



RESEARCH ARTICLE

TEACHING EFFECTS TO REMOVE THE BARRIERS OF RELATIONS BETWEEN DOCTORS AND NURSES ON THE QUALITY OF SERVICES IN THE HOSPITAL AND CLINICS OF MARIVAN

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ABSTRACT

Background: Patients are constantly seeking to increase the quality of health care. One of the important factor of improving the quality of clinical services is the relationship between doctors-nurses in hospitals. The barriers of relationship between doctor and nurse will be reduce the quality of nursing services. This study was performed to evaluate the effect education of removing barriers in relationship doctors-nurses in increasing the quality of services provided in hospitals and clinics of the city of Marivan city.

Methods: This study was an experimental study that communication barriers (negative attitudes of doctors with nurses) between nurse-physician were evaluated before and after training. The statistical population included all the doctors, nurses and patients in Fajr and Buali hospitals of Marivan city. Thirty doctors were chosen for each experimental and control group. The estimated sample size of patients were 322 persons, with randomly selection. Sample size of nurses were 200 persons which selected by enumeration methods. Data of this study were collected by questionnaire Morinaga and Choi questionnaires. Descriptive statistics such as mean and standard deviation and T-test were used for statistical analysis.

Results: The mean negative behaviors after the intervention in the experimental group had significance difference with negative behavior mean before the intervention in the experimental group and the control group ($P < 0.01$). Negative behaviors mean after intervention in the experimental group was lower than in the other groups. Services quality had significance difference after the intervention with before intervention ($p < 0.05$) on the base of patients' viewpoint. Mean of services quality after intervention was higher than before intervention.

Conclusion: The results showed that training was effective on the elimination of barriers of nurse-physician relationship, which increases the quality of services provided to patients. Therefore providing the necessary training in order to reduce barriers to physician-nurse and providing mechanisms necessary will be provided the quality of health services.

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INTRODUCTION

Generally the consumers of health services ask for quality of health care, so consultants on this field need to have high quality, safe and effective as well as cheap facilities. One of the factors that helpus I such services is the effective cooperation and relations among producers of such services (Flicek, 2012). Only by exchanging of ideas from one person to another that concepts and information can be reached to others.

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However, communication is something beyond a mere message, it should cover both transfer (writing, reading, speaking and listening) and understanding of ideas so that it can show its four main functions (control, motivation, expressing, feeling and data) in different ways (Robbins, 1989, Choi, 2004). So communication is the process of transfer of messages, ideas, facts information and concept of one person to another allowing these ideas and information change into actions (Mohammadi, 2009, Amini, 2013). In the process of services to patients and people of the society, nurses and doctors are the key elements of the health care team, they can improve the health quality, and however, many studies have shown a failure of communication among doctors and nurses

(Flicek 2012). Hereby, the relation between a nurse and a doctor involve direct cooperation between them to look after the patients in order to reach a common treatment goal. The nurses as members of treatment team should enter themselves in evaluation and health care plan for the sick (Amini, 2013). Lack of correct relation in any possible way can weaken cooperation between these two classes of society. In spite of the importance of cooperation between a nurse and a doctor in their classification of relations the nurse is located in a low place. Though some researchers stated that in recent decades the quality of the nurse-doctor relations has been developed. There are still many factors which cause barriers in their effective cooperation (Sweet, 1995; Larson, 1999). So by many studies special changes along with some plans in nursing have been suggested in order to develop cooperation and relations of nurses and doctors. The results of a study in Japan show that the nurses find it difficult to cooperate with doctors of course not with all doctors. This subject has been shown in the area of leadership in human resources management theories, it is stated that the manner of leaders and bosses influence the quality of their communications (Howell, 1999, Allinson, 2001).

