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Syrian refugee and diaspora healthcare professionals: Case studies from the eastern mediterranean and European regions

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A R T I C L E I N F O

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A B S T R A C T

Thousands of Syrian healthcare professionals have been forced to leave Syria since the onset of the uprisings in March 2011 and subsequent descent into conflict. Initially, many stayed in the eastern mediterranean region; however, as the conflict became increasingly protracted and employment policies for Healthcare Professionals (HCPs) became increasingly restrictive, some moved elsewhere, particularly to Germany and the United Kingdom, both of which have aimed to capitalise on both refugee and diaspora HCPs to support human resources gaps in their health systems. Our aim is to explore the different policy practices towards Syrian refugee and diaspora HCPs in the eastern mediterranean and European regions. Methods: We completed a narrative literature review and held a closed, virtual workshop in November 2022 in which 45 participants, most of whom had lived experience in the different refugee hosting contexts, participated. This allowed us to probe the primary themes arising from the literature review and the authors' observations and present our findings as case studies. Results: We explore through case studies from countries near Syria (Turkey, Lebanon, Jordan, Egypt) and in Europe (Germany, UK) different policies which support or restrict entry into the health workforce. For host countries, those which implement policies that support retraining, accreditation and entry into the workforce have the potential for sustained and cost-effective benefit to their health systems; the impact of this on the HCPs and health system needs further exploration. Without such policies, Syrian HCPs are forced to work in the informal health sector such as in Lebanon or Egypt, leading to potential exploitation and security risks. Discussion: Now is an important opportunity to support Syrian and other refugee HCPs who have been forced to leave their homes to capitalise on their skills to explore the impacts of potentially effective policies and interventions. Such policies that aim to invest in refugee HCPs' skills, further develop their aptitudes, and potentially establish a connection between them and their homeland in a mutually beneficial manner for both health systems in exile and in their homeland. Nonetheless, this topic still has large research gaps and remains in need of urgent research and data, particularly in view of the fall of the Syrian regime in December 2024 and its potential impacts.

1. Introduction

Syrian healthcare professionals (HCPs) have faced multiple stressors since the uprisings in March 2011 and subsequent descent into conflict. This has included direct effects of the conflict, criminalisation of their work, deliberate targeting through the weaponization of healthcare and imprisonment as well as challenges regarding education, training and working in insecure environments (Fouad et al., 2017). The COVID-19 pandemic placed increased strains on HCPs who remained in Syria (Alhiraki et al., 2021) as did the February 2023 earthquakes which

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affected northern Syria and south-eastern Turkey (Alkhalil et al., 2023). Furthermore, the earthquakes not only inflicted physical devastation, but also caused instability for Syrian HCPs, mostly physicians who had situated their families in Turkey, while working in Syria. As the conflict became increasingly protracted, some HCPs have been forced to leave Syria; of these, a proportion remain in the region in neighbouring refugee hosting countries e.g. Türkiye, Lebanon, Jordan; a smaller number have emigrated to Gulf states; some went to transit countries e.g. Egypt while others have moved to Europe, particularly to Germany and the United Kingdom (UK). Others have sought work in healthcare while others have sought alternative careers in the humanitarian sector, academia or public health given challenges in re-accreditation and retraining to work in healthcare.

The current situation for HCPs inside Syria, those who are refugees or those who have emigrated to other countries remains tenuous, even after the fall of the Syrian regime in December 2024 due to ongoing insecurity and political uncertainty. Those who remain in Syria, including those who have been internally displaced face ongoing insecurity, inadequate training or specialisation opportunities and insecure working rights or remuneration (Bdaiwi and Yamama, 2020). Those in countries neighbouring Syria, particularly Jordan and Lebanon face significant restrictions at the policy level to entering the labour market. In contrast, in Türkiye, there are innovative initiatives from the Ministry of Health and WHO EURO for doctors and nurses to retrain as generalists and work in Migrant Health Centres (MHCs) serving Syrian refugees (Zikusooka et al., 2021). This program provides an important example of 'limited registration' whereby physicians and nurses can support primary healthcare for Syrian refugees, gaining Turkish citizenship and being able to work (Honein-AbouHaidar et al., 2019). For those who are refugees or who have emigrated to Europe, the Gulf or elsewhere, accreditation, retraining and entering a new system can be an arduous and prolonged process (Abbara et al., 2019). The impact of the fall of the Syrian regime on HCP migration is yet to be evident at the time of writing.

Given the protracted nature of the conflict, restricted training and employment opportunities in some of the neighbouring refugee-hosting countries e.g. Lebanon, Jordan, together with the limited potential for return to Syria, increasing numbers have sought training and opportunities in Europe and the Gulf (Abbara et al., 2019). The exodus to Europe peaked between 2015 and 2017 when more than a million refugees took the Eastern Mediterranean route through Greece to northern Europe, particularly Germany (Gunst et al., 2019). As such, some have sought safety and opportunities in Germany and the UK among other European countries. However, even in such destination countries, they face challenges related to ratification of certificates, accreditation and entry into the workforce (Abbara et al., 2019). Importantly, in many refugee host or resettlement countries, the exact number of HCPs is unknown and may be hard to estimate due to a lack of registration processes or registration with a different nationality e.g. if born in Syria but have German nationality. As such, even official figures may not reflect the true situation.

Our aim is to examine different policy practices towards Syrian refugees and other recent diaspora HCPs in the Eastern Mediterranean and European regions which host the largest numbers of Syrian HCPs.

