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Resilience for Psychological Safety and Interprofessional Collaboration: Insights from Malaysia, Japan and Thailand Medical Educators

Muhamad Saiful Bahri Yusoff^{1,2}, Pongtong Puranitee³, Shinji Takada⁴, Yumiko Okubo⁵, Takatsugu Yamamoto⁶, Chie Saito⁷

¹Department of Medical Education, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, Selangor, MALAYSIA

²Department of Medical Education, School of Medical Sciences, Universiti Sains Malaysia, Kelantan, MALAYSIA

³Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, THAILAND

⁴Department of Anesthesiology, Teikyo University School of Medicine, Tokyo, JAPAN

⁵Department of Medical Education, Teikyo University School of Medicine, Tokyo, JAPAN

⁶Department of Internal Medicine, Teikyo University School of Medicine, Tokyo, JAPAN

⁷General Medical Education and Research Center, Teikyo University, Tokyo, JAPAN

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ABSTRACT

The high-stress healthcare environment necessitates strategies to enhance psychological safety and interprofessional collaboration. This article critically explores the pivotal role of resilience in fostering well-being, work engagement and teamwork among healthcare professionals in Malaysia, Japan, and Thailand. Drawing on the DEAL PROGRAMME (Detect, Evaluate, Act, Learn) and other resilience-building strategies, the findings highlight the importance of integrating resilience initiatives at individual, organisational and systemic levels. The structured DEAL Programme demonstrates a scalable, effective framework for reducing stress, improving collaboration, and enhancing psychological safety. Insights from Japan and Thailand reveal valuable cultural adaptations, emphasising mindfulness, mentoring and student well-being. These insights emphasise the need for contextualised resilience strategies tailored to diverse healthcare contexts. This article has elucidated how resilience can create a more supportive and high-performing healthcare system. It calls for continued investment in resilience training to ensure sustainable healthcare environments that improve patient care and professional well-being.

Keywords: *Resilience, Psychological safety, Interprofessional collaboration, Medical education, Well-being*

CORRESPONDING AUTHOR

Muhamad Saiful Bahri Yusoff, Department of Medical Education, Faculty of Medicine and Health Sciences, Universiti Putra Malaysia, 43400 Serdang, Selangor

Email: saifulbahri@upm.edu.my; msaifulbahriyusoff@gmail.com

INTRODUCTION

In the fast-paced and often stressful environment of healthcare, psychological safety and interprofessional collaboration are critical components for delivering high-quality patient care. Psychological safety, defined as a shared belief that the team is safe for interpersonal risk-taking (1–3), is essential for fostering open communication and innovation among healthcare professionals. Interprofessional collaboration, which involves different disciplines working together to achieve the best possible patient outcomes (4–6), is equally vital. However, the demanding nature of healthcare work can impede these processes, leading to burnout and reduced job satisfaction (7, 8). This underscores the critical need for resilience among healthcare professionals (9, 10). Resilience, the ability to bounce back and grow stronger from adversities (11–13) is a key factor that can enhance work engagement (14–16) thus positively affecting both psychological safety (1–3) and interprofessional collaboration (4–6).

The healthcare sector is inherently challenging, with professionals navigating high-stress situations, critical decisions, and emotional strain (17). Psychological safety is vital in this context, enabling open communication, the sharing of concerns, and the admission of mistakes without fear of retribution. This culture fosters continuous learning and improvement. Equally important is interprofessional collaboration, where diverse healthcare disciplines work together to deliver comprehensive, patient-centred care. Despite these benefits, achieving psychological safety and collaboration in high-pressure environments remains difficult, with burnout posing a significant threat. Burnout not only reduces job satisfaction and increases turnover but also compromises patient care (17, 18). This underscores the urgent need to build resilience among healthcare professionals to empower them to manage stress, recover from setbacks, and maintain a positive outlook amid challenges (9, 10). By fostering resilience, healthcare teams can create a supportive, collaborative culture that enhances psychological safety, strengthens interprofessional efforts, and ultimately improves patient outcomes.

By examining resilience-building programmes and their impact on healthcare teams, this article explores how building resilience can foster a more supportive healthcare environment, ultimately promoting better psychological safety and interprofessional collaboration. It also explores the implementation of resilience-building programmes to address these critical needs, ensuring a more sustainable and effective healthcare system.

DEFINITIONS AND CONCEPTS

Psychological safety refers to the shared belief within a team that it is safe to engage in interpersonal risk-taking (1–3). This concept emphasises the importance of creating an environment where individuals feel confident that they will not be punished or humiliated for speaking up with ideas, questions, concerns, or mistakes. In healthcare settings, psychological safety is paramount as it encourages open communication and honesty, which are crucial for patient safety and effective teamwork. When healthcare professionals feel psychologically safe, they are more likely to collaborate, share knowledge and innovate, leading to better patient outcomes.

