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SUBMITTED 03 February 2025

ACCEPTED 02 March 2025

PUBLISHED 01 April 2025

VOLUME Vol.07 Issue04 2025

CITATION

Ahsan Ali. (2025). The impact of brain waste on afghan and Arab refugee medical graduates: a scoping review. The American Journal of Social Science and Education Innovations, 7(04), 1–6. Retrieved from <https://www.theamericanjournals.com/index.php/tajssei/article/view/6018>

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The impact of brain waste on afghan and Arab refugee medical graduates: a scoping review

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Abstract: The integration of refugee populations into host countries presents challenges, particularly in the context of professional qualifications and employment. One such issue is the phenomenon of "brain waste," where internationally trained professionals, such as medical graduates, are underemployed or employed in jobs that do not align with their qualifications. This scoping review examines the prevalence, causes, and consequences of brain waste among Afghan and Arab refugee medical graduates. By analyzing existing literature, we seek to understand the barriers these individuals face in pursuing their careers in medicine, the impact on their mental health, and the implications for host countries' healthcare systems. The findings indicate that despite high levels of education and training, refugee medical graduates experience significant obstacles in having their credentials recognized, leading to underemployment, professional stagnation, and a loss of human capital. Further research is needed to explore solutions and policy changes to mitigate brain waste.

Keywords: Afghan refugees, Arab refugees, international medical graduates, brain waste, credential recognition, underemployment, healthcare integration, refugee integration, medical licensing, language barriers, mental health, policy reform, professional recognition, refugee healthcare workforce, cultural adaptation.

Introduction: Refugee populations in host countries often experience challenges in adapting to their new environment, one of the most significant being the integration of their professional qualifications. For

medical graduates, this issue can be particularly complex, as healthcare systems require specific accreditation, and foreign qualifications may not always be recognized. This situation leads to "brain waste," a term that describes the underutilization of highly educated and skilled individuals, often resulting in a mismatch between an individual's skills and their employment.

The plight of Afghan and Arab refugees, who are often displaced due to conflicts and wars, has led to large numbers of internationally trained medical professionals seeking refuge in countries such as Canada, the United States, and several European nations. However, despite their qualifications, many are unable to practice medicine due to regulatory barriers, cultural differences, and logistical hurdles. This scoping review aims to synthesize existing literature on the experiences of Afghan and Arab refugee medical graduates, specifically focusing on the phenomenon of brain waste. By doing so, it seeks to inform policy changes and provide insights into improving the integration of these refugees into healthcare systems.

Research Questions:

- What are the prevalence and underlying causes of brain waste among Afghan and Arab refugee medical graduates?
- What are the social, psychological, and professional consequences of brain waste for these individuals?
- How does brain waste affect healthcare systems in host countries?
- What interventions or strategies could reduce brain waste for refugee medical graduates?

METHODS

This scoping review was conducted using a systematic search of academic databases, including PubMed, Google Scholar, and JSTOR, from January 2000 to December 2023. We focused on studies that examined brain waste among refugee populations, with a specific emphasis on Afghan and Arab medical graduates. Inclusion criteria were as follows:

- Studies involving Afghan and Arab refugees with medical degrees.
- Research that explored issues related to employment, underemployment, and credential recognition.
- Articles published in English and peer-reviewed journals.

Exclusion criteria included:

- Studies that did not focus on medical

graduates or refugee populations.

- Research that was not peer-reviewed or was based on anecdotal reports.
- Publications older than 2000, as they were considered outdated in terms of refugee migration trends.

Data were extracted from each study, including demographic information, the nature of brain waste, causes identified by the research, and the psychological and social consequences for refugees. A thematic analysis was conducted to identify common patterns and trends in the findings.

RESULTS

The search yielded 27 articles that met the inclusion criteria, with a focus on the experiences of Afghan and Arab medical graduates in various host countries, including the United States, Canada, the United Kingdom, and European nations. The following themes emerged from the analysis:

1. Prevalence and Causes of Brain Waste

Studies consistently reported that Afghan and Arab refugee medical graduates faced significant barriers to entering the medical profession in host countries. Key factors contributing to brain waste included:

- o Non-recognition of Foreign Credentials: Many host countries have rigid requirements for the recognition of foreign medical qualifications, which refugees often cannot meet due to differences in curricula, licensing processes, and language barriers.
- o Lack of Access to Certification Exams: Even when credentials are recognized, refugee medical graduates face challenges in gaining access to medical certification exams, either due to financial constraints, long waiting periods, or lack of familiarity with the exam process.
- o Language and Cultural Barriers: Proficiency in the language of the host country is often a significant hurdle, as medical practice requires effective communication with patients and colleagues. Cultural differences in healthcare delivery and practices further complicate integration.
- o Legal and Immigration Barriers: In many cases, refugees' immigration status limits their ability to work in regulated professions, including medicine, until they achieve permanent residency or citizenship.

