

A scoping review on medical students' international migration: trends, determinants, and implications for global health workforce planning



Gerald Ser¹, Zhi Sean Teng¹, Yady Zikry Yusni¹, Krisada Ooi², Zhi Yong Wong¹, Prashwin Singh¹, Wei-Han Hong¹
¹Universiti Malaya, ²The University of Edinburgh

Introduction



Physician migration drives global healthcare workforce shortages



Medical students' migration intentions predict workforce mobility



Migration drivers inform health workforce planning



These insights are essential for maintaining sustainable healthcare systems



Synthesize evidence on trends, determinants, and implications of medical student migration

Methods



PRISMA-ScR; registered on OSF; searched PubMed, Scopus & ProQuest (2013–2025)



Dual independent screening (Rayyan) with third reviewer; JBI appraisal applied (moderate–high quality only)

INCLUSION	EXCLUSION
Primary research studies	Non-research publications (e.g. letters)
Medical students as population	Studies without relevant migration intention outcomes
Factors influencing emigration/migration intention	Studies solely exploring perceptions of migration

Results

517

initial records
 (following the PRISMA for Scoping Reviews framework)



33

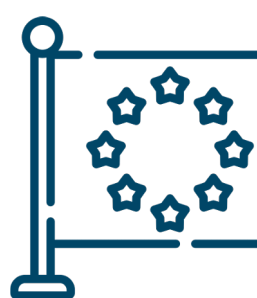
included studies



Migration intention: **20.8% – 89.6%**
 Sample sizes: **38 – 9,881** students
 Mean age: **18 – 35** years



7 studies reported
>80% intention to migrate



Europe & Central Asia was the **most represented region** with **18 studies** and 12 countries



Income was the **most common push factor** in **24 studies** (24/33, 73%)



Family was the **most common stay factor** in **13 studies** (13/33, 39%)

Conclusion



Implement targeted retention strategies in resource-limited settings to address brain drain



Source countries should improve retention with more competitive remuneration, and better working conditions

