Research and Theory for NURSING PRACTICE

An International Journal

SPRINGER PUBLISHING COMPANY

www.springerpub.com/rtnp

Research and Theory for Nursing Practice: An International Journal, Vol. 31, No. 3, 2017

Iranian Physicians' Perspectives Regarding Nurse–Physician Professional Communication: Implications for Nurses

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Background and Purpose: Nurse–physician professional communication affects the effectiveness and performance of the health care team and the quality of care delivered to the patient. This study aimed to explore the perspectives and experiences of physicians on nurse–physician professional communication in an urban area of Iran. **Methods:** Semistructured interviews were conducted with 15 physicians selected using a purposive sampling method. Physicians from different medical specialties were chosen from 4 teaching hospitals in an urban area of Iran. The data were analyzed with content analysis and themes developed. **Results:** Three themes developed during data analysis: "seeking the formal methods of communication to ensure patient care," "nurses' professional attributes for professional communication," and "patients' health conditions as the mediators of professional communication." **Implications for Practice:** Nurses need to be informed of the perspectives and

http://dx.doi.org/10.1891/1541-6577.31.3.202

experiences of physicians on professional communication. Our findings can improve nurses' understandings of professional communication that could inform the development of educational and training programs for nurses and physicians. There is a need to incorporate communication courses during degree education and design interprofessional training regarding communication in clinical settings to improve teamwork and patient care. Open discussions between nurses and physicians, training sessions about how to improve their knowledge about barriers to and facilitators of effective professional communication, and key terms and phrases commonly used in patient care are suggested.

Keywords: experiences; nurse; physician; perspectives; professional communication; qualitative research

Professional communication between health care providers, especially between nurses and physicians, is important for the provision of a caring environment in patient and family care. According to Flicek (2012), this communication is influenced by various factors such as the hospital environment, patient care setting, nurse staffing, workload, gender, socioeconomic status, and the educational level of health care professionals.

Weller, Barrow, and Gasquoine (2011) suggest that nurses and physicians develop a suboptimal interprofessional collaboration in health care settings, which can lead to suboptimal patient care. A high level of professional communication is important for gaining optimum health care outcomes and providing professional nursing care (Arling, Abrahamson, Miech, Inui, & Arling, 2014; Subirana, Long, Greenhalgh, & Firth, 2014). In this respect, Bryon, Gastmans, and de Casterlé (2012) report that effective professional communication especially between nurses and physicians enhances the quality of patient care and improves nurses' job satisfaction. According to studies by Kadda (2013) and Wagner, Damianakis, Mafrici, and Robinson-Holt (2010), appropriate communication can reduce nurses' burnout and prevent nosocomial infections. Also, Manojlovich et al. (2015) and Vaismoradi, Bondas, Salsali, Jasper, and Turunen (2014) believe that effective professional communication reduces nursing errors and preventable adverse events in hospitals. Conversely, communication failures have been reported to contribute to patients' readmissions in more serious clinical situations (Park, Jeoung, Lee, & Sok, 2015; Press et al., 2015).

COMMUNICATION AND INTERPROFESSIONAL COLLABORATION

Effective nurse–physician communication is a key requirement for collaboration and a challenge in health care settings (Ewashen, McInnis-Perry, & Murphy, 2013; Gonzalo, Kuperman, Lehman, & Haidet, 2014). However, DeKeyser Ganz, Engelberg, Torres, and Curtis (2016) state that there is a lack of appropriate communication between health care professionals for collective decision making. An insufficient understanding of professional communication patterns between physicians and nurses (Gotlib Conn, Kenaszchuk, Dainty, Zwarenstein, & Reeves,

2014; Muller-Juge et al., 2014) stems from a lack of investigation into health care providers' perceptions of professional communication (Gonzalo et al., 2014). This highlights the necessity for studies to explain how communication among nurses and physicians contributes to appropriate interprofessional collaborations by which to meet patients' needs (Lewis, Stacey, Squires, & Carroll, 2016; Zwarenstein, Rice, Gotlib-Conn, Kenaszchuk, & Reeves, 2013).

