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Advancing military medicine education: Curriculum integration and practical training at the Defence Services Medical Academy

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Abstract

Introduction: This study evaluates military medicine education at the Defence Services Medical Academy (DSMA) in Myanmar, focusing on curriculum structure, practical training quality, and alignment with evolving military and civilian healthcare needs. Despite a comprehensive approach, identified gaps in practical training (e.g., trauma care, CBRN management) and curriculum continuity hinder student preparedness for modern military medicine.

Methods: This qualitative study used Focused Group Discussions (FGDs) with 24 participants (12 students, 12 faculty) to explore themes like time constraints, practical training, curriculum integration, and modern technology integration. Data were analysed using MAXQDA 24 to identify key themes related to the curriculum's content and effectiveness.

Results: Findings indicate that while the military medicine module of DSMA covers a broad range of topics, practical training remains inadequate, especially in critical areas such as trauma care, CBRN management, and digital health technologies. Furthermore, curriculum continuity issues, marked by disconnected annual topics, impede clear progression. The study recommends revising the module to include modern warfare medicine, expanding hands-on training, and incorporating mobile learning platforms. It also suggests increasing simulation-based training, restructuring the module to enhance its practical application, and establishing a dedicated military medicine department.

Conclusion: The study identifies critical gaps in DSMA's curriculum, particularly in practical training (e.g., trauma, CBRN) and coherence. These must be addressed to better prepare students for the challenges of modern military and civilian healthcare. Proposed improvements will ensure DSMA graduates are equipped to handle contemporary healthcare demands, reinforcing the academy's role as a leader in military medical education.

Keywords: *Military Medicine, Curriculum Development, Practical Training, Outcome-Based Education, Tactical Combat Casualty Care, Qualitative Analysis*

Practice Highlights

- Extending the duration of military medicine training will provide more hands-on practice, ensuring students are better equipped to handle high-pressure medical situations.
- Making "THAMAR ZARNI" field exercises mandatory and increasing their frequency will offer students the essential real-world medical experience necessary for operational readiness.
- Updating the curriculum to incorporate modern medical technologies and advanced trauma care will prepare students to effectively address the challenges posed by modern warfare.
- Improving resource allocation, including the integration of mobile learning platforms and high-fidelity simulations, will enhance the overall training experience and increase student engagement.
- Establishing a dedicated military medicine department at DSMA will centralise education, improve curriculum coherence, and provide students with a focused space for more in-depth learning.

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I. INTRODUCTION

Military medicine is a vital branch of healthcare that ensures the operational readiness of armed forces personnel in high-stakes environments such as combat zones, disaster areas, and peacekeeping missions (van der Wal et al., 2024). Unlike traditional civilian healthcare, military medicine integrates clinical expertise with operational skills, including trauma care, medical logistics, crisis management, and adaptability under resource-constrained conditions (Woolley et al., 2017). Given the complexity and high-pressure nature of military operations, it is essential that healthcare professionals are trained to handle rapidly evolving situations (McGraw, 2023).

As global security landscapes evolve, with rapid advancements in warfare technologies and the rise of hybrid threats, military medicine has adapted to meet new challenges. Training programs worldwide now integrate contemporary medical practices to address the shifting dynamics of military operations. For example, the Tactical Combat Casualty Care (TCCC) guidelines have significantly reduced battlefield fatalities, demonstrating how modern medical education can improve outcomes (Butler Jr et al., 2007). Additionally, NATO's initiatives to standardise medical practices across member states have emphasised the importance of interoperability in multinational military operations (Onderková et al., 2024). While studies like Butler Jr et al. (2007) and Kollek et al. (2009) establish best practices in TCCC and CBRN training, few explore their integration into OBE curricula in resource-constrained regions like Southeast Asia, where there are significant gaps in practical training.

