



The Potential Role of the Libyan Medical Diaspora in Improving Undergraduate Medical Education at Home: An Online Survey

Salem A. Beshyah^{1,2}

¹ Department of Medicine, College of Medicine, Dubai Medical University, Dubai, United Arab Emirates

² Department of Medicine, Bareen International Hospital, MBZ, Abu Dhabi, United Arab Emirates

Address for correspondence Salem A. Beshyah, MB, MRCP, DIC, PhD, Department of Medicine, Bareen International Hospital, MBZ, Abu Dhabi, United Arab Emirates (e-mail: beshyah@yahoo.com).

Libyan Int Medical Univ J 2025;10:123–132.

Abstract

Background Libya faces a severe shortage of medical educators due to prolonged political instability, emigration of health care professionals, and expansion of medical schools. The Libyan medical diaspora represents an untapped resource that could support the advancement of undergraduate medical education in Libya through remote teaching, mentorship, and curriculum development.

Aim This study examines the perceptions, willingness, and practical challenges of involving Libyan medical diaspora in undergraduate medical education within their home country. It also explores technological and policy-based solutions to enhance diaspora engagement.

Methods A cross-sectional online survey was distributed to a convenience sample of Libyan doctors at home and abroad. We captured demographic details, prior educational engagement, attitudes toward diaspora involvement, and perceived barriers and enablers from 145 responses.

Results Almost half (47.6%) were diaspora doctors. A strong majority (74.5%) believed the diaspora could contribute meaningfully to undergraduate education, particularly through clinical training (79.3%) and e-learning (73.1%). Over 84% expressed a willingness to teach virtually, although significant barriers included a lack of institutional coordination (74.5%) and inadequate technological infrastructure (53.1%). Key enablers identified included structured engagement programs, financial incentives, and international academic partnerships.

Conclusion Libyan doctors in diaspora are largely willing and well-positioned to support undergraduate medical education in Libya. Strategic policy action, digital infrastructure development, and institutional coordination are crucial to effectively mobilize this potential. These findings support the case for implementing structured diaspora engagement policies in fragile states.

Keywords

- Libyan medical diaspora
- undergraduate medical education
- brain drain
- faculty development
- e-learning
- curriculum reform
- telemedicine

received
October 5, 2025
accepted after revision
November 2, 2025

DOI <https://doi.org/10.1055/s-0045-1814079>.
ISSN 2519-139X.

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Thieme Medical and Scientific Publishers Pvt. Ltd., A-12, 2nd Floor, Sector 2, Noida-201301 UP, India

المقالة باللغة العربية

الدور المحتمل للشبكات الطبية الليبية في تحسين التعليم الطبي الجامعي داخل الوطن: دراسة استقصائية عبر الإنترنت

المؤلف: سالم بشيه، كلية دبي الطبية، الإمارات العربية المتحدة، بريد إلكتروني: beshyah@yahoo.com

الخلفية: تواجه ليبيا نقصا حادا في الكوادر التعليمية الطبية نتيجة عدم الاستقرار السياسي، وهجرة العاملين في القطاع الصحي، وتوسع كليات الطب. يمثل الشبكات الطبية الليبية موردا غير مستغل يمكن أن يسهم في تطوير التعليم الطبي الجامعي في ليبيا من خلال التدريس عن بُعد، والإرشاد الأكاديمي، وتطوير المناهج.

الهدف: تهدف هذه الدراسة إلى استكشاف تصورات واستعدادات وتحديات إشراك الشبكات الطبية الليبية في التعليم الطبي الجامعي داخل الوطن، كما تبحث في الحلول التقنية والسياسية لتعزيز مشاركة الشبكات.

الطرق: تم توزيع استبيان مقطعي عبر الإنترنت على عينة ميسرة من الأطباء الليبيين داخل ليبيا وخارجها. شملت البيانات المجموعة التفاصيل الديموغرافية، والمشاركة التعليمية السابقة، والمواقف تجاه إشراك الشبكات، والعوائق والمحفزات المتصورة، وذلك من خلال 145 استجابة.