LITERATURE REVIEW

Several qualitative studies have been conducted on nurse–physician professional communication from the perspectives of nurses and other clinicians. These support the notion that both nurses and physicians encounter challenges with professional communication across countries. For instance, Schmalenberg and Kramer (2009) synthesized the findings from six research studies on nurses' stories about how they developed high-quality communication with physicians with the goal of improving patient care. The dominant component of effective nurse–physician communication was found to be collegiality and collaboration. Also, Vaismoradi, Salsali, Esmaeilpour, and Cheraghi (2011) conducted a qualitative content analysis to explore the perspectives and experiences of Iranian nurses on nurse–physician professional communication. They called for equitable professional communication between nurses and physicians and the need for investigating nurse–physician communication from physicians' perspectives.

To the best of our knowledge, there are a few in-depth qualitative studies on communication from the perspectives of physicians. Using a focus group method, Robinson, Gorma, Slimmer, and Yudkowsky (2010) asked nurses and physicians to provide themes on effective and ineffective professional communication. The clarity and precision of message that relied on verification, collaborative problem solving, maintenance of mutual respect, and an authentic understanding of the unique role were the themes of effective communication. In addition, linguistic and cultural barriers were reported as the themes for ineffective communication.

The finding of a quantitative study by Matziou et al. (2014) on physicians and nurses' perceptions about communication and collaboration showed that nurses and physicians did not share the same views concerning the effectiveness of their communication. This study also called for in-depth qualitative studies to explore professional communication from physicians' perspectives and investigate how it can be improved.

THEORETICAL BACKGROUND OF NURSE–PHYSICIAN COMMUNICATION

The term *physician/nurse game* refers to implicit or explicit communication between nurses and physicians and the social game played by them to maintain power balance in the health care system (Stein, 1967; Stein, Watts, & Howell, 1990; Sweet &

Norman, 1995). In the past, nurse–physician communication followed the hierarchy pattern in which physicians were deemed active or superior to the more passive nurses. If nurses who had responsibility wanted to give directions, suggestions, or advice on patient care, they needed to act within this hierarchy and often appeared acquiescent. However, the role of nurses has changed from nurturing to a professional role combined with education, skills, and competencies. Yet, although some nurses working on the front line believe that the physician–nurse game is still being played and nursing remains subordinate to medicine. The status of the nursing profession has changed, and nurses have been empowered to exercise autonomy in patient care and practice beyond the passive role implied by such a game (Germov & Freij, 2009; Holyoake, 2011).

The theory of planned behavior (TPB) is developed by Ajzen (1985, 1987, 1991) and is recognized in relation to the communication behavior. The TPB postulates that elements of behavioral intentions (communication in this case) are as a result of certain values or beliefs including "attitude toward a behavior," "subjective norm," and "perceived behavioral control." These elements lead to the formation of an intention for communication that under appropriate opportunities can lead to planned communication. Attitude toward a behavior is about the pattern, the pros and cons, and methods of performing the behavior of communication. Also, it consists of the degree by which health care providers positively or negatively evaluate communication and a set of beliefs linking communication to various outcomes and attributes. Subjective norm refers to personal factors and social pressures from the workplace and people influencing communication. This also is related to the individuals' perceptions of social normative pressures or others' beliefs influencing the process of communication. Perceived behavioral control is defined as health care professionals' perceptions about their own ability and others' ability to perform effective communication. In other words, it is about individuals' trust to each other for communication and perceived ease or difficulty of performing the behaviors of communication.

Communication is an important part of health care services. Communication theories allow the identification of the interventions needed to change the communication behavior and remove weaknesses associated with poor communication (Corcoran, 2007). Connecting the findings of qualitative studies to communication theories enables health care providers to predict the outcomes of the communication behavior and explore the factors influencing the process of communication. Therefore, our findings were linked to the theory of planned behavior (TPB) of communication to put them into an international perspective.

