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Interdisciplinary collaboration between nursing, emergency medicine, and pharmacy to improve patient outcomes

Abdulaziz Mustoor Mujieb Alotaibi

KSA, National Guard Health Affairs

Hussain Muidh Hadi Alqahtani

KSA, National Guard Health Affairs

Ibrahim Abdullah Ibrahim Alsannat

KSA, National Guard Health Affairs

Tareq Salem Alsewar

KSA, National Guard Health Affairs

Yaqoup Ali Alhaeerth

KSA, National Guard Health Affairs

Naif Ghanem M. Alotaibi

KSA, National Guard Health Affairs

Abdullah Abdulrahman Alkhamees

KSA, National Guard Health Affairs

Maryam Saud Alsharif

KSA, National Guard Health Affairs

Abstract---Background: Multidisciplinary team work with nursing, emergency medical staffs, pharmacists and other care givers is crucial in enhancing patients' outcomes, but there is break down in communication and unclear working relationships. **Aim:** This paper discusses the functions of these disciplines, investigates the effects of integration, defines challenges, and offers recommendations for improving the cooperation in the healthcare field. **Methods:** Literature review aimed at examining research, cases, and approaches to training effectiveness and facets of promotion of teamwork and solutions to the problems most likely to be encountered. **Results:**

Differences such as collaboration minimize the error rates in management, the effectiveness of chronic care, and patient satisfaction. Mr. Good communication can thus be solved through education, leadership, cultural competence training. **Conclusion:** Promoting interprofessional collaboration achieves better patient care outcomes and systems' organization emphasizes the need for adequate training and environment enhancement.

Keywords---Collaboration, nursing, pharmacy, emergency medicine, patients.

Introduction

In the current health care facilities, it is common to find that the patient outcomes depend on the combined effort of multifaceted clinician for example nurses, physicians in the emergency room, and pharmacists in a hospital. Both of these fields provide different types of skills when it comes to patient care and when you combine them, you get a better approach to patient care than any of these fields offer individually. The integrated and coordinated team of healthcare professionals means faster, more complete, especially in the setting of high-stake facilities such as emergency departments, there is need for fast decision and proper coordination. To this end, this research focuses on the myriad process and product benefits of interdisciplinary nursing, pharmacy, and emergency medicine integration. It also explores some barriers to effective collaboration; ways of strengthening teamwork; and topic-relevant research that illustrates its effects on patients. Thus, stressing the worth of preparing a health care team for the requirements of team effective integrated care, this paper focuses on disclosing how training and education experiences can help to dispute that collective approaches can transform health care activity.[1,2]

The Importance of Interdisciplinary Collaboration in Healthcare

Health care has long understood cross-functional in that everyone charged with the responsibility of providing care needs to work cooperatively in order to provide quality care and effective. Apparently, this is a concept that cooperates numerous experts to share the similar objectives stipulating a collaborative effort of different branches of nurses and other professionals including the emergency medicine and pharmacy. An effective teamwork tackling complex patient requirements takes advantage of specialist knowledge and expertise of all the workers engaged. For example, nurses who assume the important and sensitive patient care at the bedside, emergency physicians who take charge of miscellaneous medical conditions, and pharmacists who oversee the safety as well as the effectiveness of patient's medication therapy. Through cooperation, treatment approaches from different specialties can be integrated to contain the treatment needs of a patient hence promoting effective outcome.[3] The Significance of this model of collaboration is not limited to individual patient treatment. There is no room for communication breakdown in any part of a health facility especially in the emergency departments, coordination is critical. Coordinated undertaking guarantee that the treatment is timely, that mistakes are reduced to the slightest

