

# Faculty retention at a young medical school in crisis times and beyond: prospects, challenges and propositions from a mixed-methods study

Vanda G Yazbeck Karam, Sola Bahous, Ghada M Awada 💿 , Nazih Youssef

Lebanese American University, Beirut, Lebanon

#### Correspondence to

Dr Ghada M Awada, Lebanese American University, Beirut 1103, Lebanon; ghada.awada@lau.edu.lb

Received 12 September 2023 Accepted 20 February 2024

#### **ABSTRACT**

**Background** Retention of faculty constitutes a significant challenge for higher education institutions, especially in times of crisis. Lebanon has been experiencing economic recession since the end of its civil war in 1990 until its complete collapse in 2019. This resulted in a massive faculty exodus, escaping the daily struggle with the sinking economy.

**Purpose** The purpose of this study was to empirically investigate the factors that precipitate faculty attrition and the measures that foster long-term commitment to the institution in a time of unprecedented crisis. **Methods** An online anonymous survey, using a Likert scale, gathered responses from 92 faculty members. Quantitative findings were complemented by a qualitative exploration of emergent themes in comments. A team of three certified researchers conducted the analysis. Inductive analysis identified recurring themes, with steps like intercoder reliability checks and memberchecking enhancing data validity. The researchers ensured methodological rigour, subject expertise, and overall reliability and validity of the thematic analysis. **Results** A total of 78 faculty participated in the survey (84.8%), with 79.5% reporting overall satisfaction, but a varying degree of satisfaction was noted across items. Faculty satisfaction was highest in areas such as respectful interactions (91.0%), belonging to the workplace (85.9%), communication from the Dean's office (85.9%), supportive environment and medical school leadership's commitment to retaining faculty (82.1%). Financial assistance, support for research and professional assistance were identified as important retention measures. Effective, transparent communication from leadership was highlighted as a critical factor during times of crisis.

**Conclusion** This study provides strategies for faculty retention in times of crisis that include ensuring timely salary payments, supporting research and professional development, fostering a positive work environment and implementing bonding programmes. Transparent communication from leadership is vital for faculty satisfaction and retention. These findings can aid medical schools and other institutions facing faculty attrition during crises.

@ Author(s) (or their employer(s)) 2024. Re-use permitted under CC BY-NC. No commercial re-use. See rights and permissions. Published by BMJ.

Check for updates

To cite: Yazbeck Karam VG. Bahous S, Awada GM, et al. BMJ Leader Published Online First: [please include Day Month Year]. doi:10.1136/ leader-2023-000900

#### **BACKGROUND**

Faculty members in a medical school are valuable assets for higher education institutions, playing a critical role in establishing the university's national and international reputation. Faculty fulfil the three-dimensional mission of high-quality healthcare, practical education and advanced research

#### WHAT IS ALREADY KNOWN ON THIS TOPIC

⇒ Retaining diverse and engaged faculty is crucial for academic medicine, particularly in times of crisis. Existing literature underscores the significance of factors such as job satisfaction, leadership and financial support in retaining faculty.

#### WHAT THIS STUDY ADDS

⇒ This study reveals that a sense of belonging in the workplace and transparent, effective communication from leadership are crucial contributors to faculty satisfaction during crises. Key retention measures include financial assistance, research support and professional quidance.

#### HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY

⇒ Strategies to ensure faculty stability include ensuring timely payments, supporting faculty development and fostering a positive work environment with shared leadership. Moreover, adopting an equity-oriented crisis leadership approach with effective and transparent communication is pivotal, particularly during crises, to boost faculty satisfaction and retention.

in schools; therefore, retaining faculty is essential to enhance the institutional stature. While some turnover is natural and even considered essential for the health and viability of an organisation, in the long run, it can impact students, clinical teams and patients. It can also lead to significant financial losses due to faculty attrition.<sup>23</sup> Thus, a low faculty turnover is crucial for medical schools since intellectual capital is core to their success.3

