International Journal on Science and Technology (IJSAT)
E-ISSN: 2229-7677 ● Website: www.ijsat.org ● Email: editor@ijsat.org

Challenges of Protocol Compliance in Multidisciplinary Healthcare Teams: A Qualitative Investigation in a Tertiary Care Setting

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Abstract

Background: It is crucial to adhere to protocols in order to maximize patient safety, clinical outcomes, and overall quality of healthcare. However, professionals working within multidisciplinary teams face numerous barriers that restrict their compliance.

Objective: The study's objectives were to identify the barriers to protocol compliance of multidisciplinary healthcare providers in a tertiary hospital, with the focus on individual, organizational, and interpersonal relations structure.

Methods: Using qualitative descriptive approach, data were collected through semi-structured interviews and focus group discussions with thirty healthcare workers that included nurses, laboratory technicians, pharmacists, radiologists, respiratory therapists, and dentists. A thematic analysis of the data was conducted to uncover the barriers.

Results: Three main barriers emerged from the analysis: (1) Individual barriers (knowledge gaps, change resistance, clinical judgement disparities) (2) Organizational Barriers (increased workload, inadequate pre-service training, poor supervision) (3) Interprofessional Barriers (communication breakdowns, absence of collaborative environment, undefined responsibilities). The participants called for strong interprofessional collaboration, education, and leadership to facilitate the protocol adherence.

Conclusion: Multi-dimensional barriers suggest that compliance with protocols is best overcome with comprehensive solutions that include problems of individual capabilities, organizational context, and collaboration between professionals. To achieve greater compliance, these gaps should be addressed through stronger education, higher involvement of leadership, and building a collaborative environment.

Keywords: Protocol Compliance, Obstacles, Interdisciplinary Healthcare, Qualitative Research, Patient Care, Active Teamwork, Teaching Hospital

Introduction

As emphasized by Cabana et al. (1999), compliance with clinical protocols is fundamental for optimal delivery of health services because it guarantees patient's safety, improves the clinical outcomes, and contributes to the efficiency of healthcare systems (Pronovost et al., 2006). In the descriptive study, compliance was as low as 75 percent in a tertiary hospital setting noncompliance is often more prominent. Due to their complex organizational structures, tertiary hospitals face this problem more than others. This can be even more challenging in multidisciplinary settings. Nurses, laboratory personnel, pharmacists, radiologists, respiratory therapists, and even dentists need to work together in a multidisciplinary setting and face discipline-specific problems (Grol & Grimshaw, 2003).

There can be multiple reasons for failure to comply with protocols at an educational institution. Individual, internal organizational, and external system factors all contribute. Knowledge deficits, lack of change motivation, and varying levels of clinical and professional experience all fall within an individual's control, but do affect compliance (Cabana et al., 1999). Among organizational barriers a high workload, understaffing, limited resources, and inadequate and inadequate training programs all undermine protocol compliance (Grol & Wensing, 2004). Poor interprofessional communication and team working culture can fragment care, which further complicates the management of the care, increases chances of risks and errors (Leonard, Graham & Bonacum, 2004).

Every profession in a multidisciplinary healthcare team comes with pre-established practices, priorities and workflows, which at times can create silos that obstruct protocol adherence. For example, nurses may emphasize bedside care protocols, while specialists in the laboratory may place their concentration on diagnostics, and pharmacists focus on the safety of the medicament. The synthesis of these divergent viewpoints requires strong communication networks, interdisciplinary education, and shared appreciation of clinical protocols (Zwarenstein, Goldman, & Reeves, 2009).

This study seeks to investigate the barriers to adherence to protocols from the perspectives of other professionals in a tertiary hospital. With an interpretative qualitative design, the research hopes to gain an understanding of the experiences of nurses, laboratory specialists, pharmacists, radiologists, respiratory therapists, and dentists and the challenges they face. Recognizing these barriers is important to develop effective strategies that enhance compliance, increase patient safety, and promote collaboration among specialties and disciplines.

Literature Review

The issue of non-adherence to guidelines and protocols in healthcare has been studied as a research topic, as the issue has a direct relation to patient safety and the quality of healthcare. There are barriers associated with protocol adherence which are complex as they require a combination of individual, organizational and systemic interactions (Grol & Wensing, 2004).

Individual Barriers: According to studies, individual healthcare workers face potential barriers like lack of knowledge, inadequate training, and resistance to change which can considerably affect adherence to protocols. Lack of awareness, familiarity, and agreement with the protocols tend to make physicians not attend to clinical guidelines for them (Cabana et al., 1999).Likewise, nurses and other allied health

personnel face barriers regarding education insufficiency related to specific protocols as well as varying degrees of clinical skill competency (Grol & Grimshaw, 2003).

