

Supplementary Figure

S1 File: Search concepts and database search

S1A. Literature search concepts and sub-concepts/MeSH terms

Search query	Search concepts	Sub-concepts/ MeSH terms
1	Location	“Afghan*” OR “Bangladesh*” OR “Bhutan*” OR “India*” OR “Maldiv*” OR “Nepal*” OR “Pakistan*” OR “Sri Lanka*” OR “South Asia”
2	Population	“Medical Student*” OR “Student Medical” OR “Medical Undergraduate*”
3	Exposure	“Learning Environment*” OR “Medical Education*” OR “Educational Environment”
4	Outcome	“Perception” OR “Perception*”
Final search query	Intersection of four topics	1 AND 2 AND 3 AND 4

S1B. Database search

Database	Query	Result
PubMed	(“Afghan*” OR “Bangladesh*” OR “Bhutan*” OR “India*” OR “Maldiv*” OR “Nepal*” OR “Pakistan*” OR “Sri Lanka*” OR “South Asia”) AND (“Learning Environment*” OR “Medical Education*” OR “Educational Environment” OR “Education Medical”) AND (“Student*” OR “Medical Student*” OR “Student Medical” OR “Undergraduate*” OR “Resident*”) AND (“Perception” OR “Perception*”)	729
Scopus	(“Afghan*” OR “Bangladesh*” OR “Bhutan*” OR “India*” OR “Maldiv*” OR “Nepal*” OR “Pakistan*” OR “Sri Lanka*” OR “South Asia”) AND (“Learning Environment*” OR “Medical Education*” OR “Educational Environment” OR “Education Medical”) AND (“Student*” OR “Medical Student*” OR “Student Medical” OR “Undergraduate*” OR “Resident*”) AND (“Perception” OR “Perception*”)	442

Note: * stands for truncation.

S2. JBI checklist of cross-sectional studies critical appraisal of methodological quality assessment tool result.

No	Studies included	Q1	Q2	Q3	Q4	Q5	Q6	Q7	Q8	Total
1	Ellawala et al. (2021) ²⁶	Yes-1	Yes-1	Yes-1	No-0	Yes-1	Yes-1	Yes-1	Yes-1	90%
2	Shah et al. (2019) ³⁸	Yes-1	Yes-1	Yes-1	Yes-1	No-0	No-0	Yes-1	Yes-1	77%
3	Azim et al. (2024) ³⁷	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	100%
4	Bannur et al. (2024) ³⁵	Yes-1	Yes-1	Yes-1	Yes-1	No-0	No-0	Yes-1	Yes-1	77%
5	Algotar et al. (2024) ³³	Yes-1	Yes-1	Yes-1	Yes-1	No-0	No-0	Yes-1	Yes-1	77%
6	Zuberi et al. (2024) ³⁰	Yes-1	Yes-1	Yes-1	No-0	No-0	No-0	Yes-1	Yes-1	65%
7	Wijesinghe et al. (2023) ²⁹	Yes-1	Yes-1	Yes-1	No-0	No-0	No-0	Yes-1	Yes-1	65%
8	Chellaiyan et al. (2023) ³⁶	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	No-0	No-0	Yes-1	77%
9	Tufai al. (2021) ²⁸	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	100%
10	Khan et al. (2021) ¹⁸	Yes-1	Yes-1	Yes -1	Yes -1	Yes-1	No-0	No-0	Yes -1	77%
11	Amaranathan et al. (2018) ³⁴	Yes-1	Yes -1	Yes-1	Yes-1	Yes-1	No-0	No-0	Yes-1	77%
12	Sengupta et al. (2017) ⁴⁰	Yes-1	Yes-1	Yes-1	No-0	Yes-1	Yes-1	Yes-1	Yes-1	90%

13	Abraham et al. (2008) ¹⁶	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	No-0	Yes-1	90%
14	Jawaid et al. (2013) ¹⁷	Yes-1	Yes-1	Yes-1	Yes-1	Yes-1	No-0	No-0	Yes-1	77%
15	Nahar et al. (2011) ³⁹	Yes-1	Yes-1	Yes-1	No-0	Yes-1	No-0	No-0	Yes-1	65%

1. *Were the criteria for inclusion in the sample clearly defined?*
2. *Were the study subjects and the setting described in detail?*
3. *Was the exposure measured in a valid and reliable way?*
4. *Were objective, standard criteria used for measurement of the condition?*
5. *Were confounding factors identified?*
6. *Were strategies to deal with confounding factors stated?*
7. *Were the outcomes measured in a valid and reliable way?*
8. *Was appropriate statistical analysis used?*