International medical graduates' experiences before and after migration: A meta-ethnography of qualitative studies

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Abstract

Introduction: International medical graduates (IMGs) represent a large portion of practising doctors in many countries. Many experience difficulties, including higher rates of complaints against them and lower exam pass rates. The UK's General Medical Council (GMC) recently set targets to ‘eliminate disproportionate complaints’ and ‘eradicate disadvantage and discrimination in medical education’. Our timely meta-ethnography aimed to synthesise existing qualitative literature on the wider personal and professional experiences of IMGs to identify factors affecting IMGs' professional practice (either directly or indirectly).

Methods: In September 2019, we systematically searched Medline, Embase, Cochrane, PsycINFO, ERIC and EdResearch for peer-reviewed qualitative and mixed-methods articles that described experiences of IMGs. We extracted participant quotes and authors’ themes from included articles and used the technique of meta-ethnography to synthesise the data and develop new overarching concepts.

Results: Of the 1613 articles identified, 57 met our inclusion criteria. In total, the articles corresponded to 46 studies that described the experiences of 1142 IMGs practising in all six continents in a range of settings, including primary and secondary care. We developed five key concepts: migration dimensions (issues considered by IMGs when migrating), a challenging start (the stressful early period), degree of dissonance (between the IMG and host country in relation to the four main barriers of language, culture, medical education and belonging), levelling the playing field (interventions to reduce the impact of the barriers) and survive then thrive (adjustments IMGs made). A conceptual model that brings these constructs together in a line of argument is presented.

Conclusions: This meta-ethnography, based on a large amount of diverse qualitative studies, is the first to provide a comprehensive picture of the experiences and challenges that IMGs face before and after migration. Our results should be used to guide the development of interventions aiming to support IMGs and meet the GMC targets.
1 | INTRODUCTION

An international medical graduate (IMG) is a doctor who practises medicine in a country different to the country where they received their primary medical qualification (PMQ). Around 40% of practising doctors in the United Kingdom are IMGs. This figure is over 25% in the United States and Canada and over 40% in Australia, Ireland, Israel, New Zealand and Norway. Compared to domestic medical graduates (DMGs), IMGs are more likely to receive patient complaints, have lower pass rates at postgraduate exams and are less likely to achieve board certification. There is a similar pattern of higher complaints rates and differential attainment for doctors from ethnic minorities (some of whom are IMGs). In recognition of the urgency in addressing these issues, the General Medical Council (GMC) recently set a target to ‘eliminate disproportionate complaints from employers about ethnic minority doctors’ by 2026 and ‘eradicate disadvantage and discrimination in medical education and training’ by 2031.

A growing body of qualitative literature has sought to explore IMGs’ migration motives and integration experiences. Although offering valuable insights into the range of challenges IMGs experience in the country of practice (host country), published studies are typically confined to a single setting (e.g. the local context of a hospital or a training programme) or region while mostly relying on small study samples. Studies recruiting participants across a whole country are uncommon, and those recruiting across more than one country are rare. Yet, identifying commonalities in the experiences of IMGs, regardless of country of PMQ, host country or medical specialty, might be valuable in providing some explanation for the disproportionate complaints and differential attainment. Identifying these commonalities might also be valuable for shared learning and joint efforts in designing educational interventions and policies to achieve the GMC targets.

Approaching our research question from a constructivist worldview and considering our aim to provide an in-depth understanding of the experiences of IMGs worldwide, we chose to conduct a systematic review and qualitative evidence synthesis (QES) and, specifically, used the technique of meta-ethnography. In meta-ethnography, the order in which articles are synthesised provides a summary of the guidelines with the corresponding page in this manuscript. The review protocol was registered with the PROSPERO International Prospective Register of Systematic Reviews (CRD42020176053).

2.1 | Search strategy and selection criteria

Using a comprehensive search strategy developed with the help of a clinical librarian (Online Supplement 2), we systematically searched six electronic databases (Medline, Embase, Cochrane, PsycINFO, ERIC and EdResearch) from inception until 19 September 2019. To identify potential additional articles, we also manually screened the reference lists of relevant reviews. Articles were eligible for inclusion if they (a) were published as original research articles in peer-reviewed journals; (b) were written in English; (c) explored the experiences of IMGs in any context; and (d) employed a qualitative design, with interviews or focus groups as the primary method of data collection. Mixed-methods studies were also eligible for inclusion, provided that the qualitative component was presented in sufficient detail. We excluded studies that recruited IMGs as part of a larger group of participants (e.g. doctors in training) and did not separately report findings from IMGs. We also excluded articles reporting experiences of IMGs who were on short-term placements abroad or had returned to their country of PMQ.

2.2 | Data screening and quality assessment

We imported all identified references into EndNote (Clarivate Analytics, Philadelphia, PA) and removed duplicates. We then uploaded the results to Covidence (Veritas Health Innovation, Melbourne, Australia) and removed more duplicates. Titles and abstracts of all articles were screened independently by two reviewers: MAH screened all articles, whereas SJ and EG each screened half of the articles. During the second stage of screening, full texts of potentially eligible articles were retrieved and assessed independently, as described above. We resolved disagreements by discussion at monthly meetings and kept a journal to record all decisions. MAH read all included articles again and extracted key study characteristics (e.g. aims, country and sampling) in a spreadsheet using Microsoft Excel for Mac (Microsoft Corporation, Redmond, WA).

We assessed the quality of included studies using the Critical Appraisal Skills Programme (CASP) tool for qualitative research. The use of purposeful sampling of articles has been advocated as a way of making a qualitative synthesis more manageable. Yet, we opted to include all articles that met our inclusion criteria. The large number of studies meant that there was sufficient material for us to synthesise within each of the subtopics, for example, migration and acculturation. It also enhanced the confidence in our findings using the GRADE-CERQual framework.