Interprofessional collaboration involves the integrated efforts of multiple healthcare disciplines working together to deliver the highest quality of care (4–6). It requires mutual respect, effective communication and shared decision-making among team members from

different professional backgrounds. This collaborative approach ensures comprehensive patient care that considers all aspects of the patient’s health. Successful interprofessional collaboration can lead to improved health outcomes, increased patient satisfaction and a more efficient healthcare system.

Resilience is defined as the capacity to recover quickly from difficulties and adapt well in the face of adversity, trauma, or significant sources of stress (11–14). In healthcare, resilience enables professionals to maintain their well-being and continue providing high-quality care despite the challenges and pressures they face. It involves a combination of personal traits, coping skills and external support systems that help individuals manage stress and bounce back from setbacks (14). Building resilience is essential for preventing burnout, reducing stress and promoting long-term career sustainability among healthcare workers (9).

The Connections of Resilience with Work Engagement, Psychological Safety and Interprofessional Collaboration

Figure 1 illustrates the framework exploring the interconnected roles of resilience, work engagement, psychological safety, and interprofessional collaboration in fostering a thriving healthcare environment. The framework presents a conceptual model that intricately connects resilience to work engagement, psychological safety, and interprofessional collaboration, emphasising their interconnection in fostering a productive and supportive workplace environment, particularly within healthcare or other multidisciplinary settings.

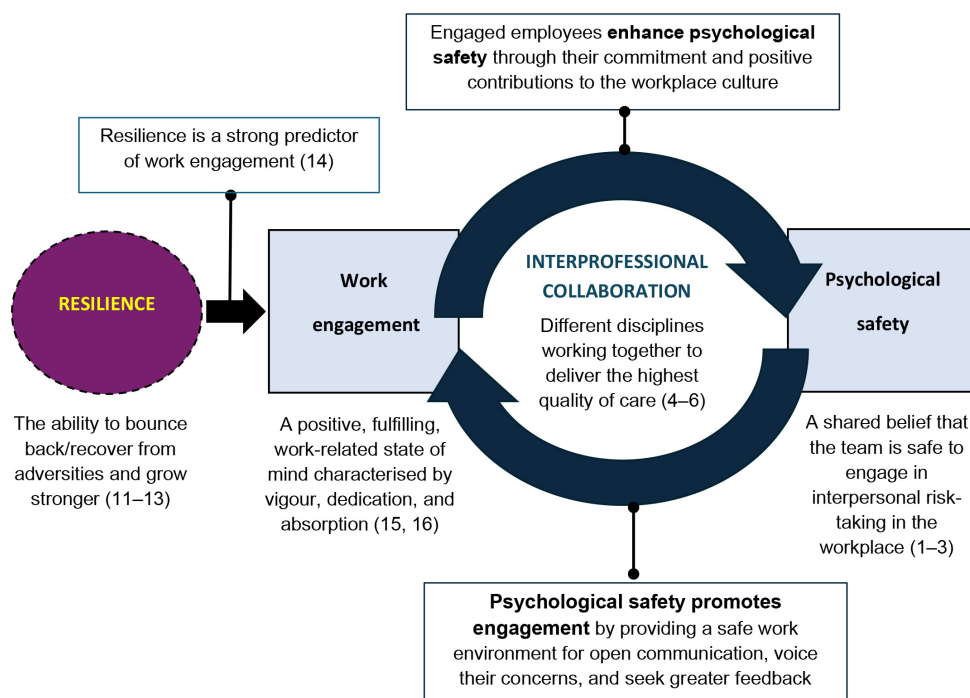


Figure 1: The interplay between resilience, work engagement, psychological safety, and interprofessional collaboration within healthcare settings.

Building resilience can be seen as a proactive approach to enhancing psychological safety and interprofessional collaboration (Figure 1). The framework presents a dynamic and cyclical relationship between resilience, work engagement, psychological safety and interprofessional collaboration. Resilience is positioned as the foundation, enabling healthcare professionals to recover from adversity, maintain well-being, and manage workplace stressors effectively. In high-pressure healthcare settings, resilient professionals are better equipped to regulate emotions, sustain motivation and reframe challenges as opportunities for growth. These adaptive capacities contribute to work engagement, a positive psychological state characterised by vigour, dedication and absorption in one's tasks. Resilient individuals are more likely to remain energised and focused, persevere through difficulties, and find meaning in their roles – characteristics strongly associated with higher levels of work engagement. In turn, engaged professionals tend to display greater initiative, openness and collaboration with others, which contributes to a psychologically safe environment. When healthcare professionals feel secure, they are more likely to share critical information, admit mistakes and contribute ideas – behaviours that are vital to high-functioning, interprofessional teams.