Military medicine programs in NATO aligned countries and U.S. based institutions also face similar gaps in training, particularly in areas such as trauma care and the management of chemical, biological, radiological, and nuclear (CBRN) incidents. However, what sets the Defence Services Medical Academy (DSMA) in Myanmar apart is the unique context within Southeast Asia, where resource constraints are more pronounced, necessitating tailored strategies for integrating modern military medical practices. This underscores the challenges DSMA faces compared to other institutions and highlights the need for resource-sensitive solutions in military medical education.

DSMA in Myanmar has played a significant role in shaping military medicine education in Southeast Asia since 1992. The academy's curriculum combines traditional medical education with specialised military training, equipping graduates with skills in combat casualty care, medical logistics, disease prevention, and trauma management (Naing et al., 2022). Since 2017, DSMA has implemented an Outcome-Based Education (OBE) curriculum, which aligns with global standards set by the World Federation for Medical Education. This approach focuses on measurable outcomes and competency-based learning, marking a shift from traditional teacher-centred methods to student-centred learning. Despite these advances, integrating a comprehensive military medicine module remains a challenge due to the need for specialised skills and faculty development (Garg et al., 2017).

DSMA employs innovative teaching strategies, such as case-based learning (CBL), problem-based learning, and simulation exercises to equip students with high-pressure competencies. However, the academy continues to face significant gaps in practical training, particularly in trauma care, CBRN incident management, and the application of digital health technologies. These gaps indicate a misalignment between the academy's training programs and the evolving demands of modern military medicine. While CBRN preparedness and digital health solutions are critical for addressing military and civilian crises, these areas remain underdeveloped within military medicine module of DSMA's curriculum (Kollek et al., 2009).

This study aims to assess how military medicine is integrated into DSMA's OBE curriculum, focusing on aligning it with essential military medical competencies. By evaluating the effectiveness of current teaching methods and identifying areas for improvement, this research seeks actionable insights to enhance military medicine module of DSMA's curriculum and offer a model for other countries with similar resource constraints. The ultimate goal is to ensure DSMA graduates are prepared to meet the multifaceted demands of both military and civilian healthcare sectors, particularly in the context of modern warfare and global health challenges. Furthermore, this research will highlight how countries facing resource limitations can adapt military medical education strategies to overcome gaps and improve operational readiness.

II. METHODS

A. Research Design

This study utilised a qualitative research design to examine the military medicine module of DSMA's curriculum and identify areas for improvement. A qualitative approach was chosen to capture participants' perspectives, particularly on practical training, integration of modern warfare knowledge, and the curriculum's effectiveness in preparing students for both military and civilian medical roles. Data were primarily collected through Focused Group Discussions (FGDs) to

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gain in-depth insights into participants' experiences and perceptions.

B. Interview Guide Development

The interview guide for military medicine education was developed through a review of literature and consultations with the DSMA curriculum committee. It focused on key aspects such as practical training, curriculum continuity, modern warfare strategies, and simulation effectiveness. The guide began with broad open-ended questions and gradually moved to specific ones. Pilot testing provided feedback that helped refine the guide before the main study.

C. Validity and Reliability

To ensure the validity and reliability of the data collection instruments, the interview guide was reviewed by three expert researchers in the field of military medicine education. These experts provided feedback on the relevance and comprehensiveness of the questions, which enhanced the study's overall rigor. Additionally, all FGDs and interviews were conducted in a controlled environment to minimise external influences and ensure consistency across data collection sessions.

D. Participant Selection and Data Saturation

Data collection for this study was conducted over a three-month period. A total of 24 participants, comprising 12 students and 12 teachers, were organised into two main groups. These groups were further divided into four FGDs, with six participants in each. Participants were selected using a purposeful sampling method to ensure a representative mix of perspectives from both students and faculty across various academic years.

Each session was led by the principal investigator, who ensured a conducive environment for open dialogue, encouraging active participation and ensuring all voices were heard. Data collection continued until thematic saturation was achieved, meaning no new themes or significant insights emerged from the discussions.

