

REVITALIZING THE *GURUKUL* SYSTEM IN MEDICAL EDUCATION: A REVIEW

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ABSTRACT :

Background: The concept of modern mentoring and the conventional *Gurukul* system has played a vital role in education, particularly in ancient India. Both of these systems emphasize personal guidance, deep learning, and holistic development. The *Gurukul* system of education was an ancient Indian educational tradition where students (shishyas) would live with their teachers (gurus) in an ashram to learn various aspects of life, knowledge, and spirituality. Mentoring system was deeply embedded in the culture, and the mentorship aspect played a vital role in the shaping of individuals and communities. In modern times, there has been a growing recognition of the need to bring back elements of the *Gurukul* system, particularly in mentoring, to help individuals reach their full potential in education and career. The review aimed to assess the revitalization of the old *Gurukul* system as a modern mentoring system. **Methods:** Articles published in the past 10 years were chosen from various databases such as PubMed, Scopus, Web of Science, Google Scholar, etc., with keywords *Gurukul*, *Sishya*, mentoring, mentor, and mentee. The information obtained was compiled. **Discussion and conclusion:** The mentoring aspect of the *Gurukul* system, which involved close personal guidance, life lessons, and learning beyond books, holds significant value in today's world. Mentoring plays a critical role in personal and professional development, offering guidance, support, and encouragement. Without mentoring, individuals, particularly those in the early stages of their careers or lives, may face a range of challenges. This narrative review has been undertaken to bring back the importance of mentoring or *Gurukul* system in bringing out effective outcomes in modern medical education.

KEYWORDS: gurukul system, Shishya, guru, mentor, mentor system

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1. INTRODUCTION:

Education illuminates a person's mind and thinking. It provides a special status to people in the society that they dwell in. Education helps to view obstacles as challenges that can be overcome with minimum fear. The future of India is made in the classrooms. Teachers are the real pillars of shaping the younger generation in all the countries across the globe. The modern educational world is rapidly evolving, with many students facing complex challenges that go beyond traditional learning. Integrating mentorship inspired by the *Gurukul* system into today's educational and professional landscapes can have far-reaching positive impacts. Personalized guidance, moral grounding, life skills, and critical thinking are just some of the critical areas where mentorship can make a significant difference. The review aimed to assess the revitalization of the old *Gurukul* system as a modern mentoring system.

2. METHODS: Articles published in the past 10 years were chosen from various databases, such as PubMed, Scopus, Web of Science, Google Scholar, etc., with the keywords *Gurukul*, *Sishya*, mentoring, mentor, and mentee. The information obtained was compiled.

3. DISCUSSION:

History of *Gurukul* system:

The *Gurukul* System of education has its roots in Vedic civilization, which is estimated to date back to approximately 1500 BC to 500 BC, according to certain studies, while other research suggests it may be even older. [1] It served as the primary educational approach in *Bharatvarsha*, the historical Indian subcontinent that

included numerous kingdoms, as well as in *Āryāvarta*, which refers to the north Indian subcontinent located in the Indo-Gangetic plains at that time. [2] In this system, young boys were sent to reside with their guru in a communal environment, typically a hermitage or ashram situated away from urban distractions. The education received was not limited to basic literacy and numeracy; it also involved the spiritual, intellectual, emotional, and physical growth of the students. This individualized approach enabled gurus to tailor their instruction to each student's unique strengths, weaknesses, and natural tendencies. [3]

The term *Gurukul* stems from the Sanskrit words *Guru*, meaning teacher or master, and *Kula*, which translates to family or home. Prior to the British colonial rule, this served as the primary educational framework in South Asia. In this educational tradition, students resided in their Guru's home, similar to a modern hostel arrangement. They would study the Vedas, Shastras, and Kalas under the guidance of their Guru. The students were regarded as integral members of the Guru's family. This educational approach is known as the *Gurukul* system. The essence of *Gurukul* is, "learning in the presence of the Guru within his household." The fundamental aim of this educational system was "Simple Living and High Thinking". [4]

The *Gurukul* System of education in ancient India:

The *Gurukul* System, which is based in ancient Indian knowledge and education (often referred to as *Bhartiya Gyaan and Shiksha Pranali*), embodies a holistic and learner-focused methodology. Originating in Vedic times, this distinctive educational model involved

students (*shishyas*) living with their teacher (*guru*) and learning through hands-on experiences, discipline, and personalized guidance. The *Gurukul* System included not just academic education but also spiritual and vocational training, cultivating the mind, body, and spirit to develop well-rounded individuals. [5] In contrast to contemporary education systems and institutions implemented by Macaulay during the colonial period, the *Gurukul* system prioritized values, ethics, and community well-being, with students actively participating in both intellectual activities and daily duties, thus enhancing their life skills and promoting resilience. [6]

Gurus in the ancient period played a vital role in shaping and grooming the students. The students were left under the care of a guru where the students experienced every task of life by living and shadowing with them in the thick and thin of guru's life. [7] Thus, the student gains access to real world experiences by choice and not by chance. This played a huge role later in the student's life of handling professional and personal difficulties with the experience gained in the student life. [8] In ancient India '*Gurukul*', is the residence of Acharya and a repository for students, where the pupils (*Shishyas*) acquired their education of holistic development. [9]

The *gurukul* system laid emphasis on the quality time spent in nature. The *guru-shishya* relationship was considered as sacrosanct, no fee was charged for education. However, as a token of love and respect for the education imparted, the guru was presented with - Guru Dakshina'- the teacher's fee. [3] Primary motive of

the *gurukul* system was to provide the student fraternity with humanism, affection and discipline. [10] The close proximity of the *guru* and *shishya* strengthened the bond between them thus helping the pupils reach great heights and influencing them to work at their maximum freewill and capacity. [10] Rich and historic culture and traditions of India are passed down from generation to generation through this educational system; without it, these aspects of the country's history would have been lost over time. Despite its age and archaic nature, India's *Gurukul* educational system is distinctive in its own right. [11] Parents without any doubt accepted what the guru taught to the students. Like students, the parents also had great regard and respect towards the guru. [3] The various characteristics of the *gurukul* system is shown in **Figure 1**.



Fig.1: The various characteristics of the *gurukul* system
Perspective of the *Gurukul* system in the modern India:

Over time, the *Gurukul* System slowly vanished. In the past, our country was invaded and ruled by foreigners in succession. Each time, when the foreigners intruded, they brought in a different cultures and practices. The native Indians had to fight out for their living and safety. This lasted for few decades, which left lasting distortion in the entire life of an Indian. During such struggles, the *gurukul* system lost its charm and importance. We were forced to follow the system, which existed during those time periods. [10] Having been privy to such a high

standard of education, India has consistently made us proud of its standard of education. In the early education as in schools, lot of emphasis has been laid upon the core subjects like science, technology, engineering and mathematics. Since more time is allotted for learning core subjects which could make good living, there is very scarce time for learning life skills.

Parents of changing times have become overly concerned about their children's ranking in the core subjects for effective survival rather than the child's holistic development. In the field of medicine this system seemed to play a pivotal role. The healer trained their *shishyas* through the practical knowledge, which made them critically think and apply their gained experience. Soft skill development was given the top priority. Self - discipline was fostered in this type of education. During the educational process, the students also learnt the skill of time management. In addition, it fostered a sense of mental peace that aided in all relationships developed by the students.

The Modern Educational system:

The contemporary education emphasises bookish knowledge and rote memory. This involves learning in a large group with minimal interaction between the teacher and the taught as well as among the taught. The advent of technology has eased the teaching and learning experience and made it joyful. However, it has paved way for several disadvantages or limitations. In addition, the emergence of the disease pandemics has completely changed the atmosphere of learning, resorting more towards e-learning. There are various

advantages through these tools such as abundance in availability of learning material, pictures, audios and videos. These are very appealing and available in various standards from simple means of understanding to complex presentations. [12]

Even though the teachers try their best to guide the students to understand and search for good and reliable sources, the time spent by the student with the teacher is very limited. Since the teacher's contact time is very minimal, the teacher is unaware of the activities of the students. Since the availability of e-learning resources at any given time is at their fingertips, they tend to get develop the habit of procrastination. [13] The concept of e-learning has minimized or even nullified the bond between the teacher and students; and also destabilized the interpersonal relationships and growth of a society. [14] As a result of modern education, one can choose how to learn but the joy of holistic development through the live skilful teachings of the teacher has become a major concern.

