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Development of Medical Leadership in Primary Health Care: A Core Skill for General Practitioners

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Abstract:

Leadership within the realm of primary healthcare (PHC) stands as a linchpin for organizational success and patient well-being, necessitating a nuanced exploration of its multifaceted dynamics and impact. This manuscript provides a comprehensive analysis of medical leadership in PHC, elucidating its essential qualities, challenges, and strategies for skill development. This study employs a literature review methodology to systematically examine existing research on medical leadership in PHC settings. It synthesizes empirical findings and theoretical frameworks to delineate the core attributes and skills required for effective leadership Key findings underscore the pivotal role of qualities such as vision formulation, effective communication, inspiration, decision-making, emotional intelligence, and adaptability. These qualities foster collaborative teamwork, patient-centered care, and organizational success. Furthermore, the study identifies various challenges faced by medical leaders, including balancing clinical and managerial responsibilities, staying abreast of healthcare advancements, and fostering strong stakeholder relationships. In light of these findings, the study proposes strategies for cultivating medical leadership skills, suggesting that organizations foster a culture of collaboration, promote interprofessional education, encourage continuous professional development, and implement leadership development programs. These initiatives aim to empower healthcare professionals with the necessary competencies to navigate complex healthcare environments and drive innovation. Overall, this study highlights the critical role of medical leadership in advancing PHC delivery. It underscores the importance of ongoing efforts to develop and support healthcare leaders in fulfilling their roles effectively, thereby contributing to the enhancement of healthcare outcomes and organizational performance in PHC settings.

Keywords: Leadership, Medical leadership, Primary healthcare (PHC), Organizational performance

Introduction:

Background on the importance of medical leadership

Leadership has been studied extensively over the years and is more important than ever in today's fast-paced world. Because of its complexity and multidimensionality, leadership has been the subject of much scrutiny (Benmira & Agboola, 2021).

One of the widely accepted definitions of leadership among scholars is provided by Chemers (2014), who defines leadership as 'a process of social influence in which one person is able to enlist the aid and support of others in the accomplishment of a common task.

Discussion of empirical and theoretical research on leadership contributes to a deeper understanding of the nature of leadership and its role in organizations. By examining real-world examples and theoretical frameworks, scholars gain insights into effective leadership practices and their impact on organizational outcomes.

The significance of medical leadership in PHC

There is a strong link between General Practitioners(GPs), PHC and Leadership. All three are mutually reinforcing and interdependent, and together they form an important part of the modern health care system(Smith et al., 2018). GPs are the core force in the PHC system. As providers of PHC services, they bear the responsibility of providing comprehensive, continuous and coordinated health care services to people in the community. An excellent general practitioner not only provides medical care but also needs to possess strong leadership skills. Leadership plays a crucial role in effectively organizing and managing the healthcare team, coordinating resources, and ensuring the delivery of high-quality healthcare services to patients.

Statement of the Problem

What is the importance of medical leadership in PHC? What are the essential qualities and skills of medical leadership? What are the impact of medical leadership on organizations and patient outcomes? How to develop leadership skills in medical leadership?

Methodology



This article adopts the literature research method, which is an important research tool aiming to reveal its core purpose through comprehensive retrieval, in-depth analysis, and objective evaluation of existing literature (Caruth, 2013). The core purpose of this method is to collect information from accumulated literature resources to verify theoretical hypotheses or provide theoretical support for solving specific scientific problems. In actual operations, researchers consult various books, journal articles, conference papers, etc., and summarize, synthesize, and analyze the information obtained to extract valuable research clues and opinions (Caruth, 2013).

Qualities and skills of medical leadership

Leadership is a multifaceted concept studied across disciplines. It is considered one of the most important topics in the humanities, yet remains one of the least understood throughout history (Hogan & Kaiser, 2005). The academic circle has not yet reached a unified understanding of leadership. Examining empirical and theoretical research on leadership contributes to a deeper understanding of its nature and its role within organizations. From the perspective of historical development, leadership theory has undergone a long and complex process. Leadership theory has evolved from initial simple trait descriptions to later behavioral analyses, followed by the rise of contextual theory, and eventually culminating in the modern multi-dimensional exploration of leadership.