In meta-ethnography, the order in which articles are synthesised can be important and remains a matter of debate. It is likely
that articles synthesised earlier have a stronger influence on the development of ideas.\textsuperscript{29,30} While synthesising articles in chronological order is common practice, some have advocated starting the synthesis with articles based on quality appraisal ‘index papers’\textsuperscript{23,31} or combining the two approaches.\textsuperscript{30} To identify ‘index papers’, we assessed aim congruence, conceptual clarity and interpretive rigour. Aim congruence was the extent to which the aim of the article was aligned to our research question. Conceptual clarity and interpretive rigour have been previously described by Toye and colleagues.\textsuperscript{23} They pertain to the richness and clarity of findings and rigour of data analysis, respectively. MAH evaluated all articles in each of the three domains and scored them as ‘high’, ‘moderate’ or ‘low’. First, we ordered articles from high aim congruence to moderate then low. Within each of these three groups, we ordered articles from high conceptual clarity to moderate then low. Within each of the resultant groups, we ordered articles from high interpretive rigour to moderate then low. Finally, within each of the resultant groups, we ordered articles chronologically. Our ‘index paper’\textsuperscript{32} was therefore the oldest article that received a high score in all the domains of aim congruence, conceptual clarity and interpretive rigour.

2.3 | Data analysis

We imported all articles into NVivo 12.6.1 (QSR International, Doncaster, Australia) and extracted second order constructs. A second-order construct, as defined by Shütz, is a concept described by the original authors and is often presented with first-order constructs (participant quotes).\textsuperscript{33} Third-order constructs are concepts arising from our (the reviewers’) interpretations of identified second-order constructs and one of the outcomes of this meta-ethnography. We coded each second order construct as a ‘node’ in a way similar to that described by Toye and colleagues.\textsuperscript{34} We kept a ‘memo’ for each node and updated it each time a new article contributed to it. This meant that we ended up with fewer nodes than the sum of second-order constructs listed in the articles.

Starting with Wong and Lohfeld’s article,\textsuperscript{32} we translated (compared) each second-order construct into the same second-order construct from the next article that it appeared in. The translation was either reciprocal or refutational depending on whether it corroborated or refuted the argument already presented in the previous article(s). We therefore carried out reciprocal and refutational translations by second-order construct rather than by article. For instance, many articles reported on experiences of IMGs in the initial period in the host country as being stressful (reciprocal),\textsuperscript{18,20,35–40} but Skjeggestad and colleagues reported that some IMGs trivialised these experiences (refutational).\textsuperscript{18} The resultant translation was that although stress was widely experienced by IMGs during this period, the experience was not universal. This contributed to our line of argument that experiences were varied and personal.

We carried out the translation until all articles with the same second-order construct were translated into each other, and a line of argument was formed. We repeated this process for all second-order constructs and considered alternative interpretations at monthly team meetings. Reading and rereading the articles within the context they were presented allowed immersion in the data. This allowed us to develop an overall line of argument and a conceptual model that encompassed, described and explained experiences of IMGs worldwide. The resultant synthesis was thus grounded in the published data and the accounts of the hundreds of IMGs who contributed to them.

2.4 | Reflexivity

The lead author (MAH) is an IMG practising in the United Kingdom. He has significant involvement in supporting IMGs in Scotland. MAH recognised many of the experiences described in this article. To mitigate potential bias, all findings, interpretations and the conceptual model were challenged by SJ and EG at monthly team meetings, and alternative interpretations were explored. SJ is a professor of health professions education with experience in biomedical and education research. EG is an experienced qualitative researcher, with a social sciences background. Both SJ and EG were involved from conception of the project and through all stages including reviews, checks and challenges of translations, third-order constructs, the conceptual model and drafts of this article.

3 | RESULTS

The flow diagram of study selection is presented in Figure 1.\textsuperscript{41} No article was excluded based on the language it was written in. Online Supplement 3 provides a summary of the critical appraisal.

3.1 | Characteristics of included studies

Characteristics of all 57 articles included in the meta-ethnography are presented in the order they were synthesised in Online Supplement 4. Among included articles, only five used mixed methods. Articles described 46 studies that included 1142 IMGs from low-, medium- and high-income countries. Twenty-one articles were conducted in Europe, 21 in the United States and Canada, 13 in Australia and New Zealand, one in Asia and one in the Middle East. A study reported in two articles included participants from two European countries\textsuperscript{21,42}; one article included participants from the United States, Canada and Israel\textsuperscript{43}; and the rest included participants from only one country. Sixteen articles were set in hospitals, 13 in primary care, six in the rural setting and 17 in mixed settings, and five did not state the setting the study was conducted in. Fifteen articles involved IMGs in training, 13 involved IMGs in permanent posts, 13 involved a mixture of grades, 15 did not state the grade of IMG, and one article involved IMGs after migration but before employment.
3.2 The synthesis

Ultimately, 56 articles contributed to the synthesis; one article was excluded, as it addressed a specific issue related to the use of translators by IMGs, which was not reported in any other article. We identified five third-order constructs related to 14 second-order constructs (Table 1).

3.2.1 Line of argument

Overall, IMGs made comparisons across several migration dimensions (safety; professional education and development; work conditions; connectedness; belonging; status and lifestyle) to make their own individual decision to migrate and to which country they migrate to. In the host country, they faced a challenging start to varying degrees. There were four main barriers (language, culture, medical education and belonging) that they had to overcome. The impact of these barriers was different for each IMG depending on the degree of dissonance in relation to each of the barriers. Support to reduce the impact of the four barriers could level the playing field. IMGs aimed to survive initially, then adjust to overcome these barriers and thrive (Figure 2). We will now describe each of these third-order constructs.

3.2.2 Third-order constructs

Migration dimensions

Migration and the decision to migrate were governed by the balance of a variety of push, pull and plant factors. Push factors are those that push people away from a country; pull factors are those that pull them to a certain country; and plant factors are those that keep them planted in the country they reside in. These factors might be better considered along certain dimensions. For example, war, political instability, violence and crime could all be seen on a ‘personal safety’ continuum, which has extremely unsafe on one end and very safe on the other. Each individual IMG and their family were on a certain point on this continuum and naturally considered moving to the very safe end of this continuum. There were many
dimensions that IMGs considered in their decision to migrate. Each of these dimensions was thus a push, pull and plant factor depending on where the IMG was when they considered migration and between which countries they made the comparisons. Comparisons were repeatedly made, typically—but not exclusively—between country of origin and host country. These comparisons were relative and subjective. In the case of migration from a war-torn country to a politically stable country, the difference was stark, but differences in other dimensions were not always as clear-cut.

