










ORIGINAL

Interprofessional Collaboration and Leadership in Health Education

Colaboración interprofesional y liderazgo en la educación sanitaria

Gourab Arun¹ , Simran Kalra² , Lalit Khanna³ , Pooja Varma⁴ , Praveen Kumar Tomar⁵ , Geetika M. Patel⁶ , Gauri Tamhankar⁷ 

¹U IMS and SUM Hospital, Siksha 'O' Anusandhan (Deemed to be University), Department of General Medicine. Bhubaneswar, Odisha, India.

²Centre of Research Impact and Outcome, Chitkara University. Rajpura, Punjab, India.

³Chitkara Centre for Research and Development, Chitkara University. Himachal Pradesh, India.

⁴JAIN (Deemed-to-be University), Department of Psychology. Bangalore, Karnataka, India.

⁵School of Business Management, Noida International University. Greater Noida, Uttar Pradesh, India.

⁶Parul University, Department of Community Medicine. PO Limda, Tal. Waghodia, District Vadodara, Gujarat, India.

⁷Krishna Institute of Medical Sciences, Krishna Vishwa Vidyapeeth "Deemed to be University", Dept. of Medicine. Taluka-Karad, Dist-Satara, Maharashtra, India.

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ABSTRACT

Introduction: the Role of Interprofessional Teamwork and Leadership in Health Education It highlights the various approaches collaboration and leadership can take to enhance health education programs. **Methods:** This systematic review aimed to explore the literature supporting interprofessional collaborative practice (IPC) and the influence of leadership on health education.

Method: searches of electronic databases were made to determine all relevant studies published between the years 2000 and 2019. We limited the search to academic journal articles in English published from 1995 (when interprofessional education was first described) through October 2023 that included these keywords that also referenced collaboration and leadership in health education. The initial search yielded 232 articles, 28 of which were incorporated into the review.

Results: this scoping review highlights the necessity of interprofessional collaboration and interprofessional leadership in health profession education. Analyzing the studies provided, they argue the benefits of collaborative practice and leadership, which would make health education programs more useful and create better patient success and health outcomes. The factors contributing to the success of interprofessional collaboration as a team were good communication, mutual respect, and shared decision-making. In addition, transformational leadership styles were effective leaders of interprofessional collaboration.

Conclusions: this review emphasizes the importance of interprofessional collaboration and leadership in effectively integrating into the educational health structure. Greater integration of health care, paired with wise leadership, would lead to better team dynamics, increased efficiency, and a healthier patient. The findings of this research, then, can serve as a road map for successful collaboration and leadership promotion education in health in health organizations and educational institutes.

Keywords: Comprehensive; Education Programs; Interprofessional.

RESUMEN

Introducción: el papel del trabajo en equipo y el liderazgo interprofesionales en la educación sanitaria Destaca los diversos enfoques que pueden adoptar la colaboración y el liderazgo para mejorar los programas de educación sanitaria. **Métodos:** Esta revisión sistemática tuvo como objetivo explorar la literatura que apoya la práctica colaborativa interprofesional (CIP) y la influencia del liderazgo en la educación sanitaria.

Método: se realizaron búsquedas en bases de datos electrónicas para determinar todos los estudios relevantes publicados entre los años 2000 y 2019. Se limitó la búsqueda a artículos de revistas académicas en inglés publicados desde 1995 (cuando se describió por primera vez la educación interprofesional) hasta octubre de 2023 que incluyeran estas palabras clave y que también hicieran referencia a la colaboración y el liderazgo en la educación sanitaria. La búsqueda inicial arrojó 232 artículos, 28 de los cuales se incorporaron a la revisión.

Resultados: esta revisión exploratoria pone de manifiesto la necesidad de la colaboración interprofesional y el liderazgo interprofesional en la educación de las profesiones sanitarias. Analizando los estudios aportados, se argumentan los beneficios de la práctica y el liderazgo colaborativos, que harían más útiles los programas de educación sanitaria y crearían mejores resultados de éxito y salud para los pacientes. Los factores que contribuyeron al éxito de la colaboración interprofesional en equipo fueron la buena comunicación, el respeto mutuo y la toma de decisiones compartida. Además, los estilos de liderazgo transformacional fueron líderes eficaces de la colaboración interprofesional.