According to Benmira & Agboola (2021), in the historical evolution of leadership theories, four main eras can be identified: the trait, behavioral, situational, and new leadership era. In leadership research, scholars generally agree that a leader's success depends on a set of key qualities and skills. These qualities and skills not only reflect the personal characteristics of leaders but also form the basis for their effective guidance and influence on others. According to Al-Masri et al. (2018), leadership in PHC is characterized by qualities such as vision, charisma, and the ability to inspire and motivate others.

Leaders need the skills to formulate and articulate a vision for the future. This requires them to conceive of a compelling direction and effectively communicate it to team members, inspiring their enthusiasm and motivation (Kotagal & Pellegrini, 2018).

An important leadership skill in PHC is effective communication, as emphasized by Pellecchia et al. (2020). They discuss the significance of leaders in PHC actively listening to their patients and colleagues, conveying information clearly, and establishing strong relationships with them. They discuss the significance of leaders in PHC actively listening to their patients and colleagues, conveying information clearly, and establishing strong relationships with them.

Emotional intelligence is also a crucial aspect of leadership. It plays a vital role in leadership by enabling individuals to understand and manage their own emotions, as well as the emotions of others (Mayfield & Peterson, 2004). This ability allows leaders to effectively handle stressful situations and build positive relationships with their team members (Salovey & Mayer, 1990). Leaders with high emotional intelligence possess the ability to communicate effectively with their team members (Bradberry & Greaves, 2009). For example, they are able to listen actively, provide constructive feedback, and empathize with the concerns and emotions of others (Goleman, 1995).

Leaders who demonstrate emotional intelligence are more likely to create a positive and supportive work environment (Goleman, 1995). They are able to motivate and inspire their team members, and effectively address conflicts and challenges. They are able to motivate and inspire their team members, effectively address conflicts and challenges, and thus contribute to increased employee satisfaction, engagement, and overall organizational performance (Hartog, 2008).

Leaders need the ability to manage their own emotions, as well as the ability to understand and empathize with the emotions of their team members. This skill helps build good interpersonal relationships, promotes teamwork, and facilitates conflict resolution (Goleman, 1995). Patel et al. (2019) highlight empathy as an essential leadership quality in PHC, emphasizing the importance of leaders being able to understand and relate to the experiences and emotions of their patients, colleagues, and other stakeholders.

Adaptability is key for leaders to maintain resilience and flexibility in complex environments. Leaders need to be able to effectively respond to changes, address challenges, and guide their teams in overcoming difficulties to achieve goals. (Mumford et al., 2000). Adaptability and resilience are essential leadership qualities in PHC, as pointed out by Maina et al. (2021). They emphasize the significance of PHC leaders' ability to adapt to changing circumstances and demonstrate resilience in the face of adversity (Maina et al., 2021).

Decision-making is another key competency for leaders, involves the ability to make wise decisions and take bold steps in complex and uncertain circumstances (Johnson, 2020). Integrity is one of the fundamental qualities of a leader, involving displaying honest behavior and adhering to strong moral principles (Brown & Treviño, 2006). Leaders with integrity can win the trust and respect of their teams and create a positive organizational culture. Confidence is a leader's unwavering belief in their abilities and judgment. This confidence not only inspires







leaders to take action, but also inspires team members and enhances their courage and determination to face difficulties (Judge & Bono, 2001).

Problem-solving and taking responsibility are core responsibilities of a leader. Leaders should have the ability to identify, analyze, and solve various problems and obstacles and be accountable for the results of the team or organization (Yukl, 2012).PHC leaders must possess strong problem-solving and decision-making skills, as highlighted by Van der Velden et al. (2018). They are able to analyze complex health situations, identify potential causes and solutions, and make informed decisions to address the needs of their patients and organization.