The importance of eradication of barriers between nurses and doctors relations arising from the fact that the outcomes of negative relations between the personnel of health care is emphasized in many studies (Baggsmit, 1997, Knaus, 1986). According to a report by the joined evaluation committee of hospital (2006) about 60% of medical failure directly come from the failure of communication and relations (Woods, 2006). Some studies stated that bad effective of the lack of correct relations among employees are much more than the health care personnel, its outcomes directly reach the patients and their safety (Saffari, 2010). On the other hand, some studies suggested that positive and useful cooperation between doctors and nurses has direct usefulness in medical care. This fact specially can be noticed in decreasing of death rate in ICU and CCU departments, furthermore, cooperation between doctors and nurses satisfy both of them (Baggsmit, 1997; Knaus, 1989).

Literary statement of correct relations between nurses and doctors in Iran considered to be different, usually there exists a lack of agreement between expectation of a graduated medical student and his capabilities obtained during his education. Because of the importance of this subject (correct relations among nurses and doctors), it is logical to assess teaching programs and do them effectively (Kajuri, 2009). For development of communicative problems some comprehensive plans should be taken into granted too, both for nurses and doctors (Morinaga, 2008).

The patient's evaluation of the quality of services mainly focuses on the relations between himself and medical personnel or the atmosphere of the place and not on the technical quality of services (Choi, 2004), with regard that the relations between nurses and doctors should be based on open, honest, mutual, respect and on the basis of capabilities, rights and responsibilities of both sides. Therefore they can help each other in common decision making to eradicate the problems of patients (Amini, 2013). The current research has been carried out in order to examine the effect of teaching for eradication of nurse-doctor barriers toward communication and its effect on the quality of services in the hospitals and clinics in Marivan.

MATERIALS AND METHODS

The current study is a semi-experimental research. The statistical community of this study consists of all doctors and nurses working in hospitals and clinics of Marivan, all patients hospitalized in AbuAli and Fajr hospital in Marivan were also assessed. Two groups of 30 doctors were chosen for control and experimental groups. According to the 2000 patients in the hospitals assessed in the study, 322 cases by the use of Morgan table were chosen randomly. Because the numbers of nurses were limited and countable, 100 cases of nurses were chosen. The study field was in the hospital of AbuAli and Fajr in Marivan. In current study two types of questionnaires obtained from Morinaga (Morinaga and Ohtesob, 2008) and Choi (Choi, 2004) were used. Validity of the questionnaires was confirmed using calculation alpha 0.78 and was proved by some experts. Stably of the questionnaires obtained from Choi study was also confirmed by alpha 0.89 and proved by experts. Granting points to the questionnaires was done in the form of Likret from 1 to 5, then total scores of the questions calculated and determined in the form of percentage. The dependent variable for negative behavior of doctors in the scale of 5 degree from 1 to 5 was examined. The score for negative behavior of doctors was changed from 6 to 36. Higher scores showed more negative behavior so the cut point of the numbers was 18 and doctors who gained more than 18 considered to have negative behavior toward nurses. The Services to the patients and relations between doctors and patients and nurses with doctors and patients were assessed as the dependent variable using five items in the scale of 5 degree; very low (1), low (2), medium (3), high (4) and very high (5). Therefore the negative point for behavior to doctors with nurses and doctors-patients was changed from 5 to 25. The cut point was 12, doctors and nurses assessed from the viewpoints of patients if gained scores higher than 12 in the assay (understanding the relations of doctors and nurses with patients) considered for higher and better services for the patients.