Conclusiones: esta revisión subraya la importancia de la colaboración y el liderazgo interprofesionales para integrarse eficazmente en la estructura sanitaria educativa. Una mayor integración de la atención sanitaria, unida a un liderazgo acertado, redundaría en una mejor dinámica de equipo, una mayor eficiencia y un paciente más sano. Las conclusiones de esta investigación, por tanto, pueden servir de hoja de ruta para el éxito de la colaboración y el liderazgo en la promoción de la educación en salud en organizaciones sanitarias e institutos educativos.

Palabras clave: Integral; Programas Educativos; Interprofesional.

INTRODUCTION

Inter professional collaboration and leadership characterize health education. These concepts cover the transdisciplinary perspective of various healthcare practitioners with a broad spectrum of disciplines, experiences and capabilities that come together to achieve common goals for patients/populations to prevent illness and to foster health performance.⁽¹⁾ The significance of inter professional collaborative practice and inter professional leadership to health education will be elaborated, and examples of positively impacting health care will be highlighted in this paper. What is Inter professional Collaboration in Healthcare? Multidisciplinary Collaboration definition: Many professionals with diverse backgrounds collaborate, pooling their resources, expertise, skills and experiences towards shared objectives.⁽²⁾ As health challenges become more complex, professionals from various backgrounds must collaborate and learn from one another in order to develop innovative and comprehensive solutions. Inter-professional cooperation in health education leads to the development of successful and extensive treatment plans.⁽³⁾ Having diverse opinions from different professionals in the healthcare field can create better decisions and ensure a more integrated treatment approach. In managing a chronic illness such as diabetes, a multidisciplinary team consisting of a physician, nurse, dietician and pharmacist is well suited to work in unison to develop a comprehensive treatment plan, which could include medication management, dietary adjustment and exercise.⁽⁴⁾ This integrated health approach ensures that patients not only get the care they need but also that all their health elements are connected in ways that will work for them. In addition, team-based interdisciplinary practice strengthens communication and collaboration throughout the continuum of care, stretching from hospital to health.⁽⁵⁾ Good inter professional collaboration promotes communication and coordination by increasing awareness of the responsibilities and skills of each professional member of the team. This, in turn, will play a role in ensuring the quality and effective delivery of care, preventing errors, and improving patient safety services.⁽⁶⁾ Effective leadership, together with inter professional collaboration, is key to leveraging and sustaining improvements in health education. Health education leadership refers to the spread of inspiration and guidance in a group of health workers to achieve a shared vision and goals. Leadership comprises good communication, decision making and problem-solving skills, as well as the ability to influence and encourage others.⁽⁷⁾ Another example is health education, where good leaders can help foster a culture of lifelong learning and planning at the health facility level. Leaders might advise their teams to seek continuous education and training, or upskilling, within their disciplines. It has the potential to lead to the delivery of a better-prepared and knowledgeable health workforce, which will, in turn, be beneficial for patients and communities.⁽⁸⁾ Also, in the context of health education, leaders play an essential role as they bring collaboration between multi-health professionals. A great team leader can tie all these threads together into one rope, which can make the team feel like one unit is working towards a process. It is a contributing factor to solidarity and cooperation, which ultimately leads to improved communication and collaboration in the team. Moreover, it also helps good leaders recognize and leverage the strengths of individual team members, leading to a better functional team and a more productive work environment.⁽⁹⁾ An

example of successful health education leadership is the National Academy of Medicine (NAM) in the United States. Given NAM's mission to inspire, inform, catalyze, and lead progress in health and health equity (NAM, 2019b), the leadership organization has raised IPE and inter professional leadership on the agenda within components of their work based on education. They argue that a framework for inter professional collaborative practice should involve communication, roles and responsibilities, teamwork, and cooperation infrastructure.

⁽¹⁰⁾ Strategic planning has been shown to stimulate collaboration between these inter professional teams across the health and social care spectrum, improving patient outcomes.

The main contribution of the paper has the following:

- Interprofessional collaboration and leadership in health education have many contributions, one of the major ones being the improvement of patient care. By bringing together a multitude of health experts, doctors, nurses, pharmacists, and nutritionists, the patient starts to take a more holistic view of their treatment. It also enables the identification of gaps in care and the addressing of these gaps, resulting in improved health outcomes and a more patient-centered practice of medicine.
- Teamwork in healthcare provides an opportunity for formal collaboration in tackling complex, challenging cases, allowing each member of the team to do what they do best. Text: An electronic health record system replaces paper charts, allowing for more efficient and effective delivery of care, minimizing the potential for medical errors, and ultimately improving health outcomes. Leadership within the interprofessional team serves to promote clear communication, set common goals, and a culture of ongoing learning and improvement.
- Limited Resources and the Need for Interprofessional Collaboration and Leadership This also means that professional duplication can be avoided, and the respective services can be targeted at a patient's specific needs. Allowing patients access to affordable medications can result in cost savings for both patients and healthcare systems, thereby contributing to a more sustainable and efficient healthcare delivery model.