2. Methods

We used three methodological approaches; firstly, a narrative literature review was conducted which explored published and grey literature regarding Syrian refugee HCPs in the Eastern Mediterranean and Europe. This was chosen to provide a broad range of information on the policies which relate to Syrian refugee HCPs, what challenges they may face and what policies may support their entry into the workforce or integration. Concepts searched included 'Syrian,' 'healthcare professional,' 'physician,' 'nurse,' 'midwife,' 'pharmacist,' 'policy,' as well as countries of interest including 'Turkey,' 'Lebanon,' 'Jordan,' 'Egypt,' 'Germany' and 'UK.' This allowed us to gain an overview of the scope of available literature. Secondly, the authors' experiences, both first hand and from many years of work on assorted projects pertaining to Syrian and other refugee HCPs, were taken into consideration. This supported the clarification of policies and their real-world implementation across the including geographical range.

This informed the closed, virtual workshop which was held in November 2022; the virtual format was to support international, particularly regional participation by Syrian HCPs and policy makers across the geographical range of interest. Attendees included HCPs with lived experience, academics, humanitarian, and policy actors; the majority of the participants were Syrian. The format included 4 short interventions highlighting personal experience of forced displacement as Syrian HCPs as well as research findings from ongoing research projects in which Syrian HCPs participated. These interventions were followed by a facilitated discussion among the participants which probed the primary themes arising from the literature review and the authors' observations. These findings are summarised as case studies below.

Participants for the workshop were identified and invited through a combination of purposeful sampling from our existing networks and gatekeepers. We collaborated with established organisations and networks that support Syrian refugee HCPs, such as the Syrian British Medical Society (SBMS,) Syrian American Medical Society (SAMS) and other relevant NGOs. These organisations acted as gatekeepers, facilitating the initial contact and extending invitations to potential participants. To ensure better coverage, we reached out to our existing networks from previous research identifying key individuals in relevance to our research questions

This study was conducted as part of the National Institute for Health Research (NIHR) funded project 131,207, Research for Health Systems Strengthening in Northern Syria (R4HSSS). The overall ethical approval for the R4HSSS project was obtained from King's College London (KCL). Given the absence of a formal Ethics Review Committee (ERC) in Syria, specific ethical approval for this study was sought from and granted by the Idlib Health Directorate (IHD), the local technical health authority in northwest Syria. The IHD has a council of consultants who review and approve ethical applications for research. Consultations with key stakeholders and interested parties, including refugee health professionals, were conducted in accordance with the ethical guidelines of both the KCL and IHD approvals to ensure the protection and confidentiality of participants.

3. Results

The literature review identified several key themes relevant to the forced displacement and integration of Syrian HCPs. These themes included the causes of forced displacement, such as persecution and insecurity, which have been documented in various sources (Fouad et al., 2017,Physicians for Human Rights 2021). Another significant theme was the challenges related to training and accreditation, including limited registration opportunities and bureaucratic hurdles in host countries (Balta, 2019,Lisans, 2022,'Sihhat Project' 2023,Eurasia 2016,Kayali, 2020). (See table 1)

The risks associated with working in the informal health sector, such as exploitation and arrest, were also highlighted in the literature (Ismail et al., 2020,Atrache, 2020,Arie, 2015,Human Rights Watch 2014, Ghaith, 2021). Positive examples of integration efforts, particularly in Turkey, Germany, and the UK, were noted for their support initiatives, which include language courses, vocational training, and professional support networks (Abbara et al., 2019,Salameh, 2021,Ali, 2023,Sygaad 2023). Additionally, the literature emphasised the difficulties faced by non-physician HCPs and female HCPs, pointing out the need for more established pathways and support mechanisms for these groups (Ismail et al., 2020,Montoya, 2015,'Talent beyond boundaries' 2023).

We identified a series of countries which illustrate different enablers and challenges for Syrian refugee HCPs both in the Eastern

Table 1
Table of Key Themes and Relevant Literature.

Key Theme	Relevant Literature	Discussion Topics in Workshop
Forced Displacement Causes	(Fouad et al., 2017,Physicians for Human Rights 2021)	Persecution, insecurity, attacks on healthcare, salary issues
Training and Accreditation Challenges	(Balta, 2019,Lisans, 2022, 'Sihhat Project' 2023,Eurasia 2016,Kayali, 2020)	Limited registration, bureaucratic hurdles, language barriers
Informal Sector Risks	(Ismail et al., 2020,Atrache, 2020,Arie, 2015,Human Rights Watch 2014,Ghaith, 2021, Ghobrial et al., 2023)	Exploitation, arrest risks, ethical challenges
Positive Integration Examples	(Abbara et al., 2019,Salameh, 2021,Ali, 2023,Sygaad 2023)	Support initiatives in Turkey, Germany, UK
Non-Physician HCPs and Gender Issues	(Ismail et al., 2020,Montoya, 2015,'Talent beyond boundaries' 2023)	Pathways for non-physicians, female HCPs challenges

Mediterranean and in Europe. Such enablers include 'limited registration' to work in MHCs in Turkey (Lisans, 2022,Eurasia 2016,Kayali, 2020), the Medical Support Worker (MSW) role (NHSE, 2022) and support from civil society organisations in the UK and schemes to support refugee HCPs in Germany with language, accreditation, and acclimatisation (Abbara et al., 2019,Hasselbach, 2021). Despite positive steps, there many are hurdles which refugee HCPs face; some of these are similar to challenges faced by migrant HCPs while others e.g. time out of training, unexpected relocation or displacement, ratification of certificates or training were unique. In addition, where it is available, literature remains skewed towards physician HCPs with more limited evidence around non-physicians HCPs, for whom the pathways to entering the labour market are often less established (Lisans, 2022, Eurasia 2016,Ismail et al., 2020,Arie, 2015,Human Rights Watch 2014, Ghaith, 2021,Ghobrial et al., 2023,Salameh, 2021,Haddon, 2014),]. This also seems to be the case among examples of refugee HCPs outside of the Syrian context (Burnham et al., 2012,Smith et al., 2024).

