Exploring the Concept of Nurse-Physician Communication Within the Context of Health Care Outcomes Using the Evolutionary Method of Concept Analysis

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Nurse-physician communication in nursing and medicine and its relationship to health care outcomes have been studied, but there is an absence of a concept analysis using the evolutionary method. This article (1) explores the meaning of nurse-physician communication within the context of health care outcomes using the process for concept analysis proposed by Rodgers; (2) aims to clarify the concept’s definition, surrogate and related terms, attributes and antecedents; (3) provides a clearer understanding of what the consequences of the concept are; and (4) suggests an operational definition. A clearer conceptualization is needed to help provide knowledge for nurses, thus guiding their practice and also theory and research.

Keywords: Communication, Health care outcomes, Nurse-physician communication

Communication has long been recognized as an essential theoretical component of nursing.¹ This is evident in the works of nursing theorists specifically King,² Orlando,³ Peplau,⁴ Travelbee,⁵ and Duld-Battey.⁶ Communication is also a precursor to providing psychosocial support by nurses to patients and their families.⁷ The communication process is integral to the attainment of health-related goals. Communication in any form is an integral part of daily life and within the realm of health care can mean the difference between life and death. A vital relationship exists between health care professionals and patients that can be either negatively or positively affected by interprofessional and/or interpersonal communication. Of particular importance and the
focus of much attention over the years is the communication between physicians and nurses. A July 21, 2004, Joint Commission for Accreditation of Healthcare Organization’s (JCAHO’s) “Sentinel Event Alert” on infant death reported that communication issues topped the list of identified root causes (72%). Greenfield reported that poor nurse-physician communication led to polarization of efforts to care for patients. The importance of nurse-physician communication has been demonstrated in terms of patient safety and other health care consequences as well as nurses’ burnout and turnover. Dysfunctional nurse-physician communication is also linked to medication errors, patient injuries, and patient deaths.

National attention has focused on patient safety since the landmark Institute of Medicine report, To Err Is Human: Building a Safer Health System. This report emphasized that 98 000 people die yearly in US hospitals related to medical errors. According to the JCAHO, promoting efficient and effective communication among health care providers is critical to maintaining patient safety. This was embodied in the National Patient Safety Goals 2004 developed by the JCAHO. Nurse-physician communication was also specifically addressed by the American Nurses Credentialing Center Magnet Program as an integral component of quality care and also to nurse satisfaction in the work environment. The American Association of Critical-Care Nurses standards for establishing and sustaining healthy work environments also put forth that nurses must be skilled communicators. They must be as proficient in communication skills as they are in clinical skills.

Communication between all members of the health team is absolutely essential to achieve quality health care outcomes. Faulkner reported that to be able to communicate effectively with others is at the heart of all patient care. Effective communication is widely regarded to be a key determinant of patient satisfaction, compliance, recovery, and patient safety. Clear, mutually understandable communication is necessary not only for good patient outcomes, but also to produce valid, useful health-related research.

**PURPOSE**

There are a considerable number of research studies conducted on nurse-physician communication within the context of health care outcomes, but there is an absence of a concept analysis in the literature using the evolutionary method. This article explores the meaning of the concept of nurse-physician communication within the context of health care outcomes in the field of nursing and medicine. The overall aim was to provide an operational definition of nurse-physician communication as it relates to health care outcomes and to understand in greater detail what the consequences are. This analysis will also clarify the concepts surrogate and related terms, attributes, antecedents, and consequences. A clearer conceptualization is needed to help provide knowledge for nurses, thus guiding their practice, in particular, patient care, and to help guide theory and research.