NURSE–PHYSICIAN COMMUTATION IN IRAN

Despite the recent progress made in health care in Iran, overcrowding health care settings, ever-increasing prevalence of noncommunicable diseases, physician domination, and nursing shortages remain important challenges for the Iranian health care system. The nature of nurse–physician professional communication in Iran follows

the same pattern in health care settings as in other countries, in which the physician occupies a role encompassing full responsibility for the diagnosis and management of the patient. On the other hand, the nurse is recognized as having responsibility for following the physician's orders and providing a caring environment for the patient and their family (Gotlib Conn et al., 2014; Muller-Juge et al., 2014). According to Vaismoradi et al. (2011), Iranian nurses communicate with physicians without being allowed to make personal communication and having the privilege of shared decision making during patient care. It is noted that such a style of communication contrasts with the style of communication in Persian mainstream society in which mutual respect, cooperation perspective, and cultivating personal communication are emphasized. This one-sided style of nurse–physician collaboration has been described by Irajpour, Alavi, Abdoli, and Saberizafarghandi (2012) as a leading cause for collaboration gaps among Iranian physicians and other health care professionals, especially nurses. It is noted however, that nurse–physician communication is complicated by the culture of communication in health care settings in terms of uncertainties, a low level of support by health care authorities and insufficient knowledge and skills of health care professionals about professional communication (Aghamolaei, Tavafian, Hasani, & Moeini, 2012; Vaismoradi et al., 2011).

The bachelor's degree in nursing science in Iran consists of the completion of theoretical and practical courses over a 4-year period and is the minimum requirement for nurses' entrance into Iranian health care settings. The principles of professional communication are included in the curriculum of bachelor degree to prepare nurses for establishing and maintaining a high level of collaboration with an emphasis on the role of each clinician in patient care. In contrast, Tavakol, Roger, and Torabi (2006) declared that the curriculum of medicine focused on the pathophysiology, diagnosis, and treatment of diseases and provided no education regarding communication with health care team members, team-based care, and collaborative decision making.

Patient care requires an interprofessional team with the patient at the center of the team. Nurses and physicians work in a team and share their knowledge and observations, although they may have different perspectives and responsibilities regarding patient care. In this respect, eliciting physicians' perspectives would be necessary to further explain this phenomenon and help nurses and physicians develop programs to improve professional communication between health care providers. Therefore, this study was designed to explore the perspectives and experiences of Iranian physicians regarding nurse–physician professional communication.

METHODS

Design

This qualitative study was conducted from May to August 2015. According to Smith, Bekker, and Cheater (2011), a qualitative design is the best choice when the aim is to improve our understandings of a "social phenomenon" and explore the experiences and behaviors of those people who live with that phenomenon.

Qualitative content analysis was used to analyze textual data, develop themes, and attain a general description of the study phenomenon. Graneheim and Lundman (2004) and Vaismoradi, Jones, Turunen, and Snelgrove (2016) note that the creation of themes as the interpretive level of content and an expression of the latent content of the text is the core feature of qualitative content analysis.

Participants and Data Collection

Fifteen physicians from different medical specialties were chosen using a purposeful sampling method. They worked in four teaching hospitals in an urban area of Iran. In line with maximum variation sampling and to capture a wide range of experiences, participants from different medical specialties were selected. They were orthopaedic surgeons, internists, pediatricians, anesthesiologists, gynecologists, general surgeons, ophthalmologists, and infectious disease specialists. Regarding the gender of the participants, six participants were female and nine were male. The participants' years of work experience ranged from 6 to 21 years with a mean of 12 years (SD = 5.6 years).

An invitation letter containing information about the study aim, estimated duration of the interviews, and ethical considerations was sent to the selected physicians. Those participants who agreed to be contacted were asked to suggest a convenient time for interview sessions. All participants approached for data collection agreed to be interviewed.

Prior to conducting the interviews, the research team prepared a semistructured interview guide based on a literature review and the experiences of the authors with the following main questions:

- How is nurse–physician professional communication in your workplace?
- Would you please describe your experiences of professional communication with nurses in your workplace?
- How do you describe effective nurse–physician professional communication?

In continuation, supplementary questions were asked to explore the participants' original responses to the questions in the interview guide and further develop their ideas and perspectives during the interviews.

Fifteen individual interviews with a semistructured format were conducted with interviews lasting a mean of 45 min. All interviews with participants were conducted by the first author (MEB) in the Persian language (Farsi) and occurred mainly in the workplaces of the participants.

The interviews were stopped after 15 interviews, once themes were identified and theoretical data saturation was achieved. It meant that no new information emerged and themes seemed to be well-established (Lincoln & Guba, 1985).