level possible, and that resources are used to the maximum. Besides, interdisciplinary work stimulates creativity ideas origination due to cross pollination of ideas. For example, a pharmacist may come with an option of a safer or cheaper drug while a nurse may give some feedback on a patients progress.[4 research also suggests that collaboration with other disciplines increases the satisfaction of the HCW with the job through setting up a favorable and courteous working climate. Collaboration minimizes stress levels typical for employed individuals, especially for those with the demanding job description since the workers feel appreciated by their peers as well as employers. But to achieve collaboration to a greater degree it is necessary to learn more about difficulties that may be encountered at work – language barriers, power relations and divergent occupational ethos. This paper explores how healthcare systems can REQ promote collaboration through training, team building activities, and use of innovative technology such as electronic health records. Acknowledging that the patient's condition is more intricate and multifaceted, that a single professional cannot cover all aspects of the treatment anymore is crucial in trying to understand that interdisciplinary model is the only model we can have.[5]

The Role of Nursing in Emergency Care

Professional nurses are central to emergency care since they are not only a key to the timely and efficient provision of this central service but also major contributors to the institutional organization. Emergency nurses work to attending to the needs of patients who experience trauma, chronic or acute illnesses and life threatening diseases. Their work goes significantly beyond pure clinical functions, thus calling for a set of competencies that may be hard to define in traditional terms. Consequently, emergency nurses are often the first to offer unexpected patients' care; being able to prioritize the care depending on the degree of the patient's illness. The triage process above guarantees that a few resources are well-utilized; it can even help save lives sometimes.[6] Triage is only one of many tasks that ENs perform: they take care of patients' wounds, give medicines, check temperature, blood pressure etc., and help doctors in resuscitation if needed. They also have an essential function of patient stabilization, which involve coordination of emergency physicians, paramedics and other care providers on stabilizing protocols. For instance, an emergency nurse may be assigned responsibilities such as airway maintenance, administration of drugs and coordinating and supervising the team in matters to do with appropriate strikes and the use of defibrillators during an arrest, say, of the heart. This is something that their automation must also entail so that they are able to perform these roles credibly during such moments .[7] Apart from practical skills, emergency nurses have emotional interaction with the patient and/or the family during an emergency. They need to be able to articulate measures and also to inspire confidence in very anxious situations. This fact underlines the integrality of the nursing care since the nurse has to be both, the person who takes care of the patient and the person who tells others about it. Also, emergency nurses may be legally responsible for their patients and be responsible for addressing their clients' needs and referring them to the necessary specialty care they might require after their discharge. Another function of emergency nurses also include disaster response and preparedness. Usually, they work at the forefront in mass incidents, epidemics, or disasters, which are the

situations when their potential for change and work in extreme conditions are revealed. Also, emergency practicing nurses promote the best health among the patients as they provide the knowledge about precautions and signs of severe situations, which help to avoid overloading of emergency departments.[8] the input that a nurse has to provide to emergency care is multiple and more than absolutely necessary. Emergency nurses combine professional competence in the delivery of care alongside our being caring and team players. They are invaluable to emergency care services that help patients whose lives depend on the best care at an unpredicted time.

Several contributions of the pharmacy to patient safety as well as medication management has been described

Facilitating Self-Care Pharmacists are essential for patient's safety and appropriate medication administration especially in acute care hospitals and emergency centres. They can analyze medication regimens for safety and efficacy, possible drug interaction and thus minimize the cases of adverse drug effects. Pharmacists act as a last barrier against medication errors and can occur during prescribing, dispensing or administration processes. [9][Pharmacists] review prescriptions to determine if a certain medication is correct, appropriate and best dosage for a particular patient Of particular interest in these contexts, pharmacists work in emergency departments and hospitals as members of patient-care teams, involved in decision making regarding a patient's therapy plan. For instance, they help to choose the optimal drugs for the patients in critical conditions, taking in account compatibility of the preparations, and the patient's status of his/her kidneys or liver, and the severity of the treatment. For example, during cardiac arrests or sepsis cases, pharmacists make and bring drugs very quickly to ensure they are administered on time.. They also offer important information in the handover process for example when patients are discharged from hospital to continue on with their medicines and minimize on readmissions.[10]