**METHODS**

Nursing in general has encountered many issues and problems in its attempts to develop its knowledge base. Philosophical pursuits made it clear that many of the problems confronted in nursing were conceptual. Concept analysis had been used with some frequency to address such problems in nursing. To better address the concerns of valuing dynamism, meaning, and interrelationships of nurse-physician communication within the context of health care outcomes, the evolutionary method of concept analysis by Rodgers was used. Rodger’s method was chosen for this concept analysis because the dynamic nature and context-dependent utility of concepts are acknowledged in her model. This method of concept analysis is an inductive, descriptive means of inquiry used to clarify the concept by identifying consensus and to examine the historical or evolutionary background of the concept.

Rodgers offers an alternative process suggesting that concepts are always context bound or affected by contextual factors and hence never fixed, truly knowable realities. This is opposite of the essentialist viewpoint that concepts are universal and unchanging in which historically concept analysis has been based. Adherence to essentialism has compromised the significance and utility of attempts to clarify and develop concepts in nursing. Duncan and colleagues argued the importance for nurses to examine the ontological origins and analysis strategies of concepts within praxis—that is, to develop and analyze concepts contextually. The emphasis on identifying the contextual basis of the nature of the concept is important for application of the concepts. Concepts are important in determining how to refer to or discuss certain situations, events, or phenomena, and how various conceptual categories may be related to each other.

The evolutionary method acknowledges the existence of vast interrelationships among phenomena and associated concepts. The concept nurse-physician communication within the context of health care outcomes is interrelated and dynamic as noted in the studies from 1986 to 2008. Thus, the goal of the evolutionary concept analysis is to clarify and develop the concepts rather than describe their essence. This method is a rigorous approach that calls for a systematic investigation of the available literature. As a methodology
ideally suited for the goals of this concept analysis, Rodgers' evolutionary processes outlined the primary activities: (1) identifying the concept of interest including surrogate and related terms, (2) identifying and selecting the appropriate sample and setting for data collection, (3) collection and analysis of relevant data to identify attributes, definitions, antecedents, and consequences, and (4) discussion of implications for practice and research and further development of the concept.

Thus, the goal of the evolutionary concept analysis is to clarify and develop concepts rather than describe their essence.

Literature Retrieval and Data Collection

Computerized search databases such as MEDLINE, CINAHL, and PsychINFO were utilized to obtain articles on the concept of interest. Original research articles from the field of medicine and nursing were reviewed. In the evolutionary method, the setting and sample refer to the period to be examined and the disciplines or types of literature to be included. The discussion of the concept of nurse-physician communication started in the 1960s and started to proliferate more in the late 1980s and into this decade. Therefore, the broad time frame chosen, 1986 to 2008, allowed for the emergence, proliferation, and significant changes of interpersonal research specifically on nurse-physician communication.

A series of similar searches of CINAHL, MEDLINE, and PsychINFO was conducted. The keywords nurse-physician and communication and nurse-physician communication and outcomes were initially searched. Only English-language articles published in the respective fields of medicine and nursing were included in the study. To be included in the concept analysis, the studies had to be original research that meets the specific, highly systematic eligibility criteria that the study’s focus involved nurse-physician communication within the context of health care outcomes. No dissertations, thesis, or news reports were included. As noted in the selection process for sampling, the studies were conducted in different countries including the United States, Canada, United Kingdom, Northern Ireland, Australia, Sweden, Switzerland, Japan, and one from Saudi Arabia.

Search Results

The CINAHL initial search results using the keywords nurse-physician and communication yielded 787 citations, MEDLINE resulted in 87, and PsychINFO revealed 16 citations. Most of these articles were not relevant to this concept analysis reported here. Further search on specific combination of concepts (ie, nurse-physician communication and health care outcomes, nurse-physician communication and outcomes) yielded a more focused array of studies. Nurse-physician communication and health care outcomes search resulted to the following: CINAHL: 94 citations, MEDLINE: 1 citation, and PsychINFO: 2 articles. The initial review of the search results included literature on interprofessional collaboration, nurse-physician collaboration, nurse-physician relationship, communication style, disruptive behavior among nurses and physicians, and communication in end-of-life care and in long-term-care settings such as nursing homes. Most of these articles were not related to the concept of interest at hand and thus were not included in the study. It was evident that a considerable number of studies on this concept were done in intensive care units.