In additional, cultural competency is also a crucial leadership skill in PHC(Gagnon et al. 2017). They argue that leaders in PHC should have an understanding and appreciation of the diverse cultural backgrounds of their patients, ensuring that healthcare services are tailored to meet their unique needs and preferences.

Charismatic leadership is one leadership style in which leaders inspire and influence their subordinates using their personal charm, vision, and communication abilities. German sociologist Max Weber initially introduced charismatic leadership in the early 20th century (Weber et al., 1947). In PHC, charismatic leadership can have a significant impact on improving patient outcomes, boosting healthcare professionals' job satisfaction, and enhancing the overall performance of primary care institutions (Hogg et al., 2018). Charismatic leaders in PHC are often characterized by their strong communication skills, their ability to articulate a clear vision for the future, and their capacity to inspire and motivate others to work towards that vision (Bass & Riggio, 2006). They may also be effective in building strong relationships with patients, colleagues, and other stakeholders, which can foster a positive and collaborative work environment within PHC (Wensing et al., 2016).

The impact of medical leadership on healthcare organizations

Leadership typically enables the employees of the organizations to work efficiently and effectively (Agarwal, 2020). Leadership style is the specific way a leader directs and motivates individuals towards the accomplishment of organizational goals (Al Khajeh, 2018). Certain organizations, particularly those in dynamic or rapidly changing industries, view leadership styles with utmost importance, utilizing them as tools employed by their managers to identify and effectively address problems (Agarwal, 2020). The results of empirical studies show that organizational performance in general is related to leadership styles and they have both positive and negative effects on organizational performance (Al Khajeh, 2018). The democratic, autocratic and charismatic leadership styles have a positive impact on organizational performance while bureaucratic leadership styles have a negative impact on organizational performance. In the healthcare industry, transformational and democratic leadership improves the quality of the communicative relationship between the leader and the members, thus wanting to build the most effective leader-employee working relationship (Romi, Alsubki, Almadhi, & Propheto, 2022). However, it's important to note that the leadership style contributing to organizational performance improvement may vary across specific industries.

Research shown that charismatic leadership can have a positive impact on PHC outcomes. For example, a study by Shanafelt et al. (2015) found that transformational leadership, which includes elements of charismatic leadership, was associated with lower rates of burnout and higher levels of job satisfaction among physicians. Another study by Fitzgerald et al. (2019) found that charismatic leadership was associated with higher levels of patient satisfaction and better clinical outcomes in primary care settings.

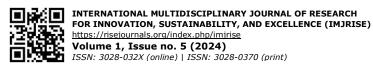
Challenges and opportunities in medical leadership

One of the key challenges of medical leadership in PHC is the balance between clinical and managerial responsibilities, as highlighted by Bloom et al. (2018). They argue that medical leaders must maintain their clinical expertise while also effectively managing their teams and resources. Another challenge is the need for medical leaders to keep up with the latest advancements in healthcare, as emphasized by Short et al. (2020). In addition, building strong relationships with patients, colleagues, and other stakeholders is crucial for medical leaders in primary health care, by Patel et al. (2019). Velden et al. (2018) highlight the importance of medical leaders being able to analyze complex health situations, identify potential causes and solutions, and make informed decisions to address the needs of their patients and organization.

Numerous empirical studies have shown that there is a significant positive correlation between leadership and employee attitudes, job performance and organizational development (Wilderom et al., 2012). Charismatic leadership not only pays attention to the leader's innate factors (genetic factors) but also pays more attention to acquired factors, including subordinates, organizations, and situations. Personality traits of extroversion, openness, initiative, and humility are easier for subordinates to perceive charismatic leadership (Walter & Bruch, 2009; Zhang et al., 2017). Charismatic leaders should have good self-awareness, self-management, life goals, passion for life (Sosik, 1998; Ho & Astakhova, 2020), openness to change and collectivistic values (Walter & Bruch, 2009), power motivation (De Hoogh et al., 2005), affinity (Sosik et al., 2002), and commitment to organizational change-promoting behavior (Nohe et al., 2013), rewards, and occasional punishment (Atwater et al., 1997), emotional control (Groves, 2005), self-sacrifice, and high moral standards (Sosik et al., 2011), motivating subordinates to generate positive emotions (Walter & Bruch, 2009). Interdepartmental cooperation, employee orientation, and collectivistic organizational culture can promote charismatic leadership (Wilderom et al., 2012; Pillai & Meindl,