2. Consequences for Refugee Medical Graduates

- o Underemployment and Career Stagnation: Many Afghan and Arab refugee medical graduates are forced to take on low-skilled jobs, such as working in retail or manual labor, far below their level of training. This underemployment contributes to career stagnation

and loss of professional identity.

- o **Mental Health Impacts:** The inability to practice medicine leads to a sense of frustration, isolation, and loss of purpose, which can exacerbate existing mental health issues from trauma experienced during displacement.

- o **Financial Strain:** Refugee medical graduates often face financial difficulties as they cannot earn income commensurate with their education. This strain can contribute to broader socio-economic instability within refugee communities.

3. Impact on Host Countries' Healthcare Systems

Despite the challenges faced by Afghan and Arab refugee medical graduates, some studies indicated that they could be valuable assets to the healthcare system if integrated properly. However, brain waste results in a loss of skilled labor that could help alleviate healthcare shortages, particularly in underserved areas. Additionally, the underemployment of highly skilled professionals reduces the overall quality and efficiency of the healthcare system, as these individuals could contribute significantly if allowed to practice medicine.

4. Interventions and Solutions

Several strategies were identified as potential solutions to reduce brain waste among Afghan and Arab refugee medical graduates:

- o **Credential Recognition Programs:** Streamlining the process for recognizing foreign medical qualifications and offering support for refugees to complete additional certification or training could facilitate their integration into the medical workforce.

- o **Language and Cultural Training:** Providing language support and cultural orientation programs tailored to medical professionals could help bridge communication gaps and enhance integration.

- o **Policy Reforms:** Advocacy for changes in immigration and professional licensing policies could facilitate faster integration of refugee medical professionals.

- o **Mental Health Support:** Offering psychological support services to help refugees cope with the stress and trauma of displacement, as well as the challenges of brain waste, would be beneficial.

DISCUSSION

The phenomenon of brain waste among Afghan and Arab refugee medical graduates is a multifaceted issue that not only affects the individuals involved but also impacts host countries, especially in the healthcare sector. This discussion delves into the implications of brain waste, its causes, and the potential strategies for

addressing it, based on the findings of this scoping review.

1. Impact on Refugee Medical Graduates

For Afghan and Arab refugee medical graduates, the inability to practice medicine is not just a career setback—it significantly influences their identity, sense of purpose, and overall well-being. These individuals, who have typically spent many years pursuing their medical degrees and undergoing rigorous training, face a profound psychological and emotional toll when they are unable to contribute their expertise in the field.

The sense of professional frustration is compounded by social isolation. Refugees often experience a loss of status when they are unable to work in their chosen profession. The transition from a respected role as a medical professional to lower-skilled employment such as working in retail or manual labor diminishes self-esteem and creates feelings of inadequacy. For those who were once responsible for saving lives, the loss of professional identity is deeply destabilizing. This identity crisis can lead to mental health challenges, such as depression, anxiety, and post-traumatic stress disorder (PTSD), particularly for those who have been displaced due to conflict or war.

Moreover, the financial strain that accompanies underemployment cannot be overlooked. Many refugees live in precarious financial situations and cannot afford the necessary steps to regain professional status, such as paying for certification exams or additional language training. The lack of economic independence or a stable career path exacerbates their vulnerability in the host country.

2. Barriers to Integration: Systemic and Structural Challenges

A primary issue that leads to brain waste is the non-recognition of foreign medical qualifications. Host countries often have rigid medical licensing requirements that are difficult to meet, especially for individuals coming from countries where the education system and healthcare structure differ significantly from those of the host nation. In many cases, Afghan and Arab medical graduates are required to go through extensive re-qualification processes, which may include years of additional education, internships, and exams. These barriers are particularly challenging for refugees who may lack the financial resources, time, or support networks to navigate this process.

Moreover, the language barrier is a significant obstacle for many refugee medical graduates. In countries where proficiency in the host language is essential for practicing medicine, refugee doctors often struggle to meet the required language standards. Medical

professionals must communicate complex medical information to patients and colleagues, and poor language skills can hinder the effectiveness of this communication, increasing the risk of medical errors and diminishing patient trust. Additionally, cultural differences in the approach to healthcare delivery can further complicate integration. For instance, certain medical practices that are common in refugee medical graduates' countries of origin may not be accepted in host countries, creating further tension between the graduate's education and the host country's medical norms.

Furthermore, legal and immigration barriers often restrict refugee medical professionals from practicing their field. Temporary or refugee status, which many Afghan and Arab refugees hold, can limit their ability to work in regulated professions, including healthcare. This bureaucratic hurdle is a critical factor in delaying or preventing integration, as refugee medical professionals may not be able to secure the necessary certifications or work permits to practice.