النتائج: كان ما يقرب من نصف المشاركين (47.6٪) من أطباء الشبكات. وأعربت غالبية قوية (74.5٪) عن اعتقادها بأن الشبكات يمكن أن يسهم بشكل فعال في التعليم الجامعي، لا سيما من خلال التدريب السريري (79.3٪) والتعليم الإلكتروني (73.1٪). كما عبّر أكثر من 84٪ عن استعدادهم للتدريس عن بُعد، رغم وجود عوائق كبيرة مثل غياب التنسيق المؤسسي (74.5٪) وضعف البنية التحتية التقنية (53.1٪). ومن بين المحفزات الرئيسية التي تم تحديدها: برامج مشاركة منظمة، وحوافز مالية، وشراكات أكاديمية دولية.

الاستنتاج: يتمتع الأطباء الليبيون في الشبكات باستعداد كبير وقدرة جيدة لدعم التعليم الطبي الجامعي في ليبيا. ويُعد اتخاذ إجراءات سياسية استراتيجية، وتطوير البنية التحتية الرقمية، وتحقيق التنسيق المؤسسي من العوامل الحاسمة لتفعيل هذا المورد. تدعم هذه النتائج الدعوة إلى تبني سياسات منظمة لإشراك الشبكات في دول العالم الثالث.

الكلمات المفتاحية: الشبكات الطبية الليبية، التعليم الطبي الجامعي، هجرة العقول، تطوير الكوادر، التعليم الإلكتروني، إصلاح المناهج، الطب عن بُعد.

Introduction

The migration of health care professionals from low- and middle-income countries (LMICs) to more developed regions—often referred to as the medical diaspora—has generated extensive debate within the global health discourse.^{1,2} While such migration is commonly criticized as a “brain drain” that exacerbates health workforce shortages in source countries, others highlight the diaspora’s potential to facilitate skills transfer, transnational collaboration, and capacity-building initiatives.^{3,4}

The medical diaspora has been recognized as an underutilized entity in the health systems of LMICs.⁴ Several examples from similar postconflict or low-resource settings, such as Sudan, Armenia, and Iraq, support the opportunity for remote education.^{5–7} There is limited information on the situation in a Libyan context.⁸

Libya exemplifies this complex dynamic. Although estimates vary, the number of Libyan doctors in diaspora is believed to range between 1,250 and 1,500.⁸ Many of these doctors initially emigrated for advanced training, often leveraging Libya’s historical partnerships and scholarship programs. Nevertheless, over time, a combination of professional opportunities, political instability, and economic hardship has disincentivized their return.^{9,10}

A pre-2011 survey of Libyan doctors residing abroad found that 88% had left primarily for further education and research, and many cited systemic reforms as a prerequisite for repatriation.¹⁰ The subsequent collapse of Libya’s political and institutional structures has made a large-scale return unlikely in the short term. Consequently, the focus has shifted from physical return to virtual reengagement. Indeed, the Libyan medical diaspora presents a valuable but underutilized resource for improving undergraduate medical education within the coun-

try.⁸ Innovations in e-learning, telemedicine, and cross-border academic partnerships offer new channels through which diaspora physicians can contribute meaningfully, without requiring physical presence in Libya. Learning from similar other LMICs may help direct the Libyan path forward.^{5–7}

The involvement of the Libyan diaspora has been unstructured and far from optimized.⁸ The present study examines whether and how the Libyan medical diaspora can contribute to and support undergraduate medical education in their home country, through a cross-sectional online survey. We aimed to examine the perceptions, willingness, and barriers facing the involvement of Libyan medical diaspora in supporting undergraduate education in their homeland.¹¹ The findings aim to inform strategies that leverage diaspora expertise to address Libya’s ongoing crisis in the field of medical education.

Methods

Target Population

The target population was identified from a list of electronic mail addresses and several professional networks of Libyan doctors practicing at home and abroad. Participation was voluntary. Convenience sampling was adopted. No information could be captured on nonresponders. Additionally, response rates could not be computed because several social and professional platforms were used. Sample size requirements were not formally calculated.