1998). Leaders who can provide vision and have decision-making power are often more needed in crises, and crises can also promote the emergence of charismatic leadership (Pillai & Meindl, 1998). Therefore, the charismatic leadership of GPs in Shanghai can be cultivated and improved through training and other acquired methods.

Countries place significant emphasis on the professional skills training of GPs. However, there is a lack of studies focusing on GP leadership, and validated and tested indices are scarce. Several leadership assessment tools have been developed to pinpoint specific leader behaviors or competencies, such as the House Model (1976), the Bass Model (1985), the Conger Model (1987), the Leadership Practice Inventory (Vitale, 2019), and the leadership quality framework (Jeon et al., 2015). Nevertheless, generic leadership assessment tools may overlook the subtleties of leadership within the PHC context, particularly for GPs, potentially resulting in incomplete or inaccurate evaluations (Li et al., 2019). Therefore, there is an urgent need to develop GP leadership to systematically identify leadership competencies and areas for improvement among GPs. By evaluating the current state of leadership skills and behaviors, healthcare organizations can customize training programs to target specific gaps and enhance leadership effectiveness.

Developing medical leadership skills

To enhance the quality and efficiency of PHC, it is crucial to cultivate robust medical leadership skills among healthcare professionals. O'Connell et al. (2018) underscore the significance of leadership skills like communication, teamwork, and adaptability in achieving these objectives. Additionally, Zwarenstein et al. (2018) argue in their study that Interprofessional Education fosters collaboration, mutual respect, and shared decision-making, all of which are essential for effective medical leadership. Furthermore, Van Den Berg et al. (2019) suggest in their study that engaging in Continuing Professional Development activities can assist healthcare professionals in staying abreast of the latest evidence-based practices, enhancing their leadership capabilities, and ultimately contributing to improved patient care. Moreover, a review conducted by Paro et al. (2017) delves into the impact of leadership development programs on the performance of PHC teams. The authors discovered that such programs had a positive influence on team communication, collaboration, and overall efficiency, thereby leading to enhanced patient outcomes.

Focus on fostering a culture of collaboration.

Creating a collaborative culture to enhance medical leadership capabilities in PHC involves fostering an environment where healthcare professionals collaborate, learn from each other, and actively engage in decision-making processes. Bringing together PHC providers, patients, administrators, and other stakeholders to discuss and strategize the enhancement of medical leadership abilities. Implement training programs that convene GPs, nurses, pharmacists, and other PHC professionals to exchange knowledge and skills. Setting mutual objectives that align with the PHC system's overarching vision. Inspiring teams to establish joint goals that necessitate teamwork to accomplish, such as enhancing patient outcomes or implementing new healthcare policies. Designating leadership roles within interdisciplinary teams that empower healthcare professionals to assume additional responsibilities. Rotating leadership positions to provide diverse team members with leadership skill development opportunities.

Promoting interprofessional education

Promoting interprofessional education (IPE) is essential for fostering collaboration and leadership skills in PHC. This involves implementing policies and structural frameworks that support IPE, defining shared learning outcomes, and creating interdisciplinary courses and simulated learning environments. It also includes training faculty in IPE principles, arranging cross-disciplinary clinical placements, and providing leadership skills training and ongoing professional development. Establishing recognition and reward systems, regularly evaluating the impact of IPE, and involving patients and the community in education initiatives are also key strategies. By adopting these approaches, educational institutions and healthcare organizations can create a supportive environment that promotes interprofessional collaboration and strengthens PHC services.

