What is critical appraisal?

- **Critical appraisal** is the process of carefully and systematically examining research to judge its trustworthiness, and its value and relevance in a particular context.

- The **Critical Appraisal Skills Programme** aims to help people develop the necessary skills to make sense of scientific evidence, and has produced appraisal checklists covering **validity**, **results** and **relevance**.

- Different research questions require different study designs. The best design for studies evaluating the effectiveness of an intervention or treatment is a **randomised controlled trial**.

- Studies are also subject to **bias** and it is important that researchers take steps to minimise this bias; for example, use of a **control group**, **randomisation** and **blinding**.

- **Odds ratios**, **risk ratios** and **number needed to treat** are methods of analysing results in order to determine if an intervention is effective.

- **Systematic reviews**, which collect, appraise and combine evidence, should be used when available.