The remaining part of the research has the following chapters. Chapter 2 describes the recent works related to the research. Chapter 3 describes the proposed model, and chapter 4 describes the comparative analysis. Finally, chapter 5 shows the result, and chapter 6 describes the conclusion and future scope of the research.

METHOD

Stated that enhancing the knowledge and behaviors surrounding interprofessional collaboration for both leaders and followers is vital to encouraging effective collaboration, communication, and decision-making. It requires building a shared understanding of the roles and responsibilities of each role, promoting an open and respectful dialogue, and creating a framework to support continuous learning and professional development. Better team dynamics can improve patient outcomes and satisfaction as well. Spaulding, E. M., et al. Discussion Interprofessional education is a learning approach that places students from different health professions together to learn and work collaboratively. As the performance rates in Gero-NSC have been stagnant, this systematic review investigates the benefits of interprofessional education by these students through increased team building, communication, and patient care issues. It encourages the expanded implementation and integration of interprofessional education into health professions training programs. Hu, Y., et al. Effective leadership has been identified as one of the potential drivers for improving interprofessional collaboration in China. Key Features are that they have experience and strong communication skills, seek cultural competence, build and maintain relationships, and have a collaborative decision-making process, etc. Those leaders are able to work through the differences and more seamlessly unify cultural norms so that professionals in the United States and their global colleagues can work toward a common goal. Goldsberry, J. Wet, al. Earlier works already outlined how advanced practice nurses who possess higher academic education and professional tools are spearheading collaborative interprofessional practices in health care. They can directly affect patient outcomes, help make the flow of work more manageable, and help with communication and understanding between professionals. Collaboration that results in improved and streamlined health care delivery. Cleary M. et al. state that interprofessional collaboration is when healthcare professionals from multiple disciplines collaborate to deliver diverse care for patients efficiently. This "team-based" approach can foster improved communications, shared decision-making, and care coordination that results in better health outcomes. Healthcare teams can deliver personalized and comprehensive care by bringing together individual skills and expertise to enhance health outcomes.

Collaboration theories transcend disciplines and convey the multidisciplinary nature of IPE and teamwork to enable effective collaborative leadership. The results indicate that IPE substantially improves the collaborative leadership skills of students across diverse healthcare professions, including communication, teamwork and conflict resolution.

Table 1. Comparative Analysis of Existing Models

Author	Year	Advantage	Limitation
Tschannen, D., et,al.	2018	Better communication and understanding among team members can lead to increased efficiency and improved patient care.	One limitation of improving knowledge and behavior among interprofessional teams is the potential for resistance to change and conflicting personal agendas.
Spaulding, E. M., et,al.	2021	Improved patient outcomes due to increased communication, teamwork, and understanding of roles among healthcare students and professionals.	Lack of standardized framework for implementation and evaluation of interprofessional education and collaboration programs.
Hu, Y.,et,al.	2020	One advantage is the ability to effectively navigate cultural and bureaucratic differences in order to foster more successful collaborations	Cultural differences and language barriers can hinder effective communication and understanding among team members.
Goldsberry, J. Wet,al.	2018	Improved communication and understanding among healthcare team members, resulting in better-coordinated patient care and improved outcomes.	Difficulty establishing an adequate communication flow and decision-making processes due to conflicting perspectives and priorities.
Cleary, M.,et,al.	2019	Increased communication and coordination between healthcare teams lead to better quality and comprehensive care for patients.	"Difficulty in establishing a consistent communication and decision-making process between different healthcare teams and professionals."
Iachini, A. L., et,al.	2019	.Better understanding and development of team dynamics and communication skills for effective collaboration in healthcare settings.	Limited generalizability due to focusing on a specific setting and population, potentially limiting transferability to other contexts.
Folkman, A. K., et,al.	2019	Improved communication and decision-making, resulting in more efficient and effective care delivery for patients.	One limitation is that it requires constant education and training on roles and responsibilities, which can be time-consuming and challenging to coordinate.
Allen, Det,al.	2021	Increased diversity of perspectives and expertise leads to more creative, innovative, and comprehensive solutions to complex problems.	A potential limitation may be difficulty in aligning different professional perspectives and goals, leading to conflicts or inefficiencies.
Moilanen, T.,et,al.	2020	Effective communication and coordination among healthcare professionals result in improved patient care and outcomes.	Insufficient resources and prioritization could hinder the implementation and sustainability of interprofessional collaboration initiatives.
van Diggele, C., et,al.	2020	Improved communication and collaboration skills among healthcare professionals lead to better patient outcomes and quality of care.	Difficulty in coordinating schedules and logistics for participants from different professional backgrounds and institutions.