E. Data Analysis

The data were transcribed and analysed using MAXQDA 24. A codebook was created to guide the analysis, and themes were identified both deductively (based on research objectives) and inductively (emerging from the data). To ensure consistency, intercoder agreement was checked by comparing codes with a second researcher. While MAXQDA was used for systematic analysis, manual coding could have been sufficient given the small dataset.

F. Informed Consent

Prior to participation, informed verbal consent was obtained from all respondents, ensuring that they understood their autonomy in deciding whether to participate in the study. Participants were also made aware that they could withdraw from the study at any time without consequence.

G. Ethical Considerations

Ethics approval was obtained from DSMA ethical Committee, and participant confidentiality and anonymity were ensured by assigning unique identifiers and securely storing personal data, accessible only to the research team. The Principal Investigator (PI), a lecturer at the Defence Services Medical Academy, conducted the FGDs. To mitigate the potential power imbalance and encourage open dialogue, several measures were implemented.

Participants were assured of complete anonymity and confidentiality, and informed consent was obtained with the explicit understanding that they could withdraw at any time without consequence. The PI began each session by emphasising that the research's sole purpose was to improve the curriculum, fostering a non-judgmental environment where all feedback was valued, regardless of its critical nature. These steps were crucial to ensure participants felt safe to speak their minds freely.

III. RESULTS

This qualitative study explores the military medicine module at DSMA, focusing on the perspectives of both students and faculty. By examining their experiences, perceptions, and suggestions, the study identifies critical gaps and areas for improvement in the integration of military and civilian medical education. The findings reveal that the current military medicine module struggles to meet the practical and theoretical needs of students preparing for both military and civilian medical roles.

The results are categorised into two primary areas of focus:

- Table 1: Challenges and Relevance of Military Medicine Education – Summarises concerns regarding insufficient training time, lack of curriculum cohesion, and the relevance of military medicine education.
- Table 2: Curriculum Structure, Practical Training, and Improvement Strategies – Proposes strategies for improving curriculum integration, expanding practical training, and enhancing resource availability.

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These findings underscore the urgent need for strategic reforms to improve DSMA's curriculum, better preparing students for the multifaceted challenges of both military and civilian healthcare.

A. Challenges and Relevance of Military Medicine Education

The following table presents the challenges and relevance of military medicine education, as viewed by both students and teachers. It outlines key concerns regarding time constraints, curriculum integration, and the importance of military medicine across different sectors, particularly in response to real-world scenarios such as national disasters.

	Theme	Sub-Theme	Student Perspectives	Teacher Perspectives
1.	Challenges in Military Medicine	Time Constraints and Practical Exposure	*"We only spend one to two weeks per year learning about military medicine, insufficient for crisis management."* (Student 5) *"Field training, like 'THAMAR ZARNI,' should be extended to a minimum of two weeks during the internship."* (Student 12)	*"The military medicine module lasts around 150 hours from Year 1 to internship, with a need for more time during internships to develop essential skills for future military doctor duties."* (Teacher 10)
		Curriculum Integration	*"Annual topics aren't connected, making it feel like starting from scratch."* (Student 1)	*"Curriculum needs real time, relevant topics with more hands-on training."* (Teacher 4)
2.	Relevance of Military Medicine	Importance Across Sectors	*"Military medicine is important not just for military doctors, but also for civilian doctors, especially given the current situation in our country, Myanmar."* (Student 3)	*"Essential knowledge for all medical students, regardless of future sectors."* (Teacher 3) *"Given the current situation in our country, military medicine is crucial for supporting both military personnel and civilians during times of crisis."* (Teacher 8)
		Real World Application	*"Crucial for work in the military and responding to national disasters."* (Student 2) *"Military medicine is essential for both military operations and providing critical healthcare during national disasters, ensuring support for civilians in times of crisis."* (Student 11)	*"In recent years, our country has faced numerous crises, including the COVID-19 pandemic, natural disasters, and ongoing conflicts. Military doctors have played a crucial role in responding to these challenges, providing essential healthcare not only to military personnel but also to civilians in need."* (Teacher 9)

Table 1. Challenges and Relevance of Military Medicine Education

The study found that the limited time for military medicine training at DSMA—only two to three weeks each year—impedes students' crisis management development. The academic year structure, with time allocated to commemoration parade training and national holidays, further reduces training opportunities. The study recommends restructuring the military medicine module of the curriculum to allocate more time for military medicine.

