

Teamwork and Communication among Healthcare Professionals in Thailand: Perspectives of Organizational Psychology on Socio-Cultural Challenges

การทำงานเป็นทีมและการสื่อสารของผู้ประกอบวิชาชีพด้านสุขภาพในประเทศไทย:
มุมมองเชิงจิตวิทยาองค์การต่อความท้าทายทางสังคมและวัฒนธรรม

Received: September 28, 2025 **Revised:** December 12, 2025 **Accepted:** December 20, 2025

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Abstract

Despite the importance of teamwork and communication for work effectiveness of healthcare professionals, studies examining how socio-cultural factors influence teamwork and communication remain limited. This review article examines how cultural dimensions influence teamwork and communication among Thai healthcare professionals by reviewing peer-reviewed studies published within the past five years. The review integrates organizational psychology's Input-Mediator-Outcome-Input (IMOI) model with Health Systems Science (HSS) to provide a dual-lens perspective for understanding both system-level conditions and team-level behavioral mechanisms. Three socio-cultural determinants are illustrated: deference to hierarchy and power differentials, group harmony, and perseverance and self-sacrifice rooted in a sense of duty. Although these determinants drive compliance, group cohesion, and resilience at work, they may also hinder all-channel communication, constructive dialogues, shared decision-making, and psychological safety and well-being over the long term. To address these challenges, the review proposes three future agendas: flattening hierarchical barriers, reinforcing multidisciplinary teams (MDTs) and multi-team systems (MTSs) collaboration, and cultivating team emotional intelligence (EI). By combining organizational psychology perspectives with the HSS framework while considering Thai socio-cultural contexts, the article offers an integrated direction to guide future research and interventions aimed at strengthening teamwork and communication in Thai healthcare organizations.

Keywords: teamwork, communication, healthcare professionals, organizational psychology, Thai socio-cultural challenges

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บทคัดย่อ

แม้การทำงานเป็นทีมและการสื่อสารจะเป็นปัจจัยสำคัญต่อประสิทธิผลการทำงานของผู้ประกอบวิชาชีพด้านสุขภาพ แต่การศึกษาว่าปัจจัยทางสังคมและวัฒนธรรมจะส่งผลต่อการทำงานเป็นทีมและการสื่อสารอย่างไรนั้นยังคงมีอย่างจำกัด บทความนี้มีวัตถุประสงค์เพื่อสำรวจอิทธิพลของสังคมและวัฒนธรรมที่มีต่อการทำงานเป็นทีมและการสื่อสารของผู้ประกอบวิชาชีพด้านสุขภาพ โดยทบทวนวรรณกรรมที่ตีพิมพ์ในช่วงห้าปีที่ผ่านมา บทความนำแบบจำลอง Input-Mediator-Outcome-Input (IMOI) ของจิตวิทยาองค์การและกรอบคิดวิทยาศาสตร์ระบบสุขภาพมาใช้ทำความสะอาดเข้าใจโครงสร้างของระบบสุขภาพและพฤติกรรมของทีม บทความระบุถึงสามปัจจัยทางสังคมและวัฒนธรรมที่มีผลต่อการทำงานเป็นทีมและการสื่อสาร ได้แก่ การให้ความสำคัญกับลำดับชั้นและอำนาจ ความกลมเกลียวภายในกลุ่ม และความเพียรพยายามกับการเสียสละที่ตั้งอยู่บนสำเนียงในหน้าที่ แม้ปัจจัยทั้งสามจะทำให้เกิดการปฏิบัติตาม ความสามัคคี และการฟื้นคืนกลับในการทำงาน แต่ก็ขัดขวางการสื่อสารแบบทุกทิศทาง การสนทนากาย่าร่างสรรค์ การตัดสินใจร่วม และความปลดภัยทางจิตใจกับความผิดสุกในระยะยาว บทความนี้จึงเสนอแนวทางการสามแนวทาง ได้แก่ ลดลำดับชั้นในการทำงาน เสริมสร้างความร่วมมือในทีมแบบสหสาขาวิชาชีพและระบบการทำงานแบบหลายทีม และพัฒนาความฉลาดทางอารมณ์ของทีม บทความนี้ได้เสนอแนวทางการผ่านมุมมองระหว่างกรอบคิดจิตวิทยาองค์การและวิทยาศาสตร์ระบบสุขภาพโดยคำนึงถึงบริบททางสังคมและวัฒนธรรมไทย เพื่อใช้เป็นแนวทางในการวิจัยและการพัฒนาการทำงานเป็นทีมและการสื่อสารในองค์การบริการด้านสุขภาพไทยต่อในอนาคต