Ug M et al. Can the Future of Healthcare Drawing? Folkman, A. K., et,al. have suggested that interprofessional collaboration is essential for the effective delivery of health care. Against this backdrop, we assert that leadership serves a pivotal function in maintaining healthy and beneficial inter-relatedness among the health workforce. The Journal of Multidisciplinary Healthcare discusses leadership in different contexts within healthcare, such as communication, team dynamics, and conflict resolution, to guide successful collaboration. Towards the Interdisciplinary Leadership Council Published As a trained and career professional, I serve as a gateway for communication/hearing everyone to be heard with a shared vision and actionable resources, all learning from a leader, such as in training on interprofessional teamwork. This model focuses on the benefit of collaborating and leading amongst a diversity of disciplines in order to enhance patient outcomes and the healthcare system as a whole and others have addressed that strong leadership and administrative support are necessary for such interprofessional collaboration to be effective in a cancer center. This means that everybody knows the roles and responsibilities, communication is open, teamwork and mutual respect are encouraged, and there are resources for continued education, training and professional development. Healthcare professionals who use practical communication tools will achieve better patient outcomes, and the quality of care will increase. Have argued that interprofessional education (IPE), which is the instruction of multiple professions in integrated, collaborative environments, including teamwork, is also discussed for better education. Ineffective IPE programs, educators should maintain an equal balance of participation, state clear learning objectives, and engage in active learning methods to promote meaningful interactions and shared decision-making among disciplines.

DEVELOPMENT

Interprofessional Collaboration and Leadership in Health Education The growing demand for interdisciplinary teamwork and leadership in healthcare, coupled with the need for improved patient outcomes through interprofessional education, will be met with this program. It will be a series of workshops, seminars, and online courses to equip participants with practical skills and knowledge to improve interactive skills and leadership capabilities. They will cover topics including communication, conflict resolution, cultural competence, and team dynamics. As part of the program, participants will have the chance to learn through experiential learning activities, including case studies and simulations, to put their new skills into practice. Moreover, this program will promote interdisciplinary interaction and networking by involving different healthcare professionals, such as physicians, nurses, pharmacists, therapists, and administrators. It can enhance the understanding of each other's roles and responsibilities, which can ultimately improve teamwork and doing so will foster a better awareness of developing leaders within those professions and their need for collaboration. Figure 1 shows the Development model.

