

Inter-professional Collaboration in Managing Chronic Diseases: Nurses, Public Health Experts, and Mental Health Specialists Systematic Review

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ABSTRACT

Numerous studies have demonstrated the advantages of teamwork, including as improved care coordination and continuity, positive behavioral changes in patients, and an increase in patient symptoms and satisfaction through better needs-based responses. But research also indicates that putting it into practice can be difficult. Professional collaboration may be jeopardized in practice if practitioners are not persuaded of its advantages for patients, or if primary care physicians believe it would result in a loss of ongoing, comprehensive patient care, a loss of their professional identity, or a loss of the qualities that make their jobs unique. This present study also tried to add value to the above said line of research and hope to pave the path for future researchers. Study is based on secondary data and takes into account KSA as the ground as a geographical location.

Keywords: Saudi Arabia, nursing, collaboration, IPC (Inter-Professional Collaboration), Critical Illness.

INTRODUCTION

The rising prevalence of chronic illnesses has created new problems for healthcare systems, especially primary care, with increased risks of care fragmentation, lower-quality care, and increased health expenses. As a result, new models of care have emerged, such as those centered on professional collaboration, to enhance patient outcomes, lower primary care costs, and improve health care processes. The optimal utilization of resources is made possible by the integrative cooperation of various healthcare professionals in primary care, which combines complementary competencies and skills. **Brem et al (2016)** Numerous studies have demonstrated the advantages of teamwork, including as improved care coordination and continuity, positive behavioral changes in patients, and an increase in patient symptoms and satisfaction through better needs-based responses. But research also indicates that putting it into practice can be difficult. Professional collaboration may be jeopardized in practice if practitioners are not persuaded of its advantages for patients, or if primary care physicians believe it would result in a loss of ongoing, comprehensive patient care, a loss of their professional identity, or a loss of the qualities that make their jobs unique. **Sangaleti et al (2017)** Professional collaboration has also been hampered by a lack of inter-professional education in the curriculum, resistance to change, and ignorance of the abilities of other professionals. As evidenced by the volume of published literature, including several systematic reviews, and the current growing interest in professional collaboration in primary care, it is imperative to get a thorough understanding of the factors that both support and impede the practice of professional collaboration. **Urisman et al (2018)**

Healthcare providers include patients, family members, and highly qualified medical professionals. To deliver excellent treatment, all team members need to cooperate and work together. The main participants in the administration of medications in healthcare institutions are nurses, doctors, pharmacists, and patients. Prescription, dispensing, administration, drug intake, drug tracking, evaluation, and patient consultation are all crucial tasks performed by these employees. **Wikanendra et al (2020)** Interdisciplinary teams can be more advantageous, innovative, risk-averse, and productive than standard functional teams. In order to reduce costs, errors, reworking, and misunderstandings, this is achieved by allowing a wide variety of ideas, concerns, and

concessions to be worked out as soon as possible. WHO (2010) states that governments are looking for new ways to help them create policies and programs because of the global shortage of health professionals. Interdisciplinary team collaboration in the medical field is essential to the development of a health profession that values teamwork. The term "inter-professional treatment" describes procedures that facilitate the delivery of the best medical care possible to patients while simultaneously attaining the best anticipated outcomes and patient satisfaction. **Kaur et al (2018)** The advantage of interdisciplinary approaches over multidisciplinary ones is that they combine the efforts of multiple professions that are all working toward the same goal: treating a patient's medical condition. Long-term effective integrative treatments are made possible by this teamwork of experts.



