THERAPY UNIT

<u>Objectives:</u>

Upon completion of this unit, participants will be able to critically appraise an article about therapy specifically, they will be able to:

1. Assess risk of bias in an article about therapy
2. Evaluate and understand measures of effects including OR, RRR, RD, and NNT
3. Evaluate the precision of the results (95% confidence interval)
4. Apply the results to their patient, balancing benefits of the treatment and side effects, costs and consideration for alternative therapy.

<u>References:</u>

Guyatt G, Rennie D, Meade MO, Cook DJ. Users' Guides to the Medical Literature: A Manual for Evidence-based Clinical Practice. 3rd ed. New York, NY: McGraw-Hill; 2015.
<u>Chapters</u>: 7, 8, 9, 10, 11.4, 12.3, and 13.2
<u>Advance reading:</u> Chapters: 8, 12.4, 13.1 and 13.4

<u>Assignment:</u>

1. Read the clinical scenario
2. *<u>ASK:</u>* Formulate a PICO question based on the clinical scenario
3. *<u>ACQUIRE</u>*: Identify the most appropriate database(s). Conduct a literature search to address the PICO question and identify the most relevant article about the therapy in question
4. *<u>APPRAISE</u>*: read the article provided, below, and critically appraise the article guided by the reading material and the provided worksheet.
5. *<u>APPLY</u>*: Consider how similar the study population to your patient. Evaluate the balance between the benefits of the intervention and the adverse events and cost.
6. *<u>ACT:</u>* how will you utilize this evidence to counsel your patient and make recommendations for management?

<u>Clinical Scenario:</u>

You are the Pediatrician on call at a community hospital. You were called to speak to a woman 35 weeks pregnant who has rupture of membranes but no other signs of labour. An Obstetrics resident called you because the mother is asking whether it is appropriate to receive antenatal corticosteroid injections to decrease the risk of respiratory distress in her baby. She had a previous preterm delivery at 32 weeks and at that time it was recommended to her to receive 2 injections of Betamethasone. Her previous baby had uncomplicated course and did not require mechanical ventilation.

You know that the current guidelines recommend Betamethasone to pregnant women before 34 weeks. You are not aware of the evidence for gestations beyond 34 weeks but you are aware that some neonatologists are recommending it. You decide to search the literature to be able to provide evidence

based counseling and recommendations.

Search Strategy and Selected Article:

You decide to search Pubmed, and you enter 2 keywords "betamethasone AND pregnancy"
You find the following article:

Gyamfi-Bannerman C, Thom EA, Blackwell SC, et al. Antenatal Betamethasone for Women at Risk for Late Preterm Delivery. New England Journal of Medicine. 2016;374(14):1311-1320.