Population Medicine

**Supplementary file**



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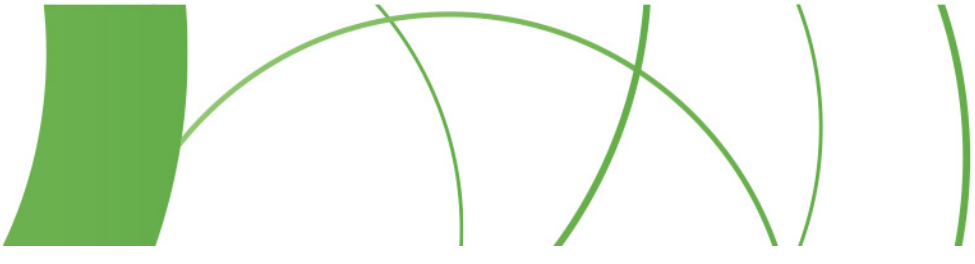

# STROBE Checklist for Cross-Sectional Studies

*STrengthening the Reporting of OBservational studies in Epidemiology*

Manuscript: Association between documented tuberculosis history and COPD among patients attending respiratory clinics in Jember, Indonesia

| Item No | Section/Topic | Recommendation | Status | Page/Location & Notes |
|---|---|---|---|---|
| **TITLE AND ABSTRACT** | | | | |
| 1a | **Title** | Indicate the study's design with a commonly used term in the title or the abstract. | Yes | "cross-sectional study" in title. |
| 1b | **Abstract** | Provide in the abstract an informative and balanced summary of what was done and what was found. | Yes | Structured abstract (Introduction, Methods, Results, Conclusions) present. |
| **INTRODUCTION** | | | | |
| 2 | **Background/rationale** | Explain the scientific background and rationale for the investigation being reported. | Yes | Background on COPD, TB burden, and Jember setting provided. |
| 3 | **Objectives** | State specific objectives, including any prespecified hypotheses. | Yes | Study aim clearly stated in final paragraph of Introduction. |
| **METHODS** | | | | |
| 4 | **Study design** | Present key elements of study design early in the paper. | Yes | "multicenter clinic-based cross-sectional study" stated in first sentence of Methods. |
| 5 | **Setting** | Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection. | Yes | Three clinics in Jember Regency; January–December 2022 specified. |
| 6 | **Participants** | Give the eligibility criteria, and the sources and methods of selection of participants. | Yes | Inclusion and exclusion criteria listed explicitly. |
| 7 | **Variables** | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable. | Yes | Primary outcome (COPD), exposure (TB history), and all covariates defined. |
| 8 | **Data sources/measurement** | For each variable of interest, give sources of data and details of methods of assessment (measurement). | Yes | Standardized data extraction form, paper and electronic records described. |
| 9 | **Bias** | Describe any efforts to address potential sources of bias. | Yes | Selection and misclassification bias acknowledged in Discussion |
| 10 | **Study size** | Explain how the study size was arrived at (sample size calculation or use of all available records). | Yes | Total population of 1,730 mentioned |
| 11 | **Quantitative variables** | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why. | Partial | Age categorized as ≤45 vs. >45 years, but no explicit justification for this cut-off provided. |
| 12a | **Statistical methods** | Describe all statistical methods, including those used to control for confounding. | Yes | Poisson regression with robust variance, bivariate and multivariable models described. |
| 12b | **Subgroups/interactions** | Describe any methods used to examine subgroups and interactions. | N/A | No subgroup or interaction analyses conducted. |
| 12c | **Missing data** | Explain how missing data were addressed. | Partial | Missing data handling mentioned (exclusion); predefined rules cited but not detailed. |
| 12d | **Sampling strategy** | If applicable, describe analytical methods taking account of sampling strategy. | N/A | Not applicable; all eligible records during study period included. |

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|---|---|---|---|---|
| 12e | **Sensitivity analyses** | Describe any sensitivity analyses. | No | No sensitivity analyses were performed or reported. |
| **RESULTS** | | | | |
| 13a | **Participants – numbers** | Report numbers of individuals at each stage of study (eligible, examined, confirmed eligible, included, analysed). | Partial | Total eligible (1,730) and included (1,576) stated; reasons for exclusion briefly noted but not fully itemized by stage. |
| 13b | **Non-participation reasons** | Give reasons for non-participation at each stage. | Yes | Exclusion reasons stated (missing COPD/TB data, duplicates). |
| 13c | **Flow diagram** | Consider use of a flow diagram. | Yes | Flow diagram referenced as Figure 1. |
| 14a | **Descriptive data** | Give characteristics of study participants (demographic, clinical, social) and information on exposures and potential confounders. | Yes | Participant characteristics reported in Table 1. |
| 14b | **Missing data per variable** | Indicate number of participants with missing data for each variable of interest. | Yes | Number of missing values per variable reported. |
| 15 | **Outcome data** | Report numbers of outcome events or summary measures. | Yes | COPD prevalence (67.1%, n=1,058 of 1,576) and TB history (27.5%) reported. |
| 16a | **Main results** | Give unadjusted and adjusted estimates and their precision (95% CI). Make clear which confounders were adjusted for and why. | Yes | Crude and adjusted PR with 95% CI reported; confounders listed. |
| 16b | **Category boundaries** | Report category boundaries when continuous variables were categorized. | Partial | Age cut-off (≤45 vs. >45 years) reported. |
| 16c | **Absolute risk** | If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period. | N/A | Cross-sectional design; prevalence ratios used directly. Not applicable. |
| 17 | **Other analyses** | Report other analyses done, e.g. analyses of subgroups and interactions, and sensitivity analyses. | N/A | No other analyses conducted. |
| **DISCUSSION** | | | | |
| 18 | **Key results** | Summarise key results with reference to study objectives. | Yes | Key findings summarised in opening paragraph of Discussion. |
| 19 | **Limitations** | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of potential bias. | Yes | Cross-sectional design, lack of spirometry, selection bias, residual confounding all addressed. |
| 20 | **Interpretation** | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence. | Yes | Comparison with international studies provided; cautious interpretation maintained. |
| 21 | **Generalisability** | Discuss the generalisability (external validity) of the study results. | Yes | Limits to generalisability noted due to clinic-based sample and referral patterns. |
| **OTHER INFORMATION** | | | | |
| 22 | **Funding** | Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based. | Yes | Funding section included in current draft. |

| Legend: | Yes — fully met | Partial — partially met | No — not met |
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| | N/A — not applicable | | |

**Note:** Items marked with * in the original STROBE checklist require information to be given separately for each study group where applicable. This checklist follows the STROBE Statement v4 for cross-sectional studies (von Elm et al., 2007; Lancet 370:1453–1457).