Ethical Considerations

The ethical approval to conduct the study was obtained from the affiliated university of the third author (MS). The participants were informed of the study's purpose and method. They were informed that their participation in the study was voluntary and withdrawal was possible at any time. Their confidentiality was reassured and the

permission to audiotape the interviews was obtained. The draft of informed consent was developed consisting of information about the participants' right during the study, their anonymity and confidentiality of data collection, which were read to the participants. Those participants who agreed to participate voluntarily in this study gave verbal informed consent recorded on the tape.

Data Analysis

The guideline proposed by Graneheim and Lundman (2004) were followed by the research team to analyze data. In line with this guideline, data collection, and analysis conducted concurrently as one audiotaped interview was transcribed *verbatim* and analyzed and then other subsequent interviews and their analysis were conducted. During the data analysis, the transcriptions were read several times to obtain the sense of whole and get familiar with the details of collected data. Next, the whole text as *unit of analysis* was divided to *meaning units* consisting of interview texts about the experiences of nurse–physician professional communication. Meaning units were condensed into concentrated descriptions close to the text that facilitated their interpretation and abstraction. Then, the condensed meaning units were abstracted and labeled with codes. It allowed the data to be thought about in a new and different way. The codes were compared together in terms of similarities and differences. Therefore, similar codes were grouped together and were labeled with themes. It was tried to develop exhaustive and mutually exclusive themes in which no data fell between two themes or fitted into more than one theme.

Rigor

The conformability and credibility of data was achieved through maximum variation sampling. The authors as nurse researchers had previous experiences with the study phenomenon and were familiar with the qualitative design. The credibility of the data was established through peer checking and member checking. After transcribing, some parts of the interviews were further discussed with three participants who were interested to scrutinize the analytical product to confirm that the researchers were reflecting participants' thoughts and ideas. As Koch (2006) suggested, two peers who were not the members of the research team but were familiar with the qualitative design and the study phenomenon also conducted peer checking. The interviews were conducted in Farsi, but to ensure that translation from Farsi to English would not negatively influence the quality of findings, only quotations were translated for the aim of the presentation of the findings under the supervision of a bilingual translator (MV).

RESULTS

The data analysis resulted in the development and saturation of three themes: "seeking the formal methods of communication to ensure patient care," "nurses' professional attributes for professional communication," and "patients' health conditions as the mediators of professional communication." The themes are described in the following text with representative quotations from the participants.

Seeking the Formal Methods of Communication to Ensure Patient Care

In the health care setting, physician's private clinic or and even at the physician's home, nurse–physician professional communication was conducted either via face-to-face communication or by telephone conversation. The preferred style of nurse–physician professional communication was the formal method of written communication in the patient's record. This ensured the physicians that nurses would implement their orders precisely for patient care. Also, face-to-face communication especially during the doctor's visit was deemed the most important type of communication between nurses and physicians.

> During the doctor's visit, I give my orders to the nurse with regard to what I expect him/her to do; so it provides me with an opportunity to review the patient's condition with nurses. By the way, the work overload and patient's crowding hinder me to have an in-depth face-to-face and full-time communication with nurses. (Female, gynecologist)

In comparison, telephone communication was recognized as the most common type of communication between nurses and physicians that might be required in some situations.

> Nurses call me when they are unable to read my handwriting, don't know the drug name, to report the result of laboratory tests or describe the patient's clinical conditions. Also, sometimes I call them to ask about my patient's condition. (Male, orthopaedic surgeon)

Although nurses would follow physicians' written orders without any question, the physicians would read the nurses' documentation of patients' vital signs and often preferred to recheck the patients' vital signs themselves during paying visits to the patients' bedside. They did not describe such an action as disrespectful to nurses, but as a method by which to check the reliability of what was reported by nurses. Generally, they trusted nurses' observations and reports unless they found something they wished to confirm or was viewed as questionable.

> During doctor's visit, I read the nurses' report, and look at the vital sign chart. Sometimes I feel that I need to recheck them in order to ensure that they have been charted precisely. Also, I prefer to check the vital sign myself to establish my diagnosis on the new data collected by myself at the doctor's visit time. (Male, infectious disease specialist)

Nurses' Professional Attributes for Professional Communication

The physicians addressed how they could develop high-quality professional communication with nurses. Nurse–physician professional communication would be optimum if the nurse had an enthusiastic approach to his or her profession and was eager to improve his or her professionally competency. On the other hand,

physicians were unlikely to initiate communication with nurses who did not seem satisfied with their profession. It was believed that nurses' job satisfaction affected the way nurses developed high-quality professional communication with physicians.