Retention of academic staff constitutes a significant challenge for universities as the sociologist Max Weber (1864-1920) indicated that a few faculty could withstand the frustrations of academic life and their practice-based knowledge often ended in resignation.<sup>1</sup> Furthermore, data from the American Association of Medical Colleges (AAMC) confirm that 38% of faculty and 43% of first-time assistant professors leave academic medicine within 10 years.<sup>4</sup> While the retention of academic staff poses a notable challenge for higher-education institutions, this becomes even more critical during times of crisis. 1 3 In fact, the uncertainty that dominates during crisis times creates a tipping point for some





#### Original research

faculty who then decide to leave, which adds momentous challenges to higher education institutions that face the obligation of acting fast and well.<sup>5</sup>

The inability to retain faculty could be due to a multitude of factors, from cultural norms that can be challenging to some 'under-represented groups', to dissatisfaction with salaries and benefits. Dandar et al showed that the reasons for faculty departure included lack of advancement opportunities, salary concerns and personal/family issues.<sup>2</sup> Other studies have reported increased dissatisfaction due to the institutional culture, distress, burn-out, unethical research behaviour and ageing.<sup>5 6</sup> Differences in gender, race, ethnicity, rank and specialty might also affect faculty retention. Job satisfaction measures employees' positive attitudes towards the system. Overall, job satisfaction is negatively related to turnover, often mediated by organisational commitment. Research shows that engaged faculty is more likely to stay at their institutions, provide better-quality patient care and foster greater patient satisfaction. Nonetheless, in order for faculty members to effectively use their sense of mission and passion, it is essential for them to have adequate access to the resources, support and tools provided by their organisation.

This study is a response to the call of Darbyshire *et al* that have argued that research focusing on staff retention is an urgent priority. Furthermore, much of the literature about crisis management in international education focuses on dealing with personal crises. However, it is more difficult to find literature on managing faculty exodus amid persistent situations faced by Lebanon, the context of the study.

Lebanon has been rocked by cascading crises, including an economic crisis and the impact of the COVID-19 pandemic that has added immense pressure on the country's healthcare system. However, it was the massive explosion on Lebanon's waterfront in August 2020 that was the final straw for many medical professionals. In Lebanon, with a financial crisis ranking in the top three most severe problems in the world since the mid-19th century, a massive brain drain with a significant exodus of physicians in a record time is becoming increasingly dreadful. Approximately 40% of skilled medical doctors have left the country, including many who had long-standing positions at prestigious university hospitals where they both practised medicine and imparted knowledge to future physicians. According to the World Bank, this dimension of the Lebanese crisis perhaps makes the Lebanese episode unique compared with other global concerns. However, as the recent World Bank/CMI report shows, Lebanon is undoubtedly not the only country facing such challenges, especially in the Middle East and North Africa region. 10 11

This study is significant as it makes an empirical investigation about the factors that precipitate faculty attrition and the measures that foster retention and long-term commitment to the institution in a time of unprecedented crisis. The purpose of this study is to explore faculty perceptions of the nature of their work, compensation and benefits, collegiality and collaboration, medical school governance, and the availability of needed resources. As such, the study addressed the following two research questions: (1) What satisfaction and retention facilitators do faculty need at a young medical school in times of crisis and beyond? (2) What retention recommendations might faculty suggest at a young medical school in times of crisis and beyond?

#### METHODS Study design

This study used the mixed-methods study design whereby quantitative data were analysed using the surveys developed by Dandar et al.<sup>2</sup> The survey comments were analysed, using the method of constant comparative analysis associated with grounded theory, to identify themes.<sup>12</sup>

#### **Study participants**

The survey was sent electronically to 92 faculty working at a young School of Medicine (SOM) in the Middle East, incorporating two medical centres using BlueSurvey platform. The survey was kept online for 1 month with two reminders sent by email to complete the survey every 10 days. Seventy-eight out of 92 filled out the survey (84.8%). The answers were anonymously gathered by information technology staff and the survey findings report was sent to investigators.

