

Patient-Provider Relationship: Compliance with Care

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Abstract: The Provider-Patient Relationship (PPR) is a novel concept of medical sociology in which patients voluntarily approach a doctor and thus become a part of a contract in which they tend to abide with the doctor's guidance. It has been proposed that an ideal PPR has 6 components, namely voluntary choice, practitioner's competence, good communication, empathy by the doctors, continuity and no conflict of interest. In fact, a poor PPR has been proved to be a major obstacle for both doctors and patients and has eventually affected the quality of healthcare and ability of the patients to cope with their illness. Owing to poor PPR, patients does not show compliance with doctor advice completely; opt for practitioner-shopping by changing their practitioner repeatedly; remain anxious; may choose quacks or other non-scientific forms of treatment; significant increase in direct and indirect medical expenses. Because of recurrent change in line of treatment as per the advice of different practitioner and non-completion of the entire course of drugs, there is a definite scope for the emergence of antimicrobial resistance which further compounds the medical cost and anxiety and finally, may develop serious forms of disease or complications. From the practitioner's perspective they may ask for unnecessary investigations or may give over-prescriptions, just to be safe. There is also observed a remarkable decline in human touch or empathy and a significant rise in unhealthy competition among doctors.

Key words: Compliance, patient satisfaction, communication skills, empathy, trust, patient comprehension, motivation, primary care

INTRODUCTION

Patient-provider relationship is the main component of medical practice and essential for the delivery of quality health care. It formed the foundation of contemporary medical ethics. This relationship was constructed socially where patients assumed the role of "the sick" and physicians assumed the role of "the healer". This implied a great deal of expectations which set up patterns of social conduct. A patient expects the physician to know everything and wants to be treated fully. This may not always happen. Physicians also have their limitations, depending on the society they come from and the type of training they have received. Physicians in public and private health care settings behave differently and for obvious reasons, private physicians devoted more time to the patient than the physicians in public-sector. However, medical care occurs here as part of physician-patient interaction where a physician defines a problem as medical or treats a social problem with a medical treatment. The physician/patient relationship is a relationship where the medical needs of one person and the technical ability of another come together-should be understood as a humane partnership. The rapid penetration of managed

care into the health care market raises concern for many patients and physician about the effects that different financial and organizational features might have on the physician-patient relationship. Some such concerns represent a blatant backlash on the part of physician whenever we talk to of health care practices with their patient's counterpart. But objective and theoretical bases for genuine concern remains. This study examines the foundations and features of the patient-physician relationship and how it may be affected by managed medical care/emerging medical care system.

Types of physician-patient relationship: Different forms of physician-patient relationship arise from differences in the relative power and control exercised by physician and patients (Table 1). In reality, these different models perhaps do not exist in pure form but nevertheless most consultations tend towards 1 type.

Paternalistic relationship: A paternalistic (or guidance-cooperation) relationship, involving high physician control and low patient control where the physician is dominant and acts as a "parent" figure who decides what he or she believes to be in the patient's best

Table 1: Types of physician-patient relationship

Patient control	Physician control	Physician control
Low	Low	High
High	Default	Paternalism
	High	Mutuality

interest (McKinstry, 1992). This form of relationship traditionally characterized medical consultations and at some stages of illness, patients derive considerable comfort from being able to rely on the physician in this way and being relieved of burdens of worry and decision making. However, medical consultations are now increasingly characterized by greater patient control and relationships based on mutuality (LeBaron *et al.*, 1985).

Mutuality relationship: A relationship of mutuality is characterized by the active involvement of patients as more equal partners in the consultation and has been described as a “meeting between experts” in which both parties participate as a joint venture and engage in an exchange of ideas and sharing of belief systems (Aveling and Martin, 2013). The physician brings his or her clinical skills and knowledge to the consultation in terms of diagnostic techniques, knowledge of the causes of disease, prognosis, treatment options and preventive strategies and patients bring their own expertise in terms of their experiences and explanations of their illness and knowledge of their particular social circumstances, attitudes to risk, values and preferences (Stewart, 2005).

