

Critical appraisal skills programme

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Welcome to the CASP UK Website

The Critical Appraisal Skills Programme helps people to find and interpret the best available evidence from health research.

It is part of an [international network](#) that shares a commitment to self-directed learning and promoting better understanding of science.

On this website you can [find out about the CASP approach](#), download the CASP checklists, and find out what sort of workshops we offer to help improve your appraisal skills.

You can even [commission one](#) that is custom designed for your needs.

Introduction by Amanda Burls:



➔ [Checklists](#)

➔ [Workshops](#)

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<http://www.casp-uk.net/>

The exponential growth of the availability of collected scientific information has made the task of finding the necessary evidence difficult and increasingly complicated.

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A methodological approach coupled with the right tools and skills to match these methods is essential for finding meaningful results. The internet has redefined and simplified search capabilities of individuals by ensuring the availability of various databases of systematic reviews, bibliographic databases, and the vast amount of published and unpublished literature concealed in various niches of the World Wide Web.

Critical appraisal skills are important in order to “sift the grain from the chaff.” These skills help in making sense of research methodologies, ensuring reliability, and for drawing the right conclusions in a particular situation. Study designs are subject

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to a number of variables that introduce bias and it is highly recommended to use an array of standardized checklists to decide the quality of the study.

One of the earliest efforts at developing a formal methodology for critical appraisal was the Critical Appraisal Skills Programme (CASP) developed in Oxford in 1993 by Dr. Amanda Burls. The program has now evolved into an international network with branches in many countries, including India.

The website of the program (www.casp-uk.net) is a virtual platform for all that CASP stands for. The homepage of the website leads on to the CASP approach of Find, Appraise, and Act. Finding the evidence is further explained and focuses on searching various types of sources that include secondary sources, bibliographic resources, and gray literature. Examples of these sources are quoted along with their scope and major limitations.

The section on Appraising the evidence lays stress on finding out the reliability of scientific articles and their unbiasedness. Methods of critical reading that lay stress on validity of studies, importance of results, and their application to the research needs are explained. Various standardized checklists can be downloaded from a link on this page. The page on “Acting on the Evidence” explores as to what extent we can apply the findings of a study to our own situation, practical issues that affect the study, and the applicability in the local context. Patient-centered decision making is also explained and its importance in the context of evidence is explored.

Separate checklists, each comprising 10-12 questions each, are available for the appraisal of Randomized Controlled Trials, Systematic Reviews, Cohort Studies, Case-Control Studies, Qualitative Studies, Economic Evaluations, Diagnostic Studies, and Clinical Prediction Rule. These lists are wide-ranging and lend direction to any researcher who embarks on a study or has questions regarding its outcomes. These checklists which allow a structured approach to finding evidence have the potential

to improve the quality of an individual’s study plan and could be used to screen out research that is of low quality. Although less comprehensive than the methodology followed by Consort Group (www.consort-statement.org), the CASP guidelines are easier to follow, especially for the novice researcher.

Two checklists that have a definite edge over other similar lists are the Diagnostic Checklist and the Economic Evaluation checklist. The more prevalent STARD (Standards for the Reporting of Diagnostic Accuracy Studies) website (www.stard-statement.org) provides a detailed checklist and an intricate flowchart; however, the 12-question CASP Diagnostic checklist is easier to follow and implement. Similarly the CASP Economic Evaluation checklist is unique and provides a simple and easy-to-implement algorithm for economic evaluation of a research study.

Conducting training for scientists and clinicians working in various spheres is one of the major activities of CASP, especially after it became a not-for-profit international entity. The webpage pertaining to workshops gives details of the methodology adapted for training, the calendar of forthcoming events, and the opinion of different individuals who have attended these proceedings. An exclusive function carried out by the training team is to train the trainers, who in turn spread the message to others by imparting critical appraisal skills.

The CASP propagates a systematic process through which the strengths and weaknesses of a research study can be identified. Adherence to this process enhances the usefulness of a study and its findings. It also helps in assessing study design and the applicability of studies to a local perspective in the most economical manner.

CASP is recommended for new researchers and those who wish to have quick, simple, and easy-to-understand tools for answering common questions regarding a scientific study.

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