At the core of this framework is interprofessional collaboration, where professionals from diverse disciplines work cohesively to deliver high-quality care. Interprofessional collaboration thrives in such environments, as professionals from different disciplines are encouraged to communicate openly, respect diverse perspectives, and coordinate care efficiently. This collaboration not only improves team performance and patient outcomes but also reinforces a culture of trust and inclusion, further enhancing psychological safety that sustains work engagement and creates a feedback loop that strengthens resilience. This dynamic cycle highlights how resilience-building strategies can support individual well-being, enhance team dynamics and improve patient outcomes.

By positioning resilience as the entry point to this cycle, the model underscores that building resilience is not merely a personal asset but a strategic intervention to enhance broader organisational outcomes. It fosters individual well-being, supports team functioning, and ultimately contributes to improved patient care. This model thus represents more than a static set of relationships – it illustrates a dynamic and cyclical process through which resilience-driven engagement creates a thriving, collaborative and psychologically safe workplace culture, particularly in complex, multidisciplinary settings.

MALAYSIA'S INSIGHTS – THE DEAL PROGRAMME: A STRUCTURED APPROACH TO BUILDING RESILIENCE

In Malaysia, the DEAL Programme (Detect, Evaluate, Act, Learn) stands out as an innovative and structured framework designed to build resilience among healthcare professionals (19–21). The programme focuses on fostering psychological safety and enhancing interprofessional collaboration by systematically addressing stressors and promoting well-being. Through a combination of psychoeducational and problem-oriented interventions, the DEAL Programme empowers healthcare teams to manage stress effectively while fostering a supportive, collaborative work environment.

Key Components of the DEAL Programme

The DEAL Programme is built on four core components—detect, evaluate, act, and learn—that work synergistically to enhance resilience and work engagement:

- a. **Detect:** The first phase involves identifying the stressors that impact healthcare professionals, such as burnout, interpersonal conflicts, or systemic issues within their work environment. This phase includes interactive presentations and small group discussions that allow participants to reflect on personal stressors and recognise common challenges within the team. This step is crucial for raising awareness and opening a dialogue about the pressures faced by healthcare workers.
- b. **Evaluate:** Once stressors are identified, the next step is to assess their impact on both individuals and the broader team. This phase focuses on understanding the severity of stressors, the emotional toll they take, and the areas where intervention is needed. Through small group discussions and presentations, participants gain insights into key well-being markers and how the DEAL process can be applied to their daily experiences.
- c. **Act:** After evaluation, targeted actions are implemented to mitigate stress and build resilience. This phase combines psychoeducational techniques with problem-oriented strategies, allowing participants to practice coping mechanisms, including cognitive-behavioural strategies, relaxation techniques, and mindfulness. Video blueprints and practical activities are used to simulate common stressors interns face, encouraging active learning and real-world application.
- d. **Learn:** The final phase emphasises continuous learning and improvement. Participants reflect on the effectiveness of the actions taken, adjust strategies based on their experiences, and adopt new approaches for managing future challenges. This iterative process ensures that resilience-building is not a one-time effort but an ongoing practice that evolves with the changing needs of healthcare professionals.

Enhancing Collaboration through WE-DEAL

The DEAL Programme is further strengthened by its WE-DEAL (Work Engagement - Detect, Evaluate, Act, Learn) component, which incorporates a helping others element (i.e., peer-support) (22). WE-DEAL focuses on fostering a culture of collaboration by encouraging interns to help each other manage stress and apply the DEAL framework collectively (22). This collaborative approach is designed to:

- a. **Collaborative detection:** Interns work together to identify stressors, share their experiences and foster mutual understanding.
- b. **Joint evaluation:** Group discussions allow for a collective assessment of well-being, enhancing empathy and insight into each other's stress responses.
- c. **Collective action:** Teams implement stress management strategies together, reinforcing a sense of community and shared responsibility.
- d. **Shared learning:** Reflection and discussion as a group help identify what worked and what did not, fostering an environment of continuous improvement.

Impact and Evaluation

The DEAL Programme has been evaluated through a comprehensive review of documents, surveys, interviews and focus groups with healthcare professionals (21, 22). The data shows that the programme has significantly improved resilience, reduced stress levels and increased coping ability (21, 22). Key performance indicators such as resilience, psychological health levels, and coping ability measured before and after the programme’s implementation, revealed a marked improvement in participants’ overall well-being.