Another dimension was opportunities for professional education and development, which was both a push and pull factor. The difference between countries could be stark, for example, when comparing these in some low-income countries with higher-income countries. It could also be more subtle, for example, migration of UK doctors to Australia or between Nordic countries.

Connectedness, belonging and status were other dimensions that IMGs considered. On these dimensions, IMGs generally moved towards a country where they felt less connected and had a lower sense of belonging and status compared with their own countries. As such, connectedness, belonging and status could be seen as factors that kept IMGs planted in their original countries. As the levels on these dimensions improved for IMGs, they acted as plant factors that tied them and their families to the host country.

IMGs made these evaluations in the different dimensions based on their values, perceptions and judgements. There were no clearer examples of the subjectivity of these dimensions than in the

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### TABLE 1 Third-order constructs with definitions, their relation to the second-order constructs and articles from which the second-order constructs were extracted

| Third-order construct | Definition | Related second-order constructs | Articles contributing to second-order constructs |
|-----------------------|------------|---------------------------------|-----------------------------------------------|
| Migration Dimensions  | When considering migration, IMGs compared countries they were going to emigrate from and countries they were immigrating to. These individual and subjective comparisons were made along a few dimensions before a final decision was made regarding migration | Immigration push, pull and plant factors | 18,19,21,42,45-54 |
|                       |            | Immigration is individual and often pragmatic | 18,19,21,42,45,46,49,54,73 |
| A challenging start    | Landing in the host country was challenging. It was a stressful period that was characterised by loss, shock, disorientation and difficulties in entering the medical profession | Loss | 14,32,37,47,52,58,59 |
|                       |            | Shock and disorientation | 14,17,32,36,40,47,55,56,58,60,61,65,68,69 |
|                       |            | The barrier of entry into the profession | 18,19,32,35,36,40,42,43,46,47,55,57-59,62,63 |
| Degree of dissonance  | There were four specific and significant barriers faced by IMGs. These were the differences in language, culture, medical education and belonging. The impact of these barriers on IMGs was related to the degree of dissonance between the IMG and the new environment in relation to each of the barriers. The greater the dissonance, the tougher the barrier | The language barrier | 15,17,18,36,37,40,42,46,62,63,65-70,72-74-78 |
|                       |            | Cultural differences | 15,16,20,36,39,46-54-56,58,59,65,69-72-83 |
|                       |            | Medical education differences | 14,16,18,54,69,70,72,75-77,80,82 |
|                       |            | Identity, belonging and bias | 15,17-20,35-37,42,43,46,52-61,66,68,69,72,76,81 |
| Levelling the playing field | The impact of the four barriers on IMGs could be reduced by providing support and improving well-being and resilience, thus levelling the playing field. Support could be provided within the work environment by colleagues, mentors and educators. It could also be provided outside work by partners, family and social networks | Support and resources | 14,17,18,20,32,36,37,39,40,46,47,55,58,62,63,67-69,76 |
|                       |            | Well-being and confidence | 18,20,35-40,62 |
|                       |            | Relationships with others | 15,16,20,35,38,39,46,54,57,58,65,69,72,75-77,80,83,88 |
| Survive then thrive   | After an initial period of adjustment, where the goal was to survive in the new country, IMGs continued making adjustments to thrive | Navigating the initial period | 15,17,18,32,35,36,40,46,47,54,56,58,60-62,65,67,68,70,72,80 |
|                       |            | Adjustments | 15-18,20,35,36,52,56,60,61,65,68,74,78-80 |
dimensions of lifestyle and adventure, which were both cited as factors considered when IMGs migrated.\textsuperscript{18,45,47,49,50} The comparisons made and ultimate decisions to move were not only made between countries but also between regions, for example, urban versus rural settings.\textsuperscript{50}

A challenging start

We found that the initial period when moving to the new country was challenging. IMGs reported suffering a sense of loss.\textsuperscript{14,32,37,47,52,59} Having suffered financial loss, they also suffered loss of social connections and professional status.\textsuperscript{32,37,43,56,60,61}

The period from landing to resuming professional roles as doctors was a challenging one\textsuperscript{18,19,32,35–37,40,42,43,46,47,55–59,62,63}—especially when sitting licensing exams.\textsuperscript{18,19,32,35–37,40,42,43,46,47,55–59,62,63} Information about these exams could be hard to find, and the assessment methods could be alien, all leading to a heightened state of anxiety regarding the licensing process.\textsuperscript{18,35–37,40,47,58} Added to that, IMGs often had to find other jobs to sustain them and their families until they passed exams.\textsuperscript{18,19,36,45,57} The pressure led some IMGs to abandon a career in medicine, especially women who often felt that it was their responsibility to look after their families and children.\textsuperscript{42,43,57}

For some IMGs, for example, refugees, there was the added stress related to the uncertainty about visas and residency status.\textsuperscript{37} It was also during this period that IMGs had to secure their family’s basic human needs\textsuperscript{64} from accommodation to schooling and banking, adding to the anxiety and stress.\textsuperscript{37,47,55,65}

For some IMGs who obtained their licences, they competed for posts with DMGs and often lost out to the competition for popular posts and had to settle for less popular ones, often in areas remote to where they landed.\textsuperscript{15,18,66} This could lead to separation from their families, which negatively affected their mental well-being as they lost a vital source of comfort and support.\textsuperscript{20,67}

IMGs suffered culture shock and disorientation at the workplace once they commenced their posts.\textsuperscript{14,17,32,36,40,47,55,56,58,60,61,65,68,69} Their first few days and weeks were a source of immense stress and anxiety as they found themselves in an unfamiliar environment that they had to fit into quickly. They were unclear about their roles and the roles of other professionals within the multidisciplinary team.\textsuperscript{14,17,32,40,55,56,58,60,61,68,69} Communication could be challenging, leading IMGs to sometimes become withdrawn. They were at risk of misunderstanding and being misunderstood.\textsuperscript{40,65,70} On the background of the stresses already mentioned, some IMGs had little resilience to withstand this pressure, and some suffered negative psychological impacts that affected them for a long time.\textsuperscript{18,20,35–40}

Degree of dissonance

The four main barriers that IMGs faced appeared to be the differences in language,\textsuperscript{18,36,37,40,42,46,70–72} culture,\textsuperscript{15,16,20,36,39,46,55,56,58,59,65,72,81} medical education,\textsuperscript{14,16,54,75–77,80} and belonging.\textsuperscript{15,19,20,35,46,55,57,59,68,72,81} It was the extent to which the IMGs’ language, culture and medical education differed from the host country’s, how weak their sense of belonging and the extent of bias they faced that determined the degree of difficulty they endured. As a result, these barriers were experienced differently by each IMG.