คำสำคัญ: การทำงานเป็นทีม การสื่อสาร ผู้ประกอบวิชาชีพด้านสุขภาพ จิตวิทยาองค์การ ความท้าทายทางสังคมและวัฒนธรรมของไทย

Introduction

Effective teamwork and communication are necessary components for high-quality healthcare services. This could be reflected in patient cases, especially complex cases that require both comprehensive and coordinated inputs from multidisciplinary health professionals, family members, and patients themselves to evaluate and treat patients holistically (Rosen et al., 2018). In contrast, when collaboration does not work well, a range of difficulties occurs (Rabøl et al., 2011), resulting in diagnostic errors, mistreatment, complications during treatments, and lower well-being for both healthcare staff and patients (Zajac et al., 2021). Communication breakdowns, such as using hierarchical and unclear top-down communication styles, resulted in cultivating emotional discomfort (Baek et al., 2023), role ambiguity, and conflict among healthcare professionals (Saxena et al., 2018). To confront these challenges, international organizations, for instance, World Health Organization (WHO) and Organization for Economic Co-operation and Development (OECD), have highlighted teaming and teamworking, systematic information sharing, and training among healthcare workers to collaborate effectively across disciplines (World

Health Organization et al., 2019). Despite this recognition, effective teamwork and communication remain persistent challenges in the healthcare context. According to OECD (2025), for example, approximately 25% of chronic condition patients were engaged in goal setting and empowerment by healthcare professionals. These figures underline the difficulties of team members' inclusivity and cooperation to foster patient-centered care.

Thailand is also facing these global challenges, especially since several socio-cultural values strongly impact teamwork and communication behaviors. Similar to Thai society, the healthcare ecosystem operates within a high power distance and collectivism (Hofstede Insights, 2021), which eventually shapes healthcare providers' interactions with colleagues, patients, and patient's families (Greer et al., 2023). In addition, teamwork and communication in the Thai healthcare setting are influenced by systemic constraints such as workload pressures, staffing limitations (Areemit et al., 2021), and professional hierarchies (Naothavorn et al., 2023). Together, these factors further foster challenges in communication and teamwork. Despite the fact that much of the existing literature on teamwork and communication in healthcare was developed within Western contexts and primarily focused on formal team design (Lemieux-Charles & McGuire, 2006), structural coordination (Steinmann et al., 2022), and individual communication skills (Heier et al., 2024), socio-cultural factors that shape everyday interactions in non-Western healthcare settings remain underexplored (Lazaro et al., 2024; Wang et al., 2023). Applying Western-based models without cultural adaptation risks ineffectiveness (Panchuay et al., 2023).

Thus, this review article adopts organizational psychology as an analytical lens to provide a theory-driven framework for understanding how socio-cultural determinants shape behaviors related to teamwork and communication and their outcomes in Thai healthcare organizations. Accordingly, this review examines literatures published since 2020 to identify key cultural dimensions affecting team and communication behaviors among healthcare professionals in Thailand. By applying organizational psychology as analytical lens, this review article aims to create a theory-driven understanding of socio-cultural factors shaping healthcare teams and to highlight implications for improving collaborative practice and guiding future research in Thai healthcare organizations.

Conceptual Foundations: Applying Organizational Psychology Lens to HSS

HSS has emerged as the third pillar of medical education alongside basic and clinical sciences. It emphasizes viewing healthcare as an interconnected system and mastering principles of quality improvement and outcomes in patient and population care (Gonzalo et al., 2017). Key HSS domains comprise (1) ethics and legal, (2) change agency, management, and advocacy, (3) leadership, (4) teaming, and (5) systems thinking, the latter connecting all domains together (Skochelak et al., 2021). Communication is also an essential competency for driving interprofessional collaboration (Hopkins, 2010). This perspective underscores that effective teamwork and communication are fundamentals to safe and coordinated patient care. Within the HSS framework, teaming is conceptualized at the system level as dynamic, cross-boundary coordination across roles and units within system linkages to accomplish shared goals. HSS highlights that teamwork effectiveness is shaped by system-level structures that create conditions for clear

communication and coordinated action. Systems-based frameworks, such as Team Strategies and Tools to Enhance Performance and Patient Safety (TeamSTEPPS), Crew Resource Management (CRM), and Ask, Advocate, Assert (AAA), provide structured tools that enhance shared situational awareness and coordination among healthcare professionals (Higginson et al., 2021).