RESULTS

In the nurse's samples; 68% female, 32% male, 75% married and 25% were single, the age average was 34.2 ± 6.2 . The job average record of the nurses was 11.3 ± 5.9 . In the sample of patients; 58.3% was female, 41.7% male, 69.8% married and 30.2% was single, 40% of the doctors were female and 60% were male. The age average of all doctors assessed were 44.2 ± 4.7 years. Those doctors with negative behavior toward nurses were indicated using the test known as non-cooperative. The number of doctors who had negative behavior before intervention (training to remove communication barriers) were 11 persons and after training were also 12 persons ($P > 0.05$). However the number of doctors who had negative behavior in experimental group were 10 and 4 persons before training and after training respectively ($P < 0.01$). It shows that the training had positive effect caused 6 persons decreasing. The most important barrier of communication among doctors and nurses in the study was lack of respect for nurses with average of 3.43. Doctors' bad behavior or bad work ethic (3.23), anger of doctor to nurse (3.16), lack of perfect explanation (2.84) and disinclination of doctors in creating work relations (1.77) were located in the past rank (Table 2). The most important communication barrier between the doctors in the experimental group with the nurses assayed, is lack of respect to nurses with mean of 4.10. However, doctors' bad work ethic (3.27),

Table 1. Abundance of the doctors' negative behavior from the view of nurses in two groups of control and experiment before and after assay

variable	group	stage	Number	Observed abundance	(%)	p. value
The number of doctors	Control	Before training	30	11	36.7	0.05>
		After training	30	12	40	
	Experiment	Before training	30	10	33.3	0.01<
		After training	30	4	13.3	

Table 2. Prioritizing of relation barriers between doctor and nurse from the point of views of the nurses assayed in control group

Barriers	Mean	Standard deviation	Priority
lack of perfect explanation	2.84	0.94	4
Doctor's disinclination for work communication	1.77	1.35	5
Doctor's bad work ethic	3.23	1.47	2
Lack of respect for nurses	3.43	1.27	1
Anger of doctors toward nurses	3.16	1.44	3

Table 3. Prioritizing of relation barriers between doctor and nurse from the point of views of the nurses assayed in experimental group

Barriers	Mean	Standard deviation	Priority
lack of perfect explanation	2.65	1.21	4
Doctor's disinclination for work communication	1.36	1.34	5
Doctor's bad work ethic	3.27	1.31	2
Lack of respect for nurses	4.10	1.15	1
Anger of doctors toward nurses	3.15	1.25	3

Table 4. Statistical indicators of the doctors' negative behavior from the viewpoints of nurses in two groups of control and experiment before and after the assay

Variable	Group	Stage	Number	Mean	p. value
Doctor's behavior and quality of services	Control	Before intervention	30	21.5	>0.05
		After intervention	30	22	
	Experiment	Before intervention	30	22.5	<0.05
		After intervention	30	15.5	

Table 5. Statistical indicators of doctors' negative behavior from the viewpoints of patients in two groups of control and experiment before and after the assay

Variable	Group	Stage	Mean	p. Value
Doctor's behavior and quality of services	Control	Before intervention	13.5	>0.05
		After intervention	15.5	
	Experiment	Before intervention	13.5	<0.05
		After intervention	22.5	

the anger of doctor toward nurse (3.15), lack of enough explanation (2.65) and disinclination of doctors in creating work relations (1.36) were located in past rank (Table 3). Table 4 describes the work ethic (behavior) of the doctors in control and experimental groups before and after intervention, it was described from the views of nurses the quality of services to patients was described considering the standpoint of nurses. Mean negative behavior of doctors was 21.5 and 22 before and after intervention respectively (P>0.05), it shows that no changes in the quality of services was observed. Also the mean negative behavior of doctors in the experiment before intervention (training to remove the communication barriers) was 22.5 and after intervention was 15.5 (P<0.05) showing a decrease in negative behavior of doctors toward nurses and high quality of services. Table 5 describes the quality of services and relations between doctors of control and experiment groups before and after intervention related to nurses and consequently to from patients' point of views to quality of services. According to the data represented in the table, mean patient's satisfaction to quality of the services and relations of doctors toward nurse and patient from the doctors in control group was 13.5 and 15.5 before and after intervention respectively which shows there was no change in

quality of services (P>0.05). Also mean patients satisfaction from the quality of the given services and relation between doctor with nurse and patient for the doctors in experiment group were 13.5 and 22.5 before and after intervention respectively (P<0.05), it shows that the quality of services increased after intervention and training.