Qualitative data from interviews and focus groups highlight the programme’s effectiveness in creating a supportive environment where healthcare professionals feel more connected and empowered to manage work stress, thus fostering better work engagement. The critical analysis of the DEAL Programme has provided valuable insights into how structured resilience-building can lead to better psychological safety through supportive work engagement and enhanced interprofessional collaboration.

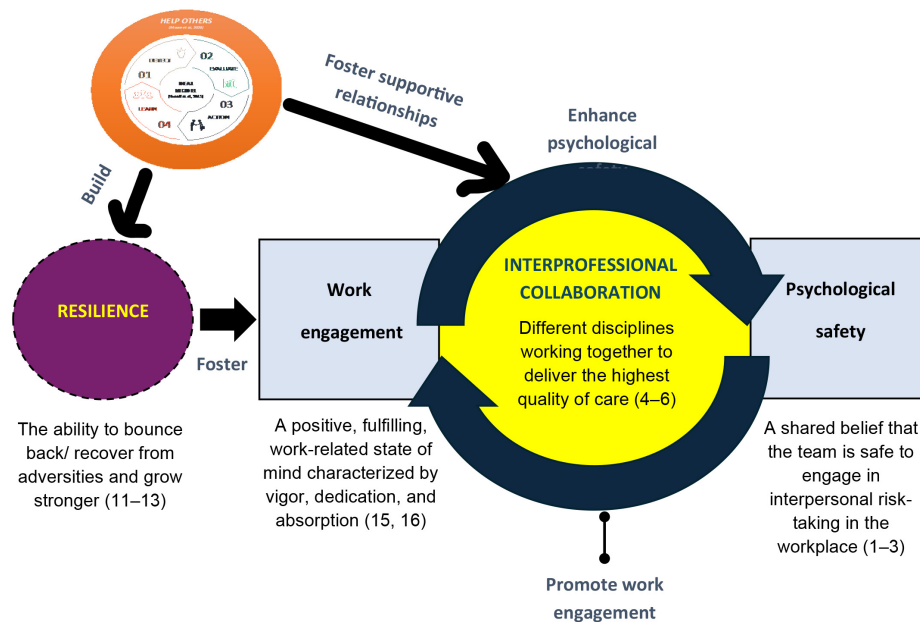


Figure 2: The relationship of the DEAL programme with resilience, work engagement, psychological safety and interprofessional collaboration.

Figure 2 visually depicts the interconnected relationships among resilience, work engagement, interprofessional collaboration, and psychological safety in healthcare settings. It begins with resilience to bounce back from adversities and grow stronger (11–13) and is depicted as a key predictor of work engagement, for a fulfilling state of mind at work, marked by vigour, dedication and absorption (15, 16). Higher resilience levels are associated with greater work engagement among healthcare professionals. Engaged professionals are more likely to participate in interprofessional collaboration, delivering the highest quality of care. This collaboration is crucial in healthcare as it ensures comprehensive patient care and leverages diverse expertise. Psychological safety is a critical outcome for interpersonal risk-taking that will enhance interprofessional collaboration effectiveness (1–3). When healthcare professionals collaborate effectively, they feel more comfortable sharing ideas and taking risks, thereby promoting a safer, more supportive work environment.

Central to this process is the DEAL Programme that builds resilience among healthcare professionals by fostering supportive relationships. By enhancing resilience, the DEAL Programme indirectly promotes higher work engagement, better interprofessional collaboration, and greater psychological safety. The diagram illustrates how resilience, built through initiatives such as the DEAL Programme, leads to greater work engagement. This engagement will create a supportive and productive work environment, ultimately contributing to improved patient care and professional well-being.

In summary, the DEAL Programme represents a comprehensive, scalable approach to building resilience among healthcare professionals in Malaysia. By integrating structured interventions that focus on detecting, evaluating, acting on, and learning from stressors, the programme promotes psychological safety and fosters a culture of collaboration. The addition of the WE-DEAL component further strengthens the programme by encouraging peer support and collective action. As a result, the DEAL Programme not only improves individual well-being but also enhances teamwork and the overall work environment, ultimately contributing to higher quality patient care.

JAPAN'S INSIGHTS – THE CURRENT PROGRESS OF RESILIENCE THROUGH SELF-CARE INITIATIVES

General Approaches in Japanese Medical Universities

Japanese medical universities have increasingly recognised the importance of resilience and well-being in their curricula. A survey conducted across 82 universities showed that 49.2% (32 out of 65 responding universities) had implemented self-care education programmes (23). These initiatives primarily focused on stress management and mindfulness techniques (24, 25). Psychiatrists or psychologists often conducted teaching. However, the educational content was not standardised across institutions, highlighting the need for future efforts to standardisation of self-care programmes (23).