The study also highlighted a need for more practical training. Despite the introduction of OBE, faculty resistance limits its impact. Increasing field exercises and internships, such as "THAMAR ZARNI", would better prepare students for real-world military medical challenges.

B. Curriculum Structure, Practical Training, and Improvement Strategies

This table highlights student and teacher views on military medicine education, emphasising the need for a more focused curriculum, modern warfare updates, and increased practical training. Both groups called for better resource allocation, use of technology, and consistent assessments, with students suggesting mobile platforms and teachers recommending a dedicated department.

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No.	Theme	Sub-Theme	Student Perspectives	Teacher Perspectives
1.	Curriculum Structure and Integration	Overlap and Redundancy	*"I suggest reviewing and reorganising these areas to eliminate overlap, making the curriculum more focused and efficient for better learning outcomes"* (Student 6)	*"Beneficial to remove overlapping topics to focus on practical aspects."* (Teacher 2)
		Modern Warfare Updates	*"As a medical student, I suggest incorporating updates on modern warfare into the curriculum, focusing on new medical technologies, advanced trauma care, and the evolving challenges of treating injuries in current conflicts."* (Student 8)	*"Need updates to include relevant modern warfare information."* (Teacher 5) *"It is important to update our curriculum to reflect on the current national and global situations."* (Teacher 7)
2.	Practical Training and Hands-On Learning	Increased Field Exercises	*"Annual field training like 'THAMAR ZARNI' should be mandatory."* (Student 4)	*"Strong need for more practical learning opportunities."* (Teacher 6)
		Hands-on Experience during Internship	*"Opportunities like 'THAMAR ZARNI' are crucial for practicing essential skills."* (Student 2)	*"Hands-on experience is vital for building competence for real world situations."* (Teacher 4)
3.	Improvement and Evaluation	Use of Technology in Learning	*" If there are no limitations on using mobile devices, we can learn more effectively, not just in military medicine but across all modules"* (Student 10)	*"While the Learning Management System (LMS) is currently running, it is not fully activated."* (Teacher 6)
		Need for Resources	*"There is a significant limitation of resources for military medicine training."* (Student 4)	*"Limited resources means students can only see, not use, items like first aid kits and other essential tools during internships."* (Teacher 5)
		Curriculum Assessments	*"It's important to assess these topics across all years, not just in Year 4, to ensure consistent learning and engagement throughout the program."* (Student 5)	*"We conduct formative assessments in Years 1, 2, 3, 5, and during internships, with a summative assessment in Year 4."* (Teacher 1)
		Establish a Dedicated Department	*"If a military medicine department is established, we would have a dedicated space to learn more and ask questions about any unclear concepts, ensuring a deeper understanding of the field."* (Student 12)	*"No dedicated department at our university; coordinators come from other departments specialising in relevant fields."* (Teacher 4) *"The plan to establish a military medicine department is still ongoing, but once it's in place, it will provide students with a dedicated space to deepen their knowledge and address any uncertainties in the field."* (Teacher 8)

Table 2. Curriculum Structure, Practical Training, and Improvement Strategies

This table highlighted key insights from both students and teachers regarding the DSMA military medical curriculum. Both groups agreed on the need to eliminate military medicine module of the DSMA's curriculum overlap and incorporate updates on modern warfare, such as new medical technologies and advanced trauma care to keep pace with global needs.

Regarding practical training, both students and teachers emphasised the importance of increasing field exercises, particularly "THAMAR ZARNI", and providing more hands-on experience during internships to improve real-world competence. Both groups also noted resource limitations, including a lack of access to essential tools like first aid kits. Lastly, the creation of a dedicated military medicine department was supported to facilitate deeper learning and address any gaps in knowledge.