DISCUSSION AND CONCLUSION

The aim of the current study was to investigate the efficacy of teaching communication barriers between nurse-doctor on the quality of services to patients. Since any decision and routine related to the health care is effective to the life of the patients, so participation of patients and society in health care and establishment a great policy in developed countries are the rights of citizenship. It has also moral view and is the sign of justice in many health care systems. Programming and health care, social services to patients on the basis of viewpoints, needs and necessities of patients, taking care of them is the key note of the health system in developed countries. It is a necessary element for development and promotion of treatment system and absorbing social trust. This by itself can create satisfaction, life quality, and development of health outcomes

and effectiveness of services. So acceptance of patients as partners of treatment systems and expanding hospitality culture, flexibility to the viewpoints and criticism of the patients is the basis of developing hospital and in national level is effective for organizing and balance big policy, plans and services for healthcare. Therefore examining the viewpoints of the patients is very effective and fruitful for advancing the quality of services. The results of the study show that the mean satisfaction of the services as well as relations with nurses and patients by the doctors in control group are 13.5 and in experiment group 15.5 showing a change in the quality of services. Also mean patients satisfaction and relations between doctors of control and experiment groups with nurses and patients are 13.5 and 22.5 respectively showing an increase in quality of services in teaching group.

In fact teaching (training) nurses and doctors had a significant effect on their relation and caused an increase of satisfaction among patients. From the viewpoint of the patients this matter developed the quality of services. The analyses of the services quality makes managers enable to prepare financial resources for the development and progress of the fields which have more effects on the knowledge of the customers in quality of services (Raju and Lonial, 2002). In studies carried out regarding quality of services to patients, a lot of factors with different influences on quality have been identified. Schoenfelder in 31 hospitals of Germany investigated the functions of the services and medical care (Coeling and Cukr, 2001). Atinga *et al.* (2011), studied the supporting, protection methods, environment, equipment and waiting time regarding the hospitals in Ghana. Hasin *et al.* (2001) studied about communications, responsibility, loyalty and environment hygiene. In USA, factors of admissions process, medical care, nursing, environment hygiene and sympathy with family were investigated (Otani and Kurz, 2004). One of the most important factors in the quality of services from the viewpoint of patients, doctors and employee is the relations existed between treatment team to each other and patients. Many studies demonstrated the effects of these relations on services and patients satisfactions. The results of a study also suggested that the relations between doctors and staff are the most important priority from the view of the patients to choose the hospital (Yagobi and Agharahimi, 2011). Lux (2011) also stated that the most important factor for satisfaction of the patients is the good doctors, their relations and quality of treatment. Results obtained from a study showed that the factors such as suitable management, standards of cleanliness, respect for patient privacy, respectful of the patient and creating a good relationship with the patients were the most important factors for satisfaction of the medical center (Baldwin *et al.*, 2005).

However considering to the patients suggestions and creating good relations with them not only is morally admirable but also it leads to development of health care and reaching permanent ways of cure. This subject especially among the patients who need special care and treatment is more important (Dwight-Johnson *et al.*, 2004). Therefore in current study the quality of services upon the relations between doctor and nurse as the treatment team has been investigated. However in control group, the patients were not satisfied enough with the relations between doctor and patient. Results of the study fulfilled by some researchers also indicated this fact that from the viewpoints of patients the rate of relations of doctors and nurses in the process of their treatment was not at a good level.