For most IMGs, language difficulties were described as the biggest barrier, especially in the initial period.\textsuperscript{18,36,37,40,42,46,70–72} This included difficulties with dialects,\textsuperscript{74,77} accents,\textsuperscript{62,71,74,76–78} colloquialisms,\textsuperscript{15,71,74,76,77} vernacular terms,\textsuperscript{74,76–78} sarcasm,\textsuperscript{15} and idioms.\textsuperscript{15,74} Although IMGs attended courses if available, these did not prepare them for the necessary language skills required at the workplace, where abbreviations and special terms were used.\textsuperscript{17,18,63,72}

Some IMGs found it difficult to express themselves, especially when a response was expected quickly.\textsuperscript{75} That resulted in avoiding speaking and discussions,\textsuperscript{36,70} especially in groups, which IMGs feared came
across as lacking knowledge.76 This also made it difficult for IMGs to socialise at work, which made it more difficult to fit in and made some IMGs feel like ‘outsiders’.36

The cultural differences that IMGs faced included culture in the workplace and in society at large.15,16,20,36,39,46,54–56,58,59,65,69,72–83 An IMG who was a native of the host country but qualified in another country did not suffer culture shock in society compared with an IMG who immigrated from another country.14,47,71,73 However, the former was likely to suffer a workplace culture shock, especially if the country of PMQ had a very different healthcare system and workplace culture.68

The same principle applied to differences in medical education between country of PMQ and host countries. Some IMGs immigrating from a medical education system where the emphasis was more on knowledge and science found it challenging to work in a healthcare and medical education system where there was more emphasis on communication skills and placed patients—rather than science—at the centre of care.14,16,75–77,80 Some IMGs did not understand what was expected of them, for example, in a communication skills session or exam.76 They sometimes thought the session or exam was about obtaining accurate information, reaching the correct diagnosis and devising the best management plan, when the emphasis was more on how they interacted with patients. Some teaching and assessment methods could also be alien to them.75

Some IMGs felt alienated and that they did not fit in or belong in their new workplace and communities.19,20,35,57,72 They did not feel they were trusted as their practice was constantly being observed and felt unfairly judged if they made a mistake similar to one made by a DMG.17,20,35,61,76 Some were made to feel unwelcome and were subjected to overt or subtle racism, marginalisation and/or discrimination.15,20,35,46,54,59,68,81 They could experience institutional and systematic discrimination15,18,20,36,46,52,55–58,66,68,81 that put them at a disadvantage when entering the profession, training programmes and progressing within these.19,20,36,46,52,66

Levelling the playing field
Interventions that targeted these barriers could reduce their impact on IMGs’ progress and mental health. Orientation programmes were not universally effective.17,18,36,46,58,62,67,69 When comprehensive, they orientated IMGs to their new workplace and sociopolitical environment, helping reduce the impact of the cultural barrier.62,67 IMGs were expected to perform at a high level from the start despite their disorientation and stress.17,18,40,58 Allowing a longer period to settle in before assuming their full duties would give IMGs time to work on reducing the impact of language, cultural and medical education barriers.17,32,36,46,67

Language courses appeared to reduce the impact of the language barrier to some extent.17,18,62,72 Well-designed and context-focused language17 and communication training as well as targeted medical education training could also reduce the impact of the language and medical education barriers respectively, although empirical evidence is required to support that.

Mentors or buddies were invaluable in reducing the impact of some of the barriers and alleviating some of the stress for IMGs,32,35,54,62 as did immigrating to a welcoming community53,55 and workplace with supervisors who were familiar with the needs of IMGs and were able to support them.20,36,40,54,63

Survive then thrive
Ultimately, IMGs migrated to improve their personal and professional lives.18,19,21,42,45–49,54 During the initial period, they just wanted to survive.15,17,18,32,33,36,40,46,47,54,56,58,61,62,65,67,68,70,72,80 They had to quickly adjust and adapt to fit in. Initially—especially when language, culture and medical education were very different—they tried not to stand out17,32,70 and contributed as little as possible to discussions.70 All the while, their senses were on high alert. They looked at, listened to and learnt what people around them said and how they said it, what they did and how they did it, how they interacted with others, what they valued and what was culturally and socially acceptable and what was not.15,17,18,32,35,36,40,46,54,56,58,61,65,68,72,80

IMGs adjusted to a lower status36,61 that could be frustrating36,56,61 and extended this adjustment to within the community.56 At times, the adjustment was to downgrade career plans and level of ambition.18 Nevertheless, IMGs forged ahead by using what they learnt in their initial heightened state of awareness and continued making adjustments.61 They adjusted the way they spoke,15,16,65,74,78,80 wrote36,61,68 and acted54,61,74,75 to blend in.32

Table 2 summarises the confidence in our findings using the GRADE-CERQual method.28

4 | DISCUSSION
This meta-ethnography is a comprehensive synthesis of the published qualitative literature, spanning from 1997 to 2019 and reporting the experiences of more than 1000 IMGs. We aimed to enhance understanding of experiences that were common to all IMGs, regardless of host country and country of PMQ. We did this by developing five third-order constructs and a line of argument that helped explain these experiences in a way that is both comprehensive and accessible. We have presented a conceptual model that explains how these constructs are related. We found that there were commonalities in the experiences of IMGs worldwide, but each IMG was unique. Our findings provide a simple and pragmatic framework to guide the understanding and assessment of each IMG’s circumstances, experiences and needs.