Pharmacists are also active players in informative activities that target both the health care practitioners and the citizens with awareness on safe use of medicines. For the healthcare teams, they help provide information about the existing best practices, drug therapies and adverse effects of new treatments. As for patients, pharmacists explain how medications are to be taken, what effects might be expected, and how patients can try to avoid adverse drug interactions. These educations are very important as will help reduce various complications and improve health of patients. The other major way by which pharmacist contributes towards medication management include the use of technological advancement such as computerized physician order entry (CPOE) systems and automated dispensing unit. These tools bring down the rate of human error in the administration of these drugs as well as improve the process. Also, pharmacists are involved in drawing, implementing, and reviewing institutional policies and procedures for medication safety-sensitive products, including anticoagulants, opioids, and chemotherapy medications.[10]

In an outpatient and community care settings, pharmacists also enhance the safety of patient by doing medication reconciliation and particularly among those

with complex health needs with chronic diseases. They find out the treatments which are repeated, stop the ineffective drugs, and modify the treatment regimen in compliance with the patient's personal objectives. That they help to implement immunization programs is something that is evidenced through their work in managing the storage, distribution and promotion of vaccines is also a testimony of these ladies effect on public health. pharmacists provide structured and focalized patient safety and optimum medication technique all through the continuum of care. Due to their focus on outcomes and patients, focused skill sets, multi-professional teamwork and dedication to minimizing risks associated with medication they are invaluable part of any healthcare team. The professional actions of pharmacists to monitor and promote the appropriate use of medicines in patients enhance, therefore, the efficiency of patient outcomes and the general quality of care.[11]

Emergency Medicine: Bridging Critical Care and Rapid Decision-Making

Emergency medicine is perhaps a sub specialty that acts as a link between intensive care and speed, which involves resolving acute medical conditions and injuries. Emergency physicians have enhanced employability fast and furious life saving decisions regarding the life of a patient within a few minutes of arrival. They are able to easily determine the patient's status and attend to those care necessities that may be life-threatening and therefore cutting down for mortality and enhancing outcomes. This combined concern with tempo and accuracy characterizes emergency medicine as a field and sets the technique of its practicing apart from other approaches.[12] In emergency medicine decisions are made fast and are guided by protocols and cases knowledge instead of algorithms. Specialists in this field are taught to do short targeted evaluations like the ATLS or ACLS protocol that provides the first steps in managing the critically injured or ill. For instance, when dealing with polytrauma, the emergency physicians examine the patient for airway patency, breathing, circulation, and neurological function at the same time that they think about obtaining x-rays or an operation. This is essential bearing in mind that their brain power when thinking, especially under pressure is useful when handling such elaborate situations. Emergency medicine also has a crucial function of linking critical care through operating as a portal to other complex care areas such as the intensive care unit or a cardiac unit. Those emergency department patients who have presentations of acute severe diseases like myocardial infarction, stroke, or septic shock will need re-stabilization before being transferred to a higher care center. Critically ill patients present to emergency physicians and, due to team style practice, other disciplines such as critical care specialists, nurses, and pharmacists are engaged in transition and continuity of care. Such a collaboration is especially important in the instances where more extensive management is necessary – for example, stroke thrombolysis, or when deciding on invasive trauma management.[13] The fourth important concept of emergency medicine is that it operates in various level of care and contexts of practice. Regardless of the type of the mass casualty event, from multiple-casualty incidents, through pandemics, to public health emergencies, emergency physicians need to manage the situation without compromising the standards of care when the context evolves. They are also involved in a disaster response planning, designing the measures and exercises that make healthcare organizations more ready to face adversity.