Survey Management

A Web-based free survey management service (Google Forms) was utilized. All participants received an initial email or a link that explained the rationale behind the survey and outlined the requirements for consenting respondents. Each

message included a unique email-specific electronic link to the questionnaire. The respondents provided an electronic informed consent before proceeding to the survey questions (by building a conditional logic). The survey Web site was open for 6 weeks. Survey responses were collected and stored electronically for anonymous analysis.

Survey Questionnaire

– **Supplementary Material S1** (available in the online version only) includes the text and layout of the questionnaire. The first part captured the professional and demographic profiles of the respondents. The survey questions were constructed as multiple-choice questions covering knowledge, attitudes, and practices. The contents were selected based on a review of the literature.^{1–7} It was β -tested on 12 participants before rolling out.

Data Analysis

The survey software tools were used to calculate summary statistics for responses to each question. As not all participants may have answered all the questions, the proportion of respondents providing a given answer was calculated individually, using the number of respondents for that question as the denominator. Data were exported into a spreadsheet (MS Excel) to perform the subgroup analysis. Subgroup analysis was used to compare the respondents at home and those abroad. The chi-square test was employed using an online statistical package (Social Science Statistics, available at <https://www.socscistatistics.com>). A p -value of <0.05 was taken to indicate statistical significance.

Ethics

A General Data Protection Regulation statement was included in the survey, and specific ethics approval was not required.

Results

Demographics and Professional Backgrounds

Of the 145 respondents, slightly more than half (52.4%) were based in Libya, while 47.6% were classified as diaspora. The majority were senior doctors (77.9%), with most having over a decade of experience in their current location (75.2%). Medicine was the most common specialty (42.1%), followed by surgery and pediatrics. In decreasing frequency, those located abroad were primarily in the Arabian Gulf (47, 61.8%), followed by Britain and Ireland (12, 15.8%) and North America (10, 13.2%). Only a few respondents were in the rest of the world (5; 6.5%). Most participants had completed their undergraduate medical education in Libya (96.6%), while two-thirds (65.5%) had undertaken postgraduate training outside of Libya. There was a significant difference in the place of postgraduate training, type of current practice settings, and nature of teaching experiences between home and diaspora participants (► **Table 1**).

Perceptions of Diaspora Engagement

Nearly three-quarters (74.5%) believed that the diaspora could make a significant contribution to improving under-

graduate education. The most highly rated areas for potential contribution were clinical training (79.3%) and e-learning (73.1%), followed by research collaboration and curriculum development. However, subgroup analysis revealed that diaspora participants valued the potential contributions more than respondents from home (► **Table 2**).

Attitudes Toward Engagement

Over 85% were willing to contribute in some capacity, with 47.3% preferring in-person teaching and 37.5% willing to teach virtually. The strongest motivators included a desire to support national development (71.7%) and the availability of institutional infrastructure (55.9%). There was no significant difference between the responses of the home and diaspora participants (► **Table 3**).

Barriers to Participation

The most frequently reported barriers were lack of coordination with local institutions (74.5%), poor online teaching infrastructure (53.1%), and bureaucratic or logistical issues (47.6%). Security concerns were also cited by over a quarter of respondents. In the subgroup analysis, there was a nonsignificant trend in the perception of respondents at home and those abroad regarding the perceived challenges faced or anticipated in the contribution of diaspora doctors to undergraduate medical education in Libya. However, there was a clear divergence between groups concerning the proposed strategies to enhance their participation (► **Table 4**).

Technology and Future Opportunities

Most respondents (84.1%) were willing to teach via virtual platforms. Preferred technologies included interactive video lectures (85.5%), case-based discussions, and telemedicine. However, only 15.4% rated Libya as fully ready for virtual education, with 44.1% suggesting moderate readiness. There was a good degree of concordance in the responses of the aboard and home participants on their interest and choice of technology. However, the responses varied regarding Libya's perceived readiness for implementing virtual medical education (► **Table 5**).

General Comments

Respondents expressed a strong willingness to contribute to medical education in Libya, particularly through short skills-based courses, practical training, and modern teaching methods. At the same time, they highlighted major barriers, including overcrowded medical schools, inadequate infrastructure, weak institutional leadership, and a lack of structured mechanisms for diaspora engagement (► **Table 6**).