The literature review was complemented by the workshop findings. The closed virtual workshop held in November 2022 involved a total of 45 participants, including 30 males and 15 females. Among the participants, 17 were Syrian doctors currently working in clinical medicine or public health in various European countries, while 12 were Syrian doctors engaged in humanitarian response efforts and health services in Turkey and Syria. The remaining participants were professionals from humanitarian donors, NGOs, and academic institutions, providing a broad range of perspectives on the challenges and opportunities faced by Syrian HCPs. This diverse group allowed for a comprehensive exploration of the issues surrounding Syrian refugee and diaspora HCPs, ensuring that the discussions reflected both clinical and humanitarian viewpoints across different geographical and institutional contexts.

In the case studies below, we provide more details of the findings from the literature (information from these findings are referenced) as well as discussion from the workshop participants; for clarity, the latter information is prefaced by 'workshop participants noted/ found…' However, in some instances, some of what was discussed in the workshop was also cross-referenced with available literature to support verification of facts and opportunities to explore the information further. Alongside the case studies, we have provided a visual summary of the pathways to employment as a doctor in each of the countries.

3.1. Case studies from the eastern mediterranean region: türkiye, lebanon, jordan & Egypt

Türkiye hosts the largest number of Syrian refugees at around 3.6 million, of whom all but around 47,000 are outside of camp settings; this has created a demographic shift in Türkiye where various events have resulted in increased anti-refugee and anti-Syrian sentiment (Derneci, 2023). Despite an initial welcome with Ankara maintaining an open-door policy, legally accepting refugees under a Temporary Protection Regulation which was established in November 2014 by the Directorate General of Migration Management (GIGM), challenges remain (Cagaptay and Yalkin, 2018). GIGM imposes bureaucratic hurdles and Syrians need to apply for a separate temporary resident permit to travel freely in Türkiye and for work permits; comparatively few Syrians have been able to successfully apply for these. Around two hundred thousand have been eligible to gain Turkish citizenship (just under half of whom are under 18 (Derneci, 2023).) The exact numbers of Syrian HCPs in Türkiye is unknown, however, it is estimated that after the conflict, around 20,000 Syrian doctors arrived as refugees. Since then, it is estimated that 15,000 of them have migrated to other countries such as Germany for various reasons (Balta, 2019). This trend of emigration from Türkiye is set to continue due to the continued trend of anti-refugee sentiment, restrictions on travel between cities and an increase in forced returns to Syria (Hickson and Wilder, 2023).

Workshop participants highlighted that those residing in Türkiye were divided between those who worked in Türkiye (either as doctors or in the humanitarian sector), and those who travelled back and forth to northwest Syria to work; this distinction was considered important as they faced different challenges and the risks for migration for countries outside the region were considered to differ. To be recognised as a generalist in Türkiye, doctors must pass the written medical examination in Turkish (STS) and complete unpaid clinical rotations 6–9 months at a University Hospital. Further, to be recognised as a specialist, doctors must be registered as a generalist then pass an oral examination in Turkish. The applicant must then present proof of any undergraduate or postgraduate qualifications, legally verified by the Syrian authorities, something which is out of reach for the majority of doctors based in Türkiye, especially those who are considered to be opposed to the Syrian government (Lisans, 2022) (See Fig. 1). Workshop participants noted that the Syrian Consulate in Türkiye, which is supposed to facilitate such verifications, has not ratified any medical certificates since 2014. This impedes progress and may result in doctors emigrating or working illegally under a Turkish doctor or in a home clinic, leaving them open to exploitation and risking arrest.

Despite challenges which Syrian HCPs face, an approach towards 'limited registration' has been supported by the Turkish government in collaboration with the EU and WHO EURO since 2016, providing opportunities for some HCPs (mainly doctors and nurses,) to work in Turkey. This SIHHAT project focuses on supporting healthcare access for Syrian refugees and providing opportunities for employment for Syrian refugee HCPs through establishing MHCs. There are currently around 181 MHCs and 10 mental health centres across 29 cities. In these centres, around 4000 HCPs are working, of whom 700 are Syrian doctors ('Sihhat Project' 2023). For Türkiye, the benefit of including Syrian HCPs is that this provides employment opportunities and addresses some of the language and cultural issues which impede Turkish HCPs working in the MHCs (Eurasia 2016).

Workshop participants explained that other options for Syrian refugee doctors include obtaining their medical diploma equivalence, "denklik" which allows them to work in a private clinic; however, this process includes passing examinations in Turkish and undertaking unpaid clinical observerships. They noted that due to poor remuneration in MHCs, not being able to work in their primary specialties, limited career progression or challenges converting their qualifications, some doctors preferred to work in the informal sector leaving them at risk of arrest and deportation (Kayali, 2020). Despite this, they noted that patients found the MHC network for primary healthcare beneficial to them as they could see a Syrian (Arabic speaking) physician or nurse. As such, despite the challenges which the HCPs experienced and the potentially negative aspects of having a parallel or two-tier system (one for refugees and one for nationals), there is . Workshop participants based in Türkiye also noted that (as of 2022), approximately 100 Syrian doctors have graduated from medical schools at Turkish universities and an estimated 700