Encouraging continuous professional development

Promoting ongoing professional development (CPD) to enhance medical leadership abilities in primary healthcare (PHC) requires a comprehensive strategy tailored to the needs and preferences of healthcare practitioners. Begin by assessing specific leadership deficiencies through surveys or interviews among primary care healthcare professionals. Offer targeted training programs such as workshops, seminars, and courses focused on enhancing medical leadership skills. Utilize online educational platforms by investing in subscriptions offering leadership and management courses. Establish mentorship initiatives where seasoned medical leaders can provide guidance and assistance to less experienced professionals, facilitating skill enhancement and career progression. Provide opportunities for professionals to engage in leadership projects or rotations within their organization. Facilitate networking interactions with colleagues and leaders in the healthcare sector, which can expose professionals to novel viewpoints on medical leadership. Supply regular feedback on performance, emphasizing strengths and areas for improvement in leadership skills. Acknowledge and incentivize professionals demonstrating outstanding leadership skills or actively participating in CPD activities. Foster an organizational culture valuing continuous learning and growth. Routinely evaluate the efficacy of CPD initiatives and modify the program as necessary to better address the evolving requirements of healthcare professionals.





Implementing leadership development programs

Identify specific leadership skills and competencies required within your PHC setting. Conduct surveys, interviews, or focus groups to assess current skill levels and areas for improvement among staff. Develop a leadership development program tailored to identified needs and goals, incorporating formal training, experiential learning, coaching, and mentoring opportunities. Create a comprehensive curriculum covering essential leadership topics relevant to the PHC context, such as communication, conflict resolution, team building, strategic planning, change management, and quality improvement. Gain buy-in and support from key stakeholders, including senior leadership, managers, and frontline staff, as collaboration from all levels is crucial for program success. Implement various training methods, including workshops, seminars, webinars, online courses, and conferences, with flexible scheduling to accommodate busy healthcare professionals. Identify internal experts or experienced leaders to serve as trainers, facilitators, or mentors, promoting peer learning and support. Collaborate with external organizations or professional associations specializing in leadership development to supplement internal resources and provide additional expertise. Encourage staff participation through incentives, recognition, and clear communication about program benefits for personal and professional growth. Continuously evaluate program effectiveness through participant feedback, performance monitoring, and outcome analysis, making adjustments and improvements over time. Establish mechanisms for sustaining leadership development efforts long-term, integrating them into regular staff training and development activities and adapting the program to evolving organizational needs and priorities.

Establishing Medical Leadership Indexes in PHC

Conducting a comprehensive review of existing literature on leadership in healthcare, specifically focusing on General Practitioners (GPs). Engaging with experts in healthcare leadership and GP practice through the Delphi technique, an iterative process that aims to reach consensus through multiple rounds of surveys and feedback, ensuring the inclusion of essential competencies. Defining and describing an index for each competency, providing a structured framework for evaluation and scoring performance. Validating the developed leadership evaluation index through rigorous research methodologies.

Conclusion

PHC plays a vital role in delivering crucial medical services to individuals and communities. It is crucial to cultivate robust leadership abilities among healthcare professionals to improve the quality and efficiency of PHC. Numerous studies provide valuable insights into effective strategies for developing these skills. Research has demonstrated a strong positive relationship between charismatic leadership and employee attitudes, job performance, and organizational growth (Wilderom et al., 2012). Charismatic leadership is a key component of leadership styles that can inspire team members, boost motivation and innovation, and enhance overall team performance. It can complement other leadership styles and address diverse leadership challenges in various contexts effectively. In summary, this research delves into the multifaceted aspect of medical leadership in the realm of PHC. By examining essential qualities, difficulties, and skill development strategies, this study lays the groundwork for improving leadership effectiveness and organizational performance in PHC settings. The proposed strategies, such as fostering collaboration, advocating for interprofessional education, supporting continuous professional development, and implementing leadership programs, offer practical ways to empower healthcare professionals and stimulate innovation in PHC delivery. By investing in enhancing medical leadership, healthcare organizations can enhance their ability to meet evolving healthcare demands, enhance patient outcomes, and elevate the overall quality and efficiency of PHC services.