Future of *Gurukul* system:

The *Gurukul* system, which originated in ancient India, prioritized individualized learning and comprehensive education through intimate relationships between students and teachers. The adoption of standardized curricula, which are tech-savvy and exam-obsessed, is emphasized in modern education. Larger class sizes and rote learning are two examples of less individualized teaching strategies used nowadays. The *Gurukul* system's individualized instruction and close teacher-student connections are its strong points, but its restricted scope and resources for kids are its

weaknesses. On the other hand, while a targeted curriculum is beneficial in contemporary education, it has a disadvantage in that it lacks the human element.

With their modern amenities and fusion of old knowledge with modern education, *gurukuls*—traditional Indian educational institutions—are attracting attention. For instance, contemporary *Gurukul* system that supports sustainability and holistic education draw inspiration from both traditional teachings and modern teaching techniques. The *Gurukul's* teachings on community service and mentoring could be incorporated into the current educational system to enhance and promote greater balance in the quest of moral and intellectual growth.

The *Gurukul* system is crucial in shaping new learning models because of its emphasis on individualized, comprehensive education. The government and commercial sectors are investigating methods to revitalize and promote *Gurukuls* while maintaining their cultural aspects and adding modern necessities. The *Gurukul's* depth and individualised mentoring are mixed with contemporary technology and evolving curricula in this type of hybrid education paradigm. As a result, this combination will offer a well-rounded approach to education, preserving the depth of conventional learning while giving the pupils essential, applicable abilities. [4]

The renamed Mentoring system in modern education:

Personal learning is discovered to have antecedents in the existence of a mentor and mentoring roles. It is found that personal learning has an impact on job happiness, role ambiguity, turnover intentions, and

actual turnover. [15] A more seasoned person (the mentor) and a less seasoned person (the mentee) form a relationship through mentoring. The mentor offers the mentee, a direction, counsel, and encouragement, frequently in a personal or professional setting. While mentoring has less of an impact on career and health-related outcomes, it may have the greatest impact on attitudes, interpersonal relationships, and motivation/involvement. Mentoring may be the most effective strategy in the academic sphere for raising academic achievement and attitudes while lowering the withdrawal symptoms. Mentoring may improve helping behaviour, interpersonal relationships, situational happiness and attachment, job performance, and the prevention of withdrawal behaviour in the workplace. [16] The various elements of the mentoring system are given in **Figure 2**.

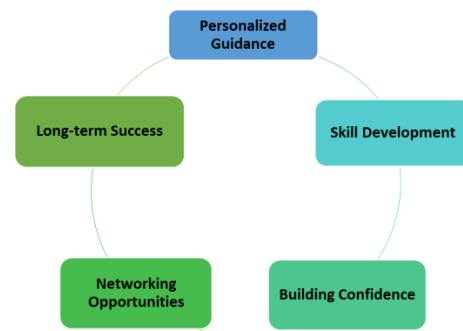


Fig. 2: Various elements of the mentoring system
Need for integrating *Gurukul-like System* with today's mentoring system:

With the fast pace of modern life and the complexity of personal and professional challenges, mentoring provides much-needed direction and support. It helps individuals navigate challenges, make informed decisions, and learn from others' experiences. [3]

Traditional education systems often focus on standard curricula, but mentoring provides the flexibility to address specific needs, interests, and potential. It allows individuals to acquire knowledge at their own pace according to their personal interests. [17] Both mentoring and the *gurukul* system promote critical thinking, encouraging individuals to not just absorb information but to question and analyze it deeply. [18] This kind of learning is highly valuable in today's world where there is information overload and the ability to discern truth from falsehood is required.

The mental health crisis among students is growing in many parts of the world. Mentoring can provide emotional support, guidance in managing stress, and help individuals develop emotional intelligence. [19] The

gurukul system's focus on holistic well-being, including mental and emotional health, is especially relevant. Today's society, which often prioritizes competition over collaboration, benefits from the values taught in the *gurukul* system. Principles of discipline, humility, and responsibility can help individuals build resilience and become more grounded, leading to better social harmony. In a fast-changing world, mentoring is crucial for career development. [20] A mentor can offer insights into industry trends, job prospects, and strategies for career advancement that traditional education might not provide. [21] **Table 1** shows the comparison of various characteristics of *gurukul* and mentoring systems.

