Original Article

Doctor-Patient Communication, What is the Situation? An Intervention Study at a Selected Governmental Hospital in Sharkia Governorate

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Abstract

Background: Good doctor-patient communication has multiple impacts as higher compliance, satisfaction for both patients and clinicians and decrease in malpractice.
Objective(s): To assess physicians' perception towards importance of effective doctor-patient communication, as well as to measure their actual practice and skills of communication according to the items of the Kalamazoo checklist before and after training program.
Methods: An intervention study was carried out at outpatient clinics in a general hospital at Zagazig district. A randomly selected sample of 198 physicians was chosen. The phases of the study were: 1- Assessing the level of doctor patient communication practice using the Kalamazoo Checklist. 2- Assessing physicians' perception towards effective communication, using a self-administered questionnaire. 3- Assessing the level of doctor patient communication practice after training program.
Results: 46.5% of physicians highly perceived the importance of effective communication; with higher perception among females. The highest perceived items (more than 80%) were the effect of good communication on patients' compliance, patients' satisfaction and physicians' satisfaction. The intervention program significantly improved the physicians' communication skills.
Conclusion: Less than half of the physicians highly perceived the importance of effective communication. Training can significantly impact communication skills.

***Keywords*:** doctor-patient communication

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INTRODUCTION

Physician's ability to communicate effectively and compassionately with the patient is a cornerstone to successful patient–physician relationship. Ineffective patient-doctor communication has been considered as a significant contributing factor to adverse outcomes.[1] That raised attention to make effective communication one of the organizational priorities to protect the safety of patients. With the increase in demand for patient-centered care, together with the rise in consumerism in medicine, health service research on the doctor-patient communication has become an important area for both medical researchers and administrators in a similar way.[2] Effective communication is achieved when providers understand and integrate the information gathered from patients, and when patients catch accurate, complete and clear messages from providers in a way that enables them to take part actively in their care.[3] The provider who encourages open communication usually gets more complete information, more accurate diagnosis, and help appropriate counseling, thus potentially improving adherence to treatment plans that benefit long-term health.[4] Good communication is fundamental for both patients' and physicians' satisfaction, satisfied patients are less likely to lodge formal and malpractice complaints. Satisfied physicians have greater job satisfaction, less work-related stress, and reduced burnout.[5]

Communication and interpersonal skills of the physicians are no longer viewed as immutable personal styles, but, instead, as a set of measurable and modifiable behaviors that can change. It has been observed that communication skills tend to decline as physicians progress through their medical education, and over time they tend to lose their focus on patient centered care.[6] Moreover, physicians around the globe spend hours and hours learning how to keep up with the latest and best medical information. What is often ignored in this learning process is paying attention to how they communicate with patients.[7]
Training in communication skills improves clinicians' knowledge, changes some of negative attitudes and enhances assessment of physicians' own ability to do specific communication tasks.[8] Many official

organizations have underscored the importance of communication skills by including training and assessment in communication and interpersonal skills as one of the competency domains.[9] There are many standardized contexts of training programs; one of them is the Kalamazoo Essential Elements Checklist, which identified seven key elements of communication in clinical encounters: build the relationship, open the discussion, gather information, understand the patient's perspective, share information, reach agreement, and give closure.[10]

In Egypt, the concept of effective communication is still underestimated, which might be due to high workload and lack of training on this important issue.[11] The greatest importance of effective doctor patient communication pushed the investigators to carry-out this work. The main objectives of the current study were: assessing physicians' perception of the importance of effective communication with patients, also measuring the actual practice of communication before and after a training program.

METHODS

The study was conducted in the outpatient clinics of one of the general hospitals of Zagazig district from August 2015 to April 2016. Zagazig district contains four general governmental hospitals, one of them was chosen randomly.

The chosen hospital contains seventeen outpatient clinics, 10 of them are internal medicine clinics and seven are surgical. The physicians who were working at outpatient clinics were identified from the records. Their total number was 300. Two thirds of the physicians were included in the study. Random selection of the sample was done with proportional allocation between surgical and internal clinics. So the sample included 70 physicians from surgical and 128 from internal clinics. Both residents and specialists were included in the study.