Application Tailored to Japan's Cultural Context

The Japanese approach emphasises the importance of early intervention, particularly for first- and second-year medical students, who often experience high levels of stress due to the vast amount of knowledge they must acquire and the intense pressure of examinations during the early phase of pre-clinical medical education. Culturally, there is a growing awareness that self-care is essential not only for academic success but also for long-term professional resilience. The use of mindfulness and stress management aligns well with traditional Japanese values of introspection and calm, although some resistance was noted among students regarding practices like meditation (23).

Current Progress of Resilience through Self-Care Initiatives

The current progress shows that, while some universities have adopted self-care programmes, there are challenges, such as a lack of standardisation and sufficient faculty trained to deliver these programmes. The COVID-19 pandemic has also underscored the importance of resilience or self-care initiatives, with 28.5% of medical students reporting depressive tendencies (26). This prompted an increased focus on mental health support (23).

A critical review of the survey results indicates that, although nearly half of Japanese medical universities offer some form of self-care education, the diversity in implementation suggests varying levels of engagement and effectiveness. Some institutions see this as an important step to combat burnout and promote long-term physician well-being, while others are constrained by tight curricula and limited faculty resources (23). The comparative analysis shows that Japan is somewhat behind other countries, like Australia and the US, where self-care education is more integrated and standardised. For example, Monash University in Australia has a well-established mindfulness-based programme that significantly improved students' mental health and quality of life (27). In Japan, there is still a need for greater acceptance and for allocating resources to make such programmes widely accessible. This provides an overview of Japan's progress in resilience through self-care initiatives, with insights into general approaches, cultural context, and areas for improvement based on comparative international practices.

THAILAND'S INSIGHTS – FACULTY DEVELOPMENT, MENTORING PROGRAMME AND STUDENT WELL-BEING CENTRE

In Thailand, resilience-building initiatives in healthcare education focus primarily on faculty development, mentorship programmes, and the establishment of student well-being centres. These initiatives aim to foster a culture of psychological safety and promote interprofessional collaboration in the workplace through tailored interventions that reflect the unique cultural and systemic contexts of Thai healthcare.

Faculty Development and Mentorship Programme

The faculty development programme in Thailand emphasises equipping educators with the skills necessary to mentor students effectively and provide constructive feedback. This initiative plays a crucial role in enhancing psychological safety and a sense of belonging within academic settings by creating a supportive and open environment where faculty and students can engage in meaningful dialogue (28–32). The mentoring programme focuses on guiding students through the high-pressure demands of medical education, addressing both academic and personal challenges.

Mentorship is viewed as a critical element in fostering resilience among healthcare professionals. By providing personalised support, mentors help students and junior professionals navigate stressors, thus contributing to the development of emotional intelligence and adaptive coping skills (33–35). This approach ensures that resilience is cultivated not only at the individual level but also embedded within the broader institutional framework, promoting long-term sustainability and collaboration.

Since mistreatment in medical schools from faculty members, peers and other professions was related to students' well-being and caused a negative impact on relationship building (36, 37). The SAFE medical school campaign has been emphasised to promote psychological safety in learning environments and workplaces. SAFE stands for S (no sexual harassment), A (avoid bullying), F (feedback appropriately), and E (equity). Mistreatment, raising awareness and its reporting system were also developed and implemented to ensure that all professionals were treated appropriately (38).

Student Well-being Centres

Student well-being centres have become a key part of the Thai healthcare education landscape, offering a range of services to promote psychological safety and well-being. These centres provide students with access to counselling services, stress management workshops and peer support groups. The presence of such dedicated resources demonstrates Thailand's commitment to fostering a resilient healthcare workforce by proactively addressing mental health.

The well-being centres also serve as hubs for peer/near-peer collaboration, where students can engage in group activities and workshops focused on building social resilience and stress coping skills. Some volunteer students serve as peer mentors and support other students who seek or need help with mental health problems.

Cultural Context and Tailored Application

Thailand's initiatives are deeply influenced by the cultural importance of community, respect for hierarchy, and collective well-being. Faculty development and mentoring programmes are structured to respect traditional values, such as deference to seniority, while promoting open communication and psychological safety. This balance is essential in a country where hierarchical relationships can sometimes impede the free exchange of ideas. Moreover, the well-being centres and their services are tailored to accommodate cultural sensitivities, such as the stigma surrounding mental health. By normalising conversations around well-being and resilience, these centres help reduce the barriers to seeking support, thereby promoting psychological safety.