Discussion

This study highlights the considerable yet underutilized potential of the Libyan medical diaspora to contribute to undergraduate medical education in Libya. The findings align with global experiences and support the findings of the previous study.⁸ However, the lack of structured programs resulted in a degree of hesitancy among the concerned doctors. The majority of respondents perceived diaspora

Table 1 Respondents' demographic and professional profile

Questions	Response options	All	At home	Abroad	p-Value
What is your current location? [N = 145]	All, Libya, abroad	145 (100%)	76 (52.4%)	69 (47.6%)	–
What is your career stage? [N = 145]	Senior	113 (77.9%)	48	65	0.00004
	Mid-grade	21 (14.5%)	18	3	
	Junior	11 (7.6%)	10	1	
What is your area of specialization (if applicable)? [N = 145]	Medicine	61 (42.1%)	30	31	0.16249 [NS]
	Surgery	25 (17.2%)	14	11	
	Pediatrics	24 (16.6%)	16	8	
	Obstetrics	4 (2.8%)	3	1	
	Family medicine	3 (2.1%)	3	0	
	Clinical sciences	7 (4.8%)	3	4	
	Other	21 (14.5%)	7	14	
How many years have you been in your current location? [N = 145]	≤ 5 years	19 (13.1%)	10	9	0.46101 [NS]
	6–10 years	17 (11.7%)	6	11	
	11–20 years	52 (35.9%)	30	22	
	> 20 years	57 (39.3%)	30	27	
Where did you complete your undergraduate medical education? [N = 145]	Libya	140 (96.6%)	75	65	0.13968 [NS]
	Abroad	5 (3.4%)	1	4	
Where did you complete your postgraduate medical education? [N = 145]	Libya	50 (34.5%)	49	1	< 0.0001
	Abroad	95 (65.5%)	27	68	
What is the setting of your current job? [N = 145]	University staff	63 (43.4%)	39	24	< 0.02
	Nonteaching hospital	43 (29.7%)	24	19	
	Private practice	39.26.9%	13	26	
Have you been involved in any medical education or training activities? [N = 145]	No	11 (7.6%)	9	2	< 0.0001
	Yes, in Libya	48 (33.1%)	47	1	
	Yes, abroad	34 (23.4%)	4	30	
	Yes, both	52 (35.9%)	16	36	

Abbreviation: NS, not significant.

involvement as highly beneficial, particularly in areas such as clinical training, virtual teaching, and research mentorship. The experienced diaspora doctors are most likely capable of supporting undergraduate education. Additionally, the medical schools in Libya are well-acquainted with the contributions of visiting teachers, who can cover a substantial portion of the curriculum through lectures and bedside teaching.¹¹ The lack of a busy clinical schedule allows a high degree of commitment to teaching.

Willingness to contribute was remarkably high, even in the face of significant structural and political constraints. This reinforces existing literature that suggests diaspora professionals often maintain strong emotional and professional ties to their home countries and are motivated by a sense of civic duty.^{5–7} This suggests that the involvement of these doctors will not face difficulties in modification and recruitment requirements. Therefore, attempts to implement models of international collaborations should be

much easier, as there are no regulatory and cultural obstacles.^{12,13} A series of meetings can be held before starting to agree on schedules, curricula, teaching styles, and assessment methods ahead of time to secure the best chances of success.

However, practical engagement remains limited due to well-documented barriers, including a lack of institutional coordination, inadequate digital infrastructure, and bureaucratic red tape. These findings align with concerns raised in similar studies in LMICs, where the gap between diaspora willingness and actual participation is often driven by policy.^{12,13} Reproducing the successful previous Medical Education Partnership Initiative to leverage diaspora collaborations in Africa rather than starting from scratch should speed up the initiation and advancement of these processes.^{14,15} Notably, over 80% of respondents favored virtual engagement models that are increasingly being adopted globally. Despite concerns about infrastructure,

Table 2 The respondents' perception of the role of the Libyan medical diaspora in improving undergraduate medical education in Libya

