

Quality assessment of studies using JBI's critical appraisal tools designed for Descriptive cross-sectional study

| Study | Sample size | JBI's critical appraisal questions | | | | | | | | | Score | Overall Appraisal |
|-----------------|-------------|------------------------------------|----|----|----|----|----|----|----|----|-------|-------------------|
| | | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | | |
| Alemayehu et al | 362 | Y | Y | Y | Y | y | Y | Y | Y | Y | 9 | Included |

Y –Yes;N-No;U -Unclear-Question. Overall score is calculated by counting the number of Y's in each row.Q1=Was the sample frame appropriate to address the target population? Q2=Were study participants sampled in an appropriate way? Q3=Was the sample size adequate? Q4=Were the study subjects and the setting described in detail? Q5=Was the data analysis conducted with sufficient coverage of the identified sample? Q6=Were valid methods used for the identification of the condition? Q7=Was the condition measured in a standard, reliable way for all participants? Q8=Was there appropriate statistical analysis? Q9=Was the response rate adequate, and if not, was the low response rate managed appropriately?

Quality assessment of studies using JBI's critical appraisal tools designed for Analytical cross-sectional study

| Study | Sample size | JBI's critical appraisal questions | | | | | | | | Score | Overall Appraisal |
|-------------------|-------------|------------------------------------|----|----|----|----|----|----|----|-------|-------------------|
| | | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | | |
| Debasu et al.[19] | 360 | Y | y | y | y | y | y | y | y | 8 | Included |
| Addisu et al. | 315 | y | y | y | y | y | y | y | y | 8 | Included |
| Wachamo et al. | 414 | Y | y | y | y | y | y | y | y | 8 | Included |
| Mitiku et al. | 358 | Y | y | y | y | y | y | y | y | 8 | Included |
| eldearegawi et al | 400 | y | y | y | y | y | y | y | y | 8 | Included |
| Dereje et al. | 386 | Y | y | y | y | y | y | y | y | 8 | Included |
| Mengistu et al | 266 | Y | y | y | y | y | y | y | y | 8 | Included |
| Moges et al. | 423 | y | y | y | y | y | y | y | y | 8 | Included |
| Hailu et al. | 394 | Y | y | y | y | y | y | y | y | 8 | Included |
| Fite et al. | 303 | Y | y | y | y | y | y | y | y | 8 | Included |
| Solomon et al. | 658 | y | y | y | y | y | y | y | y | 8 | Included |
| Tiku and Tirhas | 125 | Y | y | y | y | y | y | y | y | 8 | Included |

Y –Yes;N-No;U -Unclear-Question. Overall score is calculated by counting the number of Y's in

For analytical cross-sectional study, the JBI checklist assessed the following questions Q1= were the criteria for inclusion in the sample clearly defined? Q2=were the study subjects and the=Were objective, standard criteria used for measurement of the condition? Q5=Were confounding factors identified? Q6=Were strategies to deal with confounding factors stated? Q7=Were the outcomes measured in a valid and reliable way? Q8=Was appropriate statistical analysis used?

JBI Critical Appraisal Checklist for Cohort Studies

| Study | Sample size | JBI's critical appraisal questions | | | | | | | | | | | Score | Overall Appraisal |
|-------------------------|-------------|------------------------------------|----|----|----|----|----|----|----|----|-----|-----|-------|-------------------|
| | | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Q9 | Q10 | Q11 | | |
| Arefaine et <i>al</i> | 317 | Y | y | y | y | y | y | y | y | y | y | y | 8 | Included |
| Direslegn et <i>al.</i> | 232 | | | | | | | | y | y | y | | | |
| | | y | y | y | y | y | y | y | | | | y | 8 | Included |

- ✓ Q1 Were the two groups similar and recruited from the same population?
- ✓ Q2 Were the exposures measured similarly to assign people to both exposed and unexposed groups?
- ✓ Q3 Was the exposure measured in a valid and reliable way?
- ✓ Q4 Were confounding factors identified?
- ✓ Q5 Were strategies to deal with confounding factors stated?
- ✓ Q6 Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?
- ✓ Q7 Were the outcomes measured in a valid and reliable way?
- ✓ Q8 Was the follow up time reported and sufficient to be long enough for outcomes to occur?
- ✓ Q9 Was follow up complete, and if not, were the reasons to loss to follow up described and explored?
- ✓ Q10 Were strategies to address incomplete follow up utilized?
- ✓ Q11 Was appropriate statistical analysis used?