The establishment and final determination of the validity of the article to be included in the sample were then accomplished. According to Rodgers, the data should represent a sufficient percentage of the total data to arrive at an acceptable understanding of the concept under study. Rodgers further articulated that 30 items or 20% of the total sample is the minimum needed to facilitate a credible analysis. Furthermore, the context within which the concept is to be understood should be taken into consideration. The overall search provided a total of 34 studies (33%) that met the specified criteria (Table 1). There were 28 quantitative, 5 qualitative studies, and 1 mixed-method study both from the fields of nursing and medicine. Of these studies, most were conducted by both nursing and medicine, with 7 purely done by nursing. It was noted that there is a paucity of studies conducted by nursing as well as qualitative studies on this concept. The data selection process aimed at being inclusive but balancing specificity and strictly observing the criteria enough to be manageable (Table 1).

Data Analysis

The evolutionary method of concept analysis emphasizes that formal analysis may be conducted at or near the conclusion of data collection. This is done because this method has no element of an emergent design but rather a more focused inquiry and a circumscribed process. After the sample was selected, each item was read initially to identify the general tone and theme of the work, to have an overview of the article, and to gain a sense of the writer’s use of the concept. This step also helps the researcher become immersed in the literature, which facilitates identification of data relevant to the analysis. All articles were read at least a minimum of twice. The scientific data were all subjected to a review.
Aims of analysis are to identify the definitions, attributes, antecedents, consequences, and related concepts and surrogate terms of the concept.

Studies from nursing and medical literature were analyzed each separately. Phrases and themes were recorded onto coding sheets developed to organize the data. Each coding sheet had a specific heading such as definitions, related concepts, surrogate and related terms, and antecedents, and consequences. All data relevant to the specific heading were recorded on the specific coding sheet. Phrases and themes were reanalyzed each separately. Phrases and themes were reanalyzed each separately. Recurring ideas were grouped into themes. Some of the data collected in this study ultimately were found to be irrelevant and thus were excluded, especially as the concept became clearer through analysis. According to Rodgers, “Because the intent of analysis is to identify a consensus, failure to incorporate occasional extraneous bits of information along with predominant themes is not a cause for great concern.”

Similarities and differences of the concepts were also identified and compared with the impressions that were recorded on
the initial investigation to reveal a working definition of the concept. As the data were organized, appropriate labels were identified to describe the major aspects of the concepts. Further reading with emphasis on inductive discovery led to the establishment of context definitions and the identification of antecedents and attributes. Finally, a cohesive, comprehensive, and relevant system of descriptors or categories was generated (ie, positive and negative patient, nursing and physician outcomes). Related concepts and surrogate terms are exempt from this specific analysis procedure as they are recorded in simple 1- or 2-word units of data. The researcher noted the frequency of their occurrence in the literature, and examination of cross-disciplinary comparisons was done.

Trustworthiness throughout the concept analysis was maintained in several ways. These include (1) the use of readily available and commonly used professional databases, (2) a highly systematic eligibility criteria for the sample selection, (3) an adequate sample size to enable convergence of the data, and (4) the use of an audit log as a record of all methodological decisions that emerged during data collection and analysis and to help minimize researcher bias. Strategies relevant to qualitative research were also used to enhance the credibility of the findings. A doctorally prepared colleague was asked to validate the findings related to the themes and to decrease the influence of individual biases in the study. The absence of any hypothesis in the conduct of the study also enhanced neutrality in this investigation.

**FINDINGS**

The evolutionary approach to concept analysis is a means to identify a consensus or the “state of the art” of the concept and thus provide an important foundation for further research. The purpose is not to provide a final solution, a “crystal-clear” notion of the concept. Instead, the aim is to provide the foundation and clarity necessary to enhance the continuing cycle of concept development—a starting point rather than an end. It was emphasized that, for this study, the concepts of nurse-physician communication were analyzed within the context of health care outcomes in the field of nursing and medicine. Therefore, the definitions, attributes, antecedents, and consequences are viewed contextually from this perspective.