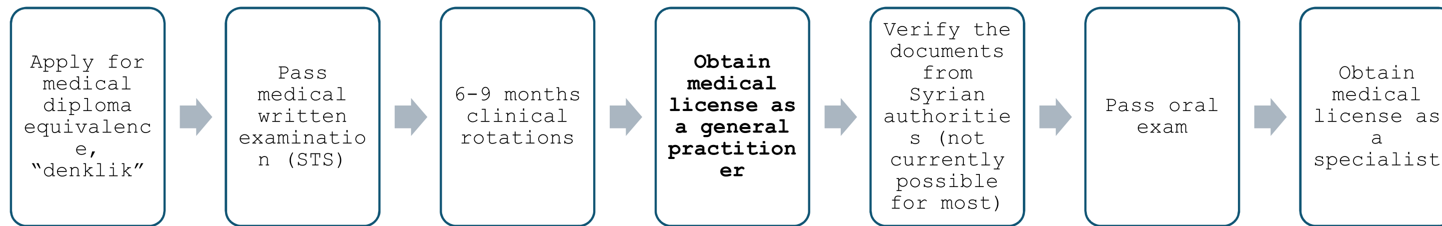

Fig. 1. Registration process in Turkey for refugee doctors (including Syrians) applying for a general practitioner license or medical license as a specialist.

medical students are currently studying. Their career aspirations following graduation or specialisation have yet to be explored and this represents an important gap in the literature. In part, the lack of clarity surrounding policy related to work options for these doctors and their colleagues in Türkiye is significant in dissuading them from the Turkish labour market, which represents a missed opportunity for both the health system in Türkiye and in Syria.

In comparison to Türkiye, Lebanon, and Jordan both present even more challenging hurdles for Syrian HCPs wishing to enter the labour market as doctors, nurses or other HCPs. In Lebanon, numerous legal hurdles prevent Syrian HCPs from supporting Lebanon's health system. The 2014 labour law Decree 197 limits employment opportunities for Syrians to agriculture, construction, or cleaning (Ismail et al., 2020). In Lebanon, this has resulted in doctors and other HCPs working illegally in the 'informal health sector', mainly providing healthcare to Syrian refugees. Informal HCPs may include unregistered or non-graduated HCPs (Ismail et al., 2020). As in Türkiye, this has created a parallel health system which, is poorly regulated and leaves HCPs and patients vulnerable to exploitation, threat of deportation, discrimination as well as presenting ethical challenges related to regulation, quality of practice or ongoing professional development (Ismail et al., 2020). Despite evidence of the challenges which Syrian HCPs in Lebanon face, opportunities for registration (even limited registration) and the potential for supporting Lebanon's health system, it currently remains unlikely that there is sufficient political will or stability in Lebanon to take proactive steps to support Syrian HCPs to formally join the workforce. The issue of gender is also key here; among the informal health workforce, workshop participants noted that fewer than 10% are female due to insecurity and risks associated with this work. In addition, similarly to other Syrian refugees in Lebanon, Syrian HCPs have been subjected to campaigns of racism at both the societal and official level which consistently pose a threat to their existence and stability (Atrache, 2020).

In Jordan, Syrians are only allowed to work in industries available to non-Jordanians, such as agriculture, sales, and construction. Similar challenges to Lebanon and Türkiye have occurred with Syrian doctors working informally, facing numerous challenges and risking arrest or deportation for treating fellow Syrians (Arie, 2015,Human Rights Watch 2014). During the COVID-19 pandemic, the Jordanian Ministry of Health, worked with the UNHCR (through the UN volunteers programme) to allow 8 refugee doctors (of whom 5 were Syrian) to work as volunteers in public Jordanian Hospitals with permits (Ghaith, 2021). However, UNHCR noted that they had received 300 applicants among those who wanted to work in the medical sector suggesting that there is more potential for refugee HCPs to support Jordan's health system (Ghaith, 2021). In 2015, a Jordanian Health Ministry official stated that there were formal ways in which Syrian refugee doctors could obtain a Jordanian licence; this includes passing the Jordanian Medical Council exams, registering and joining the Jordanian Medical Association (Montoya, 2015). Workshops participants who had worked informally in Jordan noted just as in other contexts that there is a discrepancy between official policies and practices. Due to the inability to register and work formally (alongside the protracted nature of the conflict), they reported that HCPs have sought to travel elsewhere e.g. Germany, UK where they can progress towards registration. Those who remain, do so if they are able to continue working informally (usually under the oversight a Jordanian doctor,) or for family or cultural reasons given its similarity to Syria. However, they reported that this carries its own risks to patient safety as well as to HCPs' careers, considering the absence of relevant regulations and legal framework to ensure accountability and the protection of these HCPs.

Amidst this challenging environment for HCPs in Lebanon and Jordan and taking into account the incapacity of the health systems there to incorporate refugee healthcare professionals, there have been a few initiatives which capitalise on the skills of refugee HCPs to address shortages in other regions. This includes the Talent Beyond Boundaries ('Talent beyond boundaries' 2023) (TBB) initiative in which nurses and other highly skilled professionals are supported to work in the UK, US, Canada, and Australia. While the potential advantages of this approach are focused on supporting refugee HCPs, the receiving health systems of these countries would benefit in terms of retention and integration, whether they provide healthcare to refugees or to other populations in these countries. Despite some individual successes of this scheme, there has been some critique and pushback noting the need for the receiving health systems to be better prepared at receiving and supporting the refugee HCPs.

Egypt presents an interesting context for Syrian HCPs as it is increasingly seen as a transit rather than destination country given recent political changes and restrictions to practise (Ghobrial et al., 2023). There are a total of 250,000–300,000 (approximately 130,000 registered) Syrian refugees, which are considered more than half of Egypt's registered refugee population ('UNHCR Egypt Monthly Statistical Report' 2019). While these populations are largely concentrated in urban areas, such as Cairo, Alexandria, and Damietta, where health services are generally more available and often provided by humanitarian organisations, these populations often are less visible and harder-to-reach. In contrast to Lebanon and Turkey, Syrians who are registered with UNHCR are eligible for government-funded primary and specialised healthcare services provided by the Ministry of Health and Population (MOHP) ('Services For Refugees and Asylum Seekers' 2019). However, barriers to healthcare access continue to exist, including a general lack of awareness among refugee populations about where and how to access care, as well as challenges related to geographic distance of service access points and perceived cost of services. Further inequities are experienced among those with large families, who are female, have chronic disease, and/or have experienced a long duration of asylum (leading to depletion of savings and financial resources to seek care) (Fares and Pui-Junoy, 2021). These barriers have been exacerbated by current economic, political and social conditions in Egypt have affected both refugee and host country communities, placing additional barriers on both with regards to accessing health care ('A fragile refuge: a socioeconomic assessment of syrian refugees in Egypt' 2016).