IV. DISCUSSION

The research analyses DSMA's military medical curriculum, focusing on its strengths and areas for improvement. This study emphasises the importance of specialised training, the quality of practical training, curriculum continuity, the relevance of military medical education to civilian healthcare, and the need for updates reflecting modern technologies. The study concludes with evidence-based recommendations to improve DSMA's military medical education and better prepare students for real-world healthcare challenges.

A. Time Constraints in Military Medicine Education

A significant limitation identified in the study is the insufficient time allocated to military medicine within the DSMA curriculum. The time spent on military

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medicine—no more than two or three weeks per academic year—is inadequate for developing the necessary skills for effective crisis management. Furthermore, the academic structure of DSMA consists of a ten-month academic year, in addition to approximately 30 national holidays within that year. Each year, students undergo one month of commemoration parade training, followed by an additional month off. This schedule is consistently followed each calendar year as part of the academic calendar. These time constraints exacerbate the gap in students' preparedness for real-world military medical challenges. This aligns with findings from Ellington and Farrukh (2020), who argue that time constraints are a major obstacle in military medicine education. To address this, this study suggests a restructuring of the curriculum to emphasise military medicine. Extending the duration of military medicine training would provide students with the necessary time to gain hands-on experience and develop critical competencies for high-pressure situations, ultimately enhancing their operational readiness and ability to respond effectively to emergencies (Watson et al., 2025).

B. Enhancement of Practical Training

The study finds consensus among both students and faculty on the need to enhance the practical training components of the DSMA curriculum. While the OBE curriculum introduced in 2017 aims to foster better learning outcomes, faculty resistance remains due to their familiarity with previous teaching methods. Increasing hands-on experiences, such as field exercises and internships, is crucial for developing the competencies required for real-world medical challenges. This finding is consistent with Vogel and Harendza (2016), who emphasise that practical training directly impacts clinical competence, especially in military environments.

The study also highlights the importance of mandatory field exercises like "THAMAR ZARNI", which are essential for preparing students for emergency situations. Increasing the frequency and intensity of such training will significantly enhance the competence and confidence of DSMA graduates, aligning with Dieck-Assad et al. (2021)'s recommendation for more frequent high-stakes training to improve real-world emergency response skills.

C. Curriculum Disjointedness and Continuity

The study reveals a critical issue in the lack of continuity and integration within the military medicine of DSMA's curriculum. The curriculum does not progressively build upon itself from year to year, leading to fragmentation in the educational experience. This finding mirrors the research by Brauer and Ferguson (2015), who argue that fragmented curricula hinder the development of cohesive medical knowledge.

The study contributes to the growing body of literature by identifying this issue as not unique to DSMA but prevalent in military medical education programs worldwide. Vertical integration of the curriculum is proposed as a solution to this problem. By ensuring that content from earlier years builds upon that of subsequent years, students will be able to better understand military medicine as a cohesive discipline and apply their theoretical knowledge in practice. A unified curriculum will improve both learning outcomes and operational readiness, enabling students to apply what they have learned in real-world scenarios (O'Connell et al., 2021).

While both students and faculty acknowledged the disjointedness, their perspectives on its impact differed. Students, such as Student 1, described it as "starting from scratch" annually, highlighting the learning burden and lack of a foundational understanding. In contrast, faculty members, like Teacher 4, focused more on the need for "real-time, relevant topics," which suggests a priority on content relevance over the structural flow of the curriculum. This nuanced finding is a significant contribution to the literature, showing that even with a shared concern, the specific priorities of stakeholders can vary significantly. This requires a dual approach that not only updates the content but also ensures its logical progression throughout the academic years. The current structure, which dedicates a few weeks each year to isolated topics, prevents students from developing a deep and cumulative understanding of military medicine as a cohesive discipline.