An intervention study was carried out through 3 phases:

Phase 1: Observational phase to assess the level of doctor patient communication skills using the items of Kalamazoo Essential Elements Communication Checklist (adapted).[12] Each physician has been observed three times separately according to their schedule, and the median of the three visits was considered. Single blinded technique was used to avoid bias of the results, as the observation was done by one of the researchers while the physicians were not aware about the observation and the patients had no role in the observation process.

Phase 2: This phase consisted of two steps:

— The 1st step was assessing physicians' perception of the importance of effective communication, using a self-administered questionnaire.[13] It was distributed at the beginning of the sessions.

— The 2nd step was in the form of training on effective communication. Physicians were divided into four groups, each group attended 3 sessions (one session weekly). Every session was from two to three hours. At every session certain topics were covered with special focus on different checklist elements.

1st session: It was an introduction about communication skills (definition, elements either verbal or nonverbal and areas). The learning outcome of this session was to answer three important questions; why do we communicate? What is the importance of communication? And what is the benefit of good communication in practice? Group discussion for every ten physicians (trainees) was done; every group discussed their previous experience in practice. They represented their work on flip charts and an interactive discussion between all groups was done.

2nd session: It was about questioning skills (types of questions: open, closed, clarifying, confirmatory and active listening skills). Role-play was held to demonstrate active listening skills.

3rd session: It was about how to build a relationship, how to open discussion and gather information, how to understand the patient's perspective and finally how to share information with the patients. Group discussion, role-play and simulation for the most famous mistakes and defects in the previous items were carried out. Videos, posters and booklets were used in every session.

Phase 3: it was conducted after six months from the intervention. In this phase, we asked a doctor from Family Medicine department, Zagazig University to complete the observational checklist for assessing practice again to avoid bias and to measure the change in physicians practice.

Data collection tools:

1- Kalamazoo Essential Elements Communication Checklist (Adapted) (KEECC-A). It provides 7 key elements of communication skills in clinical encounters: build the relationship, open the discussion, gather information, understand the patient's perspective, share information, reach agreement, and provide closure. KEECC-A is a valid and reliable method of assessing communication skills.[14]

Ratings were made on a 5-point Likert scale (1= poor, 2= fair, 3= good, 4= very good and 5= excellent). Responses to the 7 items were summed to provide a total communication score, with higher scores representing better communication skill. The maximum total score was 120. A total score > mean was considered good communication.

2- Self administered questionnaire: it included 10 questions that described physicians' perception towards effective doctor patient communication and its impact on health outcome.

Rating was made on a Likert scale (strongly agree, agree, disagree and strongly disagree). Strongly agree or agree were considered high perception for positive statements, while for negative statements disagree or strongly disagree were considered high perception. A total score > mean was considered high perception.

Statistical analysis: Frequencies, t-test and regression analysis were used for analysis, using SPSS version 20.0.[15]

Ethical considerations:
Official permissions were obtained from the manager of the selected hospital for doing the study. Total confidentiality of any given information was assured.

RESULTS

More than half of participants were females (54.5%), working as residents (54.5%), at internal medicine departments (64.6%) (Table1).

Table (1): General characteristics of the physicians at Zagazig General Hospital

	Physicians (n=198)	
	No.	%
Gender		
Male	90	45.5
Female	108	54.5
Department		
Surgical	70	35.4
Internal	128	64.6
Degree		
Resident	108	54.5
Specialist	90	45.5

Physicians' perception of the importance of effective doctor patient communication was clarified in Table 2.
Totally 46.5% of physicians highly perceived the importance of effective communication. The most commonly perceived items were: the doctors' attitudes towards their patients are the key determinants of good compliance with medical interventions (90.9%), effective doctor-patient communication is associated with increased patient satisfaction (84.8%) and doctors' satisfaction with their professional life is associated with a patient's trust and confidence (83.3%). However, the lowest perception was for the item "low compliance with prescribed medical interventions is associated with reduced medical costs" (19.2%).
Gender was the only significant factor that affected physicians' perception (Table 3). Significant improvement of the 7 communication skills elements of (KEECC-A) was noticed after intervention (Table 4).
Before intervention gender and academic degree of the physicians significantly affected their communication practice (Table5). However, after intervention there was no significant effect of gender, academic degree and specialty on communication (Table 6).