In contrast to other countries in the region, the challenges experienced by Syrian HCPs in Egypt and their integration into the labour market are not widely explored with limited literature discussing this topic. Generally, while foreign students can attend undergraduate medical institutions in Egypt, it is quite difficult for foreign medical students to obtain a medical licence to practise in Egypt from both the Ministry of Health and the Doctor's Syndicate upon graduation (Ghobrial et al., 2023,Abdelaziz et al., 2018). (See Fig. 2) Information about HCPs in Egypt is very limited with only two recent publications highlighting some of the issues (Ghobrial et al., 2023). From the workshop, participants who had transited through Egypt to other destination countries reported that, in 2019, a new law was introduced requiring all medical graduates to complete a year of training at one of the Ministry-approved hospitals before obtaining a licence to practise, including foreign medical graduates. Whether this law has alleviated or worsened the challenges faced by Syrian HCPs is not clear as workshop participants did not have recent experiences in Egypt. They noted that, since their initial arrival in the early phase of the Syrian conflict, these strict labour policies have prevented highly skilled professions from Syria to operate legally, leading to instances of informal work among Syrian HCWs. In some cases, this has led to the detention or intimidation of Syrian HCPs working informally in Egypt, affecting their access to livelihoods and job security, something which has been reported in the press (Haddon, 2014). Otherwise, very little is known or understood about the current situation of Syrian HCPs in Egypt though a recent publication from Ghobrial et al., highlighted some of the challenges they face. In general, workshop participants noted that Syrians in Egypt are subject to fewer discriminatory campaigns than in other neighbouring countries, and the tension between Syrians and the host communities is very minimal. This could be attributed to a variety of political, national and historical factors, as well as the ability of Syrians to contribute to the

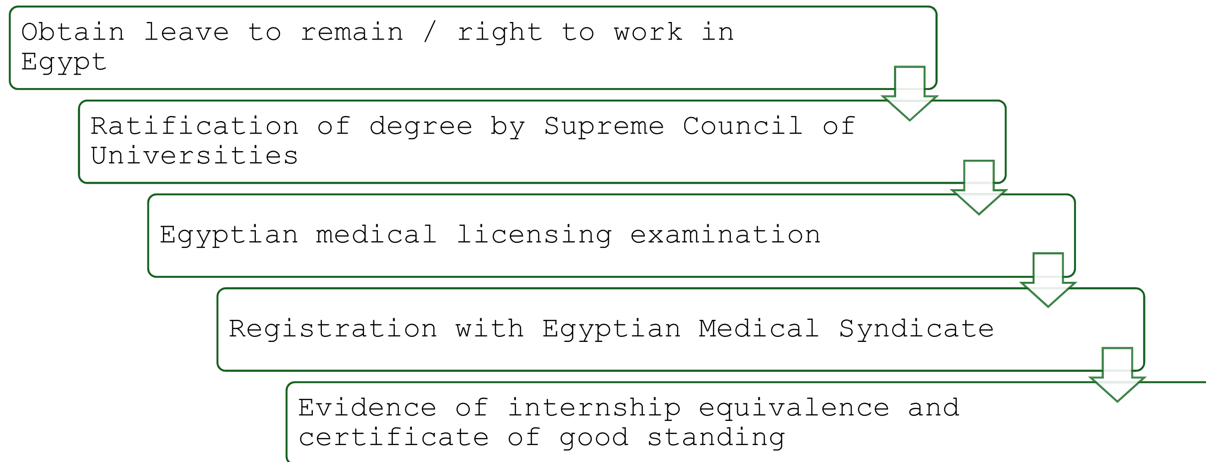

Fig. 2. Registration process in Egypt for refugee doctors (including Syrians).

local economy there (Ghobrial et al., 2023).

3.2. Case studies in Europe: Germany and UK

Germany has been a destination country for many Syrians and currently hosts over 550,000 Syrian refugees; it also hosts Syrians who have emigrated to study or work, some of whom do not want to apply for asylum so that they can travel to Syria freely. In 2024, the number of registered Syrian doctors working in Germany reached over 6120 making them the highest number of foreign-born doctors in the German workforce, accounting for around 10% of foreign doctors (Euronews Albania 2024). In Germany, refugee doctors are seen as potential solutions to support shortfalls among doctors which are estimated to be between 15,000 and 27,000, particularly in certain geographical areas and certain specialities where these doctors can support Arabic-speaking patients (Abbara et al., 2019,Salameh, 2021). There are numerous examples in Germany of how government bodies and institutions as well as academic institutions, such as Charite, have supported Syrian refugees; this is particularly so for doctors compared to other HCPs. This has included language support, vocational courses, support with post-graduate examinations and support with understanding the German health system (Ali, 2023).