References:

Agarwal, S. (2020). Leadership Style and Performance of Employees. *International Research Journal of Business Studies*, 13(1), 1-14.

Al Khajeh, E. H. (2018). Impact of Leadership Styles on Organizational Performance. *Journal of Human Resources Management Research*, 1-10. doi:10.5171/2018.687849

Al-Masri, M. et al. (2018). Leadership qualities in primary health care: a narrative review. *Journal of Healthcare Leadership*, 6(1), 50-58.

Bass, B. M., & Bass Bernard, M. (1985). Leadership and performance beyond expectations. 481-484.

Bass, B. M., & Riggio, R. E. (2006). Transformational leadership (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Benmira, S., & Agboola, M. (2021). Evolution of leadership theory. *BMJ Leader*. doi:10.1136/leader-2020-000296 Bloom, S. et al. (2018). Challenges and opportunities of medical leadership in primary care. *Journal of the American Board of Family Medicine*, 31(6), 773-778.

Bradberry, A., & Greaves, M. (2009). Emotional intelligence 2.0. San Francisco, CA: TalentSmart.





Brown, M. E., & Treviño, L. K. (2006). Ethical Leadership: A Review and Future Directions. *Leadership Quarterly*, 17(6), 595-616.

Caruth, G. D. (2013). Demystifying mixed methods research design: A review of the literature. Online Submission, 3(2), 112-122.

Chemers, M. (2014). An integrative theory of leadership: Psychology Press.

Conger, J. A., & Kanungo, R. N. (1994). Charismatic leadership in organizations: Perceived behavioral attributes and their measurement. *Journal of organizational behavior*, 15(5), 439-452.

Gagnon, M. et al. (2017). Cultural competency in primary health care leadership. Journal of Healthcare for the Poor and Underserved, 28(1), 25-33.

Goleman, D. (1995). Emotional intelligence. New York, NY: Bantam Books.

Goleman, D. (1995). Emotional Intelligence: Why It Can Matter More Than IQ. Bantam Books.

Hartog, D. N. (2008). The relationship between emotional intelligence and transformational and transactional leadership: A meta-analysis. Journal of Management Studies, 45(3), 631-647.

Hogan, R., & Kaiser, R. B. (2005). What we know about Leadership. *Review of General Psychology*, 9(2), 169-180. doi:10.1037/1089-2680.9.2.169

Hogg, W., Carrieri-Kohlman, V., & Scott, I. (2018). General practitioner leadership in primary health care: A narrative review. *Australian Journal of Primary Health*, 24(3), 211-217.

House, R. J. (1976). A 1976 Theory of Charismatic Leadership. Working Paper Series 76-06.

Jeon, Y.H,Conway, J.,Chenoweth, L.,Weise, J.,Thomas, T.H, & iams, A. (2015). Validation of a clinical leadership qualities framework for managers in aged care: a Delphi study. *Journal of clinical nursing*, 24(7-8), 999-1010.

Johnson, B. (2020). Decision-Making in Leadership: Strategies for Complex Situations. *Journal of Leadership Studies*, 40(2), 127-143.

Judge, T. A., & Bono, J. E. (2001). Relationship of Core Self-Evaluations Traits—Self-Esteem, Generalized Self-Efficacy, Locus of Control, and Emotional Stability—With Job Satisfaction and Job Performance: A Meta-Analysis. *Journal of Applied Psychology*, 86(1), 80-92.

Kotagal, M., & Pellegrini, C. A. (2018). Qualities of a Good Leader. Surgical Mentorship and Leadership: Building for Success in Academic Surgery, 151-157.