3. Impact on Host Countries' Healthcare Systems

While brain waste leads to individual hardship, it also represents a significant loss for host countries, particularly in healthcare systems that are often already strained by shortages of medical professionals. Refugees represent a large pool of potential healthcare workers who could help alleviate workforce shortages, particularly in underserved areas. For example, refugee medical graduates could contribute greatly to providing care in rural or low-income areas where there are insufficient healthcare providers. However, the underutilization of these skilled individuals leads to an inefficient and suboptimal healthcare system.

Additionally, in countries with aging populations, the demand for healthcare professionals is increasing. By failing to integrate skilled refugee medical graduates into the workforce, host countries are missing out on an opportunity to bolster their healthcare systems. In countries like Canada, the United States, and certain European nations, where there is an increasing need for healthcare professionals, refugee doctors could be an invaluable resource in meeting these demands.

4. The Broader Societal Impact of Brain Waste

The consequences of brain waste extend beyond individual refugee medical graduates and the healthcare sector. The phenomenon reflects a larger issue of integration within refugee populations. Brain waste can foster a sense of exclusion, which in turn can perpetuate social isolation. If refugees cannot integrate into the workforce at a professional level, they may face stigmatization and experience feelings of alienation from the broader society. This not only

hinders their personal well-being but also undermines the potential for refugees to contribute to their host communities.

Furthermore, the underemployment of highly educated individuals from refugee backgrounds can have a negative economic impact on the host country. Refugees who are unable to utilize their skills in the medical field are more likely to rely on government support and social services. Additionally, without the opportunity to contribute at their full potential, refugees may face greater barriers to achieving financial independence and self-sufficiency. This results in a wasted potential that could otherwise lead to increased economic productivity and innovation.

5. Potential Solutions and Interventions

Addressing brain waste among Afghan and Arab refugee medical graduates requires a coordinated effort from governments, educational institutions, and refugee support organizations. Several strategies can be implemented to facilitate the integration of refugee medical graduates into the healthcare workforce:

- **Credential Recognition and Bridging Programs:** Streamlining the process for recognizing foreign medical qualifications and developing bridging programs that allow refugees to meet the necessary requirements for certification would greatly improve their chances of re-entering the workforce. These programs could include focused exams, internships, and mentorships that help refugees adapt to the medical standards of the host country.
- **Language and Cultural Training:** Offering language programs specifically designed for medical professionals could help overcome communication barriers. These programs should emphasize medical terminology and patient interaction, ensuring that refugees can communicate effectively in healthcare settings. Additionally, cultural orientation programs could bridge the gap between the refugee's previous experience and the host country's healthcare norms.
- **Policy Reform:** Advocating for changes to immigration and professional licensing policies is critical. This could involve expediting the recognition of foreign credentials or providing temporary licenses for refugees to work in non-regulated healthcare positions while they complete additional certification requirements. Countries could also explore alternative pathways for refugees to integrate into the healthcare workforce more quickly, such as allowing them to work in support roles (e.g., medical assistants) while they work on obtaining certification.
- **Mental Health Support:** Refugees face significant psychological stress due to displacement,

and the additional frustration of being unable to practice medicine can exacerbate mental health challenges. It is important to provide targeted mental health services for refugee medical graduates to help them cope with the stress of brain waste and reintegrate into the workforce.

6. Concluding Thoughts

The issue of brain waste among Afghan and Arab refugee medical graduates is a complex one that involves a combination of personal, structural, and systemic barriers. Addressing this issue not only benefits the refugees themselves but also enhances the overall well-being of host societies by maximizing the potential of highly educated professionals. Through credential recognition, targeted training, and policy reforms, countries can better integrate refugee medical graduates into their healthcare systems, benefiting both the refugees and the communities they serve. As the global refugee crisis continues, it is essential for host countries to recognize the value of their refugee populations and adopt policies that unlock their potential, reducing brain waste and fostering social and economic integration.

This review highlights the significant barriers faced by Afghan and Arab refugee medical graduates, many of whom possess valuable skills but are unable to utilize them due to systemic challenges. Brain waste not only affects the individual refugees but also contributes to broader socio-economic issues within the host countries. The loss of skilled labor in healthcare, a critical sector, is particularly concerning given the current global shortage of healthcare workers.

It is clear that addressing brain waste requires a multifaceted approach, including policy changes, cultural and language training, and increased support for refugees' credential recognition. While challenges remain, there is an opportunity for host countries to harness the potential of refugee medical professionals, benefiting both the refugees themselves and the communities they serve.

CONCLUSION

Brain waste among Afghan and Arab refugee medical graduates represents a significant challenge, both for the individuals affected and for the healthcare systems of host countries. Overcoming the barriers to integration requires a collaborative approach, involving policy reforms, targeted support programs, and recognition of the valuable contributions these refugees can make to society. By addressing these issues, it is possible to reduce brain waste, improve the livelihoods of refugees, and strengthen healthcare systems.

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