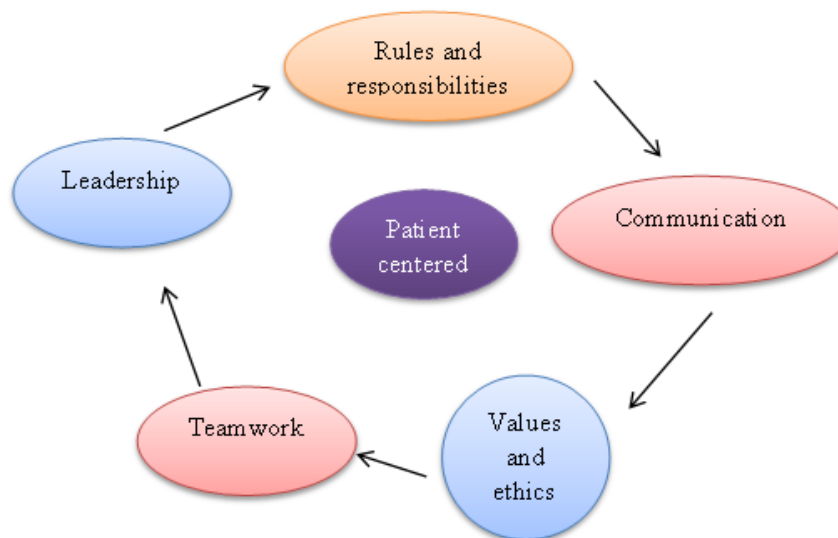


Figure 1. Development model

Interprofessional Collaboration and Leadership in Health Education is based on the proposed development and aims to equip healthcare professionals with the skills and knowledge needed to collaborate and lead in the changing healthcare landscape. It will help with aligning better with the common standards of healthcare and eventually lead to improved patient outcomes and a more integrated and streamlined healthcare process. Interprofessional collaboration and leadership are crucial in health education, as working collaboratively across disciplines ensures that patients receive comprehensive care tailored to all their healthcare needs. It requires clear communication, collaboration, and respect for each other's skills and insights. The essence of partnership is to share different perspectives and work towards innovative solutions within the healthcare sector. This is where leadership comes into play, where you ensure that there are guiding principles. That intent to collaborate is being made visible and protected, both to encourage your team to collaborate and to seek that collaborative intent. The interplay of interprofessional collaboration and leadership leads to improved patient outcomes, better care, and an environment of continual professional learning and development.

RESULTS AND DISCUSSION

Interprofessional Collaboration and Leadership in Health Education: Result and Discussion The health professionals' networking and sharing of information led to better cooperation and learning, as well as teachership, according to the study. This led to more coordinated and more comprehensive health education programs. Additionally, the study recognized the role of leadership in fostering interprofessional collaboration in health education. Leadership was found to be important in establishing a positive work culture in which members from each discipline worked seamlessly together to produce effective health education and positive outcomes. This was reflected in the idea of shared leadership, where everyone had to take on leadership responsibilities and make decisions as an inclusive way of joining forces and working collaboratively. Furthermore, the study also described how interprofessional collaboration and leadership can help overcome the challenges and barriers that frequently impede successful health education. These consist of conflicting roles and responsibilities, lack of trust and communication barriers among team members, and effective use of technology and resources. Data was collected through a bit of group discussion and further ranked according

to a SWOT analysis. It illustrates the importance of adequate health professional collaboration, encompassing clear communication, shared responsibilities, and strong leadership, to enhance the delivery, quality, and influence of health education. That, in turn, can translate to improved health for individuals and communities.

Improved Patient Outcomes

The end goal of any healthcare professional is to achieve optimal patient outcomes. Interprofessional health education and collaborative practice should be led by healthcare providers in order to lead to optimal patient outcomes. Interprofessional working (or interprofessional collaboration) is the ability to work across disciplines to achieve a common goal.

Table 2. Comparison of Performance Parameters					
No. of Inputs	Comparison Models				
	EM	IM	HM	MI	Proposed Model
100	41,3	44,8	43,5	45,2	46,9
200	42,6	46,3	41,8	47,4	43,9
300	44,5	42,1	45,7	47,2	41,6
400	46,1	43,3	42,8	41,9	44,6
500	45,8	47,1	44,3	41,7	42,4

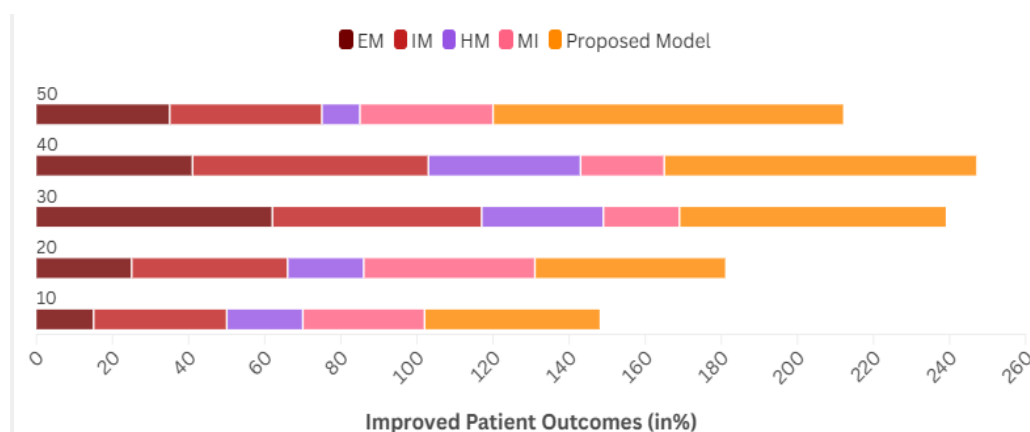


Figure 2. Computation of Improved Patient Outcomes

It involves influencing and enabling other health professionals to work collaboratively to achieve shared goals and to facilitate evidence-based decision-making to improve patient outcomes. Healthcare providers should adopt leadership in interprofessional collaboration as a means of enhancing patient care.