Apart from technical professional knowledge that is needed in practicing emergency medicine it also needs communication and leadership knowledge. Health care providers in this area need to interface with other providers, explain treatment plans and prognoses to patients and families, and solve problems that demand recognition of single patients' needs in context of multiple system constraints. It is common for their leadership to be challenged when systems are severely disrupted, and strong and stable direction is needed to keep a team productive and spirit high. Concisely, emergency medicine is critical care intervention and decision making process evidencing efficiency of its approach during the ethical time when individual's life is at its precipice. Due to the focus on the speed of the evaluation, cooperation with other disciplines, and flexibility, the field guarantees the necessary care to the patient for any severity and embodiment of the disease. Emergency medicine workers are basic weather co-heroes of societal wellbeing, caught in a perennial system of holding lives and managing risks.[14]

Examples of Effective Multidisciplinary Practice Solutions with Emphasis on Emergency Practice

An analysis of selected case scenarios is presented below in an effort to illustrate how interdisciplinary collaboration may be successfully achieved in emergency settings. The present paper illustrates, by referring to concrete examples derived from emergency contexts, how an efficient interdisciplinary cooperation makes a noticeable difference in the management of patients. The case studies are actual and give a great sense of how conscience process of care involves everybody – nurses, emergency physicians, pharmacists, and other specialists involved in patients' treatment.[15] A specific example was the case of a multi-trauma stabilized management after a severe MVA. While being relocated to the emergency department the patient had multiple fractures, internal bleeding and shortness of breath. The Ensure rapidly assessing and starting central line the Emergency Physician focused assessment based on the ATLS protocol. At the same time, the pharmacist and delivering such life-sustaining products as pain and anticoagulation reversal management products. A radiology technician speed up the process of taking images so that the team can identify hemorrhages and perform the operation. Such a combined strategy helped the surgical team to stabilize the patient within the operating room in the strict adherence to golden hour, which essentially minimizes the outcome of complications and mortality. Such an interaction and cooperation between the clinicians from different fields helped to save the patient's life.[16]

One example describes the operations of employing team work in a patient with acute myocardial infarction (AMI). Dehydrated and spiking fever, the patient complained of chest pains and shortness of breath, and the emergency department nurse immediately conducted the ECG and reported to the emergency physician about the ST-elevation in the heart attack patient. Emergency physician calls the cardiac catheterization team and the pharmacist starts drawing thrombolytic medications for use. In the process, appropriate coordination between the cardiac medical practitioners, operating nurses, and emergency staff facilitated the quick recapillary blood flow to the patients heart. Coordination of interaction of medications reduced risk associated with them and

dosage was closely observed by the pharmacist; while post-procedure nurse ensured that patients understood change in their lifestyle and importance of taking medicines as prescribed. This case shows how a multidisciplinary approach guarantees faster and proper management of complicated diseases.[17] Third example of SNA utilization is focused on the disaster management following a mass causality event due to a natural disaster. Patients received by the health care trauma team including a paramedic, a RN, an MD, and a Pharmacist. Staff nurses did triage to sort patients by level of acuity of injuries, while the doctors started resuscitative measures. Pharmacists were rationing available drugs and drugs necessary for specific functions, such as antibiotics and sleeping pills were dispensed sparingly. Further, staff involving social workers and other mental health providers was incorporated into the team to help victims with trauma. The interventions reduced the numbers of deaths and ensured optimum management of the affected people, hence the need for synergy in the presentation of crises.[18] These case-studies illustrate that effective multi-professional working within emergency paradigms requires direct and explicit communication, respect for each others' roles, and most importantly, the patient's best interest. It shows that regardless of difficult circumstance, health care professional can come through and provide health care to the sick and needy, as long as they all pull together. These examples do not only stress how important the collaboration is but also give an example on how collaboration between the health care organizations can be enhanced.[19]