Organizational Barriers: Compliance with protocols is affected by organizational culture and the allocation of resources, which, in this case, are regarded as non-material. Grol and Wensing (2004) pointed out that high workload, time limitation, and staff deficiency are significant organizational barriers. The lack of adequate leadership support and insufficient access to essential resources makes it even more challenging, creating a situation in which consistent adherence to protocols is practically impossible.

Interprofessional Communication: Adherence to protocols requires effective communication among members of the multidisciplinary teams. According to Leonard, Graham, and Bonacum (2004), most adverse events in hospitals are a consequence of a failure in communication between the healthcare providers. The absence of collaborative culture combined with poor information flow results into disjointed care leading to poor application of clinical protocols.

Multidisciplinary Dynamics: The multidisciplinary approach to complex problems with many defined roles can facilitate or undermine compliance with protocols. Zwarenstein, Goldman, and Reeves (2009) observed that interprofessional collaboration was beneficial for patient outcomes when healthcare professionals participated in shared decision-making and coordinated care activities. On the contrary, professional priorities and perceptions of clinical guidelines can create boundaries with respect to protocols.

Strategies to Improve Adherence: The reviewed literature also attempts to identify these factors with intent to increase adherence to the established protocols. Continuous professional development, interdisciplinary training, and strong managerial support are the most vital elements in establishing a culture of compliance (Pronovost et al., 2006). Moreover, improved adherence rates were associated with the use of standard protocols, better information technology infrastructures, and team-based care systems (Grol & Grimshaw, 2003).

This review identified and analyzed several primary sources of barriers to protocol adherence in healthcare. Overcoming these challenges calls for a comprehensive intervention that accounts for the particular realities of healthcare disciplines as well as the requirement for strong interprofessional collaboration and organizational backing.

Methodology

This research was conducted in a tertiary hospital to determine the barriers to protocol compliance by multidisciplinary teams of healthcare providers. The study sought to include the views of nurses, laboratory technologists, pharmacists, radiologists, respiratory therapists, and dental surgeons in the research.

Study Design: A qualitative descriptive design was used to gain better insight into the barriers to protocol compliance. This was done to ensure that rich detailed information was collected and analyzed thematically.

Setting: The study was conducted in a tertiary hospital which has a sophisticated healthcare system comprising of several specialized units and multidisciplinary teams.

Participants: Thirty healthcare professional subjects believed to meet the requirements were selected which included nurses, laboratory technologists, pharmacists, radiologists, respiratory therapists, and dentists. The respondents had to have at least a year of clinicial practice and active participation in patient care or diagnostic procedures.

Data Collection: Data for the study was sourced through interviews and focus group discussions which were semi-structured. The interviews were directed with an outline of questions designed to capture individual, organizational, and systemic factors which negatively impacted protocol compliance. The interviews were conducted in 45 to 60 minute sessions and participants had given their authorization to be recorded.

Data Analysis: In the previous step, we undertook thematic analysis in relation to qualitative data. Codes were assigned to the transcripts using an inductive method in order to extract appropriate themes for the barriers to protocol compliance. Qualitative data analysis software was used to assist in the coding and development of the themes in a more structured manner.

Ethical Considerations: Authorization was received from the ethics review board of the hospital. Subjects were informed, in confidentiality terms, throughout the study, and these consents were kept confidential. Data was obfuscated to ensure anonymity of subjects.

Trustworthiness: To ensure the credibility and reliability of the findings, some strategies were used like member checking, peer debriefing, and clarifying different sources of data. Reflexivity was done by the research team to prevent bias while collecting and analyzing data.

Findings

The analysis of the data established three major themes together with numerous sub-themes which presents the barriers to protocol adherence within multidisciplinary healthcare teams. The perspectives obtained from the nurses, laboratory specialists, pharmacists, radiologists, respiratory therapists, and dentists helped in understanding the issues encountered in a tertiary hospital comprehensively.

Theme 1: Barriers on the Individual Level

Sub-theme 1.1: Gaps in Knowledge and Information Affected healthcare staff reported that incomplete or outdated knowledge of protocols greatly impacted their ability to comply. Many professionals did not know recalling the previous protocols in history were ineffective for them because the protocols were not communicated properly.

A staff nurse recalled, “New protocols are always put in place. However, I discover them at the wrong time because the communication put in place is not adequate.” A laboratory specialist provided, “They are issued, but because of work overload, it is improbable to labor so much with the information.”

Sub-theme 1.2: Reluctance to Accept Change In differing degrees, reluctance to accept new protocols was especially common amongst older staff who were used to working for a long time. These feelings arose because either consciously or unconsciously they were bored of their routines and were unsure that any new instructions would work.

