

Additional file 4: JBI-critical appraisal checklist for analytical cross-sectional studies

| Study | Q1 | Q2 | Q3 | Q4 | Q5 | Q6 | Q7 | Q8 | Quality | Overall appraisal |
|--------------------------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|--------------------------|
| Mian et al. (2020) | Y | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Hollatz et al. (2019) | Y | Y | U | Y | Y | Y | N | Y | Fair | Include |
| Parakh et al. (2019) | Y | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Sanchez et al. (2019) | Y | Y | Y | Y | Y | Y | Y | Y | High | Include |
| Rotman-Pikielny et al. (2019) | Y | Y | Y | Y | Y | N | Y | Y | High | Include |
| Wang et al. (2019) | U | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Naorungroj et al. (2018) | Y | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Afolabi et al. (2017) | Y | Y | U | Y | N | N | U | Y | Fair | Include |
| Al Amassi et al. (2017) | Y | Y | Y | Y | Y | N | Y | Y | High | Include |
| Kejriwal et al. (2017) | Y | Y | Y | Y | N | N | Y | Y | High | Include |
| Lasisi et al. (2017) | Y | Y | Y | Y | N | N | Y | Y | High | Include |
| Payal et al. (2017) | Y | Y | U | Y | N | N | U | Y | Fair | Include |
| Shanmukappa et al. (2017) | U | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Gaffar et al. (2016) | Y | Y | Y | Y | Y | Y | Y | Y | High | Include |
| Rasouli-Ghahro et al. (2016) | U | Y | Y | Y | Y | N | Y | N | Fair | Include |
| Ummadisetty et al. (2016) | Y | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Malkwai et al. (2014) | Y | Y | Y | Y | N | N | Y | Y | Fair | Include |
| Sahril et al. (2014) | Y | Y | Y | Y | U | U | Y | Y | High | Include |
| Weinspach et al. (2013) | N | Y | U | Y | Y | Y | U | Y | Fair | Include |
| Aggarwal et al. (2012) | Y | Y | U | Y | N | N | U | Y | Fair | Include |
| Abiola et al. (2011) | U | Y | U | Y | U | Y | U | Y | Fair | Include |
| Bangash et al. (2011) | Y | Y | Y | Y | U | U | U | U | Fair | Include |

| | | | | | | | | | | |
|-----------------------------------|---|---|---|---|---|---|---|---|------|---------|
| Bowyer et al. (2011) | Y | Y | U | Y | Y | N | U | Y | Fair | Include |
| Eldarrat et al. (2011) | Y | Y | U | Y | N | N | U | Y | Fair | Include |

Y – Yes, N – No, U – Unclear.