Challenges of Interprofessional Practice and Learning

When involving an interdisciplinary approach at healthcare, several challenges are always evident that reduce its efficiency. These barriers dissolve from professional socialization, communication issues, mechanical relations and cultural variables which pose hindrances to collaboration and may in the long run negatively affect the outcomes of the services delivered to the patient. These factors are important to know and overcome so as to encourage clients to effectively cooperate with the care providers. Fragmentation by profession can be accredited as one of the key challenges that hinder interdisciplinary cooperation. Worker like nurse, emergency medical providers, and pharmacists for instance, gets trained in ways that more or less different from one another by focusing on the profession. This may result in failure to recognize any value, skill or effort of the other members in the team. For example, a physician may disregard a pharmacist's knowledge regarding potential drug interactions, while a nurse may not be included in patient care planning based on her or his perceptions of a patient's care needs. Cohesion can also be inhibited by those instances when two individuals do not respect each other or do not adequately understand each other.[20]

The other factor that causes a lot of harm in affecting collaboration is communication barriers. Cognitive factors include variation in language and working language which is said to vary along the assertiveness continuum between professionals. This study identifies how poor communication can lead to uncoordinated, slow flow of futuristic actions, wrong execution in the treatment provision or redundancy in emergency departments. For instance, the concerns that a nurse has towards the patient might not be relayed to the physicians,

major signs may be missed hence *tenemos*. Thus, distinct patterns of interaction in situations when staff teams face high-stress conditions and the absence of well-defined structured communication protocols, similar to the SBAR model (which stands for Situation, Background, Assessment, Recommendation), can also contribute to them. Organizational and structural factors also constitute hurdles of notable measures. Organizational culture and structure of a particular healthcare organization bring out a culture which discourages healthy communication and avoid participation across the organizational levels. Such structures mean that in many of the systems physicians are vested with more power of decision while other professionals such as the nurses may initially be reluctant to express themselves or indeed contest any decision that has been made. Also, workload increases, time pressure and staff deficits, which in turn impair effective teamwork. These pressures can result in burn out which disincentivize or incapacitates the healthcare provider from participating in team manufacturing.[21] Culturally related factors and interpersonal related factors also determine collaboration. When workers from different cultures, with different orientation towards work, and different values have to work together, conflict arises easily. For instance, there could be a belief by the member that he or she gets the best results when working alone while another will prefer group decision making. Furthermore, existing interpersonal tensions or distrust of other team members can undermine the core basics of collaborative work, thus, becoming a barrier to goal and objectives convergence.[22] To tackle these challenges first, healthcare organizations should dedicate efforts to enhance the culture of collaboration efforts. Finally, interdisciplinary courses for nurses' preparatory studies, solving-teambuilding exercises, and educational communication sessions may improve interaction and perceived similarity. The latter can be eradicated by standardization of the information-sharing instruments, like electronic health records and structured handoff reports. In addition, operational support is of paramount importance particularly to ensure that the leadership creates a culture that is favorable accepting and encouraging for everybody to engage optimally. Mitigation of these barriers therefore provides a window to achieve the optimal benefits of the collaborative care models thereby improving the patient experiences and overall care delivery.[23]

Communication and Interprofessional Relations Among Healthcare Professionals: Possible Interventions

Interpersonal and team competency form the core of effective client service delivery in healthcare facilities. However, to achieve synergy and integration amongst these diverse health personnel, strategies need to be put in place to overcome barriers to collaboration and promote positive inter professional relationship. They are aimed at enhancing interactions between staff members, developing procedures that have to be followed when working in groups and with the clients, and enhancing value and getting rid of conflicts. This is a good first step to improving communication by promoting the use of standardized communications tools like the SBAR model – Situation, Background, Assessment, Recombination. With SBAR, one is fully aware of the information that needs to be passed and is some way of preventing assumptions and misunderstandings within the team. For instance, when a nurse is informing a physician about a patient's status deteriorating, use of SBAR makes it easier for the reader to go