Consumerist relationship: A consumerist relationship describes a situation in which power relationships are reversed with the patient taking the active role and the physician adopting a fairly passive role, acceding to, the patient’s requests for a second opinion, referral to hospital, a sick note and, so on (Rafia, 2016).

Default relationship: A relationship of default can occur if patients continue to adopt a passive role even when the physician reduces some of his or her control with the consultation, therefore, lacking sufficient direction (Ritu, 2013). This can arise if patients are not aware of alternatives to a passive patient role or are timid in adopting a more participative relationship (Brown *et al.*, 2002). Different types of relationship and particularly those characterized by paternalism and mutuality can be viewed as appropriate to different conditions and stages of illness. For example, in emergency situations it is generally necessary for the physician to be dominant whereas in other situations patients can be more actively involved in treatment choices and other decisions regarding their care (Burcher, 2011).

Importance of provider-patient relationship: Good provider-patient communication has the potential to help regulate patient’s emotions, facilitate comprehension of medical information and allow for better identification of patient’s needs, perceptions and expectations. Medications, drugs, medicines are known and have shown to improve the quality of people’s lives but they can also pose serious risks, particularly if not taken correctly. Studies have shown correlations between a sense of control and the ability to tolerate pain, recovery from illness, decreased tumor growth and daily functioning (Institute of Medicine, Board on Neuroscience and Behavioral Health, Committee on Health and Behavior: Research, Practice and Policy, 2001). Pharmacist regardless of setting-retail, drug stores, hospital, ambulatory care, long term care, consulting, academia, government, etc. as a member of health care team is extensively trained to help patients get the benefits of medicine while reducing drug related problems and risks as much as possible (Lampkin *et al.*, 2018). The role of pharmacists has grown and changed to help patients cope with a complicated health care system. Pharmacists are medication experts they have undergone extensive education in the science of how the human body uses and responds to medicines and have also built up years of experience in real-life counseling on how to take medicines safely. The main goals of current provider-patient communication are creating a good interpersonal relationship, facilitating exchange of information and including patients in decision making (Collins, 2008).

A regular and routine based follow-up: Pharmacists checking each prescription to help ensure that:

- The information provided by the prescriber is complete
- The new medication will not interact with anything else they know you are taking
- The medication and dosage are safe with any medical conditions
- Patients complete understanding of how to take and store the medication properly
- Warn patient of possible harmful drug interactions or allergies and side effects
- Advise patient on drug-foods, drug-drug, drug-drinks, drug-herb, drug-OTC interactions or activities to avoid while taking a certain medication or on what to do if missed a dose (FitzGerald, 2009)

Compliance with medical treatment: It has been shown that pharmacist’s attitude towards his patients his ability

to elicit and respect the patient's concerns, the provision of appropriate information and the demonstration of empathy and the development of patient trust are the key determinants of good compliance with medical treatments in patients (Kerse *et al.*, 2004).

Improved patient/pharmacists satisfaction: Patient satisfaction is an important area that deserves our attention because dissatisfaction with health care services can result in litigation against physicians by patients, unnecessary health care expenditure due to repeated visits, both could be very costly for the health care system. It seems that providers who are themselves more satisfied may be better able to address patient's concern (Shan *et al.*, 2016). It has been suggested that providers who are satisfied with their professional life may have more positive effect which may in turn affect their communication with patients which then affect patient satisfaction (Dugdale *et al.*, 1999).