Table 1: Comparison of the gurukul system vs modern mentoring system:

<i>Gurukul</i> System	Mentoring system
Relationship between guru and shishya is not just academic, also for developing student's physical, emotional, and spiritual aspects, leading to holistic growth.	Mentoring plays a role in guiding students to navigate complexities of life, balance their academic pursuits with personal growth, and discover their inner potential [22]
The system was built on a one-on-one teaching approach, which ensured that the students received personalized attention.	Mentors understand unique learning needs of each individual, offering tailored guidance and support, and identifying opportunities for growth [23]
Moral and cultural values are an integral part of the curriculum.	Mentoring may instil moral and cultural values, grounding students in a sense of purpose, ethics, and responsibility. Guide individuals in handling ethical dilemmas, career decisions, and personal growth [24]
Involved in teaching life skills that were necessary for survival and success.	Mentors help students navigate career choices, decision-making processes, and personal development, providing real-world insights and strategies [25]
Students are encouraged to think critically and engage in deep discussions, often challenging existing norms and learning through dialogues.	Modern mentoring helps foster life skills by encouraging mentees to think independently, ask questions, and approach problems with a creative mindset [26]

Strong, trust-based relationships between gurus and shishyas helped foster a deep sense of commitment, loyalty, and personal responsibility.	Emphasize close, long-term relationships are proven to help mentees. This makes mentees feel supported and motivated in both their academic and personal lives [27]
Students learned leadership qualities by being guided by guru and interacting with their peers.	Mentorship fosters leadership by offering opportunities for mentees to take on leadership roles, make decisions, and learn from the experiences of their mentors [28]

Blend of both the systems will make the bond stronger:

For achieving the best, blend of both the systems is required right from the school. The core subjects are taught through research, self-study, group discussions and other means which could enhance only the knowledge and skills of the *shishyas*. [29] This system trained pupils for services for the country and self-defense like the art of archery etc. Therefore, the education imparted was comprehensive and cohesive. The curriculum has to be changed accordingly, which could impart soft skills effectively [30], which could enhance their future career life. [31, 32]

A well-structured mentorship program, with virtual component of interacting with mentors will bring fruitful outcomes. [33, 34] This is possible by effective implementation of vertical mentorship, from the first year of entry into the college till the student passes out in the final year examination. [35] By this, the mentor will be able to identify even a small deviation of the mentee from the normal and take appropriate action at the right time [36]. In addition to mentor mentee system, introduction of yoga and the extra-curricular activities, outdoor sports activities and regular counseling sessions could help. This can be implemented with the collaboration of teachers,

students and parents. [37] Thus, strengthening of weaker non-covalent bond between the teacher and the taught, to a stronger covalent bond is possible through modern mentoring (renewed *gurukul*) system. [38] This could enhance in developing a mentally and physically strong young generation Indians. Therefore, mentoring is a crucial tool for fostering growth, confidence, and success in various aspects of life.

4. CONCLUSION:

The ancient *Gurukul* system offered personalized, value-based, and holistic education, guiding individuals not just in their careers but also in their personal and spiritual lives. By integrating this system with modern educational practices, it is possible to create a well-rounded, thoughtful, and resilient generation. The new education policy of 2020 has taken an initiative to enhance education in India by introducing vocational training, opportunity to choose subjects, initiation of digital education and student exchange programs. All these efforts may reduce the mental pressure of the child and enhance the self-esteem among the students. Thus, by careful thought and actions, the old *Gurukul* system may be incorporated to the present educational system for the physical and mental wellbeing of the students.

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References:

1. Rahman, Parvejur and Mehnaz, Sagufta, International Journal for Multidisciplinary Research (IJFMR) (November 01, 2024). Available at SSRN: <https://ssrn.com/abstract=5054029> or <http://dx.doi.org/10.2139/ssrn.5054029>
2. Scharfe, Hartmut (1989). Handbuch der Orientalistik: Indien. BRILL. p. 12. [ISBN 9004090606](https://doi.org/10.1017/9789004090606).
3. Adhikari TN. A Brief Introduction to Gurukul Education. Pragya Darshan. 2023 Nov 2;5(2):60-2.
4. Bhatia K. Gurukul System of Learning-Past And Future of Education System. Archives. 2025 Feb 8
5. Joshi A, Gupta RK. Elementary education in Bharat (that is India): insights from a postcolonial ethnographic study of a Gurukul. International Journal of Indian Culture and Business

Management.