Source: <https://www.mcw.edu/mcwknowledge/mcw-stories/the-importance-of-interprofessionalism-clinical-care>

Figure 1: Factors of Inter-Professional

Additionally, it has been demonstrated that medical field professionals view improved interdisciplinary collaboration and communication as crucial components of improving clinical effectiveness and job satisfaction. According to **Bryant et al. (2017)**, five major areas of interdisciplinary collaboration have been identified in a 2018 study that evaluated the effect of interdisciplinary collaboration on errors that occur in the medical field because communication problems are often the cause of medication mishaps. Contact through tools like guidelines, policies, and interaction logs; pharmacy involvement in interdisciplinary teams; cooperative medication review during admission and release; cooperative courses and seminars; and the intricacies of job variation and environment were among these categories. **Bollen et al (2019)**

Even with the encouraging results of earlier research, medical errors seemed to occur. The creation of tailored, customized strategies needs to be prioritized more. It is also necessary to be more conscious of how different disciplines are changing their viewpoints. The modern facilities for creatives to manage innovation are evaluated by **Sami et al. (2016)**, who also support a more interdisciplinary viewpoint. Collaboration and interdisciplinary teamwork have been recognized as a strategy for a successful healthcare delivery organization as the complex nature of medical services requires a synthesis of knowledge and practices from multiple different fields. Health professionals' viewpoints and the importance they place on teamwork reveal the descriptive nature of this combination. Medical professionals face significant ideological, corporate, fundamental, and social barriers in primary care centers, which has led to an increase in teamwork and interdisciplinary collaboration. **El-Awaisi et al (2018)** A systematic review was conducted to incorporate the best recent research on healthcare personnel's proficiency with cooperation and interdisciplinary collaboration in the field of primary care. Interdisciplinary rounds offer an enticing method for improving inter-professional collaboration in emergency rooms. They can be used to evaluate the impact of formalizing nurses' participation in rounds through an interdisciplinary

measuring form on the effectiveness of inter-professional collaboration, especially between healthcare professionals such as nurses and doctors, as well as the possible impact of implementing these rounds on observable patient care impacts.. Results contribute to the growing body of evidence showing that interdisciplinary rounds foster collaboration and improve the quality of patient care during delivery. **Montross et al (2023)**

In order to evaluate and synthesize the findings of previous reviews on effectiveness, obstacles and enablers, and theoretical models or conceptual frameworks, the researcher reviewed reviews of professional collaboration in the critical care setting. The results of identifying the primary obstacles and enablers of professional collaboration in critical care are presented in the current article.

Research Objective

The Main objective of this present study is to identify the inter-professional collaboration in managing chronic diseases and the major focus will be on the importance of nurses, public health experts, and mental health specialists, etc.

Research Process

Study Design

This present study is based on the pillars of exploratory research design, it is related to the process in which maximum amount of secondary data is being explored and the researcher tries to find out the past developments, present state and future prospects. The researcher has considered the secondary data in the form of previous studies and the answers to the respective questions were identified on the basis of the same. Studies were taken from the journals of national and international repute. Electronic databases accessed were Scopus, Web of Science, ProQuest Social Science and Humanities, Pub Med, Medline, and many other related sources.

Time Frame

The respective time frame of the study was from 2014 to 2024, this time period was considered because during this period many of the policy decisions were implemented by various government and related agencies. All the considered studies were presented or published within this time period only, rest of the studies were excluded from the panel.

Selection Criteria

Researcher has collected about 121 studies from various sources, all these studies were related to the research question in one or the other way. In order to meet the objectives of the study the researcher has identified some of the inclusion and exclusion criteria based on other studies conducted in the same research area or the same geographical domain. It has been decided at an early stage that all the studies should be published or presented in English Language as this is one of the most suited language for the audience of this study. Then on the other hand some of the keywords were identified i.e. s “Saudi Arabia”, “nursing”, “collaboration”, “IPC (Inter-Professional Collaboration)”, “Critical Illness” etc. The studies who do not possess such key words were also excluded. Finally 82 studies were finalized for the present study.