Thus teaching the treatment team for development of relations is a necessary solution, the matter that we were looking for in the control group. The results of another study showed a middle relation between doctor and nurse which were similar to the results obtained from control group of the current study (Yelderim *et al.*, 2005). However, the relation between doctor and nurse consist of mutual cooperation in taking care of the patient in order to reach a common treatment aim meaning recovery of the patient (Rosentin, 2002). According to a study named "the effect of teaching relation skills to nurses on the quality of health care" the mean score of cure quality in the trained groups in the steps 2, 3 and 4 weeks after training was changed in compared to before training ($P < 0.001$) which was more than control group significantly (Karimi, 2012). The author stated that this increase was not equal in different levels of care. In the individual social- psychological dimension, 50.80%, in the republican social- psychological dimension 63.80%, relationship dimension 54.50%, physical dimension 50.60% and it was 98% in professional dimension. In control group the mean score of the quality of health care also decreased ($P < 0.001$) after training (Karimi, 2012). The capability of doctors and nurses in cooperating with each other as a team is necessary for advancement of resultant, decrease of errors and care development (Colman, 2003). This is what patients expect from their viewpoint named better quality. It was stated that the relation of nurses and doctors directly linked to quality of health care of the patient and suitable relations between doctors and nurses is not impossible (Lindeke and Dieckert, 2005).

However, the barriers for good relation can be identified in hospitals, this relations can be improved removing the barriers. Therefore, lack of attention to such barriers cause tension in the professional relation of doctors and nurses which lead to negative outcomes such as dissatisfaction of job, absence and in many cases quitting or changing the jobs. All of these have negative impact on the quality of services to the patients. Snelgrove *et al.* (2000), in a study carried out in Wales to investigate the professional relation of doctors and nurses found that the nurses believe their relations with doctors are not at a good level because of authoritative behavior of the doctors. A study done to examine the nurses' experiences for the challenge existing on the relations of doctors and nurses, stated that the most important problem was that the nurses were not respected by the doctors (40%), inconsistency and misunderstanding of the nurses (20%) and clinical rounds without presence of nurses (20%). The factors in improving this relationship are respecting nurses 3.33% and treatment in a team 3.73%.

The topics emerged in this study involve the problems of nurses in their career with doctors, lack of coordination between doctors and nurses, obeying orders by nurses, personalities of doctors from the viewpoint of nurses, standards of ideal nurses according to the viewpoints of nurses, influence of the presence of nurses in teaching rounds, image of a doctor in the mind of a nurse, viewpoints of nurses for developing professional relations with doctors (Mahmodian, 2012). Feeling superior to nurses and their diagnostic power are some priorities that doctors believe the nurses don't have and this belief reduces good relations with nurses. However understanding the correct relations with doctors in different dimensions by nurses can decrease the barriers and problems in a way that by developing and correcting the professional relations the quality of services can be guaranteed (Azimi, *et*

al., 2011). Because of different professional roles, doctors and nurses have different point of views toward patients which lead to different separate medical care, which good relations between doctors and nurses lead to suitable planning on the basis of common goals (Coeling and Cooker 2001, Evans and Carlson 1992). In the current study experiments could reduce many of these barriers. In some cases many of these worries can be reduced by informing the treatment team that good relations have great effect on satisfaction of patients and their treatment. Results of the study carried out by Rostami, showed a high positive effect on the relations between nurses and doctors when they were trained. The author also suggested the attaching courses among other courses related to nurses and doctors should be considered as important and vital course for improvement of the doctors and nurses relationship (Rostami and Rahimi, 2010). According to the results, the mean satisfaction of patients from the quality of services and relation between doctor, nurse and patient by the control group of doctors before experiment was 13.5 (before intervention) and after experiment 15.5 (after intervention) showing no change in quality of services. Mean satisfaction of the patients from quality of services and relations between doctor, nurse and patient for the doctors under experiment group was 13.5 before experiment (before intervention) and 22.5 after experiment (after intervention) which shows an increase in the quality of services in comparison with the results before training and experiments. Indeed the relation of doctor-patient and way of this relation has a significant role on the quality and patients satisfaction. Nowadays, the basic role of the relation between doctors, nurses and patients in presentation of successful services for health and effectively of medical care has been proved. The studies also show that existence of an effective communication not only help patients to feel better, but also help them to reach their perfect health on the other hand establishing an effective relation between a doctor and a patient cause job satisfaction in doctors (Kerse *et al.*, 2004). Totally, studies have shown suitable relations between doctors and patients is the key element for satisfaction of both doctors and patients, it is also effective to get cooperation of patients to follow their treatment and welcome the health care plans (Kaba and Soriakomaran, 2007).

