

**Supplementary table 1A: Quality appraisal for cross sectional studies using JBI tool for cross sectional studies**

<b>Author and Year</b>	<b>Were the criteria for inclusion in the sample clearly defined?</b>	<b>Were the study subjects and the setting described in detail?</b>	<b>Was the exposure measured in a valid and reliable way?</b>	<b>Were objective, standard criteria used for measurement of the condition?</b>	<b>Were confounding factors identified?</b>	<b>Were strategies to deal with confounding factors stated?</b>	<b>Were the outcomes measured in a valid and reliable way?</b>	<b>Was appropriate statistical analysis used?</b>
Biswas et al., 2012	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Paul et al.,2011	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Mishra et al., 2013	Yes	Yes	NA	Yes	No	NA	Yes	No
Ramesh et al., 2012	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
Kumar et al.,2015	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Gupta et al.,2015	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Vignesh et al.,2015	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Vishwakarma et al.,2015	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Paul et al.,2016	Yes	Yes	NA	Yes	No	NA	Yes	NA
Sharma et al., 2018	No	Yes	NA	Yes	No	Na	Yes	Yes
Kumar et al.,2016*	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Sachdeva & Sao et al.,2017	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Swain et al.,2017	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Bhat et al.,2018	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Bishnoi et al.,2018	Yes	Yes	NA	Yes	No	NA	Yes	Yes

Parab et al.,2018 *	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Jacob et al.,2020	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Nishad et al.,2020	Yes	Yes	NA	Yes	No	No	Yes	Yes
Zhang et al., 2012	Yes	Yes	NA	Yes	No	No	No	Yes
Tobe et al.,2013*	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Chen et al.,2012	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Shang et al.,2016	Yes	Yes	NA	Yes	No	NA	Yes	YEs
Wenjin et al., 2018	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Dai et al.,2019	Yes	YEs	NA	Yes	No	NA	Yes	Yes
Zeng et al., 2020	Yes	Yes	Yes	Yes	NA	NA	Yes	Yes
Wen et al., 2020 *	Yes	Yes	NA	yes	No	NA	Yes	Yes
Guo et al., 2020	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Guomei et al.,2022	Yes	Yes	NA	Yes	No	NA	No	Yes
Ahmad et al.,2011	Yes	Yes	NA	Yes	No	NA	Yes	Yes
<b>Wong et al.,2020</b>	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Tungvachirakul et al.,2011	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Poonual et al.,2017	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Poonual et al., 2017b	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Pitathawatchai et al.,2019	Yes	Yes	Yes	Yes	No	Na	Yes	Yes
Ray et al.,2021	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Mazlan et al.,2022	Yes	Yes	NA	Yes	No	NA	Yes	Yes

Shameem et al., 2022	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Khaimook et al.,2022	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Sennaroglu & Akmese, 2011	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Ulusoy et al.,2014	yes	Yes	NA	Yes	No	NA	Yes	Yes
Kemaloğlu et al., 2016	Yes	Yes	NA	Yes	No	No	Yes	Yes
Yorulmaz et al., 2017	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Ozturk et al.,2017	Yes	Yes	NA	Yes	No	No	Yes	Yes
Hamdi, 2018	Yes	Yes	NA	Yes	No	No	Yes	Yes
Yücel et al., 2019	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Arslan et al., 2013	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Çıkrıkçı et al., 2020*	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Arjmandi et al., 2012	Yes	Yes	No	Yes	No	NA	Yes	Yes
Islami et al.,2013	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Firoozbakht et al.,2014	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Zahed et al., 2014*	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Farhat et al., 2014	Yes	Yes	No	Yes	No	NA	Yes	Yes
Haghshenas et al., 2014	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Baradaranfar et al., 2014	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
Azizi et al., 2016	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Tajik & Ahmadpour-Kacho, 2016	Yes	Yes	NA	Yes	No	NA	Yes	YEs
Saki et al.,2017	Yes	Yes	NA	Yes	No	NA	Yes	Yes

Tuli et al.,2012	Yes	Yes	No	Yes	Yes	No	Yes	Yes
Chadha et al., 2013	Yes	Yes	NA	No	Yes	Yes	Yes	Yes
Ramkumar et al.,2018	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Ramkumar et al.,2019	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Verma et al.,2022	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Shekhar et al., 2020	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes
Lu et al.,2011	Yes	Yes	Yes	Yes	No	No	Yes	Yes
Chen et al.,2013	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Wu et al.,2014	Yes	Yes	NA	No	No	NA	Yes	Yes
Kam et al.,2014	Yes	YES	NA	Yes	NA	NA	YES	YES
Tokgöz-Yılmaz et al.,2013	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Kaplama et al.,2020	Yes	Yes	Yes	Yes	No	NA	Yes	Yes
TarviEslami et al.,2017	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Jalali et al.,2020	Yes	Yes	Yes	No	No	NA	Yes	Yes
Pilka et al.,2016	No	Yes	NA	Yes	No	NA	Yes	Yes
Alaqrabawi et al.,2016	Yes	Yes	NA	Yes	No	NA	Yes	Yes
Al-Obeidy et al.,2019	No	Yes	NA	No	No	NA	Yes	Yes

Supplementary table 1B: Quality appraisal for cohort studies using JBI tool for cohort study

Author & year	Were the two groups similar and recruited from the same population?	Were the exposures measured similarly to assign people to both exposed and unexposed groups?	Was the exposure measured in a valid and reliable way?	Were confounding factors identified?	Were strategies to deal with confounding factors stated?	Were the groups/participants free of the outcome at the start of the study (or at the moment of exposure)?	Were the outcomes measured in a valid and reliable way?	Was the follow up time reported and sufficient to be long enough for outcomes to occur?	Was follow up complete, and if not, were the reasons to loss to follow up described and explored?	Were strategies to address incomplete follow up utilized?	Was appropriate statistical analysis used?
Poonual et al.,2016	Yes	Yes	Yes	No	NA	Yes	Yes	Yes	Yes	No	Yes
Sija et al.,2022	Yes	Yes	NA	No	NA	Yes	Yes	Yes	Yes	No	Yes
Rahimi et al.,2018	Yes	Yes	Yes	No	NA	Yes	Yes	Yes	No	No	Yes
Celik et al.,2016	Yes	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Tasci et al.,2010	Yes	Yes	Yes	No	NA	Yes	Yes	Yes	Yes	Yes	Yes
Wang et al., 2019	Yes	Yes	Yes	No	NA	Yes	yes	Yes	Yes	Yes	Yes
Kumar et al.,2017	Yes	Yes	Yes	No	NA	Yes	Yes	Yes	Yes	Yes	Yes
Rai & Thakur 2013	Yes	Yes	Yes	No	NA	Yes	Yes	Yes	Yes	Yes	Yes