Despite efforts in Germany, interviews with Syrian HCPs (both refugees and migrants) have noted some challenges, particularly for those who are outside of the main cities or who are migrants rather than refugees. Workshop participants working in Germany noted some of these challenges and this was supplemented by findings from the literature. Such challenges include: difficulties learning medical German to a sufficient standard and passing language examinations; navigating the federal system; passing examinations; obtaining and ratifying degrees; accreditation of prior experience; integrating culturally with colleagues and the wider community; anti-refugee and anti-Muslim sentiment (Abbara et al., 2019). However, many Syrian HCPs in Germany, particularly doctors have made good progress with personal stories shared during the workshop of success and gratitude for the support they have received in Germany. Arriving HCPs were also able to establish professional societies where they can support each other and advance their careers. For example, Syrian HCPs have established SyGAAD, an association for Syrian doctors and pharmacists in Germany which provides support to new arrivals across different specialties (Ali, 2023).

The United Kingdom does not host as many Syrian refugees as Germany despite Syrian refugees being the highest number of resettled individuals by 2020 (Ali, 2023). However, there has been strong recognition, especially during COVID-19 of the value which refugee HCPs have to the wider health system, particularly given shortages which the National Health Service (NHS) faces (BMA 2023). This has included opportunities such as the Medical Support Worker (MSW) scheme (NHSE, 2022,NHS England 2022), an NHS England supported scheme which provides funding to NHS Trust to employ refugee (as well as migrant) doctors while they are in the process of doing their examinations (PLAB 1 & 2 or specialist examinations) and registration with the GMC (General Medical Council) (Efe, 2023). (See Fig. 3.) During the workshop, participants with direct experience of implementing the

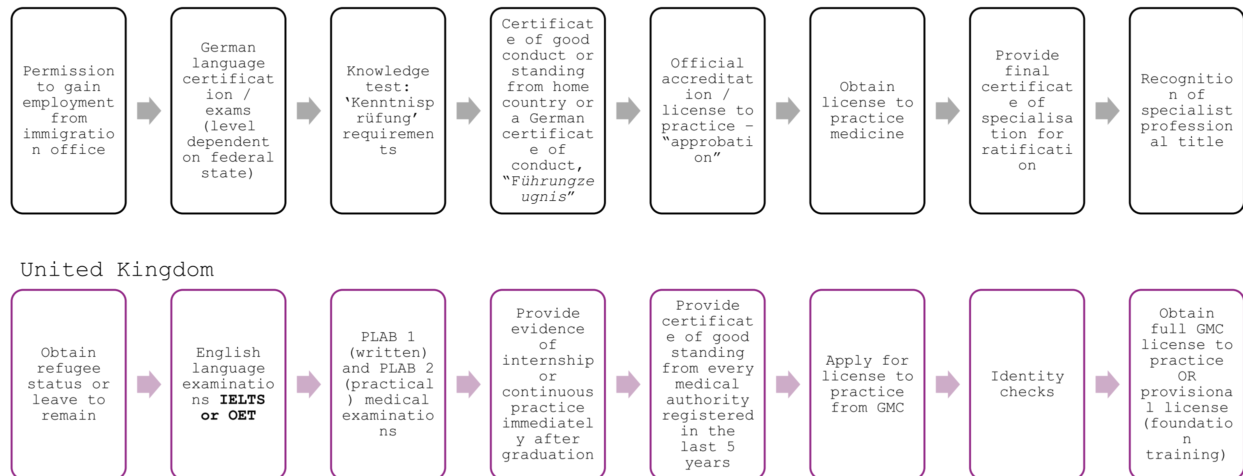

Fig. 3. Registration processes in Germany and the United Kingdom for refugee doctors (including Syrians).
GMC – General Medical Council; IELTS – International English Language Test; OETS (Occupational English Test).
PLAB – Professional and Linguistics Assessment Board.

program or working as an MSW shared their experiences, citing the positive impact it had. It allowed them to work at the equivalent of a first-year doctor but without prescribing rights and some limitations to practise. Roll out of this scheme varied across the UK and was impeded by poor planning, bureaucracy, restrictions to employment and a lack of familiarity among Trusts and the wider workforce about the MSW role. Around £15 million of funding was identified for this scheme in around 2022/2023, however funding ended in March 2023 (NHSE, 2022). Participants noted that though funding was subsequently extended in principle, it was not released by the Treasury; as such, NHS Trusts were unable to recruit MSWs without this central funding after 2023. Since then, Trusts were informed that they could continue to run MSW programs if they provided local funding, something which no Trusts in London do as of 2024 (email communication.) The total number of refugee doctors supported by this program is not known though it is estimated to be a few hundred (NHS England 2022); the number of Syrian refugee doctors who benefited are also unknown.

From the workshop, participants reported that an important support for Syrian HCPs in the United Kingdom was institutional support including from the GMC (General Medical Council) ('GMC: refugee status' 2023), BMA (British Medical Association ('BMA: help for refugee doctors' 2023)) which included practical support such as fee waivers, and from academic institutions as well as third sector organisations. Third sector institutions have also provided support with both practical and examination or registration related activities; these are spread across the United Kingdom and include the Lincolnshire Refugee Doctors Project ('Lincolnshire refugee doctor project' 2022), Building Bridges Programme for Refugee Health Professionals ('Building bridges programme for refugee health professionals in London' 2023), REACHE Northwest ('REACHE' 2023) among others. The Syrian British Medical Society ('Syrian british medical society' 2023) (SBMS) have also provided support through various initiatives including individual support, networking and information dissemination through seminars and their website. Workshop participants explained that the UK is not a federal system (unlike Germany) which meant that GMC registration was valid across the UK and gave some flexibility to move to areas with more opportunities for professional development and jobs. Despite streamlining for Syrian doctors, there has been less support for refugee HCPs of other cadres, though NHS employers have highlighted certain initiatives in the UK, particularly in the wake of the Ukrainian and Afghani crises ('Refugee healthcare professionals' 2023). The total number of Syrian refugee or migrant doctors in the UK is unknown.