Table (2) Physicians' perception of the importance of effective doctor patient communication

	Physicians with high perception (n=198)	
	No.	%
Good communication has positive impact on health outcome	110	55.6
Improvements in doctors' communication skills is associated with increases in the emotional distress of patients	58	29.3
Better communication is associated with better control of chronic diseases	122	62.1
Patient-centered visits are associated with more diagnostic tests and referrals in the subsequent months	123	62.1
Low compliance with prescribed medical interventions is associated with reduced medical costs	38	19.2
The doctors' attitudes towards their patients are the key determinants of good compliance with medical interventions	180	90.9
Effective doctor-patient communication is highly associated with increased patient satisfaction	168	84.8
Doctors' satisfaction with their professional life is associated with greater patient trust and confidence	165	83.3
Communication problems are important factors in medical litigation	151	76.3
Adequate research is needed to evaluate doctor-patient relationship and doctor-patient communications	104	52.5
Total perception	92	46.5

Table (3): Logistic regression analysis of factors affecting perception of physicians of doctor patient communication

Variables	Wald	β coefficient	Standard error	P
Gender	9.04	-0.9	0.30	0.003*
Degree	1.9	0.5	0.4	0.1
Department	2.4	0.6	0.4	0.1

Table (4) The mean practice score of the Kalamazoo Essential Elements Communication Checklist before and after intervention.

Item	Before intervention Mean± SD	After intervention Mean± SD	Paired t-test	P value
Build a relationship	6.53±1.46	9.97± 6.54	7.11	0.0001
Open the discussion	6.47± 1.65	10.21±6.57	7.66	0.0001
Understand patient perspective	9.79±1.78	12.82±2.16	19.82	0.0001
Gather information	5.91±1.73	11.04±9.18	7.64	0.0001
Share information	9.65±1.73	13.27±2.12	28.05	0.0001
Reach agreement	6.07±1.48	11.22±2.41	23.25	0.0001
Provide closure	9.41±1.59	13.29±2.31	27.33	0.0001
Total checklist	53.87±7.42	81.81±20.98	18.26	0.0001

Table (5): Logistic regression analysis of factors affecting practice of doctor patient communication before intervention

Variables	Wald	β coefficient	Standard error	P
Gender	15.2	1.4	0.3	0.0001
Degree	14.7	2.2	0.5	0.0001
Department	-0.5	0.4	0.62	0.4

Table (6): Logistic regression analysis of factors affecting practice of doctor patient communication after intervention

Variables	Wald	β coefficient	Standard error	P
Gender	1.9	-0.6	0.4	0.1
Degree	0.6	-0.9	1.1	0.4
Department	0.5	-0.9	1.1	0.4
Rate of patients	0.5	-0.8	1.1	0.4

DISCUSSION

Even though good doctor patient communication is considered as "the need of the hour", it remains an ignored part in clinical medicine. Because we realized the great importance of effective communication, we conducted this work aiming to identify the physicians' perception towards the effective communication and to assess the practice of communication before and after a training program. Most of the participants highly perceived the impact of good communication on patients' compliance (90.9%), satisfaction (84.8%) and physicians' satisfaction with their professional life (83.3%). The total perception of the importance of good doctor patient communication was only 46.5%. The previous results may be explained by an improper training of medical graduates (either under or post

graduates) on effective communication with their patients (most of the Egyptian medical education programs focus on physician centered more than patient centered care). Moreover; most of the participants were junior with low experience in effective communication. Unfortunately, only few studies have assessed doctors' perception of effective communication in comparison to the studies that investigated the patient's perception16. In two previous studies [17, 18]; physicians perceived that better communication allows greater patient satisfaction with medical care and higher rates of compliance. Additionally, it was highlighted that, patient centered care and effective communication were associated with more physicians' satisfaction with their professional life.[19]