Thailand's approach to resilience-building and interprofessional collaboration demonstrates several strengths, particularly in its holistic integration of faculty development and student well-being programmes. However, challenges remain, such as the need for more structured support systems for junior faculty and the expansion of resilience training across all levels of healthcare education.

Compared with Malaysia and Japan, Thailand's initiatives are more focused on mentorship and the development of soft skills, such as emotional intelligence. While these aspects are critical, further emphasis on structured resilience programmes, such as the DEAL model, could enhance the effectiveness of resilience-building efforts and ensure that healthcare professionals are equipped to meet the demands of modern clinical practice.

DISCUSSION

Resilience Programmes and Interventions

Across Malaysia, Japan and Thailand, resilience-building initiatives reflect a shared commitment to enhancing healthcare education and practice. However, their specific goals and approaches differ significantly across cultural and institutional contexts. In Malaysia and Thailand, such efforts often emphasise psychological safety and interprofessional collaboration as key outcomes. In contrast, Japan's approach to resilience education

emphasises self-care and individual well-being, with psychological safety more closely linked to patient safety and effective interprofessional teamwork. These variations highlight the importance of contextual relevance in shaping resilience strategies across different healthcare systems.

The implementation of the DEAL Programme has provided a structured, systematic framework for resilience-building, focusing on individual stress management and enhancing work engagement. The programme is deeply integrated into healthcare settings, offering psychoeducational and problem-oriented stress management techniques, such as cognitive-behavioural strategies, mindfulness, and peer support. The strength of Malaysia's approach lies in the DEAL Programme's comprehensive nature, scalability, and institutional adoption, providing practical tools for healthcare professionals and students to build resilience while promoting psychological safety.

In Japan, the emphasis has been on self-care education programmes, particularly within medical universities. These programmes, often led by psychiatrists or psychologists, focus on stress management and mindfulness, aligning with traditional Japanese values of calm and introspection. However, a significant challenge is the lack of standardisation across institutions, with some universities having robust programmes while others face constraints due to limited resources or curricular demands. Japan's initiatives highlight early intervention for medical students, but the system's reliance on non-standardised approaches limits its broader application compared to Malaysia's more uniform and structured DEAL framework.

In Thailand, resilience-building is anchored in faculty development, mentorship programmes, and student well-being centres. These initiatives focus on personalised support through mentorship, helping students and junior professionals manage stress and develop emotional intelligence. Thailand's approach emphasises the relational aspect of resilience, fostering psychological safety through strong mentor-mentee relationships and peer support. Student well-being centres offer counselling, workshops, and group activities, emphasising the importance of mental health and interprofessional collaboration at the student level. Thailand's approach is holistic, yet it could benefit from the addition of structured resilience programmes, like Malaysia's DEAL model, to enhance institutional consistency and long-term sustainability.

Psychological Safety and Cultural Sensitivities

The cultural contexts in Malaysia, Japan and Thailand have a profound influence on how psychological safety is promoted within healthcare settings. In Malaysia, the DEAL Programme fosters a culture of psychological safety by encouraging healthcare professionals to discuss stressors and engage in collaborative problem-solving openly. The structured nature of the programme ensures that psychological safety is systematically fostered across all levels of healthcare institutions. In Thailand, the strong focus on mentorship and peer support fosters psychological safety by fostering trusted relationships between faculty and students. The well-being centres play a crucial role in normalising mental health discussions, which helps reduce stigma around seeking help. Thailand's initiatives, however, are still evolving in how systematically they address resilience-building at the institutional level. In Japan, psychological safety has been emphasised as an essential component of patient safety and effective interprofessional collaboration. Accordingly, several academic and

professional organisations in patient safety and healthcare professional education have recently developed programmes, such as symposia and workshops, to foster psychological safety. Insights from these initiatives suggest that enhancing psychological safety may also help build resilience.