4. Discussion

Ongoing hostilities, insecurity and the devastation of Syria's health system, continue to drive Syrian HCPs out of Syria from across all regions; this is likely to remain so, even after the falling of the Syrian regime in December 2024 until the impact of this change becomes more apparent. For host countries, many of whom face workforce shortages, particularly in rural areas or less popular specialties, Syrian and other refugee HCPs are an important source of support to the health system. Initiatives to support entry into the workforce extend beyond the ethical and humanitarian and are in fact practical and economic with the costs of support registration or retraining lower than that of training undergraduates (Refugee Council 2024).

Beyond Syria, refugee HCPs from Ukraine, Gaza, Sudan and Myanmar represent valuable resources who can support the health systems of receiving host countries as well as their own health systems through diaspora networks or return post-conflict (THET 2024). Understanding policies or initiatives which support refugee HCPs to enter the workforce can allow wider roll out and support. In particular, the enablers for non-physician refugee HCPs needs to be explored in more detail as these cadres are often under-represented in the literature and processes for registration may be less streamlined. ('Talent beyond boundaries' 2023). The reason for this neglect is unclear (given widespread shortages of all HCPs) but may relate to the more established pathways available for doctors compared to other cadres or the more visible nature of doctors in the Syria diaspora. In addition, there is often a discrepancy between policies which in theory, allow registration in the host country e.g. Lebanon, Jordan, Egypt but in practice do not facilitate registration (Ghobrial et al., 2023,Honein-AbouHaidar et al., 2019).

For countries in which registration is either not allowed or not possible e.g. Lebanon, Jordan, refugee HCPs are forced to work in the informal sector, something which is of high risk to both the HCPs and patients (Honein-AbouHaidar et al., 2019,Abbara et al., 2019). This is increasingly so at a time when forced repatriation of Syrian refugees is increasing despite the illegal nature of such deportations and the associated risks. Such trends have forced refugee HCPs, particularly doctors, dentists, pharmacists and others who have the means to leave the countries neighbouring Syria to seek refuge in Europe or the Gulf. As rising anti-refugee sentiment continues in Europe, travel to Europe for asylum, work or study have become increasingly difficult even for HCPs (Dubois, 2023).

Despite enablers for entering the workforce in Türkiye, Germany and the United Kingdom, our work identified various barriers; these included bureaucracy, examinations, language, and culture, working in a different system and new medical culture (Abbara et al., 2019,Ghobrial et al., 2023,Ghobrial et al., 2023). Such factors also affected integration (Smith et al., 2024). In most contexts, it was reported that more support was provided for refugees rather than non-refugee HCPs whether through opportunities for support with examinations or observerships or organisations which can provide support navigating available pathways (NHS England 2022,'GMC: refugee status' 2023, 'BMA: help for refugee doctors' 2023,'Lincolnshire refugee doctor project' 2022,'Building bridges programme for refugee health professionals in London' 2023,'REACHE' 2023,'Syrian british medical society' 2023,'Refugee healthcare professionals' 2023). Though this is an important point to consider, there are particular challenges which refugee HCPs face including gaps in training, challenges related to obtaining original copies of certificates and their ratification and the experiences of forced displacement which may differ from that of migrant HCPs (Abbara et al., 2019). In the UK, both refugee and migrant HCPs benefited from the MSW scheme which supported a period of working in the NHS while undertaking registration processes and examinations (NHSE, 2022). The essential discontinuation of this scheme has left many physicians with limited opportunities to gain clinical experience in their host country, understand the health system and support healthcare provision. However, its roll out provided valuable lessons to understand how refugee doctors and other HCPs can be supported in their training and re-accreditation while also providing benefit to the health system of their host country.

There is a dearth of available literature which explores the particular challenges which non-physician, refugee HCPs face in host countries and which female refugee HCPs face. Nurses have been able to work in MHCs in Türkiye alongside physicians, undertaking training and registration. However, information about pharmacists and other refugee HCPs is more limited. In the UK, though there is a shortage of pharmacists, the processes for applicants qualified overseas (particularly outside of the EAA (European Economic Area)) is lengthy and expensive (NHS: information for overseas pharmacists 2024) with limited institutions offering the OSPAP (Overseas Pharmacist Assessment Program (Pharmacy regulation: courses and qualifications for pharmacists 2024)). Similar shortages are noted for dentists, nurses and midwives (Charlwood, 2022, Royal college of midwives 2022) in the UK and abroad (Boniol et al., 2022), something which impedes progress towards UHC (Universal Health Coverage). Providing opportunities for limited registration while undertaking examinations and registration, as demonstrated by the MSW program in the UK, can be one way in which refugee HCPs can be supported while also providing a service. Such schemes can reduce deskilling, reduce social or professional isolation for refugee HCPs and provide a sustainable pathway for refugee HCPs to enter the workforce.

At the policy level, restrictions on full practice - whether in actuality or by default - can reduce the likelihood that refugee HCPs can remain in those countries. For refugee HCPs, few are able to remain in Lebanon or Jordan for example due to restrictive practices with regards to employment of Syrian refugees. In Türkiye, a country which hosts the largest number of Syrian refugees whilst also facing its own multiple crises e.g. economic, political, natural disasters, policies which allow limited registration for Syrian doctors and nurses to work in MHCs provides an important example which not only supports the HCPs themselves but also patients. However, Syrian refugee HCPs, particularly doctors, find working as generalists (not in their specialties) challenging and frustrating, prompting many to look to other countries. The protracted nature of Syria's conflict is likely an important contributor to the decision to leave Türkiye as the hope of return to Syria dims, alongside concern of forced repatriations (Human Rights Watch 2022). Despite challenges during the registration process in Europe, refugee HCPs have opportunities to work in the health system once registration is complete; though gaining first employment may be difficult, there are opportunities to enter the workforce, particularly in specialties or geographies which are less popular with local graduates.