Questions	Response options	Response			p-Value ^a
		All	At home	Abroad	
Do you believe the Libyan medical diaspora can play a role in improving undergraduate medical education in Libya? [N = 145]	Yes	108 (74.5%) ^b	53	55	0.31389 [NS]
	Not sure	31 (21.4%)	20	11	
	No	6 (4.1%)	3	3	
In your opinion, what are the most important contributions the Libyan medical diaspora could make? (Select all that apply) [N = 145]	Clinical training	115 (79.3%) ^b	53	62	0.43372 [NS]
	E-learning and virtual	106 (73.1%)	48	58	
	Research collaboration	100 (69.0%)	52	48	
	Curriculum development	89 (61.4%)	40	49	
	Faculty development	83 (57.2%)	35	48	
	Medical student exchange	65 (44.8%)	38	27	
	Other	5 (3.4%)	2	4	
How significant do you think the contribution of the Libyan medical diaspora can be in providing medical education in Libya? (Likert scale: 1–5) [N = 145]	1 = Not significant	5 (3.4%)	1	4	0.02364
	2	8 (5.5%)	7	1	
	3	37 (25.5%)	24	13	
	4	39 (26.9%)	21	18	
	5 = Very significant	56 (38.6%)	23	33	

Abbreviation: NS, not significant.

^aChi-square for responses of participants at home versus abroad.^bResponses reordered in decreasing order of frequency.**Table 3** Participants' attitudes toward Libyan diaspora doctors' involvement in undergraduate medical education in Libya

Questions	Response options	Response			p-Value ^a
		All	At home	Abroad	
Would you personally be willing to contribute to undergraduate medical education in Libya? [N = 112]	Yes, in-person teaching	53 (47.3%) ^b	20	33	0.758196 [NS]
	Yes, through virtual teaching	42 (37.5%)	15	27	
	No, I do not have time/resources	12 (10.7%)	5	7	
	Yes, in research collaboration	5 (4.5%)	3	2	
What factors would motivate you (or other diaspora doctors) to engage in medical education in Libya? (Select all that apply)	Desire to contribute to Libya's development	104 (71.7%) ^b	48	56	0.32371 [NS]
	Institutional support and infrastructure	81 (55.9%)	41	40	
	Professional networking opportunities	68 (46.9%)	33	35	
	Government policy support	57 (39.3%)	32	25	
	Financial incentives	49 (33.8%)	31	18	

(Continued)

Table 3 (Continued)

Questions	Response options	Response			p-Value ^a
		All	At home	Abroad	
How strongly do you agree with the following statement? "If logistical and financial barriers were removed, I would actively contribute to Libyan medical education." (Likert scale:1–5)	1 = Strongly disagree.	9 (6.4%)	4	5	0.322876 [NS]
	2	9 (6.4%)	7	2	
	3	21 (14.9%)	12	9	
	4	36 (25.5%)	20	16	
	5 = Strongly agree	66 (46/8%)	29	37	

Abbreviation: NS, not significant.

^aChi-Square for responses of participants at home versus abroad.^bResponses are rearranged in decreasing order of frequency.**Table 4** Current practices and engagement of respondents in undergraduate education in Libya

Questions	Response options	Responses ^a			p-Value ^b
		All	At home	Abroad	
Have you previously contributed to medical education in Libya? [N = 139]	Yes, through in-person teaching/training	86 (61.9%) ^c	43/70	43/69	0.5558 [NS]
	Yes, through virtual teaching or mentorship	12 (8.6%)	8	4	
	Yes, through research collaborations	3 (2.2%)	2	1	
	No, but I am interested	34 (24.5%)	17	17	
	No, and I am not interested	4 (2.9%)	0	4	
What challenges have you faced (or anticipate) in contributing to medical education in Libya? (Select all that apply)	Lack of coordination with local institutions	108 (74.5%) ^c	50	58	0.063 [NS]
	Limited infrastructure for online teaching	77 (53.1%)	41	36	
	Bureaucratic or regulatory barriers	69 (47.6%)	25	44	
	Financial/logistical constraints	68 (46.9%)	41	27	
	Security concerns in Libya	39 (26.9%)	20	19	
What strategies enhance the participation of diaspora doctors in Libyan medical education? (Select all that apply)	Creating official diaspora engagement programs	103 (71.0%)	49	54	< 0.0001
	Providing financial incentives or grants	69 (47.6%)	55	14	
	Strengthening International institutional partnerships	94 (64.8%)	49	45	
	Establishing virtual teaching/mentorship platforms	93 (64.1%)	41	52	

Abbreviation: NS, not significant.