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Furthermore, the study highlighted a subtle but important divergence in views on resource limitations. Both groups agreed on the lack of resources, but their specific concerns differed. Students focused on the lack of hands-on access to essential tools like first aid kits, which directly impacts their ability to practice skills. In

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contrast, teachers' concerns centred more on the overall resource allocation, including the need for a dedicated department and functional digital platforms, which they see as necessary for institutional-level improvement. This highlights the need for a two-pronged strategy: addressing the immediate, practical needs of students while simultaneously working towards the long-term, structural improvements advocated by the faculty.

D. Relevance to Civilian Roles

Another key finding of the study is the relevance of military medicine training to civilian healthcare. Both students and faculty agree that skills acquired in military medicine, such as triage, emergency response, and disaster management, are increasingly relevant in civilian healthcare systems. The integration of military medical knowledge into civilian contexts is beneficial not only for DSMA graduates but also as a model for global healthcare systems, where military and civilian medical teams often collaborate during disasters and public health crises.

The study suggests that DSMA should incorporate more dual-use military medical knowledge, such as trauma treatment and public health strategies, into its curriculum. These additions would better prepare students for both military and civilian healthcare roles, improving the overall military medicine module of DSMA's curriculum and ensuring that DSMA graduates can transition seamlessly between the two sectors (Cole et al., 2024; Michaud et al., 2019).

E. Curricular Updates for Modern Warfare

The study also identifies the need for curricular updates to include modern military and medical technologies. DSMA's current module of the curriculum fails to adequately cover emerging topics such as drones, cyber warfare, and modern medical technologies used in combat situations. As Lewis et al. (2024) note, outdated curricula do not prepare students for the evolving complexities of modern medical practice in conflict zones.

To address this, the study recommends that DSMA regularly update its curriculum to include the latest advancements in battlefield medicine. For example, training on medical drone operations could enhance the ability of military medical teams to deliver supplies to remote areas under combat conditions. Furthermore, training in cyber warfare would ensure that students understand how to protect military medical infrastructure from digital threats. Incorporating such cutting-edge technologies would ensure that DSMA graduates are prepared to handle the future challenges of military medicine (Fuentes, 2021).

F. Practical Training and Hands-On Learning

As noted earlier, field exercises and internships are essential for bridging the gap between theoretical knowledge and real-world application. However, the limited frequency and scope of these opportunities hinder effective training. While the "THAMAR ZARNI" exercise is a valuable learning tool, its infrequency limits students' exposure to real-world complexities (McGraw, 2023).

To improve this, the study suggests expanding opportunities for hands-on learning through more frequent and diverse field exercises. Kolb's Experiential Learning Theory suggests that learners best acquire skills through reflection on experience. The lack of hands-on training at DSMA limits opportunities for reflective learning, which may hinder students' development in real-world medical scenarios (Kolb et al., 2014). Additionally, the integration of virtual simulations and augmented reality (AR) platforms could create simulated combat medical environments, allowing students to practice trauma care and disaster response in a controlled, virtual setting, thus overcoming logistical constraints of traditional field exercises.

G. Improvement and Evaluation

The study highlights the underuse of the Learning Management System (LMS) at DSMA, which remains a missed opportunity for self-directed learning. Mobile platforms and real-time feedback through LMS could significantly enhance the training experience, creating a more dynamic and responsive learning environment. This challenge is mirrored in other military medical institutions worldwide, where underutilisation of technology limits students' ability to engage with learning materials outside of the classroom.

The study also suggests that increasing the frequency of formative assessments could help reinforce key concepts and improve knowledge retention over time. By providing more consistent feedback, DSMA could better prepare students for military medical practice. Furthermore, the lack of a dedicated department for military medicine education results in a fragmented approach to military medicine module delivery. A specialised department would ensure better curriculum coherence and oversight, ultimately improving the quality of military medical education.

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V. CONCLUSION

This research identifies key areas for improvement in the DSMA military medical curriculum, focusing on time management, practical training, curriculum integration, and content modernisation. Findings show that limited training time, insufficient practical opportunities, and a lack of curriculum continuity hinder students' preparedness for real-world military medical challenges. Recommendations include extending training durations, increasing hands-on experiences like field exercises, and reorganising the military medicine module for better integration.