To our knowledge, our meta-ethnography is the only QES covering the broad range of experiences of IMGs before and after migration. Other available reviews have used different methods and have focused on specific issues or time periods in relation to IMGs.13,84,85 Jalali and colleagues,84 as well as Michalski and colleagues,13 conducted systematic reviews and aggregated themes from empirical studies into categories. The reviews focused on intercultural issues and transitioning. In relation to these two topics, both reviews highlighted similar second-order constructs to the ones we identified.
| Review finding       | Articles contributing to the review finding | Methodological limitations                                                                 | Coherence                                                                 | Adequacy                                                                 |
|---------------------|---------------------------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|--------------------------------------------------------------------------|
| Migration dimensions| 18,19,21,42,45–54,73                         | Minor concerns (4 articles with no or very minor concerns, 5 with minor concerns, 6 with moderate concerns) | No or very minor concerns (13 articles with no or minor concerns, 2 with minor concerns) | Moderate concerns (2 articles with no or very minor concerns, 2 articles with minor concerns, 11 articles with moderate concerns) |
| A challenging start | 14,17–19,32,35–37,40,42,43,46,47,52,55–63,65,66,68–69 | No or very minor concerns (10 articles with no or very minor concerns, 8 with minor concerns, 8 with moderate concerns) | Minor concerns (12 article with no or very minor concerns, 13 with minor concerns, 1 with major concerns) | No or very minor concerns                                               |
| Degree of Dissonance| 14–20,35–37,39,40,42,43,46,52–63,65,66,68–83 | No or very minor concerns (16 articles with no or very minor concerns, 13 with minor concerns, 16 with moderate concerns) | No or very minor concerns (84 articles with no or very minor concerns, 11 with minor concerns) | No or very minor concerns                                               |
| Levelling the playing field | 14–18,20,32,35–40,46,47,54,55,57,58,62,63,65,67–69,72–75–77,80,83,88 | Minor concerns (11 articles with no conc or very minor concerns, 9 with minor concerns, 12 with moderate concerns) | Serious concerns (17 articles with no or very minor concerns, 15 articles with minor concerns. Only 3 articles contributed significantly to well-being and 6 other articles contributed to some extent. None mentioned support for well-being) | Minor concerns (5 articles with no or very minor concerns, 21 articles with moderate concerns) |
| Survive then thrive | 15–18,20,32,35,36,40,46,47,52,54,55,57,60–62,63,65,67–78,80,82,83,88 | No or minor concerns (13 articles with no or very minor concerns, 5 with minor concerns, 9 with moderate) | No or minor concerns (10 articles with no or very minor concerns and 17 with minor concerns) | Minor concerns (5 articles with no or very minor concerns, 14 articles with minor concerns, 8 articles with moderate concerns) |

| Review finding       | Relevance                                                                 | CERQual assessment of confidence in the evidence | Evaluation of CERQual assessment                                                                 |
|---------------------|---------------------------------------------------------------------------|-------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Migration dimensions| No or very minor concerns (14 articles with no or very minor concerns, 1 article with minor concerns) | High confidence                                 |                                                                                                  |
| A challenging start  | No or very minor concerns                                                 | High confidence                                 |                                                                                                  |
| Degree of Dissonance| No or very minor concerns (41 articles with no or very minor concerns, 3 with minor concerns, 1 with moderate concerns) | High confidence                                 |                                                                                                  |
| Levelling the playing field | No or very minor concerns (29 articles with no or very minor concerns, 1 article with minor concerns, 2 articles with moderate concerns) | Low confidence                                  | We downgraded the confidence due to serious coherence concerns, especially regarding interventions for well-being. The coherence was moderate for other forms of support |
| Survive then thrive  | No or minor concerns (26 article with no or very minor concerns, 1 with moderate concerns) | High confidence                                 |                                                                                                  |
However, our methodology allowed us to develop these constructs further into third-order constructs to provide a deeper understanding of the interplay of these constructs within the wider global context and the IMGs’ journeys. Ho and Chiang conducted a meta-ethnography on the acculturation and socialisation experiences of migrant care workers but included only three studies with IMG participants. They focused on acculturation and described similar findings to ours with regard to adaptation.

In a realist synthesis of 62 articles addressing interventions to support IMGs’ transition to the host country, Kehoe and colleagues highlighted the importance of organisational, training and individual level considerations when designing these interventions. The individualised approach aligns with our findings of the individual nature of the challenges faced by each IMG. Furthermore, Terry and Lê explored the concept of social capital among IMGs. They posited that bridging social capital (relationships across groups)—as opposed to bonding social capital (relationships within groups)—between IMGs and host country society was necessary for acculturation and upward mobility. We found that IMGs were aware of this, yet found it difficult at times to form these bridging relationships and felt excluded.

We identified this isolation as part of the fourth barrier that IMGs face. Again, there were varying degrees with which this was experienced. This study is not without limitations; however, some of these may indicate important avenues for future research. First, all studies included in this review were conducted in high-income countries. This might be because these countries rely heavily on IMGs to deliver healthcare. Moreover, the publication dates of the articles in this synthesis spanned from 1997 to 2019. Although this meant that we provided a comprehensive picture of all available published qualitative literature on the topic, it is also possible that some of the specific issues explored in these articles might have changed or have been resolved over the years. A further limitation that applies to most QES is that qualitative research is often not well indexed. The qualitative filters that we used, however, had a 95% sensitivity in Medline and 94% sensitivity in Embase and PsycINFO. Last, the quality of any evidence synthesis depends on the quality of identified primary research, and, in our case, the quality of included studies was variable, with the areas of well-being and colleague relationships with IMGs being significantly understudied.

Our findings and conceptual model provide a useful framework to view the experiences of IMGs worldwide and provide insights into potential causes of disproportionate complaints and differential attainment. It might help IMGs to know that their experiences are shared, to look out for stressors and act to mitigate them and seek support at specific points in time. Our model is comprehensive, yet accessible and easy to use in a pragmatic way for individual IMGs’ needs assessment or to help those who are in immediate contact with IMGs (e.g. from colleagues and supervisors to members of the multi-disciplinary team) to understand IMGs’ experiences. This will hopefully encourage these colleagues to nurture and support IMGs to enable them to thrive for the benefit of IMGs, colleagues, patients and the healthcare systems within which IMGs work. Moreover, the model and concepts we present are of practical use to guide policymakers in countries that rely heavily on the IMG workforce to design policies that are IMG-friendly to help ‘eliminate disproportionate complaints from employers’ and ‘eradicate disadvantage and discrimination in medical education and training.’ To achieve these goals, we recommend that our findings are used to raise awareness of experiences and challenges IMGs might face, especially to their immediate supervisors; those working alongside IMGs, supervising them or employing them should strive to level the playing field for IMGs to improve their experiences and facilitate integration; policymakers should take our findings into account and strive to create IMG-friendly policies, especially if the host country relies heavily on IMGs in delivering healthcare; specific interventions at specific times should be designed to address the individual needs of IMGs; and attention should be given to under-researched aspects of the IMG experience, including well-being and colleague relationships.