Surprisingly, only 19.2% of physicians perceived the relation between effective communication and reduced medical cost. Most of the physicians, especially in governmental sector don't worry about the financial cost at their workplaces. Contradictory to this; it was found in USA that 84% of physicians highly perceived that effective doctor-patient communication means increased compliance and decreased cost.[20]

Gender was the only factor that affects the perception of effective communication, with significant higher perception among females. Females are usually more empathetic than males; they have more patience and ability to listen to the patients' stories not only to their medical problems. In accordance with these results, the study conducted by Salmon and Young noted that among men there was a lack of perception of the importance of effective communication.[21] Interestingly in a focus group of male physicians conducted in UK, 100% of them answered by "yes" when asked "Is effective communication an important component in the doctor-patient relationship?" However 100% of them answered by "No" when asked "Do you think you could benefit from a training program to improve your communication skills?".[22] Other factors rather than gender markedly affected the perception of the importance of good communication as experience, personality and understanding the social context of the patient.[23]

Training program used in this study depended upon the items of Kalamazoo Essential Elements Communication Checklist; it was noted that the practice of effective communication was significantly improved after the intervention. This may reflect the effect of training on improving this fundamental skill. Many studies [24, 25] concluded the significant effect of training on communication behavior among physicians, especially in increasing their ability to perform effective medical interviews and manage difficult situations.

Rao et al., 2007 [24], highlighted that training on effective communication made their participants more able to ask open-ended questions, express empathy and provide more information to patients.

Open discussion and understanding patient perspectives were the most improved items after intervention. Workload and physician centered care may be barriers against giving a chance to the open discussion. A research 26 considered missing open discussion as "a missed opportunity" for more information and a better diagnosis.

As regards patient's perspectives; it was agreed that understanding patients' perspectives about their health condition and treatments can promote communication exchange and adherence to the plan of management.[27] Also understanding patients' perspectives was described as the best practice approach for effective communication.[28]

Gender and physician's degree significantly affected communication behavior before the intervention. After the intervention, it was not affected by any factor. This may maximize the role of training in improving communication and ameliorating all individual differences. Consistently the review conducted by Celik et al.,[29] found that training physicians on different elements of effective communication as; delivering information, showing respect and supporting patient involvement could help them to better communication, irrespective to their individual differences. Better communication behavior among females may be explained by that they have more patience and feelings play an important role in dealing with their patients. Supportive to this result Brink et al.,[30] found that female doctors usually commit a positive communication behavior as support, empathy and encouragement. Moreover, female doctors can build rapport by reassurance and positive talk.[31]

In contrast, in another study[32], they found no gender effect on ways of communication with the patients.

As regards physician's degree, specialists have less job stress than residents and they learned how to deal with the patients in their private work; that give them the chance to better communication. In contrast, a study done by Delphine et al.,[33] didn't find any significant difference between junior and senior staff in their ways of communication with the patients.

CONCLUSION AND RECOMMENDATIONS

In conclusion, less than half of the physicians highly perceived the importance of effective communication, with higher perception rate among female doctors. The training program can dramatically improve communication and even ameliorate all individual factors. This study was one among very little number of studies that assessed physicians' perception towards effective communication in clinical practice in Egypt.

Limitations of the study: observation was a very difficult research method. The number of studies done on physicians' perception towards communication was limited, making discussion of results difficult. Additionally; as training was not formal, investigators found some resistance from physicians to comply with it, making the study time longer. On the light of the results it was recommended to; perform more studies about communication, especially in Egypt.

Integrate this important item in medical curricula either under or postgraduates. Repeated training on effective communication may make it the usual way in dealing with the patients.

Conflict of Interest: None to declare.

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