Interprofessional Collaboration

Interprofessional collaboration is a key focus in all three countries, but the methods for fostering it differ according to each country's unique educational and cultural environments. For instance, the DEAL Programme's structured group activities and small group discussions emphasise collaborative problem-solving and resilience-building among healthcare professionals. By implementing resilience strategies at both the individual and group levels, the programme strengthens team dynamics and promotes interprofessional collaboration as an integral part of healthcare practice. In Thailand, the interprofessional collaboration is fostered through the well-being centres, where students from various healthcare disciplines engage in group activities designed to enhance teamwork and communication skills. The mentorship programmes also encourage collaboration by connecting students with professionals from different fields. However, there is room to adopt more structured approaches, such as the DEAL Programme, to systematise interprofessional collaboration and ensure it is ingrained across all aspects of healthcare education. In Japanese medical universities and teaching hospitals, the importance of interprofessional collaboration has been increasingly recognised in their curricula (23). Thus, interprofessional collaboration is explicitly included as one of the basic competencies required of physicians in the Model Core Curriculum for Medical Education in Japan (39), as well as in accredited postgraduate clinical training programmes. As evidence of this progress, some hospitals have implemented the Team STEPPS (Strategies and Tools to Enhance Performance and Patient Safety) programme developed by the Agency for Healthcare Research and Quality (40). Additionally, a multidisciplinary human resource development joint-use centre, based on medical safety education methods, was established in 2023 (41). We anticipate that the standardisation of an integrated approach to education in interprofessional collaboration and psychological safety will continue to advance.

While all three countries prioritise resilience, psychological safety and interprofessional collaboration, they differ in their strategies and execution. Malaysia stands out with its structured and scalable DEAL Programme, which offers a comprehensive framework for resilience-building at both individual and institutional levels. Japan excels in early intervention and mindfulness practices, and while psychological safety and interprofessional collaboration have long been recognised as essential to patient safety in Japan, the country is now beginning to address the integration of resilience and psychological safety within medical professionalism. Thailand places a strong emphasis on relational support through mentorship and well-being centres. Still, its approach could benefit from more structured resilience programmes to ensure consistency and long-term impact. More importantly, each country offers valuable insights into resilience-building, and there is significant potential for cross-cultural learning and adaptation of best practices to enhance psychological safety and interprofessional collaboration across diverse healthcare settings.

Strategies to Build Resilience

Building resilience within healthcare settings requires a multi-level approach that addresses individual, organisational and systemic factors. In this study, resilience strategies are

categorised into micro, meso, and macro levels (Figure 3) (42), each targeting specific aspects of healthcare professionals’ well-being and interprofessional collaboration.

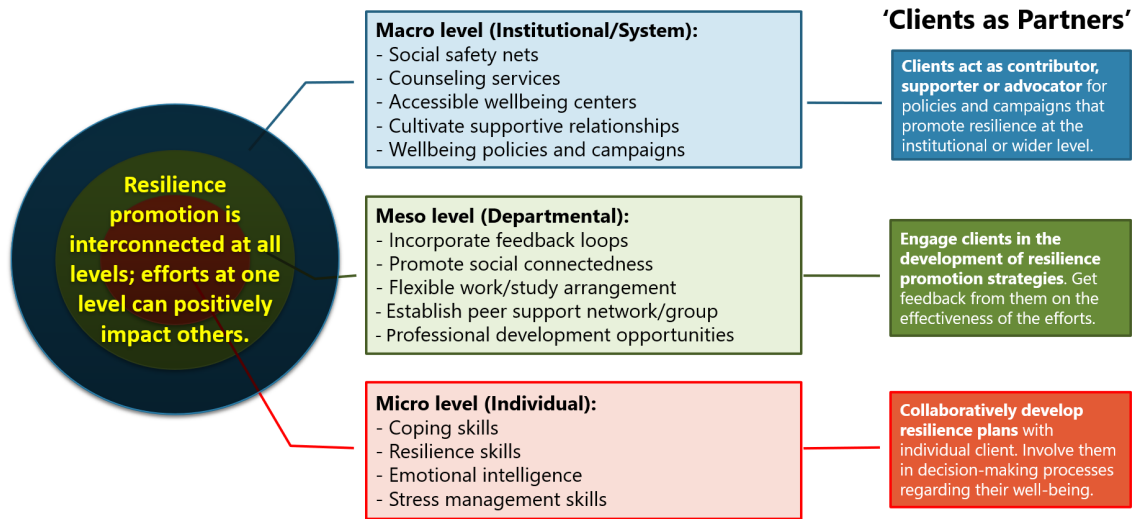


Figure 3: A resilience promotion strategy framework.

Micro-level Strategies: Individual Coping and Emotional Intelligence

At the micro level, resilience is developed through personal coping mechanisms, emotional intelligence, and effective stress management techniques. These strategies empower healthcare professionals to handle the pressures of their work environment and maintain their well-being.

- Coping skills:** Healthcare professionals are trained in various coping mechanisms, such as mindfulness, cognitive-behavioural techniques and relaxation exercises. These skills help individuals manage stress in real time and maintain their mental health.
- Emotional intelligence:** Emotional intelligence plays a key role in understanding and managing personal emotions while fostering empathy towards colleagues and patients. Healthcare professionals are encouraged to develop self-awareness, emotional regulation and social skills, which help in navigating interpersonal challenges and reducing conflicts in the workplace.
- Stress management:** Effective stress management techniques, such as time management, task prioritisation, and goal setting, enable individuals to handle workload efficiently. These strategies help reduce burnout by ensuring that professionals can meet their work demands without being overwhelmed.