straight to the main points to make a quick decision. Moreover, the use of Electronic Health Records (EHRs) allows to enhance the methods of information exchange in order all members of the team could gain up-to-date and comprehensive data about patient.[24] Other techniques for encouraging team work include holding many inter-disciplinary meetings and huddles. These meetings engender convergence of experiences of the healthcare professional professionals from the different fields like the nursing, emergency medicine, and pharmacy among others where they discuss different cases of patients and find ways to concur on the way forward on handling such cases. Short daily meetings in highly active areas such as the emergency departments would ensure more coordination because issues of concern and task assignments can be discussed. Such an approach makes all the team members participate in decision making hence avoiding more mistakes and improving patients' results.[25] Team building activities and organization trainings are one of the most counterproductive ways in enhancing communications and integration among close knit teams. For example, whereas theoretical discussions enable participants to consider how healthcare teams might deal with various, often challenging, situations, meanings-in-action, such as role play and debriefing, strengthen trust, coordination and problem solving among the teams. They also help other individuals in your team understand the significance of their contribution to the team's output and increase respect for other players in the team because of the understanding of how assembled interdisciplinary teams can bring more worth than alone physicians or nurses.[26]

Two of the main findings of the presented research were that leadership support has a significant positive impact on teamwork gains in healthcare. Managers should ensure that subordinates have the right input and feel free to equal to come out and complain to their superiors or suggest anything in the organization. Having an open-door policy and practice often-forgotten monthly debriefs will allow a person to voice or even express struggles with an issue they have without fear of being ridicules or laughed at. These allow proactive problem solving as well as constant enhancement of relations among team members. Another is conflict management training, which should be used to enhance teamwork in the Organization. In the diverse healthcare setting, people have different views, therefore when working in teams they may come into disagreement with their co-workers. By empowering the fellow members, the chance of maintaining harmony when a disagreement arises is highly likely since no team benefits from a devastated one. It means that all challenges that might occur during negotiations, e.g., active listening, empathy, and using common themes can actually be converted into strengths.[27] Last but not least, having respect and common objectives and aims for the common tasks is critical in a team. Various findings affirm that when the health care professionals value respective expertise they are capable of improved teamwork. This makes the goals to be well aligned and provides a common end purpose thus requiring the different people to respond positively to the challenges of working in a team. Separately, appreciation of individual's efforts or results in form of praise or incentive also strengthens the team environment.[28]

Therefore in today's complex health care setting improving working relationship among healthcare providers needs structural, behavioral and educational

solutions for change to occur. Through embracing structural cultural features of communication in form of protocols, interdisciplinary constructiveness, and respect, healthcare teams are in a position to out do barriers and offer quality patient care. These strategies do not only enhance the team's productivity but also contribute positively to workplace environment that enables all the professionals.

The Impact of Collaboration on Patient Outcomes: Evidence-Based Analysis

Integrated approaches indeed sustain and improve the health of its patient since its implementation has been testified on numerous studies and attempts in healthcare facilities today. Nurse-physician collaboration, that is cooperation among nurses, emergency medical doctors and pharmacists for instance, results in care improvement, reduced maltreatments and patient satisfaction. These increasing benefits are based on the enhanced knowledge, ideas, and synergy that come together with such teamwork as it applies to the patient-care processes . Studies show that eliminating preventable adverse events results in improved patient outcomes and cost savings; interdisciplinary collaboration reduces these maladies by at least 50 percent. In the same study it was shown that hospitals where the majority of staff had good team relations and good communication had only 30% of the medication error rate of hospitals where staff communication was poor. BMJ Quality & Safety For instance, engagement of pharmacists to participate in medication reconciliation reduces adverse drug effects and dosing errors wherever there occurs transitions in care including admission to and discharge from facilities. Likewise, when nurses and physicians are well-coordinated, patients are accessed to necessary treatments say infectious diseases, Sepsis or acute myocardial infarction that requires quick intervention . [29]