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AUTHOR CONTRIBUTION

MAH was the principal investigator and contributed to every stage of the process from conception to submission of the final manuscript. SJ and EG contributed to the study conception and design, screening of records and article selection, and collaborated to develop third order constructs and the conceptual model. They contributed to writing all drafts of this article including the final one. EG also advised on methodology. All authors give their final approval of the submitted article and are accountable for all aspects of the work.

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REFERENCES

1. General Medical Council. Key stats from the medical register. https://data.gmc-uk.org/gmcdata/home/#/reports/The%20Register/Stats/report. United Kingdom. 2020. Accessed December 12, 2020.
2. World Health Organisation. Migration of health workers: WHO code of practice and the global economic crisis. World Health Organization; 2014.
3. Canadian Post-MD Education Registry. The national IMG database report 2018. Ontario, Canada. 2018.
4. The Organisation for Economic Co-operation and Development. Health workforce migration (edition 2018). https://www.oecd-ilibrary.org/content/data/26513358-en. Accessed March 30th, 2020.
5. General Medical Council. The state of medical education and practice in the UK 2015. London, UK. 2015.
6. Ellin K, Spittal MJ, Studdert DM. Risks of complaints and adverse disciplinary findings against international medical graduates in Victoria and Western Australia. Med J Aust. 2012;197(8):448-452.
7. Esmail A, Roberts C. Academic performance of ethnic minority candidate and discrimination in the MRCPG examinations between 2010 and 2012: Analysis of data. BMJ (Online). 2013;347:f5662.
8. General Medical Council. GMC targets elimination of disproportionately complaints and training inequalities. https://www.gmc-uk.org/news/news-archive/gmc-targets-elimination-of-disproportionate-complaints-and-training-inequalities. Accessed June 8th, 2021.
9. Medical Council of Canada. Leaving our mark 2014-2015 Annual Report. Otowa. 2015.
10. Federation of State Medical Boards and National Board of Medical Examiners. United States medical licensing examination/performance data. Federation of State Medical Boards and National Board of Medical Examiners, United States of America. 2021.
11. Norcini JJ, Boulet JR, Whelan GP, McKinley DW. Specialty board certification among US citizen and non-US citizen graduates of international medical schools. Acad Med. 2005;80(Supplement):542-545.
12. Woolf K, Rich A, Viney R, Rigby M, Needlemann S, Griffin A. Fair training pathways for all: understanding experiences of progression. London, UCL. 2016.
13. Michalski K, Farhan N, Motschall E, Vach W, Boeker M. Dealing with foreign cultural paradigms: a systematic review on intercultural challenges of international medical graduates. PLoS One. 2017;12(7):e0181330.
14. McGrath P, Henderson S, Holewa HA, Henderson D, Tamargo J. International medical graduates’ reflections on facilitators and barriers to undertaking the Australian medical council examination. Aust Health Rev. 2012;36(3):296-300.
15. Chen PGC, Nunez-Smith M, Bernheim SM, Berg D, Gozu A, Curry LA. Professional experiences of international medical graduates practicing primary care in the United States. J Gen Intern Med. 2010;25(9):947-953.
16. Osta AO, Barnes MM, Pessagno R, Schwartz A, Hirshfield LE. Acculturation needs of pediatric international medical graduates: a qualitative study. Teach Learn Med. 2017;29(2):143-152.
17. Snellgrove H, Kuybida Y, Fleet M, McAnulty G. “That’s your patient”. There’s your ventilator”: exploring induction to work experiences in a group of non-UK EEA trained anaesthetists in a London hospital: a qualitative study. BMC Med Educ. 2015;15(1):1-9.
18. Skjeggestad E, Sandal GM, Gulbrandsen P. International medical graduates’ perceptions of entering the profession in Norway. Tidsskr Nor Laegeforen. 2015;135(12/13):1129-1132.
19. Neiterman E, Bourgeault IL. Conceptualizing professional diaspora: international medical graduates in Canada. J Int Migr Integr. 2012;13:39-57.
20. Woolf K, Rich A, Viney R, Needlemann S, Griffin A. Perceived causes of differential attainment in UK postgraduate medical training: a national qualitative study. BMJ Open. 2016;6(11):e013429.
21. Poppe A, Jirovsky E, Blacklock C, et al. Why sub-Saharan African health workers migrate to European countries that do not actively recruit: a qualitative study post-migration. Glob Health Action. 2014;7(1):24071.
22. Noblit G, Hare RD. Meta-Ethnography: Synthesizing Qualitative Studies. Thousand Oaks: SAGE Publications Inc. 1988.
23. Britten N, Campbell R, Pope C, Donovan J, Morgan M, Pill R. Using meta ethnography to synthesise qualitative research: a worked example. J Health Serv Res Policy. 2002;7(4):209-215.
24. Ring N, Jepson R, Ritchie K. Methods of synthesizing qualitative research studies for health technology assessment. Int J Technol Assess Health Care. 2011;27(4):384-390.
25. France EF, Cunningham M, Ring N, et al. Improving reporting of meta-ethnography: the eMERGGe reporting guidance. BMC Med Res Methodol. 2019;19(1):1-13.
26. The Oxford Centre for Triple Value Healthcare. CASP checklists. The Oxford Centre for Triple Value Healthcare. 2021. https://casp-uk.net/casp-tools-checklists/. Accessed January 3, 2021.
27. Benoot C, Hannes K, Bilsen J. The use of purposeful sampling in a qualitative evidence synthesis: a worked example on sexual adjustment to a cancer trajectory. BMC Med Res Methodol. 2016;16(1):1-12.
28. Lewin S, Booth A, Glenton C, et al. Applying GRADE-CERQual to qualitative evidence synthesis findings: introduction to the series. Implement Sci. 2018;13(51):1-10.
29. Campbell R, Pound P, Pope C, et al. Evaluating meta-ethnography: a synthesis of qualitative research on lay experiences of diabetes and diabetes care. Soc Sci Med. 2003;56(4):671-684.
30. Sattar N, Lawton R, Panagioti M, Johnson J. Meta-ethnography in healthcare research: a guide to using a meta-ethnographic approach for literature synthesis. BMC Health Serv Res. 2021;21(1):1-13.
31. Elmir R, Schmied V, Wilkes L, Jackson D. Women’s perceptions and experiences of a traumatic birth: a meta-ethnography. J Adv Nurs. 2016;66(10):2142-2153.
32. Wong A, Lohfeld L. Recertifying as a doctor in Canada: international medical graduates and the journey from entry to adaptation. Med Educ. 2008;42(1):53-60.
33. Schütz A. Collected Papers I. The Problem of Social Reality. Nijhoff; 1962.
34. Toye F, Seers K, Alcock N, Briggs M, Carr E, Barker K. Meta-ethnography 25 years on: challenges and insights for synthesising a large number of qualitative studies. BMC Med Res Methodol. 2014;14(1):1-14.
35. Klinger C, Markmann G. Difficulties experienced by migrant physicians working in German hospitals: a qualitative interview study. Hum Resour Health. 2016;14(1):1-13.
36. Eriksson E, Berg S, Engstrom M. Internationally educated nurses’ and medical graduates’ experiences of getting a license and practicing in Sweden - a qualitative interview study. BMC Med Educ. 2018;18(1):1-14.
37. Cohn S, Alenya J, Murray K, Bhugra D, de Guzman J, Schmidt U. Experiences and expectations of refugee doctors: qualitative study. Br J Psychiatry. 2006;189(1):74-78. doi:10.1192/bjp.bp.105.010975.
38. Skjeggestad E, Norvoll R, Sandal GM, Gulbrandsen P. How do international medical graduates and colleagues perceive and deal with difficulties in everyday collaboration? A qualitative study. Scand J Public Health. 2017;45(4):428-435.
39. Slaughter A, Lewith GA. Satisfaction amid professional challenges: international medical graduates in rural Tasmania. Australas Med J. 2014;7:500-517.
40. Terry DR, Le Q, Hoang H. Satisfaction amid professional challenges: international medical graduates working within the UK regulatory framework: a qualitative study. J R Soc Med. 2012;105(4):157-165.
41. Moher D, Liberati A, Tetzlaff J, Altman DG, PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PloS Med. 2009;6(7):e1000097.
42. Jirovsky E, Hoffmann K, Maier M, Kutalek R. Why should I have come here?” - a qualitative investigation of migration reasons and experiences of health workers from sub-Saharan Africa in Austria. BMC Health Serv Res. 2015;15(1):1-12.
43. Shuval JT. The reconstruction of professional identity among immigrant physicians in three societies. J Immigr Health. 2000;2(4):191-202.
44. Krupic F, Samuelsson K, Fatahi N, Skoldenberg O, Sayed-Noor AS. Migrant general practitioners’ experiences of using interpreters in
health-care: a qualitative explorative study. Med Arch (Sarajevo, Bosnia and Herzegovina). 2017;71(1):42-47.