> Nurses need to like their profession. I prefer to remain focused on patient care and not to hear nurses' complaints against their job during professional communication. (Female, gynecologist)

The participants reported that nurses' knowledge and skills influenced the quality of professional communication. According to some participants, nurses' sufficient knowledge and clinical skills about diagnostic procedures, common medical phrases and terms, and the treatment of diseases were crucial to develop professional communication. Some physicians in this study emphasized that nurses' scientific knowledge during telephone conversations helped with their decision making regarding the patient's condition. This contributed to the enhancement of trust on the part of physicians regarding the nurses' abilities to implement properly the orders for necessary care during their absence from the hospital.

> Enough knowledge and motivation by nurses make me confident that they are following my orders properly. (Male, general surgeon)

> Some nurses are so much more knowledgeable and skilful. I like to communicate with a skilful nurse, hear her or his perspective and be accompanied with such a nurse during patient care. (Female, ophthalmologist)

Above the educational preparation required to become a nurse, some physicians mentioned the necessity of further training for the nurse to be as knowledgeable as a physician in patient care to be competent for the development of professional communication with physicians. For instance, a participant suggested that the nurse needed to obtain advanced clinical competencies through participating in continuing education and training programs in the workplace.

> This is a good solution; nurses should be engaged in on-the-job training programs to enhance their abilities to play a better role and collaborate with physicians for the best in patient care. (Female, internist)

Besides the academic knowledge and skills required for effective professional communication, some other expectations of nurses were mentioned as influencing the development of nurse–physician professional communication. For instance, the physicians expected the nurse to become familiar with each physician's work routines, and follow their orders and routines without questioning.

> The nurse is expected to know my routines, and practice accordingly. (Male orthopedic surgeon)

The frequent turnover of nursing staff in some health care settings was a source of concern affecting the quality of communication from the participants' perspectives. Newer staff were often not familiar with routine practices, which influenced the

establishment of effective communication and could potentially affect patient care outcomes.

> Our work in the orthopedic ward is very sensitive. I know nothing about the nurse newly starting to work in the ward, her qualifications, and whether she knows the complications of cast and how to report its complications to me after a hip replacement surgery. (Male, orthopaedic surgeon)

Patients' Health Conditions as the Mediators of Professional Communication

According to the participants, the need for effective nurse–physician professional communication varied by the nature of the disease, patient care setting, duration of the patient's hospitalization, complexity of laboratory tests, and types of prescribed medications. In other words, the development of high-quality professional communication was required for the provision of high-quality care to more complex patients.

> As a pediatrician in the pediatric ward, communication with nurses is easier than other wards because the nurses are required to convey my meanings to the mother of the child, as her or his words are much understandable by the mother of that child. (Male, pediatrics)

Patients' suffering and intensity of their diseases also influenced the quality of nurse–physician professional communication. For instance, if the patient was hemodynamically stable and had no known problems, the physicians perceived no need for direct and face-to-face communication with the nurse. Instead, the physician communicated directly to the patient and professional communication was established by reading the nurse's written documentation. Therefore, the quality of professional communication depended on the quality and comprehensiveness of nurses' documentation of the patient's health condition.

On the other hand, high-quality written and verbal communication between physicians and nurses was required, if the patient's condition was critical or deteriorating or if there were abnormal laboratory test results. If the nurse was able to report scientifically the required information to the physician or could follow the physician's orders accurately, the physician's trust in the nurse was affected positively and high-quality communication would be continued with the nurse.

> I visited the patient and asked him a couple of questions about his health issues. Also, I collected other necessary information about the patient by reading the nurse' documentation in the patient's file. (Male, internist)

> The patient was hospitalized in the intensive care unit [ICU]. The nurse on the night shift called me to ask about the patient's drugs and she questioned how to regulate the number of drops. Unfortunately, she did not know how to solve this issue. (Female, internist)

The patients and their families' questions were mentioned as reasons for developing nurse–physician professional communication. In this case, the nurses would call the physicians and were then obliged to follow the physicians' written orders

in the patient chart/record. From one physician's perspective, telephone contact by nurses to answer a question from a patient negatively affected the quality of nurse–physician professional communication.