**Surrogate and Related Terms**

The notion of surrogate terms is derived from the position that there may be multiple ways of expressing the same concept. Identification of surrogate terms before beginning the formal analysis is necessary because terms that are used interchangeably to express the same concept need to be used to identify an appropriate population for sampling. Every single concept also exists as a part of a network of related concepts that provide a background and help to impart significance to the concept of interest. Identifying these related concepts adds to the contextual basis of the concept of interest by situating the concept in the context of a broader knowledge base.

The medical and nursing studies used similar surrogate and related terms in expressing the concept of nurse-physician communication. Nurse-physician interaction and nurse-physician collaborative communication were used interchangeably with nurse-physician communication. Both shared the same attributes with nurse-physician communication and were included in the study. Nurse-physician collaboration includes communication. Open communication and/or sharing of communication are attributes of collaboration. Articles about nurse-physician collaboration that did not include communication were excluded as well as “nurse-physician relationship” or also referred to as “nurse-doctor relationship.” The definition of the related concept nurse-doctor relationship has no relationship to and does not share the same attributes to the concept of interest.

**Definitions**

To be able to understand with clarity the definition of nurse-physician communication, it is important to first define communication and interpersonal communication. Communication is an act or instance of transmitting, a process by which information is exchanged between individuals through a common system of symbols, and the activity of conveying information. Communication can also be defined in multiple ways, depending on what context it is being applied. Humans communicate to share knowledge and experiences. Communication is a fundamental component of social behavior. Language is a form of communication specific to humans. Common forms of human communication include sign language, speaking, writing, gestures, and broadcasting. Communication can be interactive, transactive, verbal, or nonverbal and varies considerably in form and style. Internal communication within oneself is intrapersonal, whereas communication between 2 individuals is interpersonal.
The focus of this analysis is interpersonal communication. Interpersonal communication is important because of the functions it achieves. One reason we engage in interpersonal communication is so that we can gain knowledge about another individual so we can interact with them more effectively. We also engage in interpersonal communication to help us better understand what someone says in a given context, thus building understanding. We also establish identity through interpersonal communication through the roles we play. Finally, we engage in interpersonal communication because we need to express and receive interpersonal needs.  

According to Hansen, at its most basic level, interpersonal communication has 3 distinct elements: (1) a sender, (2) a message, and (3) a receiver. The sender is the person who speaks or who has a message to send. The message is the information to be communicated. The receiver is the listener or observer for whom the message is intended. Although this seems very simple, it is not. Interpersonal communication is much more than the exchange of words between 2 people. Communication is what you say, how you say it, why you say it, when you say it, and what you neglect to say. Nonverbal communication includes your facial expressions, your gestures, your posture, and your vocal tones. How a message is sent and how it is received have an impact on the relationship between sender and receiver.  

Kennedy and Garvin asserted that communication is one of the most important components of relationships between nurses and physicians. Nurse-physician communication may be defined as the act or process of transmitting information through a common system of symbols, sign, behavior, speech (oral), writing (nonverbal or written), or signals according to a common set of rules in an open, timely manner. Other dimensions of this concept that have been identified include mutual understanding, respect, satisfaction, and conflict management.  

Attributes of the Concepts  
Identification of the attributes of the concept represents the primary accomplishment of concept analysis. The attributes of the concept constitute a real definition, as opposed to a nominal or dictionary definition that merely substitutes one synonymous expression for another. Attributes are consistent and unique to a particular concept and when combined constitute a tangible definition that sets it apart from other concepts.  