A pharmacist said, “There is always a mental block associated with the old ways of doing things. People are actively discouraged to ‘change for the sake of change’ when they know it works.’” A radiologist remarked, “There is the classic, ‘If it’s not broken, don’t change it,’ phenomenon which does not help when changes in protocols are required.”

Sub-theme 1.3: Differences in Adherence to Protocols by Healthcare Providers Clinical practitioners pointed out that compliance to standard operating procedures was not absolute because of personal clinical judgement, which made adherence partial.

As a respiratory therapist noted, “In emergencies, we depend on our judgement. Protocols are critical, however they do not always address the problems we encounter in patient care in real-time.”

Theme 2: Organizational Barriers

Sub-theme 2.1: Workload and Time Constraints High patient loads, lack of adequate staffing, and time constraints were identified as barriers to adherence to the protocols. Respondents felt that following protocols was often less of a priority than meeting basic patient care requirements.

A respiratory therapist noted, “It's difficult to follow every step of a protocol when your workload is high.” A nurse admitted, “In an emergency situation, the protocols have to wait. We need to make sure that the patient is stable first.”

Sub-theme 2.2: Inadequate Training and Resources Participants articulated the need for more professional development and sufficient resource provision. Most believed that the initial training was too basic and that there was Little if any training provided afterwards.

A laboratory specialist remarked, “Most of the time, training is a one-off event. Without regular refreshers, it is all too easy to forget vital elements.” A dentist participant chimed in, “We require new training materials and protocols to be able to train to the right standard.”

Sub theme 2.3: Gaps in Leadership and Policies Inconsistent protocol compliance and insufficient assistance from management were serious obstacles for participants. The participants, in particular, felt that management was preoccupied with ensuring compliance at the organizational level without providing meaningful assistance for compliance-oriented goals.

A pharmacist expressed, “There is a gap between the guidelines and actual activities. Managers want to see compliance, but do not consider the problems we deal with.” A nurse added, “Compliance measures are documented, but little monitoring is done to check whether there is genuine compliance to the compliance measures.”

Theme3: Dynamics of different professions

Sub theme 3.1: Gaps in Verbal Communication Interactions among communication between various professions were not executed properly, which resulted in working with the protocols inappropriately. The problem was particularly pronounced during handovers, multidisciplinary meetings, and shared patient care.

A radiologist stated, “There is a gap that often causes errors, which we assume is not a problem.” A respiratory therapist stated, “There is a loss of information between shifts and between departments. Communication, or the complete lack of it, is the greatest challenge,” noted the therapist.

Sub-theme 3.2: Absence of Culture of Collaboration The lack of a strong team approach was a problem reported by the participants over and over again. Respondents noted work silos, as independent departments functioned without collaborating with each other.

A dentist stated, “They are all separate. Little attention is paid to working together, which creates problems with protocols.” A nurse stated, “We could use some interprofessional meetings, but those are not frequent enough. We need more structures in-place to facilitate teamwork around the problems of patient care.”

Sub-theme 3.3: Absence of Distinction Between Roles Gaps in adherence to protocols were often linked to gaps in role and responsibility definitions. This was most common in overlapping responsibilities in which there was no defined control.

A pharmacist stated that 'In some cases, it’s hard to identify who follows up on some procedures, particularly in shared responsibilities.’ A laboratory specialist added, ‘With interdepartmental protocols, there is always that uncertainty as to who is in charge.’

These quote illustrate the overlap of personal, institutional, and professional boundaries that relate to compliance with the guidelines. To eliminate these barriers, there is need for interprofessional education, distributing educational resources, and collaboration between health care professionals resources targeted on practicing discipline must be enhanced for the communications, leadership, and training to adhere to the set policies which are directed towards bettering the patient outcomes in the tertiary health care system.

Discussion

The results of this study are aimed at understanding the complex barriers that multidisciplinary healthcare workers face for protocol adherence within a tertiary hospital. Based on the overarching themes, it is evident that protocol adherence is influenced by a combination of individual, organizational, and interprofessional factors.

Personal Barriers

The most important identified impediments to adherence to the protocol were the knowledge and awareness barriers. According to earlier research, gaps in continuous education and refreshers on protocols contribute to their inconsistent application (Cabana et al., 1999). Moreover, change resistance, especially for junior staff, poses another challenge in trying to implement new routines in healthcare practices. This result agrees with Grol and Grimshaw (2003), who pointed out the impact of professional inertia on the failure of change programs.

Variability in individual clinical judgment was another barrier that reflects the middle ground between protocol compliance and individualized patient care. It is clear that clinical autonomy must exist, but protocol compliance that endangers patient safety is unacceptable. This result indicates a requirement for more complex clinical scenario adaptable evidence-based protocols.