45. Klein D, Hofmeister M, Lockyear J, Crutcher R, Fidler H. Push, pull, and plant: the personal side of physician immigration to Alberta. Canada Fam Med. 2009;41(3):197-201.

46. Legido-Quigley H, Saliba V, McKe M. Exploring the experiences of EU qualified doctors working in the United Kingdom: a qualitative study. Health Policy. 2015;119(4):494-502.

47. McGrath P, Henderson D, Holewa HA. Liaison officer for international medical graduates: research findings from Australia. Illn Crisis Loss. 2013;21(1):15-28.

48. Oberoi SS, Lin V. Brain drain of doctors from southern Africa: brain gain for Australia. Australian Health Rev: A Publication of the Australian Hospital Association. 2006;30(1):25-33.

49. Ballard KD, Robinson SI, Laurence PB. Why do general practitioners from France choose to work in London practices? A qualitative study. British J Gen Pract. 2004;54:747-752.

50. Kearns R, Myers J, Adair V, Coster H, Coster G. What makes ‘place’ attractive to overseas-trained doctors in rural New Zealand? Health Soc Care Commun. 2006;14(6):532-540.

51. Chen PG, Nunez-Smith M, Berg D, Gozu A, Rulisa S, Curry LA. International medical graduates in the USA: a qualitative study on perceptions of physician migration. BMJ Open. 2011;1(2):e000138. doi:10.1136/bmjopen-2011-000138.

52. Humphries N, Tyrrell E, McAleese S, et al. A cycle of brain gain, waste and drain - a qualitative study of non-EU migrant doctors in Ireland. Hum Resour Health. 2013;11(1):1-10.

53. Han GS, Humphreys JS. Overseas-trained doctors in Australia: community integration and their intention to stay in a rural community. Australian J Rural Health. 2005;13(4):236-241.

54. Chen PGC, Curry LA, Bernheim SM, Berg D, Gozu A, Nunez-Smith M. Professional challenges of non-U.S.-born international medical graduates and recommendations for support during residency training. Acad Med. 2011;86(11):1383-1388.

55. Sockalingam S, Khan A, Tan A, et al. A framework for understanding international medical graduate challenges during transition into fellowship programs. Teach Learn Med. 2014;26(4):401-408.

56. Neiterman E, Bourgault IL. Professional integration as a process of professional resocialization: internationally educated health professionals in Canada. Soc Sci Med. 2015;131:74-81.

57. Neiterman E, Bourgault IL. The shield of professional status: Comparing internationally educated nurses’ and international medical graduates’ experiences of discrimination. Health (London). 2015;19(6):615-634. doi:10.1177/1363459314567788.

58. Lillis S, St George I, Upsdell R. Perceptions of migrant doctors joining the New Zealand medical workforce. New Zealand Med J. 2006;119:46-54.

59. Ha S, Choi HR, Lee JK, Lee YH. Challenges experienced by North Korean refugee doctors in acquiring a medical license in South Korea: a qualitative analysis. J Conti Educ Health Prof. 2019;39(2):112-118.