2017;15(1):100-20.

doi:10.1504/IJICBM.2017.085390

6. Kambala YJ, Ramakrishna M. The Impact of British Colonial Rule on the Indian Education System: Collapse and Deterioration. Int J. Curr Inn Adv Res, Vol: 6, Issue: 3, 2023; 7-11.
7. Narayan RV, Katoch S, Sarkar R. The Key Areas and Unmet Need of Mentorship Programs in Indian Dermatology: A Survey Based Analysis. Indian Dermatol Online J. 2023 Nov 24;15(1):64-68. https://doi.org/10.4103/idoj.idoj_245_23
8. Cheng YC, Tsui KT, Chow KW, Mok MM, editors. Subject teaching and teacher education in the new century: Research and innovation. Springer Science & Business Media; 2002 Mar 31. ISBN: 9629490609, 9789629490607
9. Nachimuthu P. [Mentors in Indian Mythology. Management and Labour Studies](https://doi.org/10.1177/0258042X0603100203), XLRI Jamshedpur, School of Business Management & Human Resources. 2006;31(2):137-151. <https://doi.org/10.1177/0258042X0603100203>
10. Shanwal VK. Development of the Gurukula Education System in India. Journal of Education and Teacher Training Innovation. 2023;1(2):60-67. <https://doi.org/10.61227/jetti.v1i2.65>
11. Selvamani P. Gurukul System- An Ancient Educational System of India. Internat. J. Appl. Soc. Sci. 2019; 6(6):1620-1622.
12. Kumar P, Saxena C, Baber H. Learner-content interaction in e-learning- the moderating role of perceived harm of COVID-19 in assessing the satisfaction of learners. Smart Learn. Environ. 2021;(8):5. <https://doi.org/10.1186/s40561-021-00149-8>
13. Maatuk AM, Elberkawi EK, Aljawarneh S, Rashaideh H, Alharbi H. The COVID-19 pandemic and E-learning: challenges and opportunities from the perspective of students and instructors. J Comput High Educ. 2022;34(1):21-38. <https://doi.org/10.1007/s12528-021-09274-2>
14. Azmat M, Ahmad A. Lack of social interaction in online classes during COVID-19. Journal of Materials and Environmental Science. 2022;13(2):185-196.
15. Lankau, MJ, Scandura TA. An investigation of personal learning in mentoring relationships: Content, antecedents, and consequences. The Academy of Management Journal. 2002;45(4):779-790. <https://doi.org/10.2307/3069311>