Meso-Level Strategies: Social Connectedness and Peer Support

At the meso level, the focus shifts to creating supportive work environments through enhanced social connectedness, flexible work arrangements and structured peer support systems.

- a. **Social connectedness:** Building strong relationships and networks within healthcare teams is vital for fostering resilience. Regular team-building activities and peer support meetings foster a sense of community, enabling healthcare professionals to share their challenges and offer mutual support.
- b. **Flexible work arrangements:** Flexibility in work schedules is crucial for maintaining a healthy work-life balance. By offering adaptable work hours, healthcare institutions can help reduce the stress of managing personal and professional responsibilities. Flexible work arrangements are particularly important in high-pressure environments like healthcare, where the demands can fluctuate significantly.
- c. **Peer support:** Structured peer support systems provide healthcare professionals with platforms to discuss their experiences, share coping strategies, and offer guidance. These systems promote collective resilience by enabling team members to learn from one another and to foster collaboration in managing work-related stress.

Macro-Level Strategies: Institutional Policies and Organisational Support

At the macro level, resilience is reinforced through organisational policies and systemic interventions that create an environment that supports well-being and professional sustainability.

- a. **Well-being policies:** Institutions need to implement and enforce policies that prioritise employee well-being. This includes policies on workload management, designated rest periods, and mental health support programmes. By institutionalising these policies, healthcare organisations can ensure that resilience is not left to individual efforts alone but is embedded in the organisational culture.
- b. **Counselling services:** Access to professional counselling services is critical in supporting the mental health of healthcare professionals. These services provide a confidential space for individuals to address mental health challenges and receive appropriate interventions. Counselling helps professionals manage burnout, anxiety, and depression, contributing to a healthier workforce.
- c. **Supportive leadership and relationships:** Leadership plays a pivotal role in fostering resilience within healthcare teams. Encouraging open communication, providing regular feedback and recognizing the contributions of team members are key practices that create a supportive and inclusive work environment. Leaders who actively promote a culture of psychological safety enable their teams to thrive, even under stress.

By addressing resilience at the micro, meso and macro levels, healthcare institutions can create environments where professionals feel supported both individually and collectively. Personal coping strategies, combined with organisational support and systemic interventions, form a comprehensive framework for resilience-building that enhances psychological safety and interprofessional collaboration, ultimately leading to improved patient care and staff well-being.

Implications for Practice

Healthcare educators and policymakers should prioritise the development and implementation of resilience-building frameworks to safeguard the psychological safety of healthcare teams. Institutions should invest in both individual coping mechanisms and

organisational-level interventions, such as flexible work arrangements and peer support systems, to create a work environment that promotes long-term sustainability and well-being. Interprofessional collaboration, supported by resilience, is vital to addressing the complex challenges of modern healthcare.

Future Research Directions

Further research is needed to explore the longitudinal effects of resilience programmes on healthcare professionals' performance, job satisfaction and patient care quality. Additionally, cross-cultural studies comparing resilience strategies in different healthcare systems will provide more comprehensive insights into how these interventions can be customised to meet the specific needs of diverse healthcare settings. By advancing resilience research, healthcare systems can better equip their workforce to thrive in high-pressure environments while maintaining the highest standards of care.

CONCLUSION

This critical review underscores the critical role of resilience in promoting psychological safety and interprofessional collaboration in healthcare settings across Malaysia, Japan and Thailand. The findings reveal that resilience is not only a personal trait but also a key factor that strengthens the overall work environment, thereby improving communication, teamwork and well-being among healthcare professionals. By fostering psychological safety, healthcare teams are more likely to engage in open dialogue, share knowledge, and innovate, ultimately resulting in better patient care outcomes. Through the application of the DEAL programme and its WE-DEAL extension, this study highlights the effectiveness of structured resilience-building interventions at the micro, meso, and macro levels. These programmes have proven successful in enhancing work engagement and fostering a collaborative culture, which are essential for sustaining a supportive healthcare environment. However, the study also points to the need for continued efforts to standardise and expand resilience-building initiatives within healthcare education and practice. While countries have made progress in implementing resilience strategies, cultural and systemic differences pose unique challenges that require tailored solutions. Future resilience strategies should consider these diversities and integrate resilience training more seamlessly into healthcare curricula and workplace policies.

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