survey forms.
Findings

SURVEY RESPONDENTS BY CARE PROVIDER

- **48%**: BOTH
- **42%**: MIDWIFE
- **10%**: DOCTOR
Findings

Time from arrival to discharge

<table>
<thead>
<tr>
<th>Time Interval</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 1 hour</td>
<td>76</td>
</tr>
<tr>
<td>2 - 4 hours</td>
<td>67</td>
</tr>
<tr>
<td>4 - 6 hours</td>
<td>14</td>
</tr>
<tr>
<td>Over 6 hours</td>
<td>2</td>
</tr>
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</table>
Future Plans

- The development of a dedicated 24/7 obstetric emergency department will be an important innovation within the hospital for late 2015.

- Have core triage staff and clarify roles of triage staff.

- Implement triage competency.

- The development and implementation of triage screening tools, algorithms, and practice guidelines to improve documentation and clinical assessment.

- Support midwives to undertake education programmes such as prescribing, phlebotomy, IV cannulation, CTG and ultrasound.

- Adequate training in telephone triage.

- Ongoing education for midwives.

- Revisit audits to ensure meeting standards.
Conclusion

- The above case studies and audit findings clearly outlines the extended role of midwives in obstetric emergency room.
- History taking skills, physical examination, competence in phlebotomy and intravenous cannulation, medicinal prescribing, ultrasound scanning and formulating differential diagnosis helps the midwife to provide comprehensive care to women antenatal and postnatal.
- These necessary skills set will help midwives working in an obstetric emergency department to provide pregnant women and their families with a person centered, effective, safe, timely and optimal quality care.
- Extended role of midwives thus help reducing waiting time, increase patient satisfaction, and helps in providing safe and quality care for women and their families.
Thank You!

Thank you!

Yeah, thanks a lot!

We really appreciate it!