#### Instruments

To develop the questionnaire, the members of the Faculty Affairs Committee explored data from Standpoint Surveys (AAMC)<sup>2</sup> and reviewed essential concepts. The researchers vetted the questions for inconsistency and ambiguity, after which they modified or removed some items and developed the final questionnaire. The survey included 22 questions sorted into 7 categories. The respondents' answers were classified according to a 5-point Likert scale from very dissatisfied to very satisfied for some questions, strongly disagree to agree with other questions or strongly agree.

#### **Process**

After receiving approval from the Lebanese American University Institutional Review Board, the web survey was sent anonymously by email through the Blue survey software to all LAUSOM faculty employed for over 1 year, with three reminders. The survey responses were analysed by using IBM SPSS statistics V.27, Furthermore, the Microsoft Excel 2016 was used to categorise and code the emergent themes the participants' reflection logs yielded.

#### **Data collection and analysis**

Demographic information included sex, department, track and academic rank. The responses were grouped into the following inter-related categories: (1) personal: ranks, salary, benefits overall satisfaction, (2) institutional: culture, commitment to professional growth, easiness of communication with the leadership and retention strategy and (3) environment: regional and societal. The options of the targeted items to state participants' agreement or satisfaction, and processes fairness, easiness, helpfulness or likeliness are the 5-point Likert scale answers. <sup>13</sup> The latter were numerically labelled from 1 to 5 for the quantitative statistics. Responses assigned labels 1 or 2 indicate a disagreement with the statement, being a satisfaction item or retention facilitator, responses with label 3 are the indecisive ones, and responses allocated labels 4 or 5 denote an agreement with the statement. The per cent of agreement and mean were calculated for each satisfaction item. Good items, satisfaction element or retention facilitator, with at least 75% of agreement and a mean more than 4, should be recommended for potential retention plans. Items with an agreement between 50% and 75% and a mean among 3-4 are considered as fair recommendations.

A team of three researchers, rigorously trained in qualitative methods, independently conducted a comprehensive analysis. They extracted, coded and refined themes and subthemes through discussions, ensuring methodological rigour and data validity. The inductive analysis identified recurring themes, with measures like intercoder reliability checks and member-checking

Table 1         Characteristics of the study participants				
Gender	Track	Rank	Department	Time to join LAU
Women 49% Men 51%	Tenure 24% Non-tenure 76%	Instructor 19% Assistant 60% Associate 12% Professor 9%	Basic sciences 8% Clinical 92%	1–5 years: 46% 6–10 years: 24% 10–15 years: 28% >15 years: 2%
LAU, Lebanese American University.				

enhancing reliability. The researchers ensured methodological rigour, subject expertise, and overall reliability and validity of the thematic analysis.

#### **RESULTS**

The characteristics of the study participants are displayed in table 1.

#### Findings on research question 1

What satisfaction and retention facilitators do medical faculty need at a young medical school in times of crisis and beyond?

The findings showed that the overall faculty satisfaction with the SOM was reported by 62 respondents (79.5%). The effective percentages of faculty satisfaction were those falling between 75.0% and 91.0%. The highest number was 71 (91.0%) in response to 'respectful interactions'. 'Belonging to the workplace and communication from the dean's office' reported 67 (85.9%) responses. The 'supportive environment and SOM leadership's commitment to retaining faculty' wrote 64 (82.1%) responses. Sixty-four (82.1%) agreed with the SOM leadership strategy to retain faculty, and 55 (70.5%) agreed that the SOM leadership was committed to professional growth and success. Regarding the easiness of getting resources, the best resources

were conferred to the information technology services with sixty responses out of 74 (81.1%), followed by the other needed help. The lowest response was for finding a research space twenty out of 57 (35.1%) (table 2).

#### Findings on research question 2

What retention recommendations might faculty suggest at a young medical school in times of crisis and beyond?

