



PRACTICE NURSES COOPERATION WITH PHARMACIST- PHYSICIANS IN MEDICATION RECONCILIATION ADHERENCE; REVIEW

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Abstract:

Based on the results on the Physician-Pharmacist and Nurses Collaboration Index, it appears that physicians had the perception that clinical pharmacists were involved in the provision of patient care, that they could be trusted to follow up on suggestions, and that they were credible. The findings of the review indicate that the intervention that was based on teams created favorable conditions for the development of new approaches to work in order to acquire commitment to professional working relationships. Compliance with medication reconciliation is accomplished by a formal procedure that involves the doctor providing the patient with the most comprehensive and correct list of drugs that they are currently taking, and then comparing that list to the prescription orders that were given upon admission and discharge.

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Introduction:

Medication mistakes are a major issue for patient safety and finances in hospitalized patients in the United States and Europe. During transitions of care, over 50% of medication mistakes happen, and up to 67% of medication histories have at least one error. As the number of patients taking various drugs increases and pharmaceutical treatment management gets more complex, the need for medication reconciliation becomes necessary. Implementing medication reconciliation at all care transitions in organizations has been effective in preventing Adverse Drug Events (ADEs) and decreasing prescription mistakes [1,2].

Healthcare experts have already defined the procedure of medication reconciliation. Healthcare professionals (HCPs) get the most accurate medication history from patients and their families to detect and address any unintentional differences. Currently, there is no agreement on who should be responsible for overseeing the process and who should be tasked with compiling the drug list. Additional obstacles include the lack of a standardized procedure, time constraints, and patients' or physicians' unfamiliarity with certain drugs. The Institute for Healthcare Improvement states that reconciliation is a collaborative obligation among nurses, pharmacists, and physicians, each with a specific function [3,4].

The American Society of Health-System Pharmacists supports the pharmacist's involvement in medication reconciliation. Recent research has demonstrated that when pharmacists participate in medication reconciliation at admission and discharge, it leads to a decrease in medication mistakes, enhances patient safety, and lowers costs related to health resource consumption [5].

Review:

In today's world, a significant number of pharmacists are actively engaged in clinical pharmacy services within hospital wards. Furthermore, in many locations, pharmacists have successfully become indispensable parts of the ward teams [6]. According to the European Statements of Hospital Pharmacy, the primary responsibility of a hospital pharmacy is to maximize the favorable results for patients by collaborating with members of a variety of disciplines within the context of multidisciplinary teams in order to ensure the responsible utilization of medications [3]. It has been discovered that collaborative care between pharmacists, doctors, and nurses has the potential to enhance patient

outcomes as well as the process of treatment [6]. This is in addition to the fact that the importance of multidisciplinary cooperation has expanded. In light of this, it is essential to have a solid understanding of the process by which a cooperative relationship between a ward-based pharmacist, nurses, and physicians develops.

A theoretical framework for collaborative working relationships (CWR) between physicians and pharmacists has been suggested [4]. This framework is intended to provide assistance to researchers and practitioners who are interested in pharmacist cooperation initiatives. According to this paradigm, professional working relationships are divided into five phases that evolve in a progressive manner, beginning with Stage 0 (professional awareness) and ending with Stage 4 (commitment to professional working relationship). The framework also provides a description of three aspects that are responsible for the establishment of the collaborative connection. These factors are the qualities of the participant, the situation, and the exchange. In contrast to context characteristics, which are more closely associated with the environment, such as organizational structure, participant characteristics include things like the level of education and training experience that an individual possesses. The social interactions that take place between pharmacists and physicians are referred to as exchange characteristics [5].

On the other hand, there has been a very limited amount of research conducted in Sweden to explore the nature of CWRs and how they are integrated between pharmacists and other healthcare practitioners such as physicians and nurses [6]. Despite the fact that the number of clinical pharmacists working in hospitals is growing, clinical pharmacists have not historically been considered to be a member of the core patient care team in Swedish hospitals. As part of a research project that was carried out in September 2015, a clinical pharmacy service was introduced into a general medical ward of a hospital located in the rural region of northern Sweden. [7] The research was carried out over a period of six months, and its purpose was to investigate whether or not medication reviews carried out by clinical pharmacists as a member of a ward team may potentially lower the number of drug-related problems (DRPs). [7] Prior to the implementation of this service, a qualitative research was carried out in order to gain an understanding of the expectations and attitudes held by medical

professionals, specifically nurses and physicians. At this particular hospital, clinical pharmacists had not been involved in the provision of patient care services prior to the interviews that were conducted. According to the findings of the study, the physicians and nurses had limited experience dealing with clinical pharmacists, had limited understanding of their clinical abilities and clinical competency, and had negative attitudes of clinical pharmacists. Those who worked in nursing believed that pharmacists were going to take away their jobs, while those who worked in medicine believed that their burden was going to rise. At the time, they were considered to be obstacles that may prevent the service from being successfully implemented [8].

The community-based (general practitioners and community pharmacists) research that has been conducted to investigate CWR has been conducted. Rathbone et al. investigated the concept of clinical work relationship (CWR) between general practitioners (GPs) and pharmacists in Australia with regard to medication adherence [8]. In their description, the authors suggested that CWRs may be supported by trust and shared viewpoints, both of which can be developed through the interaction of the participants during training. Furthermore, in order for the CWRs to be effective, it was necessary for them to have identical ideas about the duties and objectives of each other. A research was conducted in Canada that investigated CWR for nurses, doctors, and pharmacists working in team-based hospitals. According to the findings that we obtained, pharmacists were highly appreciated, and the success of partnerships was increased when the relationships between the parties involved were founded on mutual trust and respect. It was also determined that there were organizational obstacles, such as scheduling, logistics, space, employment, and continuity [9].