Risk factors of provider-patient relationship: Factors that had lately put the provider-patient relationship at risk. These included; Rising health care costs due to advances in science and technology, over-specialization, inappropriate use of drugs and diagnostic technology, changing patient/community expectations due to ready access to health care, gaining the right of partnership in decision-making and increased awareness about adverse events (Anonymous, 2015). Increased commercialization of medical practice its deregulation and privatization, mushrooming of private hospitals, aggressive intrusion of the pharmaceutical industry and medical insurance companies as well as globalization had resulted in highly increased costs of medical care (Mackintosh and Koivusalo, 2005). This exploitation of the patient had also resulted in complaints and a large number of legal claims. There were specific provider-related factors which affected the provider's relationship with the patient. These included clinical skills for proper diagnosis and investigation, management of cases and procedural skills as well as communication skills. The physician's unfriendly attitude, lack of good manners and unethical behavior towards the patient affected the relationship (Raveesh *et al.*, 2016). Innovative strategies were needed to improve this relationship. Medical education curriculum needed to include teaching of ethics, sociology aimed at creating cultural sensitivity, empathy and respect for the patient's dignity, standards of practice as well as legal aspects of medical practice. The physician should learn to treat patients as consumers and should respect their rights as such. The physician should understand the patient's perspective and explore all contextual factors, e.g., age, gender, family, socioeconomic status, culture,

religion, beliefs, concerns and expectations about health and illness (AAMC., 2017). Patients also needed to be educated and empowered to exert their rights and provided health literacy in order to demystify health-related issues. Health systems had to be strengthened to provide universal coverage in a patient-friendly atmosphere and maintain continuity of care with provision for regular audits. Health systems everywhere had set goals of full coverage of and accessibility to health care for all, equity and efficiency and a high level of patient satisfaction. But problems like shortage of health workforce resulting in long waiting hours, inappropriate technology, budget constraints, over-specialization resulting in increased costs and a lack of good bedside manners were hampering the provision of improved quality of health care (Sorensen *et al.*, 2012).

MATERIALS AND METHODS

Fundamentals for dynamic relationship

Communications skills: Good communication allows patients to share vital information essential for an accurate diagnosis of their problems, enables physicians to have a better understanding of their patient's needs and potentially lead to better symptom reduction. It improves patient understanding and adherence to treatment plans, reduces work-related stress and burnout for practitioners and leads to positive effects on health care costs including decreased diagnostic tests, referrals and length of hospital stay. On the contrary, a breakdown in the physician-patient relationship often manifests as unsatisfactory patient provider communication, the dominant theme in malpractice claims (Piyush *et al.*, 2015). Prior research on patient complaints focused on documenting the frequency of complaints, complainant demographics and categorizing broadly the nature of these complaints into categories such as billing, treatment, diagnosis, efficiency, operational systems, poor attitudes and communication. Attentive listening skills, empathy and use of open-ended questions are some examples of skillful communication. Improved physician-patient communication tends to increase patient involvement and adherence to recommended therapy, influence patient satisfaction, adherence and health care utilization and improve quality of care and health outcomes (Debono and Travaglia, 2009). Patients often regard their physicians as one of their most important sources of psychological support. Empathy is one of the most powerful ways of providing this support to reduce patients feelings of isolation and validating their feelings or thoughts as normal and to be expected. Relationship building is especially important in breaking bad news. Important factors include understanding

Table 2: Principles for enhancing the provider patient relationship in managed care (Goold and Lipkin, 1999)

Provider	Plans
Enhanced knowledge, skills and attitudes of provider, patients and plans in the relationship foster continuity Protect the interests and the preferences of individuals	Encourage attention to psychological aspects of care Monitoring satisfaction with visit time Avoids decisions that interrupt continuity Promote a patient centered culture
Contribute to quality improvement and standardization efforts Practice prudence in medical spending decisions Minimize conflicts of interest Review contracts for potential effects on provider patient relationship	separate administrative rule communication from patient care Standardize with protection for individual needs and preferences Protect patient confidentiality Eliminate intrusive incentives in physician contracts Structure employer contracts to encourage accountability to members Promote candor in advertising and elsewhere

patient’s perspectives, sharing information and patient’s knowledge and expectations. Miscommunication has serious implications as it may hinder patient’s understanding, expectations of treatment or involvement in treatment planning (Barry, 2007). In addition, miscommunication decreases patient satisfaction with medical care, level of hopefulness and subsequent psychological adjustment. In addition, to minimizing avoidance behavior which prevents patients from expressing opinions, effective physician-patient communication should involve productive conversation which involves understanding of both parties’ perspectives by shifting from a perspective that is rigidly certain of one’s belief to a more exploratory approach that strives to understand the situation from another perspective. Recognizing the impact of patient reciprocation of communication and affect in a medical visit is important as it may help create positive exchanges to defuse negative patterns (Chevalier, 2017). The pharmacist also gets benefits in this process. Potential benefits to the pharmacist in this process include:

- Enhanced professional status in the view of patients and other health care providers
- Establishment of an essential component of patient care that cannot be replaced by technicians or automation
- Enhanced job satisfaction through improving patient outcomes
- A value-added service to offer patients
- Revenue generation through payment for counseling services-limited at present but growing

Empathy: Empathy is vital to ensure the quality of relationship. This enables the physician to understand the symptomatic experiences and needs of individual patients. Studies have suggested that physician empathy improves the therapeutic effect and the patient’s quality of life. Empathy facilitates trust and disclosure and can be directly therapeutic (Weiner and Auster, 2007). Physicians express empathy not only by grasping the personal meanings of patient’s words but also by (automatically)

matching patient’s nonverbal style, for example, their vocal tones. When physicians attune to patients nonverbally, patients feel more comfortable and give fuller histories. Further, there is a growing body of evidence suggesting that empathy directly enhances therapeutic efficacy. Engaged communication has been linked to decreasing patient anxiety and for a variety of illnesses, decreasing anxiety has been linked to physiologic effects and improved outcomes. An expert panel on how physicians deliver bad news concluded that patients cope better in the long term if their physicians are empathic (Marsden, 2014).

Trust: Trust is the keystone of provider-patient relationship. Trust is defined as “assured reliance on the character, ability, strength or truth of someone or something”. Trust does not usually result from a single interaction but instead it is built over time with repeated interactions through which expectations about a person’s trustworthiness can be tested. According to, thom and associates clearly stated behaviors that patients most strongly associate with enhanced trust (Shenton, 2004). These include comforting and caring, demonstrating competency, encouraging and asking questions and explaining. More surprising is that patients find less value in gentleness during the examination, discussing options and asking opinions, looking in the eye and being treated as an equal. Trust in physicians allows patients to effectively discuss their health issues (Walter, 2004). Development of trust enables the patient to comply with the physician’s guidance which consequently results in improvement of health. The physician must recognize that although, he or she has expert knowledge of the medical facts, the patient is the expert when it comes to determining what is best for him or her given his or her values, beliefs and aspirations (Henriksen *et al.*, 2008). Hence, the physician is obligated to present clinical data as free as possible of personal or professional bias and to assist patients in understanding the rationale, effectiveness, benefits and potential risks of a treatment plan without manipulation or coercion. Table 2 lists

several principles physicians can follow to retain professional standards and nurture and sustain the public's trust in physician-patient relationships.

Informed consent: This is based on the moral and legal arguments of the patient's autonomy (independence in decision making). In relation to trust, the physician needs to be honest with the patient and his family to provide a genuine assessment of favorable and unfavorable outcome probabilities, along with the suggested therapy. It is important that consent is obtained for each act and not assumed because this is a routine assessment or procedure and therefore can be carried out automatically (Maree, 2005). It is essential the patient understands their diagnosis, the benefit and rationale of the proposed treatment and the likelihood of its success together with the associated risks and consequences, for example, side effects. Therefore, a prescriber needs to discuss these aspects with the patient. In addition, potential alternative treatments should also be discussed to allow the patient to make a comparison with the proposed plan. The prognosis if no treatment is prescribed should also be discussed. Such a wide-ranging discussion may require more than one appointment and reinforces the necessity for an ongoing patient-professional relationship focused on the needs of the patient (Brown and Bussell, 2011).