Another prime field is the patient-centered care organization where collaboration has a major influence. The Journal of the Interprofessional Care provides a meta-analysis of team-based practices which positively affect chronic disease processes such as diabetes and hypertension. These contexts are Characterized by a related team of experts who involve a patient in as Many Ways as Possible by not only treating the disease but the surrounding psychological and social elements. For example, involvement of a nurse in patient education, a physician in treatment decision and a pharmacist in matters of medication compliance enhances the patients' capacity to respond adequately to their diseases and hence have better long-term outcomes .Such organization of work also improves hospital stay and decreases the readmissions rates as an element affecting patients' recovery and costs. A paper in *Health Affairs* also noted that organizations that employed interdisciplinary rounds in its intensive care units saw their patients stay shorter, by about 15%, and the rate of readmissions also fell. These are a result of self-directed decision making where each team member brings his/her expertise when preparing detailed care plans. It thus avoids early discharges with complications that result in another hospital admission as they have not received adequate care tools to enable them manage at home.[30]

While operating in emergency situations, such as fire outbreaks, students are more likely to make correct decisions when working in a team format. In Annals

of Emergency Medicine, it was discovered that communications that cut across the teams leads to the stabilizing of patients 25% faster as opposed to functional silos. For instance, when an emergency nurse quickly reports the vital signs or a pharmacist compiles the necessary medications while the physician considers the imaging tests results the patient is benefited. These dynamics play a central role in the rescue process during an emergency such as stroke, trauma or a cardiac arrest where times matter. Furthermore, patient outcome is improved because patients are assured by the cohesiveness that is evident amongst the collaborating providers. In a survey by the Agency for Healthcare Research and Quality (AHRQ), 20% more patients of collaborative teams recognized as satisfied than the patients with disjointed experiences. This satisfaction has its origin in assertiveness, cooperation, and perceived integrals congruency which enshrine patient and family confidence in the health care team. evidence-based analysis underscores the critical role of interdisciplinary collaboration in enhancing patient outcomes. By reducing medical errors, improving chronic disease management, shortening hospital stays, and elevating patient satisfaction, collaborative approaches demonstrate their indispensable value in modern healthcare. As healthcare systems increasingly prioritize teamwork and communication, the benefits of collaboration will continue to shape better outcomes for patients and providers alike. [31]

Training and Education: Preparing Healthcare Teams for Integrated Care

On this point, training and education are core necessities for creating health-care teams who are capable to provide co-ordinate and competent care. There is more to interdisciplinary than a common aim; it entails understanding of certain skills, facts and attitudes needed for professionals cutting cross disciplines to work together. Therefore the development of the sophisticated competencies described above can help healthcare organizations create effective teams that are effectively ready to respond to the challenges in patient care especially in settings such as emergency or primary care departments. Interprofessional learning (IPE) has been recognized as one of the important components in the training for integrated care delivery. This approach enables students and working health care professionals from different disciplines in health care including nursing, emergency medical services, and pharmacy, to learn alongside, from, and about each other. IPE based programs constructively prepare participants for respecting their colleagues' roles and expertise. For instance, it would involve the manner in which pharmacists contribute towards medication safety as understood by the nursing students while the trainee Pharmacists would learn the observational roles of nursing students in the care of their patients. These interactions provide the basis for carrying out operational practice in clinical settings, in teams.[32]

Another important method in preparing healthcare teams for integrated care is simulation based training. Since it has been established that real experience is the only way to develop professional competence, simulations offer a controlled exercise in face of actual difficulties, for example, in cases of an emergency with several severely or critically injured patients or when dealing with a patient with a sepsis. They enable participants to interact with one another in realistic scenarios, pose communication problems and decision-making pressures whilst ensuring the patient is not at any real risk. For example, considering a clinical

