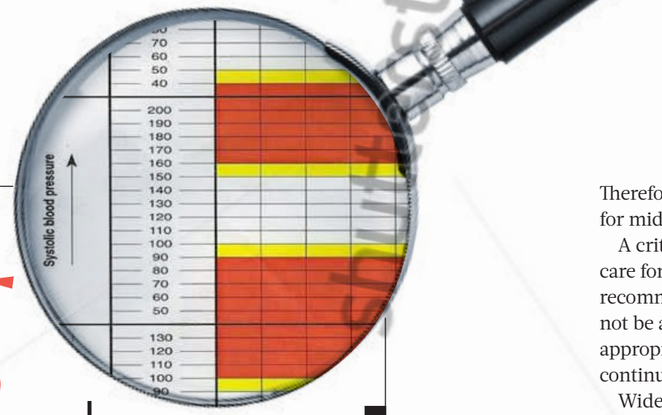
# *Thinking* outside the box




The MEOWS chart is a valid tool in identifying physiological changes preceding critical care. But ***Jo Killingley*** questions whether it promotes the development of critical analysis in midwives.

**THE EARLY WARNING SCORE (EWS) CHART** was introduced in the 1990s and its success in detecting change and identifying 'at risk' patients led to the development of the modified early warning score (MEWS). This identified risk and deterioration over time by measuring the patient's basic clinical indicators of oxygen delivery and tissue perfusion (see Table 1).

The chart was further developed after the Confidential Enquiry into Maternal and Child Health 2007 and 2011 reports (CMACE, 2011; Lewis, 2007). A modified early obstetric warning system (MEOWS) was recommended as a means to track early physiological parameters and aid early recognition of acutely unwell women.

But, while the MEOWS chart is successful in identifying 'at risk' women, does it promote critical thinking or holistic care? Midwifery is autonomous, holistic and encompasses tacit knowledge. Is it undermining the autonomous holistic dyad of care from midwives to use a chart that determines the direction of care?

The current leading cause of death is maternal sepsis – there were 83 deaths in the UK and Ireland between 2009 and 2012 (Knight et al, 2014). Recognition of these symptoms (see Table 2) must be made on an individual basis and not mistaken as a by-product (see Table 3).

**TABLE 1**

| Basic clinical indicators of oxygen delivery and tissue perfusion |
|---|
| Oxygen saturation |
| Respiratory rate |
| Conscious level |
| Capillary refill time |
| Heart rate |
| Urine output |
| Blood pressure |

**TABLE 2**

| Some of the symptoms of sepsis | |
|---|---|
| Pyrexia | Skin rash |
| Fever | Hypothermia |
| Diarrhoea | Breast tenderness |
| Vomiting | Hypoxia |
| Abdominal pain | Urinary symptoms |
| Tachycardia | Offensive vaginal discharge |
| Hypotension | Oliguria |
| Tachypnoea | Impaired consciousness and failure to respond to treatment |
| Wound infection | |

**TABLE 3**

| Potential symptoms which should not be discredited |
|---|
| A mother feeling warm as a result of full breastmilk and therefore her temperature is dismissed |
| Abdominal discomfort – contributing factor to the uterus involuting and therefore no further investigations |
| Tiredness and lethargy – assumed due to the physical demands of birth and feeding a newborn baby |

Therefore, critical thinking is an essential skill for midwives.

A critical analysis and understanding of holistic care for a woman must be in line with RCOG (2012) recommendations. They state the MEOWS chart must not be an isolated assessment, but a trigger for the appropriate professional to review and to ensure there is continuous observation to prevent further deterioration.

Wider observation and critical thinking can be supported by a variety of tools (Sepsi Six Plus Two, Think Sepsis, SBAR, PROMPT and escalation policies). In isolation, the tools are poor predictors (Edwards et al, 2014) so, to care for women safely, a prompt response will provide a clear pathway for a multidisciplinary approach.

Evaluative Thinking (ET) – defined by Buckley et al (2015) as critical thinking applied to contexts of evaluation – can be a complex skill and difficult to develop, especially if it is linked to an event, such as caring for a woman with a deteriorating condition. For educators and mentors, it is imperative to create and cultivate evaluative thinkers in student midwives. Raskoff and Matsumoto (2015) discuss the perils of critical thinking for students – information is readily available, but the ability to assess its quality is a skill set that should be practised.

*The MEOWS chart must not be an isolated assessment, but a trigger for the appropriate professional to review*

The MEOWS chart is instrumental in the identification of physiological change in women. However, it needs to be used in conjunction with thinking, acting, communicating and delivering high standards of holistic care (Banfield and Roberts, 2015). This is what we must teach our students.

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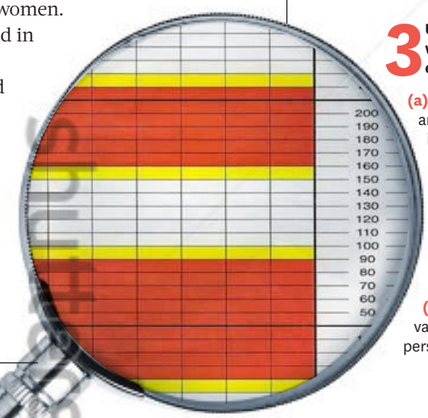


## THINKING CRITICALLY IN THE WORKPLACE

Practical strategies examples of activities (Buckley, 2015)

**1 Create an intentional evaluative thinking (ET) learning environment**

**(a)** Display logic models in the workplace, for example, in meeting rooms and newsletters.

**(b)** Create public spaces to record or display questions and assumptions.

**(c)** Post questions, such as: 'How do we know what we think we know?'

**(d)** Highlight the learning that comes from successful evaluations and also from 'failures' or dead ends.

**2 Establish a habit of scheduling meeting time focused on ET practice**

**(a)** Have participants 'mine' their logic model for information about assumptions and how to focus evaluation work. For example, categorising outcomes according to stakeholder priorities.

**(b)** Use opening questions to start an ET discussion, such as: 'How can we check these assumptions out for accuracy and validity?' and 'What plausible alternative explanations are there for this finding?'

**(c)** Engage in critical debate on a neutral topic.

**(d)** Critically review and identify assumptions in a published article.

**3 Use role-play when planning evaluation work**

**(a)** Conduct a scenario analysis. Have individuals or groups analyse and identify assumptions embedded in a written description of a fictional scenario.

**(b)** Take on various stakeholder perspectives using the 'thinking hats' method in which participants role-play as a particular stakeholder (De Bono, 1999).

**(c)** Conduct an evaluation simulation – simulate data collection and analysis for your intended evaluation strategy.

**4 Diagram or illustrate thinking with colleagues**

**(a)** Have teams or groups create logic and pathway models (theory of change diagrams or causal loop diagrams).

**(b)** Diagram the programme's history.

**(c)** Create a system, context, and/or organisation diagram.

**5 Engage in supportive, critical peer review**

**(a)** Review peer logic models – help identify assumptions in their theory of change.

**(b)** Use the critical conversation protocol – a structured approach to critically reviewing a peer's work through discussion.

**(c)** Take an appreciative pause – stop to point out the positive contributions and have individuals thank each other for specific ideas or support.

**6 Engage in evaluation**

**(a)** Ensure that all evaluation work is participatory and that members of the organisation at all levels are offered the opportunity to contribute their perspectives.

**(b)** Encourage members of the organisation to engage in informal, self-guided evaluation work.

**(c)** Access tools and resources necessary to support all formal and informal evaluation efforts, including the support of external evaluators, ECB professionals, data analysers.