Enhanced Communication and Teamwork Skills

Sufficient healthcare can be one of the most critical parts of the healthcare system, where communication and teamwork play a specific role. Investment in formal education and training aimed at improving these skills can, therefore, raise the standard of healthcare delivery. Furthermore, promoting interprofessional collaboration and robust leadership can significantly contribute to the success of healthcare teams.

Table 3. Comparison of Performance Parameters					
No. of Inputs	Comparison Models				
	EM	IM	HM	MI	Proposed Model
100	46,5	43,9	41	42,7	62
200	47,6	42,1	35	41,6	42
300	42,9	41,3	45	45,2	75
400	41,5	44,2	62	43,8	80
500	47,3	41,8	51	46,1	99

We would explore here the need for enhanced communication and teamwork skills, the significance of interprofessional working in health care, and the role of the lead in giving a win-win for facilitating and maintaining them. Focusing on these areas and investing in them would allow us to continue the fight for better healthcare outcomes and the best possible care.

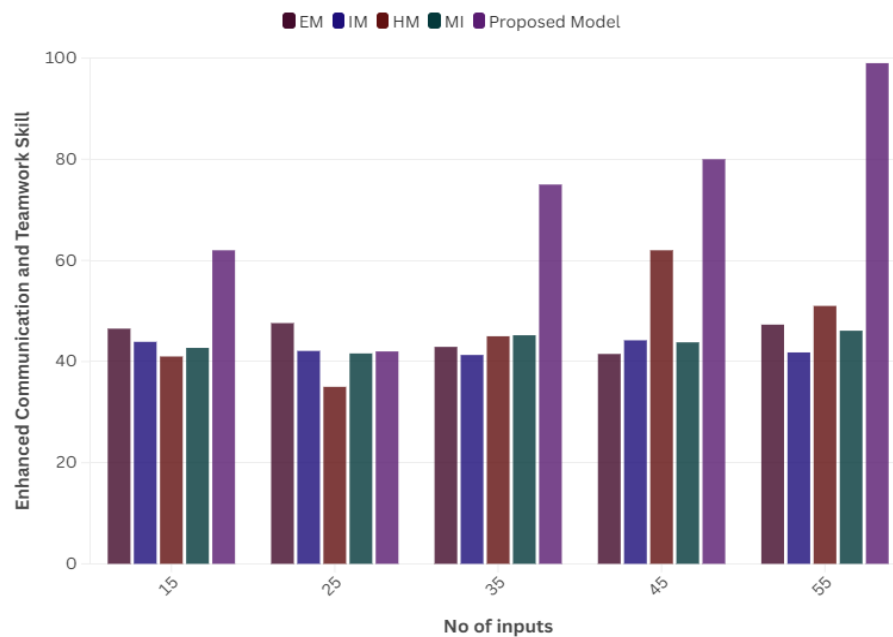


Figure 3. Computation of Enhanced Communication and Teamwork Skills

Innovation and Creativity

The use of enhanced communication and coordination is a key factor that positively strengthens collaboration and leadership among health professionals, particularly health education professionals. It is a concept that speaks about listening, sharing knowledge, and collaborating to achieve a common goal. Health professionals need to have strong communication skills to convey information clearly, listen to others and resolve conflicts.

Table 4. Comparison of Performance Parameters					
No. of Inputs	Comparison Models				
	EM	IM	HM	MI	Proposed Model
100	41,7	42,5	46,3	43,1	44,9
200	45,4	44,2	41,6	46,8	42,3
300	43,6	47,1	42,9	45,7	41,4
400	46,5	43,4	41,2	47,6	42,7
500	45,1	41,8	43,8	44,6	42,4