^aCount (percent).^bFor chi-square test of differences between response for those at home and abroad.^cResponses are reordered by decreasing order of frequency.

Table 5 Respondents' views on the role of technological solutions and future opportunities

Questions	Response options	Responses ^a			p-Value ^b
		All	At home	Abroad	
Would you be interested in engaging with Libyan medical students through virtual teaching platforms? [N = 145]	Yes	122 (84.1%)	63	59	0.667152 [NS]
	No	23 (15.9%)	13	10	
Which technologies do you think would be most effective for diaspora-led teaching? (all that apply) [N = 145]	Online interactive lectures	124 (85.5%) ^c	60	64	0.2540 [NS]
	Digital case-based discussions	81 (55.9%)	39	42	
	Telemedicine-based clinical training	69 (47.6%)	43	26	
	E-learning platforms	50 (34.5%)	26	24	
How do you rate Libya's readiness for implementing virtual medical education? (Likert scale 1–5) [N = 143]	1 = Not ready at all	21 (14.7%)	9	12	0.070014 [NS]
	2	37 (25.9%)	15	22	
	3	63 (44.1%)	34	29	
	4	15 (10.5%)	11	4	
	5 = Fully ready	7 (4.9%)	6	1	

Abbreviation: NS, not significant.

^aCount (percent).

^bFor chi-square test of differences between response for those at home and abroad.

^cResponses reordered by decreasing frequency.

Table 6 A structured summary of the statements you shared, highlighting the main themes and concerns expressed by Libyan doctors both in Libya and abroad

1. Engagement and Willingness: - Many Libyan doctors, especially younger ones, are eager to contribute to medical education. - Short training courses, practical skill building, and focused workshops (e.g., communication, medical ethics, psychiatry, presentation skills) are seen as effective and appealing. - Dedication, perseverance, and teamwork are considered essential for positive change.
2. Systemic and Structural Challenges: - The number of medical students far exceeds the capacity of Libyan universities, which lack adequate infrastructure and facilities. - Calls to limit the number of medical schools (suggesting only two strong universities should remain open). - Weaknesses in educational institutions leave students lacking practical training and staff support. - Deficiency in simulation tools, clinical decision-making training, and modern teaching technologies. - Leadership and governance issues, political obstacles, and personal rivalries are significant barriers.
3. Diaspora Contributions: - Previous attempts by diaspora doctors have often failed due to systemic barriers and a lack of structured collaboration. - For diaspora engagement to succeed, contributions must be coordinated under universities or official government bodies. - A joint committee (inside and outside Libya) with clear vision, targets, and pathways is recommended. - Some respondents believe hope lies more in the private sector than in government-led initiatives.
4. Resources and Incentives: - Sharing resources and empowering local training is vital. - Virtual and blended learning could help improve access and quality. - Payment scales and reward systems need to be fixed to attract skilled professionals. - Sustainable funding is necessary; charity-based efforts are not viable in the long term.
5. Quality Concerns: Poor-quality teaching is often associated with private teaching institutions run by nonprofessionals and backed by the government.

(Continued)

Table 6 (Continued)

● Overenrollment and lack of facilities are worsening standards. ● Documentation, digital skills, and communication training are seen as urgent needs.
6. Recommendations for Future Action: ● Review past diaspora initiatives to understand barriers and improve future efforts. ● Create a coordinated body to organize diaspora and local expert contributions. ● Develop surveys on who has attempted to contribute, what worked, and why shortcomings occurred. ● Collaboration with Libyan institutions and local health leaders is essential.

many respondents reported familiarity with platforms and telemedicine tools. The success of such tools elsewhere suggests that with modest investments, Libya could adopt a similar approach. For instance, the experiences with telemedicine and teaching, online histopathology teaching, and low-cost ultrasound education can all be adopted.^{16–21}