Confidentiality: Medical confidentiality need not be requested explicitly by patients, all medical information, by nature is generally considered to be confidential, unless the patient grants approval for its release. Confidentiality in medicine involves a careful balance of respecting patient autonomy, the duty to warn, protecting confidential patient information and soliciting appropriate disclosures (Petronio *et al.*, 2012). Confidentiality in relation to genetic information is likely to present a common ethical dilemma as it becomes possible to screen for gene mutations linked to an increasing number and type of diseases (Ray, 2007). Confidentiality and privacy have received a great deal of attention recently with the passage and implementation of the Health Insurance Portability and Accountability (HIPAA) Act. Good practice involves: treating information about patients or clients as confidential and applying appropriate security to electronic and hard copy information. Seeking consent from patients or clients before disclosing information where practicable. Being aware of the requirements of the privacy and/or health records legislation that operates in relevant states and territories and applying these requirements to information held in all formats including electronic information. Sharing information appropriately about patients or clients for their healthcare while

remaining consistent with privacy legislation and professional guidelines about confidentiality. Where relevant, being aware that there are complex issues relating to genetic information and seeking appropriate advice about disclosure of such information. Providing appropriate surroundings to enable private and confidential consultations and discussions to take place. Ensuring that all staff are aware of the need to respect the confidentiality and privacy of patients or clients and refrain from discussing patients or clients in a non-professional context. Complying with relevant legislation, policies and procedures relating to consent. Using consent processes including formal documentation if required for the release and exchange of health and medical information. Ensuring that use of social media and e-Health is consistent with the practitioner's ethical and legal obligations to protect privacy (Medical Board of Australia, 2014)

Professional boundaries: This deals with any behavior on the part of the physician that transgresses the limits of the professional relationship or boundary violations. In the context of the physician-patient relationship, a boundary violation refers to any behavior on the part of a physician that transgresses the limits of the professional relationship. Boundary violations have the potential to exploit or harm patients (Aravind *et al.*, 2012). Boundary violations differ from boundary crossings which occur whenever the patient-physician interaction goes beyond the usual therapeutic framework but is not necessarily harmful to a patient. For example, if a therapist happens to encounter a patient in a social setting that is a boundary crossing but it is neither harmful nor unethical as long as the therapist does not violate confidentiality. However, if the therapist plans to meet the patient for dinner it is a boundary violation (Gutheil and Gabbard, 1998). The potential areas of exploitation include personal or social boundary violations, business relationships and sexual activity. Examples of personal or social boundary violations include seeing patients in unorthodox settings for the convenience of the physician, loaning a patient money or burdening the patient with personal information. Business ventures with a patient or taking advantage of insider information revealed by the patient are examples of unethical business relationships. Any form of sexual activity with a patient is a clear boundary violation (PSYCH., 2003).

Patient-physician relationship and medical ethics

Duties of physicians to patients: For monitoring the concord of this relationship, ethical codes have been developed to guide the members of the profession. The

Hippocratic Oath was an initial expression of such a code. According to this physicians have some responsibilities or obligations to the patients. They have a legal duty to provide a certain standard of skill and care to their existing patients. The legal duty of care is created when a physician agrees to treat a patient who has requested his or her services. In determining what that duty requires, physicians should consider whether the care they are providing is that which a "reasonable physician" would provide under the circumstances. Specialists would need to exercise a higher degree of skill in their area of expertise.

Obligations to the sick: Though a physician is not bound to treat each and every person, one should be mindful of the requirement of high character of mission and the responsibility for performance in professional duties. One should never forget that health and lives of those entrusted to his care depend on his skill and attention. A physician advising a patient to seek service of another physician is acceptable but in case of emergency he must treat the patient. No physician could arbitrarily refuse to treat a patient, however, for good reason when an ailment which is not within the range of experience of the treating physician, he may refuse treatment and refer the patient to another physician (Raina *et al.*, 2014).

Patience, grace and secrecy: Patience and gracefulness should characterize the physician. It is the responsibility of the physician to keep patient's information confidential unless there is a serious or imminent danger in doing, so. Under some circumstances, a physician may reveal it in the interest of society to protect a healthy person against a communicable disease. In such instance, the physician should act as he would wish another to act toward one of his own family in like circumstances (Ramchandra, 2008).