The findings showed that retention recommendations had received different response agreement per cent. Financial assistance reported the highest number (n=68, 87.2%). Financial support for scholarly activities (n=65, 83.3%) reported the second-highest number, followed by professional help for research (n=64, 82.1%), which ranked third. Professional assistance for teaching (n=63, 80.8%) was the fourth highest mean. Professional assistance for external grants (n=62, 79.5%) reported the fifth highest mean. Opportunities for collaborative research reported 56 responses (71.8%). Both relaxing policies for leave and opportunities for clinical work abroad (n=55, 70.5%) had the same responses. Both wellness activities and the hotline for well-being, along with the formal mentoring programme, had the lowest number (n=47, 60.3%) (table 3).

The citation of the extracted themes and subthemes confirmed the trustworthiness of the generated data of the above quantitative statistics (see table 4). First, the need for additional support from the SOM was cited 59 times; namely financial support (23 citations), research office and related staff (18 citations), increased benefits (7 citations), purchasing platforms to enhance and facilitate teaching (6 citations), and more space for academic tasks (5 citations). The second major concern for the participating faculty was the interactions with peers and superiors and it was cited 34 times. The interaction issues were the paucity of

		Satisfact	ion		
Satisfaction items	No of responses	No	Per cent	Mean±SE of the mean	SD
1. Current academic rank	78	44	56.4	3.4±0.2	1.3
2. Balance of time for academic work	78	56	71.8	3.6±0.1	1.1
3. Fair compensation	78	28	35.9	3±0.1	1.2
4. Benefits	78	47	60.3	3.5±0.1	1.2
5. Supportive environment	78	64	82.1	4.1±0.1	1
6. Belonging to workplace	78	67	85.9	4.2±0.1	1
7. Respectful interactions	78	71	91	4.5±0.1	0.9
8. Communication from the dean's office	78	67	85.9	4.3±0.1	0.9
9. SOM leadership's commitment to retain faculty	78	64	82.1	4.1±0.1	1
10. SOM leadership's commitment to professional growth	78	55	70.5	4±0.1	1
11. Department leadership's commitment to professional growth	78	52	66.7	3.8±0.1	1.1
12. Hospital leadership's commitment to professional growth	78	42	53.8	3.5±0.1	1.1
13. Research resources	78	29	37.2	3±0.1	1.2
14. Teaching resources	78	59	75.6	4.1±0.1	1
15.1. Office space	71	35	49.3	2.9±0.2	1.7
15.2. Clinical space	71	43	60.6	3.1±0.2	1.6
15.3. Research space	57	20	35.1	2.1±0.2	1.7
15.4. Human resources	71	40	56.3	3.1±0.2	1.5
15.5. Equipment	74	48	64.9	3.4±0.1	1.3
15.6. Administrative support	75	49	65.4	3.5±0.1	1.3
15.7. Information technology	74	60	81.1	3.9±0.1	1.2
16. Overall, SOM satisfaction	78	62	79.5	4±0.1	0.9
17. Overall, hospital satisfaction	78	54	69.2	3.7±0.1	1.1

### Original research

 Table 3
 Descriptive statistics—retention facilitators

		Potential facilitator				
Retention facilitators	No of responses	No	Per cent	Mean±SE of the mean	SD	Recommendation for the plan
18.1. Financial assistance	78	68	87.2	4.5±0.1	0.8	Strong
18.2. Relaxing policies for leave	78	55	70.5	4±0.1	1	Strong
18.3. Opportunities for clinical work abroad	78	55	70.5	4.1±0.1	1	Fair
18.4. Opportunities for collaborative research	78	56	71.8	4±0.1	0.9	Fair
18.5. Wellness activities and hotline for well-being	78	47	60.3	3.7±0.1	1	Fair
18.6. Formal mentoring programme	78	47	60.3	3.8±0.1	1	Fair
18.7. Professional assistance for external grants	78	62	79.5	4.2±0.1	1	Strong
18.8. Professional assistance for research	78	64	82.1	4.2±0.1	1	Strong
18.9. Professional assistance for teaching	78	63	80.8	4.1±0.1	0.9	Strong
18.10. Financial support for scholarly activities	78	65	83.3	4.2±0.1	1	Strong

team spirit among peers (15 citations), the unfairness of decisions taken by superiors (13 citations) and lack of communication from the leadership team (6 citations). The third issue mentioned in the comments was the promotion process that was cited 12 times. The promotion criteria were not appropriate (10 citations) and clinical contribution should be more recognised (2 citations). Moreover, the emergent themes/sub-themes reinforced the need for better financial support, a healthy environment, appropriate promotions and available resources in any successful retention plan.