DISCUSSION

A. Nursing Collaboration

The work environment for nurses is a crucial organizational factor that can either help or hurt effective nursing progress. The nursing staff and hospital facilities are pleasant, nurse supervisors exhibit sufficient leadership, collaborative contacts between physicians and nurses are evident, and nurses actively participate in healthcare operations at organizations with favorable work conditions. These organizational traits have been found to boost patient safety, increase efficiency, and enhance overall treatment quality, resulting in a successful healthcare system. **Lamparyk et al (2022)** Important research shows that a moderate to excellent work environment fosters job autonomy, motivation, commitment, and success, which results in a very happy nursing staff. Additionally, better psychological health, wellness, and job retention have been associated with a pleasant nursing workplace. Nurses make contributions to the medical sector by recognizing clinical alterations, discussing pharmaceutical treatment with patients, caregivers, and other medical professionals, suggesting and implementing medication-related measures, and keeping track of patients' and medications' treatments. **Collaborative et al (2016)** The current state of nursing lacks a framework for evaluating nurses' knowledge, skills, and attitudes in inter-professional medical activities. The study was conducted in two phases, starting with a scoping review and concluding with five Delphi rounds, in order to reach a consensus with experts regarding the capabilities of nurses for roles in multidisciplinary pharmaceutical care. This study created a competency framework for skill-based nursing education. **Zorek et al (2013)** Future research should focus on teaching nursing students these competencies. To evaluate students' preparedness to become proficient in inter-professional pharmacological care in clinical settings, a standardized tool should be developed. To understand

the relationship between interdisciplinary collaboration and nurse management skills, a cross-sectional study was conducted. 3,324 nurses who had worked in an intensive care unit in Japan for more than three years were among the members. **Leventhal et al (2021)** Finally, it was decided Interdisciplinary teamwork may benefit from emergency room nurses' improved managerial abilities. The ability of nurses to manage has been strongly associated with a high level of collaboration across different medical experts.

B. Pharmacy Collaboration

Drug errors that have serious side effects and could be fatal are the reason for this partnership. A pharmacist is a vital member of the medical team that provides pharmaceutical care for both prevention and treatment, serving as a resource for both patients and healthcare providers. **Ward et al (2018)** A pharmacist develops, implements, and assesses a treatment plan in collaboration with the patient and other specialists to help prevent delays and address symptoms and problems. Pharmacy professionals have a positive influence on patient care, according to numerous studies. Pharmacists are still an underutilized source, according to a recent Cochrane Review, even though their therapies improved clinical outcomes despite their high levels of education and the fact that doctorates are now required for action. Pharmacists have a huge chance to close the "medical care entry" gap in light of the shortage of medical professionals. **Schot et al (2020)** They are often the only doctors available to suburban and impoverished areas, are uniquely accessible without the hassle of scheduling an appointment, and are often regarded as one of the most trustworthy experts. Chronic illnesses require frequent medication reviews and physicals, which strains the time and resources of general practitioners. Other medical professionals, such as community pharmacists, could handle many of the tasks associated with the care of chronic diseases in the community. **Begun et al (2011)** The responsibilities of community pharmacists have evolved from helping doctors by monitoring and distributing medications to a more complex role where they become more independent. Monitoring patient medication use and overall health outcomes necessitates close collaboration with general practitioners. Despite the increasing demand for collaboration, there aren't enough of the components that make community pharmacists and general practitioners work well together. **Vatn et al (2022)** Things like a lack of communication and cooperation between the two professions could be major obstacles to collaboration. Accordingly, a systemic review that focused on non-co-located cooperation between general practitioners and community pharmacists found that situations with sufficient resources and close career separation, direct and frequent contact, a history of collaboration, and an understanding of each other's responsibilities and strengths when providing patient care were the main factors that positively impacted this cooperation. Effective inter-professional collaboration was hampered by the presumptive disparity in status and power between professions as well as a lack of knowledge about one another's abilities. **Labrague et al (2022)**