Prognosis: The physician should neither exaggerate nor minimize the gravity of a patient's condition. He or she should ensure that knowledge of the patient's condition disclosed to his relatives will be for the best interest of the patient. A physician is free to choose whom he will serve except in an emergency. Once having undertaken a case, the physician should not neglect the patient, nor should he withdraw from the case without giving adequate notice to the patient and his family. Physician could not commit an act of negligence that may deprive his patients from necessary medical care (Rajesh, 2011). Provisionally or fully registered medical practitioner shall not willfully commit an act of negligence that may deprive his patient or patients from necessary medical care. When a physician who has been engaged to attend an obstetric case is absent and another is sent for and delivery

accomplished, the acting physician is entitled to his professional fees but should secure the patient's consent to resign on the arrival of the physician engaged. Recently, MCI has also come out with a modified code of ethics for physicians who have often been suspected to be ignoring the ethics of the noble profession by promoting the pharmaceutical industry's interests. The modified code of ethics prohibits medical practitioners and their family from accepting gifts, travel facilities, hospitality and monetary grants from the healthcare industry either in their name or in the names of their family members (Krishnan, 2014).

Models of relationship: In North America and Europe for instance, there are at least four models which depict this relationship.

Paternalistic model: The best interests of the patient as judged by the clinical expert are valued above the provision of comprehensive medical information and decision-making power to the patient.

Informative model: By contrast it sees the patient as a consumer who is in the best position to judge what is in her own interest and thus views the physician as chiefly a provider of information.

Interpretive model: The aim of the physician-patient interaction is to elucidate the patient's values and what he or she actually wants and to help the patient select the available medical interventions that realize these values.

Deliberative model: The aim of the physician-patient interaction is to help the patient determine and choose the best health-related values that can be realized in the clinical situation. To this end, the physician must delineate information on the patient's clinical situation and then help elucidate the types of values embodied in the available options.

Table 3 compares the 4 models on essential points. Importantly, all models have a role for patient autonomy; a main factor that differentiates the models is their particular conceptions of patient autonomy. Therefore, no single model can be endorsed because it alone promotes patient autonomy. Instead the models must be compared and evaluated at least in part by evaluating the adequacy of their particular conceptions of patient autonomy. The 4 models are not exhaustive. At a minimum there might be added a fifth, the instrumental model. In this model, the patient's values are irrelevant, the physician aims for some goal independent of the patient such as the good of society or furtherance of scientific knowledge.

Table 3: Comparison between physician-patient relationship models (Emanuel and Emanuel, 1992)

Points	Informative	Interpretive	Deliberative	Paternalistic
Patient values	Defined, fixed and known to the patient	Inchoate and conflicting, requiring elucidation	Open to development and revision through moral discussion	Objective and shared by physician and patient
Physician's obligation	Providing relevant factual information and implementing patient's selected intervention	Elucidating and interpreting relevant patient values as well as informing the patient and implementing the patient's selected intervention	Articulating and persuading the patient of the most admirable values as well as informing the patient and implementing the patient's selected intervention	Promoting the patient's wellbeing independent of the patient's current preferences
Conception of patient's autonomy	Choice of and control over, medical care	Self-understanding relevant to medical care	Moral self-development relevant to medical care	Assenting to objective values
Conception of physician's role	Competent technical expert	Counselor or adviser	Friend or teacher	Guardian

RESULTS AND DISCUSSION

Effect of provider patient interaction

Provider's approach to patients: Providers who adopt an autocratic approach assume a dominant or controlling role, speaking with an authoritarian tone and giving directions without seeking patient input. In contrast, providers who adopt a participatory approach collaborate with the patient to develop a mutually acceptable treatment plan, providing decisional support or guidance without ignoring patient views and demanding compliance with a certain therapeutic plan (Souliotis, 2016).