Tokunaga *et al* (2000), indicated that one of the main factors to satisfy patients is kindness and warm relationship of the nurses as well as technical concepts of health care such as nursing skills, teaching nurses, impact more than other aspects on perfect satisfaction of the patients (Arlond and Boggs, 2013). Authors also emphasized on their book that the nurse is the first person entering the process of treatment, nurse's good relation with patients and process of complete information regarding the patient's illness paves the way for better trust and communication (Arlond and Boggs, 2013). However the patients' expectations and their satisfaction whether male or female considering their education and marital status, show that patients want for attention to their rights especially in treatment. Therefore emphasis on the basic human rights in medical care especially respecting their dignity as a human became important when a patient is badly treated gets familiar with weak points of health system. Results of a study done to investigate the development of the patient-doctor relationship, proved that unsuitability of the patient-doctor relationship influence the rate of satisfaction (Lee *et al.*, 2002). In other study significant correlation between patients' expectations and understanding of the health care was not observed (Cheragchi, 1995).

According to the results obtained from the present study, the number of doctors with negative behavior was 11 and 12 before and after intervention (before training) respectively. As can be indicated, the control group was not taught or trained consequently there was no significant changes in doctors' negative behavior. However in teaching group, the number of doctors who had negative behavior were 10 and 4 before and after intervention (teaching or training) respectively. As can be seen, the number of doctors who had negative behavior decreased from 10 to 4 and this difference is significant. The degree of negative behavior was at high level before teaching, however after teaching some negative behavior were still available among the doctors. The negative behavior of doctor is a potential social problem. Probably this behavior has outcomes not only from the point of health care quality but also with regard to the use limited resources (Mello *et al.*, 2003). This negative behavior affects the doctor-patient relation and cause a decline in inclination of doctor to visit patients who needs special care (Nelson *et al.*, 2007, Mello *et al.*, 2003, Bassett and Leer, 2000). In a study carried out in Pennsylvania, the negative behavior was observed in 93% of the doctors as in many cases the doctors refused to visit the patients (Stoddert *et al.*, 2005). With regard to the main role of doctors in treatment team, which is accepted in the health care of our organization whether correctly or incorrectly, their special attention of this group of treatment team to professional behavior can be affective in correcting of the behavior of the members of the treatment team. Therefore the doctors and nurses should have a good communications, and management staff of hospital should recognize these communications and try to make them better. For this matter, teaching can be a useful element for the development of the relations between doctors and nurses.

Conclusion

According to the results obtained from the current study, teaching was effective to remove the barriers of doctor-nurse relation, consequently, the quality of services in the hospitals and clinics of Marivan became better by the way, decreasing of barriers could develop the quality of services. To achieve one's goal, it is necessary to design teaching book related with communication skills and dedicate it to courses of medicine students. Communicative skills will be taught among the groups of clinical staff professionally and be a standard assay in the training courses. For the hospital staff such teaching of suitable communication skills in the medicine teaching system can be a suitable action for development of relations between two groups of doctors and nurses.