C. Collaboration of Psychology Department

IPE has been identified as a method to improve job satisfaction, foster comprehension for medical organizations, and provide a more thorough approach to patient-management. **Dijkstra et al (2021)** Recently, educational medical schools were advised by the Institute for Healthcare Improvement to implement IPE training in order to teach medical practitioner trainees how to effectively interact. With the goal of fostering cooperative skills, students from a variety of health professions learn about, from, and with one another through the innovative educational approach known as IPE. In 2016, psychology joined an enlarged Inter-professional Education Collaborative (IPEC), joining the IPE movement later than other professions. Compared to other disciplines, psychology has lagged behind in embracing and promoting the IPE concept and integrating it into future psychology education. **Yamamoto et al (2022)** Practitioners in psychology participated in IPE at lower rates than trainees in other medical specialties. Positively, there are more opportunities for psychologists to take part in IPE. To encourage psychology students, teachers, and trainees to become more active with IPE, we hope psychologists will fervently answer this call to action. **Tillack et al (2012); Fatahi et al (2019)** Their ability to recognize and seize opportunities to further integrate into the growing interdisciplinary collaboration will be enhanced. The future roles of psychologists in joint and coordinated care settings are impossible to predict due to the ambiguity surrounding the evolution of the medical care system and the shifting duties of diverse behavioral physicians. Interaction has barriers that need to be recognized and overcome. In addition to actively fostering the growth of collaborative environments and the organizational infrastructure that supports these conditions, psychologists are encouraged to enhance their interactions with other actions and non-behavioral health professionals and to be ready for changing and potentially unexpected roles and strategies. The advancement of psychology as an occupational health discipline may be greatly impacted by their recognition of the importance of collaboration and their desire to recognize it as a crucial component of their therapeutic practice and professions. Practitioners who enroll in psychology programs with the goal of becoming psychologists frequently overlook the significance of creating more comprehensive professional frameworks as interprofessional colleagues and medical professionals. A psychologist's career development may begin with their perception of themselves as a lone practitioner in a lone practice. For a person to accept the role of a

medical professional providing therapy in an interprofessional context, their identity must develop progressively. The shift from psychologist to medical specialist may be unexpected and confusing. **Burns et al (2022)**

D. Collaboration of Radiology

Over the past few decades, the fast rise of electronic means of communication has significantly changed inter-professional contact in medicine. Although this is true in many domains, it is most apparent in the interactions between radiologists and referral physicians. Therefore, radiological reports and images are now available to clinicians at any time and from any location, i.e., not simply in the radiology department or during radiology phases or conferences, thanks to the introduction of PACS picture and saving systems as well as digital referring and documenting systems. As a result, there may be less opportunity for doctors and radiologists to interact face-to-face, for instance, endangering traditional and contemporary inter-professional communication. **Kindle et al (2023)** To investigate the possibilities, efficacy, and attitudes of inter-professional communication between radiologists and referring physicians; to identify the opportunities and difficulties in this situation faced by referring physicians using digital referring and reporting systems and electronic photographic equipment in a university hospital setting. So, to sum up Inter-professional communication relies heavily on collaboration, mutual competency, and trust, all of which were considered to be necessary for expanded direct contacts between radiologists and doctors. To get input in both directions and to better understand the unique needs of sub-specialized physicians, radiologists and doctors should work together. The implementation of a progressive method can yield demonstrable results and a mutually acceptable plan. To develop a comprehensive plan, the professional roles in the radiology department should be considered. **Wilson et al (2022)** If partners recognize the expert competency and significance of each member, they can work together more effectively to increase human capacity, facilities logistical system, and other requirements. Creating interprofessional training opportunities and promoting collaborative medical treatment are the goals of the Interprofessional Education Collaborative, a national organization. The leaders of radiologic scientific schools, however, have not been the subject of any research. Examining the opinions and ideas of project coordinators is essential because of their impact on radiologic technology services.

CONCLUSION

Possibilities for collaboration can be strengthened by shared interdisciplinary professional experiences. There are a number of issues with interdisciplinary collaboration that should be considered while planning and constructing projects. Project management and planning are more crucial from the beginning due to these challenges. The core criterion can assist avoid some of the potential issues of interdisciplinary collaboration while developing and executing multidisciplinary projects. As primary care becomes increasingly accustomed to IPC, governance, professional practices, and attitudes will all change in tandem.

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