From an organizational psychology perspective, teamwork is recognized as a multilevel and dynamic system that evolves across time and contexts. It is influenced not only by structural features at the team and organizational levels, but also by individual-level inputs, processes, and outcomes (Mathieu et al., 2019). To explain how these components interact, Ilgen et al. (2005) proposed the Input-Mediator-Outcome-Input (IMOI) model to illustrate how teamwork operates. Recent studies (Kozlowski, 2015; Marlow et al., 2018; Mathieu et al., 2017) suggest that teamwork mediators can be grouped into cognitions, affects, and behaviors, which shape how teams interact and perform. Across the team processes, communication serves as a mechanism that allows sharing information, coordinate tasks, and adjustment in responses to changing demands (Kozlowski & Chao, 2018).

Using the IMOI model as an analytical lens introduced three major points of view. First, the model provides guidance to explore potential factors affecting effective healthcare team performance. Since healthcare teams serve specific purposes, they require different combinations of members' skills, task interdependence, authority distribution, and personality composition (Salas et al., 2018). Understanding distinct factors influencing team interactions could be beneficial. Secondly, the model emphasizes mediators, which are incorporated between team emergent states and processes. This means that rather than solely relying on team interaction, team processes could be shaped by team inputs, which in turn may lead to proximal outcomes (Marks et al., 2001). Finally, the IMOI model recognizes that the team performance is recursive, whereby team outcomes can feed back to members and further impact their development and future performance (McGuier et al., 2024). This IMOI lens provides a mechanism for understanding teamwork and communication behaviors, which are strongly shaped by Thai socio-cultural norms such as authority relations, psychological safety, and trust, and which eventually influence healthcare delivery.

In summary, HSS and IMOI offer complementary perspectives for understanding teamwork in healthcare settings. While HSS explains how system-level structures and workflows can create optimal conditions for collaboration, the IMOI explores the behavioral and psychological perspectives of how team members actually interact within these structures. Applying an organizational psychology lens therefore allows a more precise understanding of how socio-cultural determinants influence teamwork inputs, mediators, and ultimately drive healthcare outcomes. Together, these models provide fruitful frameworks to investigate how socio-cultural factors influence specific IMOI components. The following section discusses Thai socio-cultural norms that affect teamwork- and communication-related behaviors in greater detail.

Thai Socio-Cultural Determinants of Teamwork and Communication in Healthcare

Throughout Hofstede's six cultural dimensions, Thai culture scores high on power distance, collectivism, and consensus, while showing moderately high levels of uncertainty avoidance, pragmatism, and indulgence. These cultural factors shape Thai-preferred interaction styles, including healthcare professionals' views of teamwork and communication with colleagues, patients, and patient's families (Hofstede Insights, 2021). Three socio-cultural determinants are particularly important to consider: deference to hierarchy and power differentials, group harmony, and perseverance and self-sacrifice rooted in a sense of duty. The following section examines how these determinants appear in and how they affect healthcare workers' teamwork and communication.

1. Deference to hierarchy and power differentials

Deference to hierarchy and power differentials stems from Thai culture's high level of power distance, in which unequal power distribution between individuals and groups of different status is widely accepted (Hofstede Insights, 2021). Health professionals are expected to behave with respect within a strict hierarchical structure: senior physicians hold the highest status and are addressed as *Ajarn* (an honorific title used to address someone as highly educated or an expert), followed by junior physicians (usually referred to by *Ajarn* as *Mhór* or Doctor), nurses, and other healthcare workers (usually addressed by *Ajarn* as *staff*), respectively. With this seniority mindset, communication and decision-making tend to flow in a top-down direction. Lower hierarchical-level healthcare workers are encouraged to politely follow instructions instead of confronting authority and raising concerns such as mistreatment, for fear of being perceived as troublemakers and risking their future careers (Naothavorn et al., 2023; Oon-arom et al., 2024). Furthermore, research shows that nurses also frequently dismiss their questions related to treatment orders, which reduces their engagement in specialized care (Van Gulik et al., 2021).

In the context of teamwork, the cultural norm of *Kreng jai* (suppressing personal opinions and feelings to sustain harmony) encourages lower-order members to take on heavy workloads without complaint, even when they privately disagree (Areemit et al., 2021). In stressful situations, healthcare professionals often rely on nonverbal gestures, such as smiling or remaining silent, to de-escalate tensions rather than directly confronting the authority. These practices make the root causes of ongoing problems less visible, limit opportunities for learning and improvement through problem solving, and instill latent conflicts (Panchuay et al., 2023). Overall, the acceptance of hierarchy and power differentials among Thai healthcare professionals tends to reinforce a top-down, one-way communication style that leaves little room for feedback and constructive dialogue (Areemit et al., 2021).