#### **DISCUSSION**

Evidence shows an increasing frequency of crises in modern society. 14 As a result, experts propose a reframing of crises as continuous and interconnected events rather than isolated occurrences. 15 By adopting this mindset, it becomes possible to identify the 'incubation period' of a crisis, during which subtle signals and warnings emerge. Successful crisis management requires proactive surveillance strategies for crisis prevention, along with efforts to mitigate the impact once a crisis has surfaced. <sup>1</sup> Not long ago education systems were shaken by the COVID-19 pandemic, the morale of faculty was considerably affected and higher education institutions faced enormous challenges in retaining their workforce.<sup>17</sup> Therefore, institutions should gain an understanding of the specific retention challenges they face during such times and implement targeted retention initiatives accordingly. Ongoing collection and analysis of data on faculty resignations are crucial for informed decision-making.

Our study identified factors contributing to faculty satisfaction, support and engagement, alongside strategies for long-term

**Table 4** Themes and subthemes extracted from the comments of different sections related to faculty satisfaction and potential retention facilitators

Theme (no)	Subthemes	No of citation
Support (59)	Financial	23
	Research	18
	Benefits	7
	Teaching	6
	Space	5
Interaction (34)	Team spirit	15
	Fairness	13
	Communication	6
Promotion (12)	Criteria	10
	Clinical recognition	2

retention and reduced attrition. The integration of qualitative insights with quantitative data ensures a comprehensive grasp of faculty experiences, providing actionable insights for targeted retention strategies aligned with diverse needs. The qualitative findings revealed nuanced insights into faculty satisfaction and retention facilitators at our young SOM. The emergent themes and subthemes derived from participant comments shed light on various aspects of their experiences. Key satisfaction areas include respectful interactions, a sense of belonging to the workplace, effective communication from the dean's office and the leadership's commitment to retaining faculty. The overarching 'Support' theme emphasised the multifaceted nature of support needed, including financial assistance, enhanced benefits and adequate resources. Essential strategies found to be important as retention measures were providing financial assistance and supporting research through facilitated access to funded grants. Additionally, offering professional assistance and collaborative research opportunities can further enhance faculty satisfaction and retention.

A sense of belonging, defined as belonging, appreciation, acceptance and motivation, <sup>18</sup> along with involvement, characterised by how individuals behave, <sup>19</sup> can be considered as a framework for this study within the context of Tinto's model of institutional action. In this regard, fostering a sense of involvement and belonging plays a crucial role in enhancing retention.<sup>20</sup> These findings align with Mirkamali's study, which emphasised the significance of creating a safe environment.<sup>21</sup> Positive environments not only enhance teamwork and reduce administrative bureaucracy but also address issues, improve faculty quality of life and ultimately increase satisfaction and contentment. To further promote faculty retention, medical institutions should foster a culture of inclusivity, support faculty development and address biases in the promotion and tenure process. 19 Furthermore, devising an appropriate reward system, supporting academic activities and granting more autonomy to faculty members can enhance retention. Research showed that providing faculty members with promotion and professional development opportunities can also improve retention.<sup>22</sup> During times of crisis, faculty members face increased challenges and uncertainties, leading to higher levels of stress and anxiety. In such situations, the quality of interpersonal relationships and the support provided by the institution become even more critical factors influencing faculty retention.<sup>23</sup> In our SOM, this positive atmosphere can be attributed to the relatively small number of faculty who know each other and maintain collegial relationships. Additionally, the Office of Faculty Affairs and Development, operated by a committee comprising faculty members

from various departments, significantly enhances our school's positive work environment. Through fostering collegial relationships, promoting professional development and implementing supportive programmes, it plays a pivotal role in maintaining high levels of faculty satisfaction and retention, particularly during crises.