Li, L., Gan, Y., Jiang, H., Yang, Y., Zhou, X., Zheng, Y., ... & Lu, Z. (2020). Job satisfaction and its associated factors among general practitioners in China. *The Journal of the American Board of Family Medicine*, 33(3), 456-459.https://doi.org/10.3122/jabfm.2020.03.19012

Maina, A. et al. (2021). Adaptability and resilience in primary health care leadership. *Journal of Healthcare Management*, 66(4), 305-312.

Mayfield, D., & Peterson, D. R. (2004). Emotional intelligence in the workplace: Application of theory. Business Horizons, 47(1), 47-54.

Mumford, M. D., Zaccaro, S. J., Harding, F. D., Jacobs, T. O., & Fleishman, E. A. (2000). Leadership Skills for a Changing World: Solving Complex Social Problems. *Leadership Quarterly*, 11(1), 11-35.

O'Connell, M., Lown, B., & Bhat, R. (2018). The impact of leadership on patient outcomes in primary health care. *Journal of Healthcare Leadership*, 10, 43-51.

Paro, H., Braghiroli, K., & Peduzzi, M. (2017). The impact of leadership development programs on primary health care teams: A systematic review. *Journal of Health Management*, 15(3), 403-419.

Patel, V. et al. (2019). Empathy in primary health care leadership. Journal of General Internal Medicine, 34(10), 2087-2092.

Pellecchia, U. et al. (2020). Communication skills in primary health care leadership. *Patient Education and Counseling*, 103(10), 1975-1981.





Romi, M. V., Alsubki, N., Almadhi, H. M., & Propheto, A. (2022). The Linkage Between Leadership Styles, Employee Loyalty, and Turnover Intention in Healthcare Industry. *Frontiers in Psychology*, 13. doi:10.3389/fpsyq.2022.890366

Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. Imagination, Cognition and Personality, 9(3), 199-217. Shanafelt, T. D., Hasan, O., Dyrbye, L. N., Sloan, J., Satele, D., Sloan, J. R., & West, C. P. (2015). Changes in burnout and satisfaction with work-life balance in physicians and the general US working population between 2011 and 2014. Mayo Clinic Proceedings, 90(12), 1600-1613.

Short, L. et al. (2020). The role of medical leadership in primary health care innovation. *Medical Journal of Australia*, 212(10), 456-459.

Smith, A. (2017). The Inspirational Role of Leaders in Empowering Others. *Leadership Quarterly*, 25(3), 301-317. Van den Berg, S., Kok, G., & Schyns, B. (2019). The role of continuing professional development in developing medical leadership skills in primary health care. *Journal of Continuing Education in the Health Professions*, 39(3), 181-187.

Van der Velden, A. et al. (2018). Problem-solving and decision-making skills in primary health care leadership. *BMC Family Practice*, 19(1), 121.

Vitale, T. R. (2019). The impact of a mentorship program on leadership practices and job satisfaction. *Nursing Management*, 50(2), 12-14. https://doi.org/10.1097/01.NUMA.0000552745.94695.81

Weber, M., Henderson, A. M., & Parsons, T. (1947). The Theory of Social and Economic Organization. 57(5), 524-528.

Wensing, M., Grol, R., Eccles, M., & Davis, D. (2016). Leadership in improving primary care: A review. *BMJ Open*, 6(11), e012515.

Wilderom, C. P., Van den Berg, P. T., & Wiersma, U. J. (2012). A longitudinal study of the effects of charismatic leadership and organizational culture on objective and perceived corporate performance. *The leadership quarterly*, 23(5), 835-848.

Willson, K. A., FitzGerald, G. J., & Lim, D. (2021). Disaster Management in Rural and Remote Primary Health Care: A Scoping Review. *Prehospital and disaster medicine*, 36(3), 362–369.

World Health, O. (1978). Declaration of alma-ata. Retrieved from

Yukl, G. (2012). Leadership in Organizations. Pearson Education.

Zwarenstein, M., Barr, H., & Goldman, J. (2018). Interprofessional education: A key strategy for effective medical leadership in primary health care. *Journal of Interprofessional Care*, 32(6), 767-773.