The study also stresses the need for military medicine module updates to include emerging medical technologies and dual-use knowledge relevant to both military and civilian healthcare. Enhancing technology use and improving assessment structures are also proposed to create a more dynamic learning environment. Implementing these changes will better prepare students to meet the evolving demands of military and civilian healthcare.

These recommendations have global relevance, offering valuable insights for institutions in resource-constrained regions to bridge the gap between military medicine and civilian healthcare. By adopting new technologies and integrating dual-use knowledge, military medical education can better equip students for modern warfare and global health challenges.

A clear action plan for restructuring the module of the DSMA's curriculum includes extending practical training time, integrating simulation-based learning, and establishing a dedicated military medicine department. However, barriers such as budget constraints and faculty resistance to new teaching methods must be addressed for successful implementation.

To address the identified gaps, a phased implementation strategy is recommended, acknowledging the budget constraints and potential faculty resistance.

Phase 1 (Immediate & Low-Cost): Focus on quick, resource-efficient changes. This includes making "THAMAR ZARNI" field exercises mandatory and increasing their frequency to provide more hands-on practice, as noted by both students and teachers. Additionally, the underutilised Learning Management System (LMS) can be fully activated to support mobile learning and self-directed study, a cost-effective solution to improve access to materials. These measures can be implemented quickly with minimal budget impact and will show immediate benefits.

Phase 2 (Mid-Term & Moderate-Cost): This phase involves curriculum restructuring and targeted faculty development. The curriculum should be reorganised to eliminate overlapping topics and vertically integrate content from year to year, a key recommendation from both students and faculty to improve learning continuity. Investment in faculty training is also crucial to ensure they adopt the Outcome-Based Education (OBE) model effectively and embrace modern teaching methods like simulation. This phase requires a moderate investment but will build the necessary institutional capacity for long-term change.

Phase 3 (Long-Term & High-Cost): The final and most impactful change is the establishment of a dedicated military medicine department at DSMA. While this requires significant budget allocation, it is essential for centralising education, ensuring curriculum coherence, and providing a focused space for in-depth learning and expertise development. This step should be pursued after the foundational improvements from the first two phases are successfully implemented, demonstrating the academy's commitment to prioritising military medical education and justifying the necessary financial investment.

By adopting this strategic, phased approach, DSMA can systematically address its curriculum's shortcomings while managing resource constraints and garnering buy-in from all stakeholders. This plan offers a clear path forward, ensuring that DSMA graduates are not only prepared for the challenges of modern warfare but also equipped to serve as leaders in both military and civilian healthcare contexts.

Notes on Contributors

Dr Zaw Phyo is the Principal Investigator. As a lecturer at Myanmar's Defence Services Medical Academy, he played a significant role in the development of the manuscript. His contributions included a thorough review of the existing literature, identification of research gaps, and clarification of the study's objectives and questions. Additionally, he was involved in drafting and revising the manuscript, ensuring that the content was both relevant and of significant value to the field of medical education.

Dr Ye Phyo Aung, serving as a mentor, played a crucial role during the methodology phase of the study. He endorsed the chosen research design, sampling strategies, and data collection techniques, providing valuable insights that greatly enhanced the research execution.

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Dr Tayzar Hein contributed by assisting in the meticulous proofreading of the article, ensuring that it met clarity, coherence, and strict academic standards.

Dr Tun Tun Naing was instrumental in analysing the collected data. He applied statistical techniques to ensure the research findings were robust and reliable, further enriching the manuscript's quality and academic integrity.

Ethical Approval

The Ethical Review Committee of the Defence Services Medical Academy, Yangon, Myanmar, granted ethical approval (2/Ethics/2024).

Data Availability

The data that support the findings of this study are openly available in Figshare repository,

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Declaration of Interest

There is no conflict of interest in the current research.

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