The survey emphasized the importance of structured and incentivized engagement frameworks. Formal diaspora engagement programs backed by financial and institutional support were emphasized. These findings underscore that ad hoc or individual initiatives are insufficient. A coordinated national- or university-level strategy is essential. Additionally, utilizing diaspora doctors in their countries of origin can contribute to achieving global equity in health care and education.²²

The subgroup analysis provided some added insights into the similarities and differences in views on the subject between diaspora doctors and those at home. Pulling these views together is crucial for success. Champions on both sides of the fence are needed in addition to the organizational setup. It helps that both groups mostly studied undergraduate education in Libya, thus giving them a good grasp of the situation. The diaspora respondents were almost exclusively trained outside Libya. This should bring in more experiences, particularly since the majority of them are senior doctors. The home participants reflect a domestic career trajectory. Both groups express enthusiasm for improving Libya's medical education. Postgraduate training abroad is common among the diaspora, which contrasts with limited foreign training among Libyan-based respondents. The interplay between Libyan doctors at home and those in diaspora, particularly regarding their educational backgrounds, motivations, and potential contributions to medical education reform in Libya, can be complex and must be tackled carefully.²³ The diaspora doctors' exposure to diverse health systems can enrich perspectives and skills relevant to curriculum and faculty development.¹⁰ The enthusiasm for contributing to Libyan medical education, especially if logistical and financial barriers are addressed, is also supported by evidence that many expatriate physicians are willing to return or engage with the Libyan system if meaningful reforms and support structures are implemented.¹⁰ The need to integrate perspectives and leverage champions from both groups is well-founded, as successful reform often requires both local contextual understanding and external expertise.²³ Social intelligence and humility among diaspora

doctors are crucial for adapting to local culture and demonstrating sensitivity.^{3,23} The present study offers an opportunity to build on the current understanding of the dynamics between domestic and diaspora medical professionals and the prerequisites for successful educational reform in Libya.^{8,10} The quality of medical education varies across Arab countries, including Libya, and physician migration patterns are influenced by both push and pull factors related to training quality and career opportunities. Longitudinal research and policy interventions are needed to address the specific challenges and opportunities presented by the interplay between domestic and diaspora doctors in medical education reform.²⁴

The free-text statements underscore that while the Libyan medical diaspora represents a valuable resource, achieving meaningful impact requires systemic reform. Coordinated frameworks linking diaspora experts with local institutions, supported by sustainable resources and incentives, may offer the most effective way to strengthen undergraduate medical education in Libya.

Several limitations are worth mentioning. Convenience sampling has its inherent limitations. Although a broadly good split between doctors at home and in diaspora was evident, distribution within these two major subgroups was not homogeneous, reflected in the preponderance of doctors in the Gulf region among the diaspora subgroup and from Tripoli and Benghazi among the doctors at home. Also, this study is based on self-reported data, which may be subject to selection bias. Respondents are likely to represent doctors who are already interested in or exposed to educational initiatives. The sample size prevented further subgroup analysis (e.g., by specialty or country of residence), limiting a more in-depth interpretation. Additionally, no qualitative insights from the free-text responses were analyzed, which could be addressed in future work.

Conclusion

The Libyan medical diaspora is a highly willing and potentially transformative resource for addressing educational gaps in Libya's medical sector. While interest in contributing is strong, implementation is constrained by policy, infrastructure, and coordination challenges.

To harness this resource effectively, Libya must (1) develop national diaspora engagement programs, (2) improve technological infrastructure for virtual education, (3) facilitate

international academic partnerships, and (4) provide incentives and recognition for diaspora-led teaching. Additional lessons learned could be transferable to other fragile or post-conflict states, reinforcing the call for equitable digital medical education in resource-limited contexts.

Practical steps for leveraging diaspora doctors could start with medical colleges appointing an international collaboration officer who is tasked with identifying the Libyan diaspora and creating a database with their academic skills, interests, and contact details. This officer would then reach out to them and keep them informed of opportunities for collaboration in a stepwise manner.

Conflict of Interest

None declared.

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