simulation of a mimicked cardiac arrest, the clinical teams learn how the need for basic life support and the use of an AED and drugs can be accomplished in a coordinated and efficient manner. It is also apparent that leadership development is as central to training for integrated care as is effective teamwork. Healthcare managers on the one hand should set the right collaborative tone in their organizations and help employees understand that joint efforts should be the end goal. Leadership skills training include abilities for instance producing conflict solutions, communicating, and team motivation. These programs promote effective resolution of problem solving in contrast to leaving it to the leaders thus enriching the health care teams learning of how to manage the challenges that arise in an interprofessional context.[22] The healthcare team needs ongoing education in order to stay informed on the updates concerning the healthcare delivery models of integrated care. The direction of practical activities at workshops, conferences or online courses allows not only broaden the knowledge of professionals but also develop their teamwork abilities. For example, a 'real-life' workshop on chronic disease self-management, employing different interactive tools such as cases, discussions, and role plays but address a subject such as chronic disease self-management teams constantly relying on participants' teamwork. These programs support the concept of integrated care and also help participants to continue learning throughout their working careers.[23] Cultural competence training is also one of the important components of the preparation of squads for integrated care. People who practice health care currently work in various settings that compel them to understand and address cultural disparities affecting interaction. These differences often pose a challenge when it comes to cultural sensitivity in teams, but training that is aimed to embracing such a diversity makes sure that all patients are treated fairly. For instance, knowing a patient's culture may assist a team in providing customized interventions in a patient-centred way implying that a given patient will follow through with a recommended treatment regimen.[24]

Conclusion

Cooperation across the disciplines is at the epicenter of ongoing attempts to enhance the quality of service and coordination of the given sphere. Using the different and individual skills of the nursing field, emergency medicine, and pharmacy will ensure patients requirements are met efficiently and effectively due to a proper combined and comprehensive understanding of the issues at hand. In collaboration, it has been proved that many errors are eliminated, chronic illnesses are well managed, and most important patients are satisfied hence the importance of collaboration in attaining better health. However, to improve the functionality of teams, one has to learn how to overcome barriers that may be present in communication processes, poorly defined or assigned roles in teams. Simulation practice, establishment of team, and other ways to ensure supportive culture are crucial in preparing professions to work interdependently in integrated teams. Over time, discourse on health systems has shifted; as it moves forward, collaboration and strengthening team training will need to be priorities that shape the growth of equality in the care given to patients around the world. This paper also demonstrates that cooperatively supported work not only provides value in the present for enhancing relations and knowledge sharing but is also

the only approach to shift healthcare to be collaborative, comprehensive, and patient-centered.

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التعاون بين التخصصات في التمريض، الطب الطارئ، والصيدلة لتحسين نتائج المرضى

الملخص

الخلفية: يعتبر العمل الجماعي متعدد التخصصات بين التمريض، العاملين في الطب الطارئ، الصيدلة وغيرهم من مقدمي الرعاية أمراً حيوياً في تعزيز نتائج المرضى. ومع ذلك، هناك مشاكل في التواصل والعلاقات العملية غير الواضحة بين هذه المهن.

الهدف: يناقش هذا البحث وظائف هذه التخصصات، ويستعرض تأثيرات التكامل بينها، ويحدد التحديات التي قد تواجهها، ويقدم توصيات لتحسين التعاون في مجال الرعاية الصحية.

الطرق: استعراض الأدبيات بهدف فحص الأبحاث، والحالات، والنهج المتعلقة بفعالية التدريب وجوانب تعزيز العمل الجماعي والحلول للمشكلات التي من المحتمل أن يتم مواجهتها.

النتائج: من بين الفروق التي تم التعرف عليها، يمكن أن يساهم التعاون في تقليل معدلات الأخطاء في الإدارة، وتحسين فعالية الرعاية المزمنة، وزيادة رضا المرضى. يمكن حل مشاكل التواصل من خلال التعليم، القيادة، والتدريب على الكفاءة الثقافية.

الخلاصة: إن تعزيز التعاون بين المهنيين يؤدي إلى تحسين نتائج رعاية المرضى، كما أن تنظيم الأنظمة يعزز الحاجة إلى التدريب الكافي وتحسين بيئة العمل.

الكلمات المفتاحية: التعاون، التمريض، الصيدلة، الطب الطارئ، المرضى.