Nowadays, leadership is being tested in ways the world has not seen in generations. Crisis leadership is not simply leadership in a crisis but a particular set of skills that can be applied to both the emergency at hand, and to the adaptive period that follows. Crisis leadership is marked by the need to understand and to integrate the insights and concerns of those being led, and therefore, leaders' roles in a medical school become even more vital in retaining faculty in times of crisis.<sup>24</sup> The study's findings emphasised that faculty had the highest satisfaction in leadership's strong communication patterns and their commitment to retaining faculty. These positive perceptions align with previous research which highlighted the importance of effective leadership in faculty retention.<sup>3 9</sup> To navigate a crisis successfully and support faculty during challenging times, an equityoriented crisis leadership approach can be adopted.<sup>25</sup> In fact, the role of the leaders in reacting to crises with an equitable perspective is crucial to minimising racial, gender or other traumas that are compounded by the traits and effects of any catastrophe.<sup>24</sup> Virella's conceptual framework outlines eight pillars for equity-oriented crisis leadership, including fostering hope, adopting an equity-focused mindset, inclusive decisionmaking, equitable resource allocation, establishing fair systems and structures, promoting inclusive communication, engaging in equity-oriented critical self-reflection and advocating for radical change.<sup>25</sup> Communication stands out as one of the most crucial pillars of this framework. In fact, best practices for crisis communication, established through years of psychological and organisational research, include transparency, honesty and empathy. A strong commitment to faculty retention, coupled with effective communication, empowers the school leaders to create a cohesive and resilient environment within the medical school. This sense of security and support plays a significant role in motivating faculty to remain committed to the institution's mission and weather the storm together. Furthermore, our school dean's efforts to create an integrated approach to faculty retention are vital. A positive work environment that embraces shared leadership, ongoing interest in faculty ideas and the prevention of major divisions contributes to faculty engagement during crises. Retention strategies implemented by the dean encompass 1:1 faculty consultation services, recruitment of part timers, Lebanese interuniversity collaboration, internal policies relaxation, support for scientific growth and fulfilling welfare needs. This comprehensive leadership approach aims to stabilise retention efforts and foster an open and effective environment.

In normal circumstances, faculty remuneration has been identified as a critical factor influencing faculty departure.<sup>2</sup> Additionally, research by Hermann and Akpan demonstrated that freezes or cuts on wages and salaries negatively affect faculty retention.<sup>26</sup> <sup>27</sup> However, during times of crisis, faculty remuneration becomes even more vital in ensuring the satisfaction and retention of talented faculty. While the private sector may implement measures such as pay freezes or cuts during economic crises, wages in academic institutions generally remain stable, making educational institutions more attractive as employers during times of crisis. Nevertheless, academic institutions are not immune to the impact of the recession and may face pressure to implement austerity measures.<sup>27</sup> Interestingly, in our context, faculty did not relocate between institutions within the country;

rather, they chose to leave the country in search of better life and work conditions. On the other hand, to address this financial issue, our leadership flexibility in relaxing the school's internal policies, allows full-time faculty to work temporarily outside the country, enabling them to gain financial rewards and develop professional skills. Furthermore, the findings of this study reinforce the importance of providing faculty members with research resources. Previous research has shown the necessity of providing faculty members with opportunities for professional growth through promoting research activities and interuniversity collaboration with type I universities. 122

While wellness activities, well-being hotlines and formal mentoring programmes are valuable and important in supporting faculty members' long-term well-being and professional growth, they may not be at the forefront of their priorities during times of crisis. During times of crisis, faculty members' focus may shift towards more immediate and tangible support for their essential needs, such as access to financial resources, clear communication of job stability, and assistance with balancing personal and professional responsibilities. As the situation stabilises and normalcy returns, faculty needs may shift, and the importance of these supportive programmes and activities may regain prominence in their priorities.