REFERENCES

- Allinson, C. W. 2001. The effects of cognitive style on leader-member exchange: A study of manager-subordinate dyads. *Journal of Occupational and Organizational Psychology*, 74(2): 201-220.
- Amini, M. 2013. Communication Skills Training impact on public health nurses. *Health Information Management*, 10(1):109-118.
- Arnold, E. C. and Boggs, K. U. 2013. Interpersonal relationships: Professional communication skills for nurses: Elsevier Health Sciences.
- Atinga, R. A., Abekah-Nkrumah, G. and Domfeh, K. A. 2011. Managing healthcare quality in Ghana: a necessity of

- patient satisfaction. *Int J Health Care Qual Assur.*, 24(7), 548-563.
- AzimiLolaty, H., Ashktorab, T., BagheriNesami, M. and BagherzadehLadari, R. 2011. Experience of professional communication among nurses working in educational hospitals: a phenomenological study. *Journal of Mazandaran University of Medical Sciences*, 21(85), 108-125.
- Baggsmit, J. 1997. Nurse-physician collaboration and satisfaction with the decision-making process in three critical care units. *American Journal of Critical Care.*, 6(5): 393-399.
- Baldwin, E. and Shaw, C. 2005. Buildings. Patient choice. Pick and mix. *The Health service journal*, 115(5940), 38.
- Bassett, K. L., Iyer, N. and Kazanjian, A. 2000. Defensive medicine during hospital obstetrical care: a by-product of the technological age. *Social Science and Medicine*, 51(4), 523-537.
- Cheraghchi, M. 1995. What patients expect from physicians. *Global Hygiene*, 10(1), 16-22.
- Choi, K.S. 2004. The relationships among quality, value, satisfaction and behavioral intention in health care provider choice: a South Korean study. *Journal of Business Research*, 57(8): 913-921.
- Coeling, H. and P. Cukr (2001). Communication n styles that promote perceptions of collaboration, quality, and nurse satisfaction. *Nurse Care Qual.*, 14(2): 63-74.
- Coleman, E. A. 2003. Falling through the cracks: challenges and opportunities for improving transitional care for persons with continuous complex care needs. *Journal of the American Geriatrics Society*, 51(4), 549-555.
- Dwight-Johnson, M., Lagomasino, I. T., Aisenberg, E. and Hay, J. 2004. Using conjoint analysis to assess depression treatment preferences among low-income Latinos. *Psychiatric Services*, 55(8), 934-936.
- Evans, S. A. and Carlson, R. 1992. Nurse-physician collaboration: Solving the nursing shortage crisis. *Journal of the American College of Cardiology*, 20(7), 1669-1673.
- Flicek, C. L. 2012. Communication: A Dynamic between Nurses and Physicians." *MEDSURG NURSING*. 21(6): 177-182
- Hasin, M., Seeluangsawat, R. and Shareef, M. 2001. Statistical measures of customer satisfaction for health care quality assurance: a case study. *Int J Health Care Qual Assur*, 14(1), 6-14. doi: 10.1108/09526860110366214
- Howell, J. M. and K. E. Hall-Merenda (1999). The ties that bind: The impact of leader-member exchange, transformational and transactional leadership, and distance on predicting follower performance. *Journal of Applied Psychology*, 84(5): 680.
- Kaba, R. and Sooriakumaran, P. 2007. The evolution of the doctor-patient relationship. *International Journal of Surgery*, 5(1), 57-65.
- Kajuri, S. 2009. Medical Training Tips. Shiraz, Irsa Pub.
- Karimi, H. 2012. The effect of training communication skills to nurses on the quality of patient care. *Journal of Evidence-Based Care*, 2(5):37-48.
- Kerse, N., Buetow, S., Mainous, A. G., Young, G., Coster, G. and Arroll, B. 2004. Physician-patient relationship and medication compliance: a primary care investigation. *The Annals of Family Medicine*, 2(5), 455-461.
- Knaus, W. A., et al. 1986. An evaluation of outcome from intensive care in major medical centers. *Annals of Internal Medicine*, 104(3): 410-418.