Based on the results of the PPCI, it appears that physicians have the perception that clinical pharmacists contribute actively to the provision of patient care, that they are credible, and that they can be trusted to follow up on suggestions. However, there is potential for growth of clinical work representatives within the domain of job specification. The results of our PCCI assessments were likewise comparable to those discovered in earlier research investigations [10]. It was demonstrated by both the PCCI scores and the qualitative data that having a clear understanding of one's function is essential in order to cultivate

positive connections [10]. This should not come as a surprise given that the domain of role specification had the lowest results. As was mentioned before, ward-based pharmacists are not a typical practice in Sweden. This, however, varies from hospital to hospital, and in certain clinics, clinical pharmacists are already well-established members of the ward staff. However, due to the fact that the majority of pharmacists are employed in community pharmacies, a significant number of medical professionals and nurses are not aware of the skills of clinical pharmacists [11].

Individual, contextual, and exchange characteristics are some other elements that have the potential to influence CWR. The individuals who took part in the research project acknowledged that individual qualities do, in fact, make a difference. This was brought up by a physician who was referring to the concept of having the appropriate person at the appropriate location for the pharmacists. The openness of the physicians and nurses to address the matter, as well as their open-mindedness, was also observed from the perspective of the pharmacists observing the situation. The participants made connections between these variables and the care and safety of patients. According to the participants, communication was characterized as being open, based on collaborative conversation, and collaborative in nature, and thus, an opportunity to gain knowledge. In this particular investigation, the concern that was expressed about the participation of knowledge specialists in the rounds was not relevant, as was previously stated. Particularly, in this particular instance, concerns over power that were associated with the expert role were not seen to be a problem. In this particular study, interviews were conducted with just female pharmacists. An intriguing male viewpoint would have been welcome; nonetheless, the sample is representative of the gender demographics that are present in ward-based practice in Sweden [12].

The job specification was one of the most important conclusions that emerged from this research. According to the findings of this study, there is the potential for pharmacists to enhance interprofessional collaborative care as well as comprehend the duties of other professional roles if they get training alongside other professionals such as physicians and nurses [12]. It is common knowledge that a comprehensive medication reconciliation procedure may greatly reduce the number of medication mistakes that occur as a

consequence of an erroneous or incomplete drug history. An effort that was carried out by the Institute for Healthcare Improvement (IHI) came to the conclusion that the primary objective of the medication reconciliation procedure is to reduce the number of adverse drug events caused by medications. The WHO High 5's initiative in Australian hospitals generated measurable and sustained improvements in the accuracy of medication information on admission, therefore lowering the risk for drug-related adverse events and damage. These gains were accomplished by the implementation of a medication reconciliation procedure that was sustainable. Between 0.21 and 0.16, the mean number of accidental and undocumented deliberate medication differences per patient dropped, whereas the mean number of intentional medication discrepancies reduced from 0.34 to 0.08. Discrepancies that were not purposeful fell from 15.2% to 11.1% of the total. One research found that a set of interventions, one of which was medication reconciliation, were implemented over a period of seven months and were successful in reducing the incidence of medication mistakes by seventy percent and the risk of adverse drug reactions by more than fifteen percent. As an additional point of interest, there is a growing body of research suggesting that the implementation of medication reconciliation can result in decreases in the length of hospital stays, the number of patients who require readmission, and the overall cost of healthcare. The use of the hospital within the first thirty days after release was decreased by a package of discharge services that included medication reconciliation [13,14].

In the country of Lebanon, there is no established procedure for the reconciliation of patient medications. There is a lack of conformity between the execution of medication reconciliation in hospitals in Lebanon and the guidelines that are followed internationally. In the present day, the process of obtaining a drug history is often carried out by nurses or physicians, while the function of the pharmacist is sometimes overlooked. According to the findings of a recent survey that evaluated the pharmacy practices of general hospitals in Lebanon, around 41% of hospitals execute medication reconciliation at admission, transfer of care, and discharge. It was shown that teaching hospitals were more likely to execute medication reconciliation than non-teaching hospitals. Additionally, it was observed that pharmacy services in teaching hospitals appeared to be more advanced when collaboration with connected medical schools was seen [15]. The

results of a prior research, which did not specifically focus on medication reconciliation, demonstrated that student pharmacists and professors identified over one thousand drug-related issues, of which 4.3% were connected to medication reconciliation. Among Jordanian pharmacists, there was a relatively low level of understanding of the idea and policy of the medication reconciliation process, according to a study that evaluated the practice of medication reconciliation in hospital pharmacies in Jordan, which is a nearby nation [15].

Conclusion:

Pharmacists, physicians, and nurses play a crucial part in the drug reconciliation process. The American Society of Health-System Pharmacists has outlined pharmacists' main duties as creating patient-centered drug reconciliation systems, educating patients and healthcare professionals, and assisting in patients' care transitions. Medication reconciliation might be enhanced by using two main strategies: pharmacist-led reconciliation and conducting thorough patient interviews. Medication safety officers (MSOs) have a crucial leadership role in ensuring that all hospital staff perceive medication reconciliation as a medication safety concern rather than an extra task. Most Saudi hospitals depend on doctors or medical students to gather drug histories. Pharmacists' involvement in this procedure might enhance the thoroughness and precision of drug listings.

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