#### Limitations

The small number of faculty participating in the survey is a limitation of this study. Nevertheless, this can be deemed acceptable, given the support from a mixed-method approach. In addition, the researchers presented data gathered from a single institution. However, the proposed strategies for supporting the recruitment and retention of faculty might be used by other medical schools encountering massive faculty departure in a time of crisis.

#### CONCLUSION

In conclusion, diverse, capable and engaged faculty are the most valuable resources in academic medicine. Faculty turnover not only disrupts the normal flow of activities but also incurs significant financial costs and affects the institution's internal and external perceptions. Providing critical retention support, especially for those at higher risk of leaving, is essential. Furthermore, strategically planning for long-term achievement in faculty stability is paramount. These strategies encompass ensuring timely salary payments, supporting faculty development and research, implementing bonding programmes, and nurturing a positive work environment that fosters a sense of belonging and embraces shared leadership. Additionally, effective, timely and transparent communication from leadership plays a crucial role in enhancing faculty retention and satisfaction, particularly during times of crisis. The specific challenges faced by our young medical school in Lebanon, contribute to the broader understanding of faculty dynamics in the midst of persistent crises. By aligning our findings with established literature and acknowledging the unique context of Lebanon, the study provides actionable recommendations for enhancing faculty satisfaction, support and retention in the field of medical education.

**Contributors** VGYK, SB, NY and GMA have jointly made substantial contributions to conception and design, acquisition of data, analysis and interpretation of data. Vanda Abi Raad, SB, GMA and NY did the drafting and the revising of the article or revising critically for important intellectual content. (3) Vanda Abi Raad, SB, GMA and NY had the final approval of the version to be published had an agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved. All authors qualify for authorship. Each author has participated sufficiently in the work and took public responsibility for appropriate portions of the content.

## Original research

All authors jointly made decisions about who is an author before submitting the manuscript. VGYK, guarantor.

**Funding** The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

**Competing interests** None declared.

Patient consent for publication Not applicable.

Ethics approval This study involves human participants and the IRB operates in compliance with the national regulations pertaining to research under the Lebanese Minister of Public Health's Decision No.141 dated 27/1/2016 under LAU IRB Authorisation reference 2016/3708, the international guidelines for Good Clinical Practice, the US Office of Human Research Protection (45CFR46) and the Food and Drug Administration (21CFR56). LAU IRB US Identifier as an international institution: FWA00014723 and IRB Registration # IRB00006954 LAUIRB#1. Participants gave informed consent to participate in the study before taking part.

**Provenance and peer review** Not commissioned; externally peer reviewed.

**Data availability statement** All data relevant to the study are included in the article or uploaded as online supplemental information.

**Open access** This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

#### ORCID in

Ghada M Awada http://orcid.org/0000-0001-8486-1630

#### **REFERENCES**

- 1 Shaterjalali M, Gholampoor Y, Jeihooni AK, et al. Faculty retention in regional medical schools in Iran: a qualitative content analysis. BMC Med Educ 2021;21:24.
- 2 Dandar VM, Field JP, Garrison GE. Promising practices for promoting faculty engagement and retention at US medical schools. Association of American Medical Colleges, 2017.
- 3 Nausheen F, Agarwal MM, Estrada JJ, et al. A survey of retaining faculty at a new medical school: opportunities, challenges, and solutions. BMC Med Educ 2018:18:223.
- 4 Liu D, Yu X, Wang Y, et al. The impact of perception of discrimination and sense of belonging on the loneliness of the children of Chinese migrant workers: a structural equation modeling analysis. Int J Ment Health Syst 2014;8:52.
- 5 King V, Roed J, Wilson L. It is very different here: practice-based academic staff induction and retention. J High Educ Policy Manag 2018;40:470–84.
- 6 Kebaetse M, Mokone GG, Badlangana L, et al. Academic staff recruitment and retention challenges at the University of Botswana medical school. S Afr Med J 2016;106:730–4.
- 7 Wynen J, Op de Beeck S. The impact of the financial and economic crisis on turnover intention in the US federal government. *Public Pers Manag* 2014;43:565–85.
- 8 Darbyshire D, Brewster L, Isba R, et al. Retention of doctors in emergency medicine: a scoping review protocol. JBI Evid Synth 2020;18:154–62.