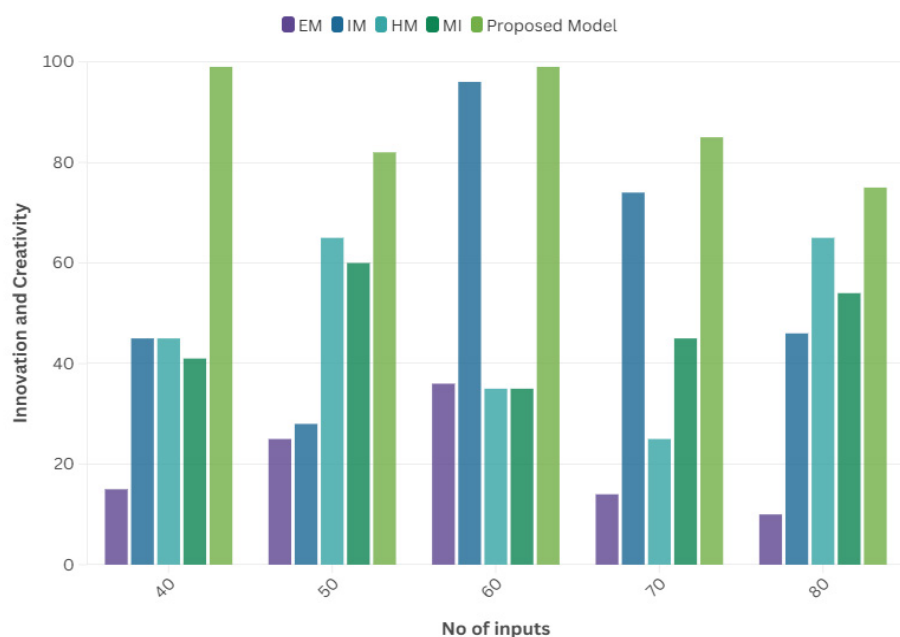


Figure 4. Computation of Innovation and Creativity

Moreover, interprofessional teamwork typically results in the effective use of resources and shared goals among different professionals involved in care. Also, good communication and coordination build trust and respect among the team members, improving collaboration and shared accountability. By enhancing communication and coordination among health professions, education, interprofessional collaboration, and leadership, patient outcomes can be improved, and the current healthcare system can be made more efficient and effective.

CONCLUSIONS

Their outcome fosters an interprofessional approach that enhances communication, cooperation and coordination between different disciplines in the field of health education and leadership. It translates into better health outcomes, improved efficiency in healthcare provision, and, eventually, a positive work environment. Discipline integration is essential to the success of health education; therefore, interprofessional collaboration and leadership are key. Collaboration among health professionals can ensure that patient care is integrated and delivered based on a multidisciplinary approach that engages with a patient's totality of health that encompasses their physical, mental and social well-being. Collaborative success requires effective teamwork and clear communication between healthcare professionals. That involves a collective understanding of one another's roles, responsibilities, and expertise, along with a willingness to learn from one another. This results in the patients receiving more comprehensive and coordinated care, which leads to increased health care outcomes. The variety of perspectives and methods brought together fosters innovative problem-solving and decision-making, another benefit of interprofessional collaboration. Open communication and mutual respect are essential when discussing and analyzing various treatment options in order to determine the best course of action for the patient. Overall, a strong, effective leader in the healthcare team would significantly elevate interprofessional collaboration. Such a leader, a "leader with," creates a sense of trust and communication among various members, resulting in improved collaboration and, therefore, better outputs. In summary, interprofessional collaboration and teamwork through effective leadership are essential in order to enhance health education, resulting in optimal patient outcomes. Collaboration is key for all healthcare professionals, and learning practical leadership skills to practice collaborative collaboration in healthcare is essential.

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CONFLICT OF INTEREST

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AUTHORSHIP CONTRIBUTION

Data curation: Gourab Arun, Simran Kalra, Lalit Khanna, Pooja Varma, Praveen Kumar Tomar, Geetika M. Patel, Gauri Tamhankar.

Methodology: Gourab Arun, Simran Kalra, Lalit Khanna, Pooja Varma, Praveen Kumar Tomar, Geetika M. Patel, Gauri Tamhankar.

Software: Gourab Arun, Simran Kalra, Lalit Khanna, Pooja Varma, Praveen Kumar Tomar, Geetika M. Patel, Gauri Tamhankar.

Drafting - original draft: Gourab Arun, Simran Kalra, Lalit Khanna, Pooja Varma, Praveen Kumar Tomar, Geetika M. Patel, Gauri Tamhankar.

Writing - proofreading and editing: Gourab Arun, Simran Kalra, Lalit Khanna, Pooja Varma, Praveen Kumar Tomar, Geetika M. Patel, Gauri Tamhankar.