

Assessment of Adherence to the STARD Statement for the Quality of Reports on Diagnostic Studies Published on the Iranian Journal of Radiology

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Received 2016 December 21; Accepted 2017 February 08.

Abstract

Background: Standards for the Reporting of diagnostic accuracy studies (STARD) statement was developed to improve the accuracy and completeness of reporting of studies of diagnostic accuracy. It allows readers evaluate the internal and external validity and enable readers to assess the potential for bias in the study and the generalizability of the results.

Objectives: Up to date, few data exist about the quality of diagnostic accuracy studies in Iran. Therefore, we evaluated the extent of adherence to the STARD for the quality of reports on diagnostic accuracy studies in the Iranian journal of radiology.

Methods: In this cross-sectional descriptive study, we searched Iranian journal of radiology and retrieved all diagnostic accuracy studies for recent 3 years and evaluated their adherence to STARD. We used STARD checklist (version January 2003) available at www.stard-statement.org

Results: We identified about 14 potential diagnostic accuracy studies meeting our inclusion criteria. In this preliminary study 50% identified the article as diagnostic accuracy study in the title or abstract (MeSH heading sensitivity and specificity). 4% reported details of blinding. 3% had a flow diagram. 38% described the number, training and expertise of the persons reading the index tests and the reference standard. 25% reported definition of cutoffs and/or categories of the results of the index tests and the reference standard. Only 40% of the reports of diagnostic evaluations reported precision for the estimates of diagnostic accuracy. The occurrence of uninterpretable, indeterminate and intermediate test results were 30%. The report time interval from the index tests to the reference standard was 40%. Only 40% of articles reported on more than 50% of STARD items, while no articles reported on more than 85%. A flow chart was presented in 3 articles. Assessment of reporting on individual items of the STARD statement revealed wide variation, with some items described in 15% of articles and others in 100%. Mean STARD score (0 - 25 points available) was 14.8 (range, 5.5 ± 19.5).

Conclusions: These findings show non-adherence to the STARD. The authors, reviewers, and editors should pay more attention to reporting by checking STARD statement items and including a flow diagram to represent study design and patient flow.

This is an abstract presented in the 33rd Iranian congress of radiology (ICR) and the 15th congress of Iranian radiographic science association (IRSA).