The identification and analysis of the attributes of nurse-physician communication yielded a number of dimensions of the concept. They are the following: (1) accuracy (the content is valid and without errors of fact, interpretation, or judgment), (2) understandability (the language or reading level are appropriate), (3) timeliness and availability (exchange of information is provided or available when the other is in need of it), (4) reliability (the source of information is credible, and the content is kept up to date), (5) consistency (the content is consistent with information from other sources), (6) balance (the content presents the benefits and risks of potential actions or recognizes different and valid perspectives on the issue), (7) repetition (the delivery of/access to the content is continued, repeated, or reinforced until the receiver receives it), (8) cultural competence (the exchange of information accounts for special issues for select population groups, for example, ethnic, racial, and linguistics), and (9) openness. 

The data analysis revealed that effective nurse-physician communication is characterized by accuracy, understandability, openness, timeliness and availability, reliability, consistency, balance, cultural competence, and repetition (Table 2).

**Antecedents**  
An antecedent is a contextual feature of a concept. Antecedents are situations or occurrences preceding an instance of the concept. Data analysis revealed a number of antecedents for nurse-physician communication. The antecedents were more evident in the sample of qualitative studies selected for this study. The findings indicate that an instance of the concept nurse-physician communication is preceded by willingness to communicate with specific antecedents of communication apprehension and perceived communication competence, assertiveness, motivation, job morale, and role awareness.

All the antecedents described that effective nurse-physician communication can occur if there are willingness to communicate, assertiveness, motivation, job morale, and role awareness. Willingness to communicate has been defined as the probability that an individual will choose to
communicate, specifically to talk, when free to do so.\textsuperscript{44} One overwhelming communication personality construct permeates every facet of an individual’s life and contributes significantly to the social, educational, and organizational achievement of an individual.\textsuperscript{44} This concept is composed of further antecedents, namely, communication apprehension and perceived communication competence. Communication apprehension is anxiety associated with real or anticipated communication events. Self-perceived communication competence is a person’s evaluation of his/her ability to communicate.\textsuperscript{44}

Assertiveness is defined as the ability to express thoughts and feelings confidently and comfortably while respecting the rights of others.\textsuperscript{46} Motivation is (1) an internal state or condition that activates behavior and gives it direction, (2) wants that energy and direction to lead to goal-oriented behavior, or (3) is an influence of needs and desires on the intensity and direction of behavior. Nurses and physicians who are assertive, well-motivated, and with good job morale are more likely to communicate effectively and collaborate with each other toward positive patient outcomes.

Role awareness is another instance for nurse-physician communication to occur. Dayton\textsuperscript{32} asserted that roles are socially prescribed patterns that provide guidelines for behavior. Men and women are socialized into roles by society that leads to expectations of self and others. Males and females are socialized differently, use language differently, and communicate differently. Role taking is a central mechanism for developing self-concept and for understanding the self-concept of others. Nurse and physicians who are well aware of their delineated roles as an individual and in the job environment tend to communicate more effectively (Table 3).

**Consequences**

For this analysis, the descriptions of consequences or situations that follow an instance of the concept nurse-physician communication were viewed within the context of health care outcomes and represent the collective of all studies included here. The consequences of nurse-physician communication within the context of health care outcomes are equally much in agreement with the antecedents. The term consequences relates to the concept analysis process of concept development, whereas outcomes pertain to health care outcomes of nurse-physician communication. There is an abundance of descriptions of consequences of nurse-physician communication in the literature, and they contain a mixture of both positive and negative outcomes.

Discrepancies in the quality of interprofessional communication were noted in some of the studies. Identification and analysis of the consequences of nurse-physician collaborative communication yielded multiple, recurrent themes of negative outcomes described as “poor,”\textsuperscript{38,49} “difficult,”\textsuperscript{56} haphazard,\textsuperscript{46} and “disruptive.”\textsuperscript{17} Other studies described communication among nurses and physicians as one where “tension”\textsuperscript{39} and “breakdown”\textsuperscript{29} were present. Most studies also revealed that nurse-physician communication can or needs to be improved.\textsuperscript{18,19,41} Consequently, effective nurse-physician communication yields positive outcomes for both health care providers and patients. Positive and negative outcomes were noted both on the health care providers and the patients.