60. Lockyer J, Hofmeister M, Crutcher R, Klein D, Fidler H. International medical graduates: learning for practice in Alberta, Canada. J Conti Educ Health Profess. 2007;27(3):157-163.

61. Harris A. Encountering the familiar unknown: the hidden work of adjusting medical practice between local settings. J Contemp Ethnogr. 2014;43(3):259-282.

62. Gilles MT, Wakerman J, Durey A. “If it wasn’t for OTDs, there would be no AMS”: overseas-trained doctors working in rural and remote Aboriginal health settings. Australian Health Rev: A Publication of the Australian Hospital Association. 2008;32(4):655-663.

63. Kuusio H, Lamsa R, Aalto AM, Manderbacka K, Keskimaki I, Elovaino M. Inflows of foreign-born physicians and their access to employment and work experiences in health care in Finland: qualitative and quantitative study. Hum Resour Health. 2014;12(1):1-11.

64. Maslow AH. A dynamic theory of human motivation. 1958.

65. Rao A, Freed CR, Trimm RF. International and American medical graduates in a U.S. pediatric residency program: a qualitative study about challenges during post-graduate year 1. Med Teach. 2013;35(10):815-819. doi:10.3109/0142159X.2013.802297.

66. Woods SE, Harju A, Rao S, Koo J, Kini D. Perceived biases and prejudices experienced by international medical graduates in the US post-graduate medical education system. Med Educ Online. 2006;11(1):4595. doi:10.3402/meo.v11i.4595.

67. Curran V, Hollett A, Hann S, Bradbury C. A qualitative study of the international medical graduate and the orientation process. Can J Rural Med: The Official Journal of the Society of Rural Physicians of Canada – Journal Canadien de la Medecine Rurale: le Journal Officiel de la Societe de Medecine Rurale du Canada. 2008;13:163-169.

68. Njeeb U, Wong B, Hollenberg E, Stroud L, Edwards S, Kuper A. Moving beyond orientations: a multiple case study of the residency experiences of Canadian-born and immigrant international medical graduates. Adv Health Sci Educ Theory Pract. 2019;24(1):103-123.

69. Durey A, Hill P, Arkses R, et al. Overseas-trained doctors in indigenous rural health services: negotiating professional relationships across cultural domains. Aust N Z J Public Health. 2008;32(6):512-518.

70. Skjeggestad E, Gerwing J, Gulbransden P. Language barriers and professional identity: a qualitative interview study of newly employed international medical doctors and Norwegian colleagues. Patient Educ Couns. 2017;100(8):1466-1472. doi:10.1016/j.jpec.2017.03.007.

71. McGrath P, Henderson D, Holewa H. Language issues: an important professional practice dimension for Australian international medical graduates. Commun Med. 2013;10(3):191-200.

72. Warwick C. How international medical graduates view their learning needs for UK GP training. Educ Primary Care: An Official Publication of the Association of Course Organisers, National Association of GP Tutors, World Organisation of Family Doctors. 2014;25(2):84-90.

73. McGrath PD, Henderson D, Tamargo J, Holewa HA. ‘All these allied health professionals and you’re not really sure when you use them’: Insights from Australian international medical graduates on working with allied health. Aust Health Rev. 2011;35(4):418-423.

74. Jain P, Krieger JL. Moving beyond the language barrier: the communication strategies used by international medical graduates in intercultural medical encounters. Patient Educ Couns. 2011;84(1):98-104.

75. Narumoto K, Schultz KC, Merenstein JH. Outpatient precepting of international medical graduate and the orientation process. Can J Rural Med. 2006;119:157-163.

76. Mahajan J, Stark P. Barriers to education of overseas doctors in paediatrics: a qualitative study in South Yorkshire. Arch Dis Child. 2007;92(3):219-223.

77. Dorgan KA, Lang F, Floyd M, Kemp E. International medical graduate-patient communication: a qualitative analysis of perceived barriers. Acad Med. 2009;84(11):1567-1575.

78. Sommerser J, MacDonald W, Buursa C, Lim D, Grunt language versus accent: the perceived communication barriers between international medical graduates and patients in central Wheatbelt catchments. Aust J Prim Health. 2012;18(3):197-203.

79. Morrow G, Rothwell C, Burford B, Illing J. Cultural dimensions in the transition of overseas medical graduates to the UK workplace. Med Teach. 2013;35(10):e1537-e1545.

80. Seastrand G, Gafford J. Behavioral science education and the international medical graduate: a qualitative exploration of the experiences of Canadian-born and immigrant international medical graduates. Adv Health Sci Educ Theory Pract. 2006;11(1):39-56.

81. Searight HR, Gafford J. Behavioral science education and the international medical graduate: a qualitative exploration of the experiences of Canadian-born and immigrant international medical graduates. Adv Health Sci Educ Theory Pract. 2006;11(1):39-56.
83. Fiscella K, Roman-Diaz M, Lue BH, Botelho R, Frankel R. ‘Being a foreigner, I may be punished if I make a small mistake’: Assessing transcultural experiences in caring for patients. *Fam Pract*. 1997;14(2):112-116.

84. Jalal M, Bardhan KD, Sanders D, Illing J. Overseas doctors of the NHS: migration, transition, challenges and towards resolution. *Future Healthcare J*. 2019;6(1):76-81.

85. Kehoe A, McLachlan J, Metcalf J, Forrest S, Carter M, Illing J. Supporting international medical graduates’ transition to their host-country: realist synthesis. *Med Educ*. 2016;50(10):1015-1032.

86. Ho KH, Chiang VC. A meta-ethnography of the acculturation and socialization experiences of migrant care workers. *J Adv Nurs*. 2015;71(2):237-254.

87. Terry DR, Lê Q. Social capital among migrating doctors: the “bridge” over troubled water. *J Health Organ Manag*. 2014;28(3):315-326.

88. Povranovic Frykman M, Mozetic K. The importance of friends: social life challenges for foreign physicians in southern Sweden. *Community Work Fam*. 2019;23(4):385-400.

89. Health Information Research Unit. Health Information Research Unit - HIRU ~ Hedges. McMaster University, Ontario, Canada, 2021. https://hiru.mcmaster.ca/hiru/HIRU_Hedges_home.aspx. Accessed January 2, 2021.

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Additional supporting information may be found in the online version of the article at the publisher’s website.

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