Provider instruction on patient comprehension and recall: Patients often receive information about the drug name and recommended dose and dosage frequency but the majority of patients still receive no specific oral counseling about the purpose of therapy, how long to take their medication, side effects, other precautions and when the medication will begin to work. In fact, the quality of medication instruction by a provider is a better predictor of patient comprehension and recall than the patient's age and education (Zeng-Treitler *et al.*, 2008).

Provider support on patient motivation and evaluation of care: Being ill and undergoing treatment can involve a variety of stresses, practical problems and other concerns that adversely affect patient's evaluations of treatment and their motivation to perform difficult tasks such as changing an unhealthy life-style, taking multiple medications, tolerating adverse events and maintaining a positive self-image and outlook. Patients also develop more positive attitudes and achieve better treatment outcomes when their caregivers make a systematic effort to reinforce the value of therapy. For example, experimental studies in hypertension management have documented substantial gains in patient adherence and clinical outcomes if patients receive regular blood pressure monitoring and feedback about their condition from a pharmacist or nurse (Manolakis and Skelton, 2010; Adams, 2010).

Social context: Sick people want help because illness threatens their connection to the vividness. They naturally invest hope in the physicians they find while patients as a group dislike thinking unpleasant thoughts (Goami, 2007) (no doubt physicians do, too, although, probably less, so, in the health care setting. A culture heavily invested in "the power of positive thinking" produces patients who may resist thinking about the possibility that their physicians will disappoint them (Portmann, 2000). Physicians also communicate and treat their patients differently according to other social characteristics such as social position and ethnicity. Physicians themselves have contributed to a culture of medical practice in which objective test results are given more credence and are felt to be more reliable than the subjective history of the patient. In practically more than 80% of diagnoses are made by history alone (Lipkin, 1987).

Prudence: Physicians should focus on continuity in relationships with individual patients as well as other specialists and nurse's staff with the organization as a whole. Continuity encourages trust, provides an opportunity for patients and physician to know patient's as persons and provides a foundation for making treatment decisions with a particular patient. It allows physicians to be better advocates for their patients and allows patients some power by virtue of the personal relationship they have with this physician. Practitioners can practice prudence. Physicians should be prudent in their use of resources and at minimum resources should provide services to patients with utmost benefits.

Compliance: Compliance with physician advice is a key outcome of medical care consultations. The medical care physician is the key coordinator of prescribing medicine and medication prescribing is a core component of medical care and patient compliance with recommendations to take medications varies. Patients reporting high levels of concordance with the physician were one third more likely to be compliant in taking

medications prescribed during that consultation. In contrast, continuity of care measures, trust in the physician and enablement were not consistently or not independently related to compliance with medications (Kerse *et al.*, 2004).

Provider interaction with the electronic health record:

The computer with the Electronic Health Record (EHR) is an additional ‘interactant’, consumes an increasing proportion of clinicians’ time during consultations. To ensure effective communication with their patients, clinicians may benefit from using communication strategies that maintain the flow of conversation when working with the computer as well as from learning EHR management skills that prevent extended periods of gaze at computer and long periods of silence. On the other hand, patients may perceive the use of EHR as part of the provider’s responsibilities and an important source of information at the point of care. Moreover, some clinicians may be quite skilled at multi tasking, enabling them to more successfully integrate their interactions with the computer and the patient. Thus, their use of the computer might have positive or at least neutral effects on their communication with patients (Shachak and Reis, 2009).

The effect of the internet: Studies on how the internet affects patient’s experience of empowerment within the clinical encounter shown mixed outcomes. Many patients encountered resistance from physicians to discussing online health information. Some patients noted that when the information they found did not coincide with the physician’s views, their GPs “decisively rejected or dismissed” their findings (Wyatt, 2001). Some physicians dismissed patient’s acquired knowledge in attempts to assert their authority, leading patients to be cautious in challenging their physician’s opinions (Hart *et al.*, 2003). Patient’s online searching could result in physicians showing hostility or irritation in some cases labeling persons as “over-informed” or “problem patients” (Broom, 2005). These types of reactions have been interpreted as strategies for re-asserting the conventional, hierarchical consultation model in situations where the physician feels that his expertise or authority is threatened.