Findings from studies revealed that conflicts in nurse-physician communication directly affect nursing satisfaction toward professional role and may not maximize the potential contribution that nurses can make to planning patient care, thus contributing to nursing shortage.\textsuperscript{38} Conflicts in nurse-physician communication may be a contributing factor to the current nursing shortage, but conflict is not the only cause. The quality of interprofessional communication and issues about teamwork are associated with error reduction, job satisfaction, and less time missed from work because of illness or fatigue, which all could contribute to nursing shortage.\textsuperscript{43}

**TABLE 3** Antecedents of Nurse-Physician Communication

<table>
<thead>
<tr>
<th>Antecedents of Nurse-Physician Communication</th>
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<tbody>
<tr>
<td>1. Willingness to communicate</td>
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<tr>
<td>1.1. Communication apprehension</td>
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<tr>
<td>1.2. Perceived communication competence</td>
</tr>
<tr>
<td>2. Assertiveness</td>
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<tr>
<td>3. Motivation</td>
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<tr>
<td>4. Job morale</td>
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<tr>
<td>5. Role awareness</td>
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</table>

The quality of interprofessional communications and issues about teamwork are associated with error reduction, job satisfaction, and less time missed from work because of illness or fatigue, all of which could contribute to nursing shortage.

Burke and colleagues\textsuperscript{64} and Rosenstein and O’Daniel\textsuperscript{49} reported that deficient communication among providers creates the conditions for acrimony, frustration,
and distrust that can lead to inferior care and a greater risk for error. According to Manojlovich and DeCicco, factors in the work environment affect nursing and patients’ health consequences. Nurse-physician communication may not influence all health care consequences, but its effect on nurse-assessed medication errors, for example, suggests that small but significant decreases in medication errors can be achieved when nurses and physicians communicate better.41-52

In a study conducted by Rosenstein and O’Daniel, nurses were reported to have behaved disruptively almost as frequently as physicians. Most respondents perceived the behavior as having negative or worsening effects on both nurses and physicians on stress, frustration, concentration, communication, collaboration, information transfer, and workplace relationship. Even more disturbing were the respondents’ perceptions of negative or worsening effects on adverse events (or at least a contributing factor), medical errors, patient safety, patient mortality, the quality of care, and patient satisfaction, which may well, in turn, have a negative effect on clinical outcomes.

Quality interaction and good communication between nurses and physicians are associated with increased staff satisfaction, enhanced retention, lower nurse turnover,17,18,34,35,38,45,46 perception of increased quality of care among family members and ability to meet their needs,18,34,35 and increased self-concept among nurses. Communication as an aspect of collaboration, when effective, correlates with positive health care outcomes in acute care settings.8 Death or mortality rates were lower;27,32-35,45 potential for survival is increased,18,27,33 length of stay is shorter,18,27,30,34-38,42,45,55 and cost is reduced16,35 in those hospitals that reported higher-quality physician-nurse communication.

The literature also provided evidence that multidisciplinary intervention resulted in better communication and collaboration among physicians and nurses. This was demonstrated by Varizani and colleagues through the creation of an intervention unit that instituted multidisciplinary rounds and the addition of a nurse practitioner and a hospitalist medical director. Ashton and colleagues found that discussions during surgical morning meetings among nurses and physicians can enhance personal and professional experience and lead to improved patient health outcomes. Communication strategies that allow nurses and physicians to achieve individual goals and support social cohesion among team members are also important.

