## Placebo Response

- What did you think?
- What did you find most compelling/want to discuss?
- Anything you disagreed with?
- What was the history of the placebo effect?
- Did you notice that thalidomide was mentioned here, like it was in Bradford Hill?
- What were some of the cultural differences?



## What should we do?

• At what point is it medically appropriate for a doctor to conclude that a placebo is the best "therapy" for a patient?





## Case Study

- Newborns can acquire HIV from their mothers at the moment of birth. In some African countries, more than 30% of pregnant women who are examined at perinatal clinics are infected with the AIDS virus.
- AZT reduces the chance of baby being infected. In the United States, pregnant women infected with HIV are advised to use this regimen.
- In 1997 American and African researchers gave a placebo, rather than AZT, as a control to pregnant women in Africa who were infected with HIV and were participating in clinical trials.
- The researchers were evaluating lower and fewer doses of AZT in the studies to see if low doses might be effective, because of the expense.



## Matched Pairs Experiments

In a matched pairs experiment, each person is matched with someone similar or they act as their own control. This is another way to try and account for possible confounding.

Example: Half the swim team is given a caffeine tablet, half is given a placebo. Then they are asked to swim 10 laps as fast as possible while being timed. Two weeks later, the half that got placebo are given caffeine while the half that were given caffeine got placebo. They were timed again. Each swimmer's placebo score is compared to the caffeine score