|  |  |  |
| --- | --- | --- |
| Articles  | Critical appraisal criteria for cross-sectional studies | Total score  |
|  | Were the criteria for inclusion in the sample clearly defined? | Were the study subjects and the setting described in detail? | Was the exposure measured in valid and reliable way? | Were objective, standard criteria used for measurement of the condition  | Were confounding factors identified?  | Were strategies to deal with confounding factors stated? | Were the outcomes measured in a valid and reliable way? | Was appropriate statistical analysis used? |  |
|  | yes | No | NA | Yes | No | NA | Yes | No | NA | Yes | No | NA | Yes | No | NA | Yes | No | NA | Yes | No | NA | Yes | No | NA |  |
|  Maru y et al /2009 (36) | √ |  |  | √ |  |  | √ |  |  | √ |  |  |  | × |  |  | × |  | √ |  |  | √ |  |  | 75% |
| Wakwoya EB et al/2016(41) | √ |  |  | √ |  |  |  | × |  | √ |  |  | √ |  |  | √ |  |  | √ |  |  | √ |  |  | 87.5% |
| Girma Y et al/2014(33) | √ |  |  | √ |  |  | √ |  |  | √ |  |  |  | × |  |  | × |  | √ |  |  | √ |  |  | 75% |
| Ejara D et al/2018(31) | √ |  |  | √ |  |  | √ |  |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 75% |
| Demssie DB et al/2016(30) | √ |  |  | √ |  |  |  | × |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
| Modjo KE et al/2015(38) | √ |  |  | √ |  |  | √ |  |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 87.5% |
|  Muluy D et al/2012(39) | √ |  |  | √ |  |  | √ |  |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 75% |
| Bekere A et al/2014(28) | √ |  |  | √ |  |  |  | × |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
| G/Hiwot A et al/2014(27) | √ |  |  | √ |  |  | √ |  |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 87.5% |
| Ali Y/2015(44) | √ |  |  |  | × |  | √ |  |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
| Hailu C/2005(34) | √ |  |  | √ |  |  | √ |  |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 87.5% |
| Tadese F/2017(40) | √ |  |  | √ |  |  |  | × |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
| Mengstie A et al/2015(43) | √ |  |  | √ |  |  |  | × |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
| Mebratu T/2014(37) | √ |  |  | √ |  |  |  | × |  | √ |  |  |  | × |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
| Ketema Z/2016(35) | √ |  |  |  | × |  |  | × |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 62.5% |
|  Esubalew F et al.,/2018(32) | √ |  |  | √ |  |  | √ |  |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 87.5% |
| Wondie T et al/2012(42) | √ |  |  | √ |  |  |  | × |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 75% |
| Demlew MZ et al/2014(29) | √ |  |  | √ |  |  |  | × |  | √ |  |  | √ |  |  | × |  |  | √ |  |  | √ |  |  | 75% |
|  |  |  |  |  |  |  |  |  |  |