As evident in the literature, the perceptions of physicians and nurses about the components of collaborative communication vary in a number of respects. The consequences of nurse-physician communication to patients and health care providers also vary and are multiple. These consequences are classified into positive or negative patient and nursing and physician outcomes. See Tables 4, 5, and 6 for a summary of the consequences of nurse-physician communication.

| TABLE 4 Consequences of Nurse-Physician Communication: Patient Outcomes |
| --- | --- |
| Positive Patient Outcomes | Negative Patient Outcomes |
| 1. Improved quality of patient care | 1. Poor quality of patient care |
| 2. Increased patient safety | 2. Compromised patient safety |
| 3. Increased patient satisfaction | 3. Poor or less patient satisfaction |
| 4. Error reduction | 4. Medical errors or adverse events |
| 5. Shorter length of stay | 5. Patient readmissions |
| 6. Decreased mortality and/or increased potential for survival | 6. Increased mortality |
| 7. Reduced cost | 7. Increased cost |

| TABLE 5 Consequences of Nurse-Physician Communication: Nursing Outcomes |
| --- | --- |
| Positive Nursing Outcomes | Negative Nursing Outcomes |
| 1. Nurses’ reports of better learning | 1. Acrimony |
| 2. Ability to act rapidly | 2. Frustration |
| 3. Ability to maximize information | 3. Disturb |
| 4. Ability to plan care | 4. Stress |
| 5. Lower personal stress | 5. Decreased concentration |
| 6. Less time missed from work | 6. Job-induced tension |
| 7. More respect from coworkers | 7. Inability to maximize potential contribution to patient care or poor patient care |
| 8. Improved professional relationships | 8. Greater risk for error |
| 9. Greater participation in all phases of care | 9. Flawed workplace relationships |
| 10. Improved perception of increased quality of care and ability to meet family member’s needs | 10. Decreased nursing satisfaction toward professional role |
| 11. Increased job satisfaction | 11. Decreased nurse satisfaction |
| 12. Increased satisfaction for professional role | 12. Less organizational commitment |
| 14. Controlling costs because it saves time | 14. Increased nurse turnover |
| 15. Enhanced nurse retention | 15. Nursing shortage (ultimate negative outcome) |

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Operational Definition
Based on the definitions and attributes identified in this review, the following definition is suggested: Nurse-physician communication is the ability to transmit accurate, comprehensible, consistent, reliable, culturally competent, balanced, repeated information through a common system of symbols, sign, behavior, speech, writing, or signals according to a common set of rules in an open, timely manner toward positive health care outcomes.

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS
The findings of this analysis suggest that ineffective, deficient, or poor communication among nurses and physicians result in negative health care outcomes for both the health care providers and patients and that collaborative communication can be improved. Efforts to increase and improve effective communication among health care workers are needed to improve the delivery of care and enhance positive outcomes.

Collaborative relationships between physicians and nurses in any culture not only are beneficial to the patients, but also facilitate better communication and increase satisfaction within the 2 professions. However, formal training in this area is often absent from educational programs. For the purpose of initiating and developing mutually respectful interprofessional relationships between physicians and nurses, it is desirable that medical and nursing schools in the country include interprofessional education in their curriculum to increase understanding of the complementary roles of physicians and nurses. This should encourage an establishment of an interdependent relationship between nurses and physicians. Acquisition of these skills is frequently a combination of inherent attributes and learned experiences. Stimulating learning with strategies such as didactic presentations, experiential discussion, audiovisual and written exercises, and role playing could assist others in developing programs that enhance interpersonal communication skills. Developing communication skills through assertiveness, conflict resolution, delegation, and motivating others can empower and maintain positive relationships.

Organizations must be committed to improving staff relations. This commitment must include creating a culture in which respect and integrity are valued, unacceptable behavior is not tolerated, and the reporting environment is nonpunitive. An organizational self-assessment should be conducted to increase staff awareness of the nature and severity of the issue. Lines of communication should be open to create a nonantagonistic environment in which important issues can be discussed. Structured staff education programs may be necessary to reinforce appropriate modes of conduct of communication. Courses focusing on communication skills, conflict management, team building, and collaboration provide a forum for improving employees’ skills. Administrators can also provide support through structured communication-building interventions and implementation of policy changes that may improve the quality of interdisciplinary communication. The challenge is to develop creative health care teams that facilitate positive communication patterns among all members of the health care team, thereby leading to improved outcomes and wiser use of resources.