> The nurse calls me and I say that I have written everything required in the patient's file. The nurse says that they have been under so much pressure by the patient to contact you, as though they [patients and their companions] do not trust the accuracy of other health care professionals' decision making in the time of the physician's absence from the hospital. (Male, orthopedic surgeon)

DISCUSSION

Our study focused on the perspectives and experiences of physicians on nurse–physician professional communication in Iran. Briefly, we found that the physicians preferred the written communication in the patient's record and face-to-face communication as the formal of methods of communication to ensure that patient care would be performed. Also, nurses' enthusiasm toward their profession, their knowledge and skills required for patient care, and the improvement of nurses' clinical competencies influenced professional nurse–physician communication. Furthermore, the patient's health condition and complexity of the diseases were other factors influencing the development of professional communication between physicians and nurses. Although this study focused on the perspectives of physicians on nurse–physician communication in Iran, the results are noteworthy and transferable to other health care systems in both transitional and developing countries where there maybe consideration of cultural elements influencing professional communication. The influence of resource constraints and weak management systems are highlighted in developing countries. Nevertheless, Aveling, Kayonga, Nega, and Dixon-Woods (2015) reported that communication between health care staff in various developed and developing health care systems proposed that the causes of patient care issues were similar and stemmed from human factors, resources, and behaviors.

According to the first theme of this study, the physicians preferred written communication in the patient's record and face-to-face communication to ensure of the implementation of patient care. In health care settings of developing countries such as Iran, face-to-face communication is often limited to emergencies because of overcrowding and a lack of time. Therefore, the written method of communication helps with conveying messages accurately. Our finding in this theme is compatible with the first element of TPB by Ajzen (1985, 1987, 1991) as attitude toward a behaviour. A comparison of nurse–physician professional communication in Iran and developed countries shows that the electronic ordering system as an advanced style of written communication is the commonly used method of communication internationally. The electronic communication method facilitates the sharing of clinical observations and orders and has the potential to take into account real-world power differentials between nurses and physicians (Zwarenstein et al., 2013). However, it is known that the tone, intensity, and urgency of the voice cannot be delivered through this method of communication and miscommunication may occur

(Flicek, 2012). Similar to our study findings, Robinson et al. (2010) and Burns (2011) reported that most nurses and physicians preferred face-to-face communication in clinical rounds to ensure the accuracy of messages, exchange information about patients, and reduce risks.

According to our second theme, nurses' job satisfaction, and their knowledge and skills of patient care as well as workplace attributes influenced professional nurse–physician communication. In the TPB, Ajzen (1985, 1987, 1991) declares that workplace subjective norms refer to individuals' factors and social pressures from the work environment that can influence the communication process. In addition, in lines with our study findings, Burns (2011), Flicek (2012), and Dean and Oetzel (2014) stated that time constraints, too much patients' needs, and nursing shortages hindered effective professional communication between health care professionals.

Also, some physicians expected nurses to become familiar with each physician's work routines and follow them accordingly. This is a workplace norm. From work conducted on the nurses' perspectives (Regan, Laschinger, & Wong, 2016) and Vaismoradi et al. (2011), communication with physicians could become challenging when they had no independence in decision making and were only expected to act based on physicians' routines and follow their orders. A strategy for effective nurse–physician communication is that the physician and nurse demonstrates sufficient autonomy, mutual listening, and information sharing for reaching the goal of high-quality teamwork (Muller-Juge et al., 2014).

In addition to knowledge and skills for patient care, the nurses were expected to be familiar with common medical phrases and terms to develop professional communication. Similarly, Beuscart-Zéphir, Pelayo, Anceaux, Maxwell, and Guerlinger (2007) stated that communication by health care professionals depended on shared knowledge and a common language about the patient. Also, Robinson et al. (2010) specified that the clarity and precision of messages transferred between health care professionals relied on the common language and verification of information. Therefore, a shared theoretical and practical model of professional communication with the consideration of both nurses and physicians' expectations of effective professional communication can lead to patient-centered care and safe practice (Curtis, Tzannes, & Rudge, 2011).