2. Group harmony

The Thai socio-cultural setting is deeply connected to collectivism, where individuals tend to see themselves as part of a group and place high value on group harmony (Hofstede Insights, 2021). Family is the core unit for cultivating this value. From an early age, children are taught to respect parents and elders and to consider others, which shapes a sense of gratitude and obligation

(Panthachai & Kakkaew, 2024). These values also influence healthcare professionals' teamwork and communication in both positive and challenging ways.

On the positive side, collectivism enhances group cohesion and mutual support. Thai healthcare teams often describe their interaction among team members as "working together like family". Specifically, senior nurses mentor juniors, and all members are willing to give up their own interests for collective success (Srichalerm et al., 2024). However, on the negative side, collectivism can make open discussion and shared decision-making more challenging. For example, healthcare providers often concede to family wishes in sensitive decisions, especially in advance care planning (ACP) for palliative cases (Ketchaikosol et al., 2024). From the family perspective, strong social expectations that families should protect their loved ones could lead to a behavior known as a "conspiracy of silence", where families soften, withhold, or distort vital health information from patients, resulting in treatments that go against healthcare professionals' recommendations and patients' preferences (Saimmai et al., 2022). These behaviors demonstrate that collectivist values can foster group cohesion and mutual support, yet could also hamper transparency of communication and patient-centered care. Recognizing both sides of group harmony is significant for developing more culturally sensitive approaches to care planning in Thailand (Pairojkul et al., 2023).

3. Perseverance and self-sacrifice rooted in a sense of duty

Perseverance and self-sacrifice are deeply intertwined Thai virtues that influence how healthcare professionals work and communicate. These values are partly linked to Buddhist doctrines that emphasized *Khanti*, or patience and bearing hardship with calmness. Since childhood, Thais are socialized to restrain their emotions, discouraging open displays of negative feelings, including frustration and fatigue, while reinforcing the belief that enduring hardship is a moral deed (Girish et al., 2025). In healthcare work settings, this tolerance for adversity translates into fulfilling responsibilities without complaint.

This can be observed in the Ministry of Public Health (2011) national policy, which emphasize that village health workers (VHVs) should "behave with diligence, endurance, determination, and sacrifice... in carrying out voluntary work". Ethnographic research further illustrates this ideal of perseverance and self-sacrifice in the field of healthcare. One VHW interviewee continued to work during the COVID-19 pandemic despite her family's pleas to quit, explaining that she felt bound by a sense of duty to the community (Cohen & Cohen, 2024). At the same time, these values also help explain why some problems remain hidden. A study found that while 74.5% of Thai medical students experienced mistreatment, only 8.2% formally reported it, fearing that doing so might be seen as selfish (Naothavorn et al., 2023).

A similar pattern is observed among Thai physicians driven by a sense of duty toward patients and colleagues. One study found that 63.8% of physicians worked despite being sick, and the percentage rose to 74.8%, 83.5%, and 94.9% under conditions of insufficient resources, high workload, and staffing shortages, respectively. Therefore, perseverance and self-sacrifice can support work resilience and commitment, yet over time, these values may contribute to exhaustion, burnout, and lower well-being and job satisfaction (Surawattanasakul et al., 2024).

In summary, teamwork and communication among Thai healthcare professionals are partly shaped by socio-cultural norms of deference to power differentials, group harmony, and perseverance and self-sacrifice rooted in a sense of duty. Deference may improve group compliance but also hinder constructive feedback between team members. Group harmony supports cohesion and unity, yet it can also reduce openness in communication and shared decision-making. Lastly, perseverance and self-sacrifice enhance work resilience in the short term, but often at the cost of presenteeism and well-being in the long run. Building on these insights, the following section outlines policy recommendations and directions for organizational psychology research.

Future Agendas for Thailand's Teamwork and Communication in Healthcare Professions

Drawing from the proposed theoretical frameworks and socio-cultural considerations, several future agendas could guide improvements in teamwork and communication among Thai healthcare professionals.

1. Flattening hierarchy

From an organizational psychology perspective, a team is defined as two or more individuals who have specific roles, perform interdependently, and adaptively interact to achieve shared goals. To complete tasks effectively, teams must possess both (1) the necessary knowledge, skills, and attitudes for working in teams (Baker et al., 2006) and (2) task interdependence, so that team members coordinate with one another, allowing them to access critical resources and produce coordinated workflows (McGuier et al., 2023). This means that healthcare professions could improve teamwork characteristics and communication by flattening hierarchical barriers to support an all-channel communication style. As a result, all team members are able to collaboratively deliver care and share responsibility at the team level (Fiscella & McDaniel, 2018). Moreover, endorsing psychological safety for team members is essential. Team leaders need to create a working climate in which each member's expertise is respected and novel input from less experienced junior professionals is trusted and welcomed (Edmondson & Bransby, 2023).

