## Simple Study Designs

Example 1: A randomized clinical trial (RCT) was conducted to compare the efficacy of subcutaneous heparin versus intravenous (IV) heparin in preventing new episodes of deep vein thrombosis (DVT) in patients admitted to hospital for treatment of an initial episode. Patients were followed for 90 days following initial therapy. Of **213** patients assigned to the subcutaneous arm, **6** experienced new episodes compared to **15** episodes in **219** patients assigned to IV. link to source article

Example 2: Sleep apnea is a condition where sufferers periodically stop breathing during sleep due to constriction of the airways. The condition can be treated by having patients wear nasal masks which are pressurized by a small air pump to keep airways open. The traditional method of diagnosing sleep apnea is for a suspect patient to undergo an overnight sleep test in a clinic. Researchers at the University of Calgary developed a device for conducting such tests in the patient's home, avoiding the expense of the clinic based test. **241** subjects who had been referred for assessment after an initial examination underwent both the clinic and the home based test. Of these patients, **116** tested positive on both tests, **108** were negative on both tests, **1** tested positive only on the overnight test. link to source article

Example '3: In a landmark study published in 1950 by Richard Doll and Austin Bradford Hill in the U.K. **60** female lung cancer patients were compared with **60** similarly aged healthy patients. **41** of the cancer patients were established smokers compared to **28** in the control group. link to source article

**Example 4:** Last year saw the publication of the "Royal College of General Practitioners Oral Contraception Study", which looked at the relationship between oral contraceptive use and overall mortality. Quoting from the abstract:

**46,112** women were observed for up to 39 years, resulting in **378,006** woman years of observation among never users of oral contraception and **819,175** among ever users. **1,747** deaths occurred in never users of oral contraception and **2,864** in ever users.

link to source article