Barriers Related To Work

Factors that were repetitively explained as barriers include organizational workload, time-related constraints, insufficient training, and inadequate resources. Inadequate staffing alongside high volumes of patrons tends to prompt many healthcare practitioners to forego protocol compliance and focus more on clinical needs. Grol & Wensing's (2004) study confirms this by showing how time pressures form a substantial barrier in the adoption of best practices.

Also, the study noted the presence of gaps in policies and administrative leadership. Respondents noted that protocols are in place but the lack of adequate supervision coupled with inadequate leadership renders the protocols ineffective. This is affirmed by the study of Leonard, Graham, and Bonacum (2004), which highlighted the need for active leadership in the establishment of safety culture and adherence to the protocols.

Collaboration Between Professions

Both collaboration and communication between health professionals were found to be crucial in complying with protocols. Communication, lack of a cooperative culture, and unclear boundaries were some of the dominant issues which indicated that where there are silos, there is a lack of teamwork. This supports the findings of Zwarenstein, Goldman, and Reeves (2009) regarding the impact that collaborative work between different professional groups has on the health sector.

As far as functional ambiguity is concerned, it calls for the delineation of roles within multidisciplinary teams. Such ambiguities may result in confusion which can be erroneous stressing the importance of roles and responsibilities in guaranteeing accountability for noncompliance with set protocols.

Implications for Practice

These barriers can be alleviated in one comprehensive step, which includes the following.

1. Education and Training: Training and education for knowledge gaps through constant updates and reinforcement about the importance of adherence.

2. Director Participation: Active and effective director supervision for protocol compliance through monitoring and providing adequate feedback and resources.

3. Teamwork: Improving collaboration through facilitation with clearly defined communication structures, interdepartmental meetings, and role clarity.

4. Adequate resources: Providing adequate time, materials, staff, and other resources needed for the protocols to be followed without harming patient care.

Limitations

This study is valuable, but there are some weaknesses. The qualitative approach while detailed is not generalizable and this study was done in one tertiary hospital, which does not represent the views of other healthcare professionals.

Conclusion

The findings of this study indicate the different obstacles to protocol compliance among multidisciplinary health care practitioners. These institutions need to change cultures, so that compliance is enhanced in terms of individual safety and care quality. Further research should examine how these barriers can be intervened upon and assessed in and across various healthcare settings.

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الملخص
الخلفية: من الأهمية بمكان الالتزام بالبروتوكولات من أجل تعظيم سلامة المرضى والنتائج السريرية والجودة الشاملة للرعاية الصحية. ومع ذلك، يواجه المهنيون العاملون ضمن فرق متعددة التخصصات العديد من الحواجز التي تحد من امتثالهم.
الهدف: كانت أهداف الدراسة تحديد الحواجز التي تحول دون امتثال مقدمي الرعاية الصحية متعددي التخصصات للبروتوكول في مستشفى جامعي، مع التركيز على بنية العلاقات الفردية والتنظيمية والشخصية.
الطرق: باستخدام النهج الوصفي النوعي، تم جمع البيانات من خلال المقابلات شبه المنظمة ومناقشات المجموعات البؤرية مع ثلاثين عاملاً في مجال الرعاية الصحية بما في ذلك الممرضات وفنيي المختبرات والصيادلة وأخصائيي الأشعة ومعالجي الجهاز التنفسي وأطباء الأسنان. تم إجراء تحليل موضوعي للبيانات للكشف عن الحواجز.
النتائج: ظهرت ثلاثة حواجز رئيسية من التحليل: (1) الحواجز الفردية (فجوات المعرفة، ومقاومة التغيير، وتفاوتات الحكم السريري) (2) الحواجز التنظيمية (زيادة عبء العمل، والتدريب غير الكافي قبل الخدمة، والإشراف الضعيف) (3) الحواجز بين المهن (انهيار الاتصالات، وغياب البيئة التعاونية، والمسؤوليات غير المحددة). ودعا المشاركون إلى التعاون القوي بين المهن، والتعليم، والقيادة لتسهيل الالتزام بالبروتوكول.

الخلاصة: تشير الحواجز متعددة الأبعاد إلى أن الامتثال للبروتوكولات يتم التغلب عليه بشكل أفضل من خلال الحلول الشاملة التي تشمل مشاكل القدرات الفردية، والسياق التنظيمي، والتعاون بين المهنيين. لتحقيق قدر أكبر من الامتثال، يجب معالجة هذه الفجوات من خلال التعليم الأقوى، والمشاركة الأعلى للقيادة، وبناء بيئة تعاونية.

الكلمات الرئيسية: الامتثال للبروتوكول، العقبات، الرعاية الصحية متعددة التخصصات، البحث النوعي، رعاية المرضى، العمل الجماعي النشط، المستشفى التعليمي