2. Strengthening multidisciplinary collaboration and team integration

Healthcare in Thailand remains challenged by siloed working practices, where departments and professions tend to operate in parallel rather than as integrated teams. Strengthening MDTs and collaboration requires adjustments, such as improved referral systems, cultural shifts that promote shared responsibility, and interprofessional training to prepare professionals to work collaboratively (Zajac et al., 2021). For instance, a study found that a shared decision-making model that integrates perspectives from multiple disciplines can provide coordinated and holistic care, eventually improving patients' quality of life (Kongkar et al., 2025). Teamwork must also extend across multi-team systems to ensure the continuity of care (Ingels et al., 2023). To further support collaboration, a useful starting point may be to nurture more positive perceptions toward collaborating with other professions, since how healthcare professionals perceive interprofessional collaboration often shapes how they actually engage in teamwork (Boonmak et al., 2024).

3. Fostering team emotional intelligence

A positive emotional climate is essential for cooperation, stress management, and sustained team performance. In Thailand, where emotional restraint and conflict avoidance are common, fostering team EI is particularly important because it allows healthcare professionals to address issues constructively rather than suppressing them. Team EI refers to the collective ability to recognize and regulate emotions, encourage respectful expression, and repair negative moods when they arise (Aritzeta et al., 2020). Structured forums such as Schwartz Rounds (sessions that provide staff with opportunities to reflect on the emotional and social dimensions of their work) exemplify how applying these practices fosters psychological safety, normalizes vulnerability, and strengthens compassion. Ultimately, fostering team EI enhances collaboration, staff well-being, and patient care (Ng et al., 2023).

Conclusion

This review article proposes using the IMOI model from organizational psychology alongside existing HSS frameworks to provide a stronger foundation for understanding the behavioral aspects of healthcare professionals. At the same time, the review introduces socio-cultural perspectives as a third framework to make considerations of teamwork and communication more contextually vivid. Three cultural determinants, including deference, group harmony, and perseverance and self-sacrifice, along with their strengths and challenges, are discussed. To move forward, interventions including reducing hierarchical barriers, integrating MDTs, and building team EI may offer ways to improve teamwork and communication mediators within the IMOI model, such as psychological safety, collaboration, respectful expression, and well-being. For researchers, this review highlights the importance of taking Thai socio-cultural factors into account and offers opportunities to expand understanding of teamwork and communication within healthcare contexts through organizational psychology approaches.

References

Areemit, R. S., Cooper, C. M., Wirasorn, K., Paopongsawan, P., Panthongviriyakul, C., & Ramani, S. (2021). Hierarchy, “kreng jai” and feedback: A grounded theory study exploring perspectives of clinical faculty and medical students in Thailand. *Teaching and Learning in Medicine*, 33(3), 235-244. <https://doi.org/10.1080/10401334.2020.1813584>

Aritzeta, A., Mindeguia, R., Soroa, G., Balluerka, N., Gorostiaga, A., Elorza, U., & Aliri, J. (2020). Team emotional intelligence in working contexts: Development and validation of the Team-Trait Meta Mood Scale (T-TMMS). *Frontiers in Psychology*, 11, 1-8. <https://doi.org/10.3389/fpsyg.2020.00893>

Baek, H., Han, K., Cho, H., & Ju, J. (2023). Nursing teamwork is essential in promoting patient-centered care: a cross-sectional study. *BMC Nursing*, 22(1), 1-8. <https://doi.org/10.1186/s12912-023-01592-3>

Baker, D. P., Day, R., & Salas, E. (2006). Teamwork as an essential component of high-reliability organizations. *Health Services Research*, 41(4p2), 1576-1598. <https://doi.org/10.1111/j.1475-6773.2006.00566.x>

Boonmak, P., Saensom, D., Tangpukdee, J., Ruaisungnoen, W., Chanthapasa, K., Chaibunruang, A., Kraiklang, R., Limmonthol, S., Phimphasak, C., Boonmak, P., & Boonmak, S. (2024). Perceptions and influencing factors of interprofessional collaboration in final-year health science students. *Journal of Interprofessional Care*, 38(6), 1109-1116. <https://doi.org/10.1080/13561820.2024.2401363>