- Larson, e. 1999. The impact of physician-nurse interaction on patient care. *Holistic Nursing Practice* 13(2): 8-31.
- Lee, S. J., Back, A. L., Block, S. D. and Stewart, S. K. 2002. Enhancing physician-patient communication. *ASH Education Program Book*, 2002(1), 464-483.
- Lindeke, L. and A. Dieckert, 2005. Nurse-physician workplace collaboration. *Online Journal of issue in nursing*, 10(1): 123-138.
- Lux, M. P., Fasching, P., Schrauder, M., Löhberg, C., Thiel, F., Bani, M., Goecke, T. 2011. The era of centers: the influence of establishing specialized centers on patients' choice of hospital. *Archives of gynecology and obstetrics*, 283(3), 559-568.
- Mahmodian, F. 2012. Nurses, doctors and nurses experience the challenges of professional relations in 2011. *Sadra Medical Scienc*, 2(1):22-31.
- Mello, M. M., Studdert, D. M. and Brennan, T. A. 2003. The new medical malpractice crisis. *New England Journal of Medicine*, 348.
- Mohammadi, Sh. Z. 2009. Surveying the relationship of communication and collaboration skills among nurses and doctors Alborz hospital of Karaj. *Jurnal of Medical Science of Azad University*.
- Morinaga, K., Ohtesob, A. 2008. Doctors' traits perceived by Japanese nurses as communication barriers: A questionnaire survey. *International Journal of Nursing Studies*, 45(5):740-749.
- Nelson, L. J., Morrissey, M. A. and Kilgore, M. L. 2007. Damages caps in medical malpractice cases. *Milbank Quarterly*, 85(2), 259-286.
- Otani, K. and Kurz, R. S. 2004. The impact of nursing care and other healthcare attributes on hospitalized patient satisfaction and behavioral intentions. *J Healthc Manag*, 49(3), 181-196; discussion 196-187.
- Raju, P. S. and Lonial, S. C. 2002. The impact of service quality and marketing on financial performance in the hospital industry: an empirical examination. *Journal of Retailing and Consumer Services*, 9(6), 335-348.
- Robins, A. P. 1389. Principles of Organizational Behavior. Tehran, Cultural Research Bureau Pub.
- Rosenstein, A. H. 2002. Nurse-physician relationships: Impact on nurse satisfaction and retention. *AJN the American Journal of Nursing*, 102(6), 26-34.
- Rostami, H., Rahmani, A. and Ghahramanian, A. 2010. The Viewpoint of Nurses about Professional Relationship between Nurses and Physicians. *Journal of Research Development in Nursing and Midwifery*, 7(1), 63-72.
- Saffari, M. 2010. Health relationship. Tehran, Subhan pub.
- Snelgrove, S. and Hughes, D. 2000. Interprofessional relations between doctors and nurses: perspectives from South Wales. *Journal of Advanced Nursing*, 31(3), 661-667.
- Studdert, D. M., Mello, M. M., Sage, W. M., DesRoches, C. M., Peugh, J., Zapert, K. and Brennan, T. A. 2005. Defensive medicine among high-risk specialist physicians in a volatile malpractice environment. *Jama*, 293(21), 2609-2617.
- Sweet, S. and I. Norman, 1995. The nurse-doctor relationship: a selective literature review. *Journal of advanced nursing*, 22(1): 16.
- Tokunaga, J., Imanaka, Y. and Nobutomo, K. 2000. Effects of patient demands on satisfaction with Japanese hospital care. *International Journal for Quality in Health Care*, 12(5), 395-401.

- Woods, M. 2006. How communication complicates the patient safety movement. Patient Safety and Quality Healthcare. Retrieved from <http://www.psqh.com/mayjun06/dun.html>."
- Yaghoubi, M., Agharahimi, Z., Karimi, S. and Javadi, M. 2011. Factors Affecting Patients' Preferences in Choosing a Hospital Based on the Mix Marketing Components in Isfahan. *Hakim*, 14(2), 106-114.
- Yildirim, A., Ates, M., Akinci, F., Ross, T., Selimen, D., Issever, H., Akgün, M. 2005. Physician–nurse attitudes toward collaboration in Istanbul's public hospitals. *International Journal of Nursing Studies*, 42(4), 429-437.