- 9 Cherro M, El-Khoury J. Lebanon facing an exodus of psychiatrists when they are most needed. Asian J Psychiatr 2022;71:103081.
- 10 Shallal A, Lahoud C, Zervos M, et al. Lebanon is losing its front line. J Glob Health 2021;11:03052.
- 11 Marchesini G. Internationalization of tertiary education in the Middle East and North Africa, ERIC - ED612370. World Bank; 2020. Available: https://eric.ed.gov/?id= FD612370
- 12 Harris IB. What does "the discovery of grounded theory" have to say in medical education. Adv Health Sci Educ Theory Pract 2003;8:49–61.
- 13 Joshi A, Kale S, Chandel S, et al. Likert scale: explored and explained. BJAST 2015;7:396–403
- 14 't Hart P, Heyse L, Boin A. New trends in crisis management practice and crisis management research. J Contingencies Crisis Manage 2001;9:181–8.
- 15 Jaques T. Reshaping crisis management: the challenge for organizational design. Organ Dev J 2010;28:9–17.
- 16 Kane RL, Egan JM, Chung KC. Leadership in times of crisis. Plast Reconstr Surg 2021:148:899–906.
- 17 Poon Y-S, Lin YP, Griffiths P, et al. A global overview of healthcare workers' turnover intention amid COVID-19 pandemic: a systematic review with future directions. Hum Resour Health 2022;20:70.
- 18 Goodenow C. The psychological sense of school membership among adolescents: scale development and educational correlates. *Psychol Schs* 1993;30:79–90.
- 19 Astin AW. Student involvement: a developmental theory for higher education. J Coll Stud Dev 1999;40:518–29. Available: https://www.researchgate.net/publication/ 220017441
- 20 Knekta E, McCartney M. What can departments do to increase student retention? A case study of students' sense of belonging and involvement in a biology department. J Coll Stud Retent: Res Theory Pract 2021;22:721–42.
- 21 Mirkamali SM, Hajkhozeymh M, Ebrahimi S. Criteria to identify, attract and retain human resources and provide appropriate solutions (case study: staff of Tehran University campus faculties). *JDEM* 2015;1394:9–18. Available: http://www.jdem.ir/article\_485\_7a39a08db7e35540 afa4559958bdbae5.pdf
- 22 Davenport D, Alvarez A, Natesan S, et al. Faculty recruitment, retention, and representation in leadership: an evidence-based guide to best practices for diversity, equity, and inclusion from the council of residency directors in emergency medicine. West J Emerg Med 2022;23:62–71.
- 23 Ries A, Wingard D, Gamst A, et al. Measuring faculty retention and success in academic medicine. Acad Med 2012;87:1046–51.
- 24 Xierali IM, Nivet MA, Rayburn WF. Diversity of department chairs in family medicine at US medical schools. *J Am Board Fam Med* 2022;35:152–7.
- 25 Virella PM. Introducing the pillars of equity-oriented crisis leadership: a conceptual framework. Sch Leadersh Manag 2023;43:390–410.
- 26 Hermann C. Structural adjustment and neoliberal convergence in labor markets and welfare: the crisis and austerity measures impact European economic and social models. *Competition & Change* 2014;18:111–30.
- 27 Akpan CP. Job security and job satisfaction as determinants of organizational commitment among University teachers in cross river state, Nigeria. Br J Educ 2013;1:82–93. Available: www.eajournals.org/.../Job Security-and-Job-Satisfactionas-Determinant