Cohen, A., & Cohen, P. T. (2024). Paradigm conflict: Village health volunteers and public health in Thailand. *The Asia Pacific Journal of Anthropology*, 25(3), 251-265. <https://doi.org/10.1080/14442213.2024.2357104>

Edmondson, A. C., & Bransby, D. P. (2023). Psychological safety comes of age: Observed themes in an established literature. *Annual Review of Organizational Psychology and Organizational Behavior*, 10, 55-78. <https://doi.org/10.1146/annurev-orgpsych-120920-055217>

Fiscella, K., & McDaniel, S. H. (2018). The complexity, diversity, and science of primary care teams. *American Psychologist*, 73(4), 451-467. <https://doi.org/10.1037/amp0000244>

Girish, M., Jaroenkajornkij, N., Binson, B., & Lev-Wiesel, R. (2025). Cultural differences in revenge fantasies using drawings: A comparative study between Indians and Thais. *Asian Journal of Social Psychology*, 28(4), Article e70051. <https://doi.org/10.1111/ajsp.70051>

Gonzalo, J. D., Haidet, P., Papp, K. K., Wolpaw, D. R., Moser, E., Wittenstein, R. D., & Wolpaw, T. (2017). Educating for the 21st-century health care system: An interdependent framework of basic, clinical, and systems sciences. *Academic Medicine*, 92(1), 35-39. <https://doi.org/10.1097/ACM.0000000000000951>

Greer, R. C., Kanthawang, N., Roest, J., Perrone, C., Wangrangsimakul, T., Parker, M., Kelley, M., & Cheah, P. Y. (2023). The challenges and potential solutions of achieving meaningful consent amongst research participants in northern Thailand: a qualitative study. *BMC Medical Ethics*, 24(1), 1-12. <https://doi.org/10.1186/s12910-023-00991-0>

Heier, L., Schellenberger, B., Schippers, A., Nies, S., Geiser, F., & Ernstmann, N. (2024). Interprofessional communication skills training to improve medical students' and nursing trainees' error communication: quasi-experimental pilot study. *BMC Medical Education*, 24(1), 1-10. <https://doi.org/10.1186/s12909-023-04997-5>

Higginson, J., Hofler, L., & Hammoud, M., M. (2021). Principles of teamwork and team science. In S. Skochelak, E., M. Hammoud, M., & K. Lomis, D. (Eds.), *Health systems science* (2nd ed., pp. 127-129). Elsevier.

Hofstede Insights. (2021). *Country Comparison: Thailand*. <https://www.hofstede-insights.com/country-comparison/thailand/>

Hopkins, D. (2010). *Framework for action on interprofessional education and collaborative practice*. World Health Organization Geneva.

Ilgen, D. R., Hollenbeck, J. R., Johnson, M., & Jundt, D. (2005). Teams in organizations: From input-process-output models to IMOI models. *Annual Review of Psychology*, 56, 517-543. <https://doi.org/10.1146/annurev.psych.56.091103.070250>

Ingels, D. J., Zajac, S. A., Kilcullen, M. P., Bisbey, T. M., & Salas, E. (2023). Interprofessional teamwork in healthcare: Observations and the road ahead. *Journal of Interprofessional Care*, 37(3), 338-345. <https://doi.org/10.1080/13561820.2022.2090526>

Ketchaikosol, N., Pinyopornpanish, K., Angkurawaranon, C., Dejkriengkraikul, N., & Chutarattanakul, L. (2024). Physicians' experiences and perceptions about withholding and withdrawal life-sustaining treatment in Chiang Mai University Hospital: A cross-sectional study. *BMC Palliative Care*, 23(1), 1-8. <https://doi.org/10.1186/s12904-024-01511-6>

Kongkar, R., Ruksakulpiwat, S., Phianhasin, L., Benjasirisan, C., Niyomyart, A., Ahmed, B. H., Puwarawuttipanit, W., Chuenkongkaew, W. L., & Adams, J. (2025). The impact of interdisciplinary team-based care on the care and outcomes of chronically ill patients: A systematic review. *Journal of Multidisciplinary Healthcare*, 18, 445-457. <https://doi.org/10.2147/jmdh.S497846>

Kozlowski, S. W. J. (2015). Advancing research on team process dynamics: Theoretical, methodological, and measurement considerations. *Organizational Psychology Review*, 5(4), 270-299. <https://doi.org/10.1177/2041386614533586>

Kozlowski, S. W. J., & Chao, G. T. (2018). Unpacking team process dynamics and emergent phenomena: Challenges, conceptual advances, and innovative methods. *The American Psychologist*, 73(4), 576-592. <https://doi.org/10.1037/amp0000245>