The review of literature consistently reports that nurses in Magnet hospitals have “good” nurse-physician relationships. Health care experts often equate “goodness” with collaboration. Studies have also shown positive associations between Magnet hospital characteristics and structural empowerment. Nurses who worked in Magnet hospitals reported higher levels of both structural empowerment and job satisfaction than did those who worked in non-Magnet facilities. Those findings indicate that effective strategies to improve the practice environment for nurses might have far-reaching consequences. The implication for nursing is that more attention to the practice environment is needed. Identifying relevant factors in the environment might be a potential long-term strategy to improve nurses’ job satisfaction. Nurse leaders should be role models and create environments supportive of communication between health care professionals.

The National Patient Safety Goals have been established to address issues such as decreasing medical errors, particularly by focusing on better communication between health care providers. The JCAHO’s safety goal 2E recommends a standardized handoff communication between the health care team, as well as providing for an opportunity for questions and response. One tool that has been found to assist with structuring and standardizing communication is situation, background, assessment, and recommendations (SBAR). This serves as a format for communicating information in a logical and consistent manner. It is also a systematic approach to communication necessary for the health care team to provide

### TABLE 6 Consequences of Nurse-Physician Communication: Physician Outcomes

<table>
<thead>
<tr>
<th>Positive Physician Outcomes</th>
<th>Negative Physician Outcomes</th>
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<tbody>
<tr>
<td>1. Enhanced learning</td>
<td>1. Stress</td>
</tr>
<tr>
<td>2. Improved understanding of daily tasks</td>
<td>2. Frustration</td>
</tr>
<tr>
<td>3. Enhanced professional relationships</td>
<td>3. Decreased concentration</td>
</tr>
<tr>
<td>4. Decreased information transfer</td>
<td>5. Flawed workplace relationships</td>
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safe and effective patient care. In addition to using SBAR for calls to physicians, this tool is used for shift report and transfers to other units or organizations and to provide information to other members of the interdisciplinary team. Aside from SBAR, patient handoffs suggest that face-to-face communication provides the most effective handoffs of hospitalized patients, promoting patient safety. Communication during multidisciplinary rounds also needs to be improved. Weber and colleagues stated that “If ward rounds serve as the central marketplace of information, nurses’ knowledge is underrepresented. Further research should try to determine whether the quality of patient care is related to a well-balanced exchange of information to which nurses, physicians, and patients contribute their specific knowledge.

On the unit level, nurse managers equipped with increased leader communication skills should include communication as a performance standard of each nurse’s job description. Application of communication skills is an observable and useful management tool to maintain and improve employee performance and to foster assessment of employee development. The use of performance standards can help ensure that employees and managers have the same understanding of the level of performance required to meet expectations.

**CONCLUSION**

Results from this analysis substantiate existing knowledge related to nurse-physician communication within the context of health care outcomes. The findings also extend that knowledge by more clearly identifying the definitions, surrogate terms, related concepts, attributes, antecedents, and consequences. An operational definition was also suggested. In addition, the relationship of nurse-physician communication to health care outcomes is explicitly defined as to positive or negative patient and provider outcomes. A clearer conceptualization is important as it could influence greatly future developments in theory, practice, and research.

In accordance with Rodgers’ evolutionary method, the results of this investigation are consistent with the idea of a cycle of continuing development that serve as a heuristic by providing the clarity necessary to create a foundation for further inquiry and development. The results here may, for example, have bearing on how future communication strategies and interprofessional and multidisciplinary interventions may be designed and evaluated for better health care outcomes. Further nursing research is needed to help achieve this goal.

**References**


Nurse-Physician Communication and Concept Analysis


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