While our findings mentioned some challenges which female Syrian HCPs face, it is essential to underline that these challenges are not uniform. Intersectionality—where multiple social identities, such as gender, refugee status, ethnicity, religion, political position, culture and professional background overlap—significantly affects the experiences of female HCPs. The intersection of these identities often leads to compounded forms of disadvantage for some groups. For example, In France, the principle of laïcité (secularism) is enshrined in law, mandating a strict separation between religion and the public sphere, including public health care facilities (Cohen-Almagor, 2022). This has led to regulations that prevent the wearing of religious symbols, including the 'hijab,' in specific public-sector jobs, such as healthcare (BPE 2016). For female HCPs from Islamic conservative backgrounds, this policy may create barriers to both professional training and employment. Many of these women view the 'hijab' as an integral part of their identity and faith, and being forced to remove it conflicts with their religious and cultural values (Mellen and French, 2021). As a result, they are often placed in a conflicted position where they must choose between adhering to their religious beliefs or pursuing their professional aspirations. Another example is the difference in the ability of Syrian HCPs to access their documents from Syrian universities and ministries to meet the registration requirements in their countries of asylum. Individuals who oppose the Syrian government and are wanted by the security branches usually have to pay large sums of money as bribes to obtain or authenticate their certificates and sometimes are unable to do so. In contrast, those loyal to the Syrian government can obtain them more easily.

Policies in countries where Syrian refugee and recent diaspora HCPs are hosted are varied and impact the reception and integrations of these HCPs (Smith et al., 2024). Additionally, the decision of HCPs to remain in a particular country and invest in their future prospects is impacted not only by the policies that direct their incorporation into the healthcare system, but also by the general ambience which nurtures them and their families, as well as the level of prejudice they confront (Ghobrial et al., 2023,Hasselbach, 2021,Chulov, 2022). With supportive strategies and a positive atmosphere, countries whose policies and communities are welcoming will likely reap the benefit of these HCPs entering their health system by filling workforce or specialty shortages in ways which are cost-effective (Hamblett and Tack, 2020). The role of third sector and regulatory bodies e.g. BMA, GMC in the UK were noted to have supportive impacts on gaining clinical experiences and registration for refugee doctors; support for other refugee HCPs appears more sparse. For countries where Syrian HCPs are restricted, whether in policy or in practice from entering the health system, the existence of a parallel, informal health system has multiple risks (Ismail et al., 2020,Atrache, 2020,Arie, 2015,Human Rights Watch 2014,Ghaith, 2021).

5. Conclusion

Though there is increasing literature and interest in refugee HCPs, evidence gaps remain. An important gap remains that of the push and pull factors which force Syrian HCPs from Syria or if and when they

would consider a return. It remains too early to understand the impact of the fall of the Syrian regime on these trends. Additionally, more exploration of the experiences of non-physician HCPs and particularly of female HCPs are key gaps (Hamblett and Tack, 2020). By exploring what does and does not work in terms of policies or interventions in these countries which host Syrian HCPs, we can gain broader understanding which will benefit other refugee HCPs as well as countries which face workforce shortages (Bell, 2023,Bell and Walkover, 2021). This continues to be crucial at a time when there are world-wide HCPs shortages in countries which host refugee HCPs and where there are prominent discussions about ethical recruitment practices globally. Without addressing the barriers to retraining and registering in host health systems, there will be ongoing negative impacts on the personal and professional lives of refugee HCPs, many of whom have and continue to live and experience the traumas of armed conflict, with a toll on their mental health or the feeling that they are *'living a life in stagnation'* (Smith et al., 2024). This strengthens the need to think beyond policy but at the direct experiences of refugee HCPs and how they can be supported both personally and professionally.

Abbreviations

EEA - European Economic Area
ERC - Ethics Research Committee
GMC - General Medical Council
HCPs - Healthcare Professionals
IELTs – International English Language Test
IHD - Idlib Health Directorate
KCL - King's College, London
MHCs - Migrant Health Centres
MOHP – Ministry of Health and Population
MSW - Medical Support Worker
NHS - National Health Service
NIHR - National Institute of Health Research
OET – Occupational English Test
PLAB – Professional and Linguistics Assessments Board
R4HSSS - Research for Health Systems Strengthening in Syria
SAMS - Syrian American Medical Society
SBMS - Syrian British Medical Society
STS - Medical Turkish Equivalency Examination
TBB - Talent Beyond Boundaries
UHC - Universal Health Coverage
UK - United Kingdom
UN - United Nations
MSW - Medical Support Worker

Author contributions

AA, MA and AE were involved in the conceptualisation and methodology of this study and produced the first draft. KW, OA, DR, AG, MM, FH and MH as well as AA, MA and AE were involved in presentations at the workshop and writing (reviewing and editing) of the subsequent drafts. All authors have approved the final draft.

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CRediT authorship contribution statement

Aula Abbara: Conceptualization, Formal analysis, Methodology, Writing – original draft, Writing – review & editing. **Munzer Alkhalil:** Conceptualization, Data curation, Methodology. **Kinan Wihba:** Formal analysis, Visualization, Writing – review & editing. **Omer Abdrabbuh:** Methodology, Writing – review & editing. **Diana Rayes:** Writing – review & editing. **Andrew Ghobrial:** Formal analysis, Methodology, Visualization, Writing – review & editing. **Manar Marzouk:** Visualization, Writing – review & editing. **Fadi Halabi:** Formal analysis, Methodology, Writing – review & editing. **Mahmoud Hariri:** Writing – review & editing. **Abdulkarim Ekzayez:** Conceptualization, Methodology, Writing – original draft, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no known competing financial or personal interests which could influence this work.

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