16. Eby LT, Allen TD, Evans SC, Ng T, Dubois D. Does Mentoring Matter? A Multidisciplinary Meta-Analysis Comparing Mentored and Non-Mentored Individuals. *J Vocat Behav*. 2008 Apr;72(2):254-267. <https://doi.org/10.1016/j.jvb.2007.04.005>
17. Grimus M. Emerging technologies: Impacting learning, pedagogy and curriculum development. *Emerging technologies and pedagogies in the curriculum*. 2020:127-51. https://doi.org/10.1007/978-981-15-0618-5_8
18. Koul, Sanjay, The Gurukul System Evolution, Impact, and Resurgence of India's Ancient Holistic Education Model (August 04, 2024). Available at SSRN: <https://ssrn.com/abstract=5165891> or <http://dx.doi.org/10.2139/ssrn.5165891>
19. Wiedermann CJ, Barbieri V, Plagg B, Marino P, Piccoliori G, Engl A. Fortifying the Foundations: A Comprehensive Approach to Enhancing Mental Health Support in Educational Policies Amidst Crises. *Healthcare (Basel)*. 2023 May 14;11(10):1423. <https://doi.org/10.3390/healthcare11101423>
20. Martins T, Faciola A. Shaping future professionals: the role of mentoring in graduate education and career development. *Journal of Dairy Science*. 2025 Mar 3. <https://doi.org/10.3168/jds.2024-26178>
21. Nuis W, Segers M, Beusaert S. Conceptualizing mentoring in higher education: A systematic literature review. *Educational Research Review*. 2023 Nov 1;41:100565. <https://doi.org/10.1016/j.edurev.2023.100565>
22. Allen TD, Eby LT. The Blackwell handbook of mentoring: A multiple perspectives approach. Blackwell publishing. 2007 Ed. <https://doi.org/10.1111/b.9781405133739.2007.x>
23. Makhambetova A, Zhiyenbayeva N, Ergesheva E. Personalized learning strategy as a tool to improve academic performance and motivation of students. *International Journal of Web-Based Learning and Teaching Technologies (IJWLTT)*. 2021 Nov 1;16(6):1-7. <https://doi.org/10.4018/IJWLTT.286743>
24. bt Sakiman J, Yasin M. Importance of Ethics of Education Management. *International Journal of Academic Research in Business and Social Sciences*. 2023;13(12):4940-4951. <https://doi.org/10.6007/IJARBS/v13-i12/20343>
25. Kram KE. Phases of the mentor relationship. *Academy of Management Journal (pre-1986)*. 1983 Dec;26(4):608-625. <https://doi.org/10.2307/2392687>
26. Topping KJ, Maloney S, editors. The Routledge Falmer reader in inclusive education. Psychology Press; 2005. ISBN: 0415336643, 9780415336642
27. Allen TD, Eby LT, Poteet ML, Lentz E, Lima L. Career Benefits Associated With Mentoring for Proteges: A Meta-Analysis. *Journal of Applied Psychology*. 2004; 89(1): 127-136. <https://doi.org/10.1037/0021-9010.89.1.127>
28. Lee J, Sunerman H, Hastings L. The influence of being a mentor on leadership development: Recommendations for curricular and co-curricular experiences. *Journal of Leadership Education*. 2020 Jul 15;19(3):44-60. <https://doi.org/10.12806/V19/I3/R4>
29. Kukreja S, Arora R, Mahajan R, Singh T. Mentorship Program: Modern Outlook of Traditional Knowledge. *Int J Appl Basic Med Res*. 2020 Apr-Jun;10(2):65-67. https://doi.org/10.4103/ijabmr.IJABMR_109_20
30. Narang I, Das A, Sarkar R. Mentorship in Dermatology-A Beginner's Guide. *Indian Dermatol Online J*. 2021 Nov 22; 12(6): 907-911. https://doi.org/10.4103/idoj.idoj_293_21
31. Donovan JC. A survey of dermatology residency program directors' views on mentorship. *Dermatol Online J*. 2009 Sep 15;15(9):1. PMID: 19930988.
32. Yeh C, Desai AD, Wilson BN, Elkattawy O, Shah R, Behbahani S, Wassef C, Lipner SR. Cross-sectional analysis of scholarly work and mentor relationships in matched dermatology residency applicants. *J Am Acad Dermatol*. 2022 Jun;86(6):1437-1439. <https://doi.org/10.1016/j.jaad.2021.06.861>
33. Noormahomed E, Williams P, Lescano AG, Raj T, Bukusi EA, Schooley RT, Cohen CR. The Evolution of Mentorship Capacity Development in Low- and Middle-Income Countries: Case Studies from Peru, Kenya, India, and Mozambique. *Am J Trop Med Hyg*. 2019 Jan;100(1_Suppl):29-35. <https://doi.org/10.4269/ajtmh.18-0560>
34. Fernandez JM, Behbahani S, Marsch AF. A guide for medical students and trainees to find virtual mentorship in the COVID era and beyond. *J Am Acad Dermatol*. 2021 May;84(5):e245-e248. <https://doi.org/10.1016/j.jaad.2020.12.075>

35. Haglund L. Mentoring as a tool for staff development. Health Info Libr J. 2004 Mar;21(1):61-5.
<https://doi.org/10.1111/j.1471-1842.2004.00470.x>.
36. Fountain J, Newcomer KE. Developing and sustaining effective faculty mentoring programs. Journal of Public Affairs Education. 2016 Dec 1;22(4):483-506.
<https://doi.org/10.1080/15236803.2016.12002262>
37. Tobin MJ. Mentoring: seven roles and some specifics. Am J Respir Crit Care Med. 2004 Jul 15;170(2):114-7.
<https://doi.org/10.1164/rccm.2405004>.
38. Lafleur AK, White BJ. Appreciating mentorship: the benefits of being a mentor. Prof Case Manag. 2010;15(6):305-311.
<https://doi.org/10.1097/NCM.0b013e3181eae464>