Bias assessment refers to the process of identifying, evaluating, and accounting for systematic errors or deviations in research or data that may distort findings, conclusions, or interpretations. It is a critical component of quality appraisal in studies, particularly in systematic reviews, meta-analyses, and clinical trials.

 Definition (Concise) Bias assessment is the evaluation of the risk that a study's results are distorted due to systematic errors in its design, conduct, analysis, or reporting.

 Key Aspects Types of Bias assessed may include:

Selection bias (non-random allocation or recruitment)

Performance bias (differences in care provided)

Detection bias (differences in outcome assessment)

Attrition bias (loss of participants)

Reporting bias (selective outcome reporting)

Tools used for bias assessment include:

Cochrane Risk of Bias Tool (RoB 2)

ROBINS-I (for non-randomized studies)

QUADAS-2 (for diagnostic studies)

Purpose: To determine the credibility and reliability of evidence, guiding evidence-based decisions.