Lazaro, I., Imanda, C., & Pranata, S. (2024). The role of cultural competence in optimizing interprofessional collaboration in older adults in Indonesia. *International Journal of Aging Health and Movement*, 6 (1), 13-22. <https://www.ijahm.com/index.php/IJAHM/article/view/115>

Lemieux-Charles, L., & McGuire, W. L. (2006). What do we know about health care team effectiveness? A review of the literature. *Medical Care Research and Review*, 63(3), 263-300. <https://doi.org/10.1177/1077558706287003>

Marks, M. A., Mathieu, J. E., & Zaccaro, S. J. (2001). A temporally based framework and taxonomy of team processes. *The Academy of Management Review*, 26(3), 356-376. <https://doi.org/10.1111/j.1475-6773.2006.00566.x>

Marlow, S. L., Lacerenza, C. N., Paoletti, J., Burke, C. S., & Salas, E. (2018). Does team communication represent a one-size-fits-all approach?: A meta-analysis of team communication and performance. *Organizational Behavior and Human Decision Processes*, 144, 145-170. <https://doi.org/10.1016/j.obhdp.2017.08.001>

Mathieu, J. E., Gallagher, P. T., Domingo, M. A., & Klock, E. A. (2019). Embracing complexity: Reviewing the past decade of team effectiveness research. *Annual Review of Organizational Psychology and Organizational Behavior*, 6, 17-46. <https://doi.org/10.1146/annurev-orgpsych-012218-015106>

Mathieu, J. E., Hollenbeck, J. R., Van Knippenberg, D., & Ilgen, D. R. (2017). A century of work teams in the Journal of Applied Psychology. *Journal of Applied Psychology*, 102(3), 452-467. <https://doi.org/10.1037/apl0000128>

McGuier, E. A., Kolko, D. J., Aarons, G. A., Schachter, A., Klem, M. L., Diabes, M. A., Weingart, L. R., Salas, E., & Wolk, C. B. (2024). Teamwork and implementation of innovations in healthcare and human service settings: A systematic review. *Implementation Science*, 19(1), 1-19. <https://doi.org/10.1186/s13012-024-01381-9>

McGuier, E. A., Kolko, D. J., Stadnick, N. A., Brookman-Frazee, L., Wolk, C. B., Yuan, C. T., Burke, C. S., & Aarons, G. A. (2023). Advancing research on teams and team effectiveness in implementation science: An application of the Exploration, Preparation, Implementation, Sustainment (EPIS) framework. *Implementation Research and Practice*, 4, 1-16. <https://doi.org/10.1177/26334895231190855>

Ministry of Public Health. (2011). Regulations of the ministry of public health concerning village health volunteers B.E. 2554 (2011). Government Gazette.

Naothavorn, W., Puranitee, P., Kaewpila, W., Sumrithe, S., Heeneman, S., Van Mook, W. N. K. A., & Busari, J. O. (2023). An exploratory university-based cross-sectional study of the prevalence and reporting of mistreatment and student-related factors among Thai medical students. *BMC Medical Education*, 23(1), 1-13. <https://doi.org/10.1186/s12909-023-04462-3>

Ng, L., Schache, K., Young, M., & Sinclair, J. (2023). Value of Schwartz rounds in promoting the emotional well-being of healthcare workers: A qualitative study. *BMJ Open*, 13(4), 1-7. <https://doi.org/10.1136/bmjopen-2022-064144>

OECD. (2025). *Does healthcare deliver?: Results from the Patient-Reported Indicator Surveys (PaRIS)*. OECD Publishing.

Oon-arom, A., Wiwattanaworaset, P., Wiwattarangkul, T., Vadhanavikkit, P., Srifuengfung, M., Chiddaycha, M., & Wainipitapong, S. (2024). Academic difficulties, education-related problems, and discrimination among Thai gender-diverse medical students: a cross-sectional study of Thai medical schools. *BMC Medical Education*, 24(1), 1-8. <https://doi.org/10.1186/s12909-024-06018-5>

Pairojkul, S., Raksasataya, A., Sorasit, C., Horatanaruang, D., & Jarusomboon, W. (2023). Thailand's experience in advance care planning. *Zeitschrift für Evidenz, Fortbildung und Qualität im Gesundheitswesen*, 180, 85-89. <https://doi.org/10.1016/j.zefq.2023.05.010>