According to the third theme, the patient's health condition and the need for further communication besides the written word by the physician were other factors influencing the development of nurse–physician professional communication. According to the international literature, in addition to the patient's health condition and the need for unscheduled communication between the nurse and physician in emergencies, hospital regulations and the type of work setting can hinder or facilitate nurses' communication with other clinicians (Donelan, DesRoches, Dittus, & Buerhaus, 2013). Therefore, the designation of a communication guideline along with the description of the elements required for developing professional nurse–physician communication can save communication time in overcrowded health care settings, increase clinicians' perceptions of collaboration and prevent possible misperceptions (De Meester, Verspuy, Monsieurs, & Van Bogaert, 2013).

In this study, if the patient was hemodynamically stable, the physicians preferred to communicate directly to the patient and obtained information from nurses' written documentation instead of face-to-face communication with nurses. In this respect, the quality of nurses' documentation increased physicians' trust in nurses, which is connected to the third element of TPB (Ajzen, 1985, 1987, 1991) as perceived behavioral control. According to McComb and Hebdon, (2013), appropriate communication and mutual trust between health care staff are the requirements for enhancing patients' outcomes. However, individual and affective aspects of communication that influence nursing staff retaining and are instrumental in socialization in the workplace should not be ignored (Galletta, Portoghese, Battistelli, & Leiter, 2013). Also, the nurse's feeling of workplace mistreatment because of communication issues with other clinicians has a detrimental effect on nursing practice and can even threaten the quality of care (Laschinger, 2014). In addition to face-to-face communication between the nurse and physician, face-to-face communication between the patient and physician as the patient's primary care provider is highlighted and mostly appreciated by the patients and even reduces the probability of adverse events (Dill, Pankow, Erikson, & Shipman, 2013; Felix et al., 2016).

CONCLUSION

This is the first study in Iran to explore nurse–physician professional communication from the physician's perspective. This study has provided an empirical foundation for understanding nurse–physician communication in Iran.

Nurses are required to consider the perspectives of physicians regarding professional communication that can result in both parties' satisfaction with collaboration in health care settings. An enhancement of communication education during the degree education of both nurses and physicians is needed to improve their understanding of each other's role in patient care and increase their competencies so as to convey appropriate and important information about patient care through face-to-face and written communication. In particular, such competencies are crucial in overcrowded and busy health care settings in which health care professionals lack sufficient time for communication or have a limited access to electronic methods of communication.

Implications for Practice

Nurse policymakers need to consider the influence of nurse–physician professional communication on nurses' job satisfaction and organizational issues and atmosphere of the workplace during the designation of programs to improve interprofessional communication. The opportunities for interprofessional training for nurses and physicians are encouraged to improve nurses and physicians attitudes toward communication, enhance their mutual trust to communication, and inform them of the subjective norms influencing communication in the workplace. They are required to establish teamwork in clinical settings and empower all parties

involved in patient care. Interprofessional education should focus on the redefinition of each health care professional's roles and behaviors to improve the quality of teamwork. Also, ongoing training programs in team communication has been recommended for the creation of a common understanding of professional communication between the nurse and physician (Sheldon & Hilaire, 2015; Tang, Chan, Zhou, & Liaw, 2013). Moreover, "on-the-job" training sessions for both physicians and nurses should incorporate the improvement of their knowledge about key terms and phrases commonly used by health care professionals. Policymakers can also emphasize the importance of each profession being familiar with each others routines that influence the flow of patient care. The incorporation of advanced communication methods such as electronic tools into the traditional methods of communication can enhance the accuracy of message transferred between clinicians and prevent probable misperceptions.

Moreover, free open and equitable discussion between physicians and nurses is suggested to remove misunderstandings and pave the way to a high-quality patient care based on mutual respect between health care team members. Future studies are required to develop a shared theoretical and practical model or a guideline of communication with the consideration of all health care professionals' role in the process of effective communication that improve patient care.

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Acknowledgments. Tehran University of Medical Sciences provided facilities and support for this project. The authors would like to thank the physicians for their contributions to this study, which made production of this article possible.

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