Panchuay, W., Soontorn, T., & Songwathana, P. (2023). Exploring nurses' experiences in applying AIDET framework to improve communication skills in the emergency department: A qualitative study. *Belitung Nursing Journal*, 9(5), 464-470. <https://doi.org/10.33546/bnj.2789>

Panthachai, S., & Kakkaew, N. (2024). The influence of family structure on child development: A psychological study of Thai family dynamics. *Journal of Exploration in Interdisciplinary Methodologies*, 1(6), 37–49. <https://so19.tci-thaijo.org/index.php/JEIM/article/view/1185>

Rabøl, L. I., Andersen, M. L., Østergaard, D., Bjørn, B., Lilja, B., & Mogensen, T. (2011). Descriptions of verbal communication errors between staff. An analysis of 84 root cause analysis-reports from Danish hospitals. *BMJ Quality & Safety*, 20(3), 268-274. <https://doi.org/10.1136/bmjqqs.2010.040238>

Rosen, M. A., DiazGranados, D., Dietz, A. S., Benishek, L. E., Thompson, D., Pronovost, P. J., & Weaver, S. J. (2018). Teamwork in healthcare: Key discoveries enabling safer, high-quality care. *The American Psychologist*, 73(4), 433-450. <https://doi.org/10.1037/amp0000298>

Saimmai, P., Hathirat, S., & Nagaviroj, K. (2022). What challenges do Thai general practitioners and family physicians confront when discussing advance care planning with palliative care patients and families?: A qualitative study. *Journal of The Department of Medical Services*, 47(1), 94–102. <https://he02.tci-thaijo.org/index.php/JDMS/article/view/252203>

Salas, E., Reyes, D. L., & McDaniel, S. H. (2018). The science of teamwork: Progress, reflections, and the road ahead. *American Psychological Association*, 73(4), 593-600. <https://doi.org/10.1037/amp0000334>

Saxena, A., Davies, M., & Philippon, D. (2018). Structure of health-care dyad leadership: an organization's experience. *Leadership in Healthcare Services*, 31(2), 238-253. <https://doi.org/10.1108/lhs-12-2017-0076>

Skochelak, S., E., Hammoud, M., M., Lomis, K., D., Borkan, J., M., Gonzalo, J., D., Lawson, L., E., & Starr, S., R. (2021). *Health Systems Science* (2nd ed.). Elsevier.

Srichalerm, T., Jacelon, C. S., Sibeko, L., Granger, J., & Briere, C.-E. (2024). Thai novice nurses' lived experiences and perspectives of breastfeeding and human milk in the Neonatal Intensive Care Unit (NICU). *International Breastfeeding Journal*, 19(1), 1-10. <https://doi.org/10.1186/s13006-024-00620-5>

Steinmann, G., Daniels, K., Mieris, F., Delnoij, D., Van de Bovenkamp, H., & Van der Nat, P. (2022). Redesigning value-based hospital structures: a qualitative study on value-based health care in the Netherlands. *BMC Health Services Research*, 22(1), 1-14. <https://doi.org/10.1186/s12913-022-08564-4>

Surawattanasakul, V., Kiratipaisarl, W., & Siviroj, P. (2024). Association between presenteeism, Associated Factors, and Outcomes among Intern Physicians in Public Hospitals during the COVID-19 Pandemic: A Cross-Sectional Study. *Medicina*, 60(6), 1-15. <https://www.mdpi.com/1648-9144/60/6/962>

Van Gulik, N., Hutchinson, A., Considine, J., Driscoll, A., Malathum, K., & Botti, M. (2021). Perceived roles and barriers to nurses' engagement in antimicrobial stewardship: A Thai qualitative case study. *Infection, Disease & Health*, 26(3), 218-227. <https://doi.org/10.1016/j.idh.2021.04.003>

Wang, H., Van Wijngaarden, J., Buljac-Samardzic, M., & Van de Klundert, J. (2023). Factors and interventions determining the functioning of health care teams in county-level hospitals in less affluent areas of China: a qualitative study. *Frontiers in Public Health*, 11, 1-10. <https://doi.org/10.3389/fpubh.2023.1082070>

World Health Organization, OECD, & International Bank for Reconstruction and Development. (2019, Oct 10). *Delivering quality health services: A global imperative for universal health coverage*. Retrieved 8 Sep, 2025, from <https://www.who.int/publications/i/item/9789241513906>

Zajac, S., Woods, A., Tannenbaum, S., Salas, E., & Holladay, C. L. (2021). Overcoming challenges to teamwork in healthcare: A team effectiveness framework and evidence-based guidance. *Frontiers in Communication*, 6, 1-20. <https://doi.org/10.3389/fcomm.2021.606445>