Management of adverse events: Adverse event resolution must consider multiple dimensions of trauma in the provider and system response. Provider communication timeliness and quality were important influences on patient’s responses to adverse events. Confronting an

adverse medical event collaboratively helped both patients and providers with patient’s emotional, physical and financial trauma and minimized the anger and frustration commonly experienced. Health organizations, providers, investigators and policymakers should consider the patient experience when developing provider training or evaluating processes in patient resolution (Duclos *et al.*, 2005). Greater insight into patient’s actual experiences following an adverse medical event might improve the medical community’s handling of these events. The model communication plan regarding crisis moment is detailed in Table 4.

Special about provider-patient relationship:

A physician-patient relationship-based paternalism is still deeply rooted in today’s Japan. However, it is also true that “patient-oriented healthcare” is beginning to be emphasized in the clinical field here. Demand by patients for the disclosure of medical information is growing year by year. It is expected that physicians have 2 types of relational skills, namely; instrumental or the conducts related to the task and socio-emotional conduct. In the first, questions are made and information is provided while in the latter, feelings are addressed and empathy and commitment are shown. Affective communication between physicians and their patients is characterized by a balance between instrumental conducts and affective conducts, depending on the patient’s specific needs. In recent times, a great deal of factors has been found impacting on the physician-patient communication (Osorio, 2011). The most basic of these have to do with the physician’s gender, given that with the increased number of women in the medical profession it has been found that women have their patients in mind when making decisions and they also bear in mind the psychosocial aspects involving their patients. It has been proven that men are more likely to seek direct consultation to use the medical jargon and to focus more on physician type discussions while women like to talk more with their patients, obtaining better results and diminishing costs (Schmittiel *et al.*, 2000). While males speak with a higher, stronger, tone of voice, dominating and competitive, interrupting others, communication from women is more emotional, subjective and cordial, showing more commitment with the sentiments of others; Additionally, the verbal conducts of women are reflected in the non-verbal communication. There is evidence revealing that female medical professionals for the most part express and interpret emotions through non-verbal clues, more precisely than males for example through a smile although there are exceptions.

Table 4: Communication plan for an adverse moment

Variables	Communicate	Evaluate and refine	Reputation recovery
Patient (s) and/or family	Ensure patient and/or family is provided with constant updates regarding the status of disclosure/communication engage for feedback, appropriately address	Ensure patient’s privacy was protected follow up to determine additional information needs and reaction to public interest	Communicate the results of any investigations and efforts taken to address the root issue continue to provide information when requested maintain relationship
Other patients and stakeholders	Execute communications plan, using stakeholder specifics tactics Communicate with priority stakeholders first in the predetermined sequence Monitor for response, be open to feedback Adjust strategy as need	Based on listening/monitoring activities, assess the need for additional communication	Communicate the results of any investigations and efforts taken to address the root issue Continue to provide information when requested Highlight resulting improvements to safety processes
CEO and key executives	Provide ongoing updates regarding the status of communications Flag issues and concerns identified through monitoring activities	Provide debrief and summary reports of media and social media monitoring Provide summary of stakeholder reactions relationships and	Develop communications plan regarding completed investigation, seek approval Provide summary of communications activities and impact on stakeholder corporate reputation
Internal staff and volunteers	Ensure internal audiences are kept up to date Communicate expectations of employees and volunteers (for stakeholder inquiries)	Monitor internal reactions and recommunicate as necessary If required, consider higher quality touch points (e.g., town halls)	Communicate lessons learned and organizational next steps Be extremely cautious of blame it is counterproductive
Key operating units (Legal, HR, finance, risk, etc.)	Ensure information from operating units was appropriately considered in communication Provide ongoing updates as required	Provide debrief and summary reports of media and social media monitoring, if appropriate Provide summary of stakeholder reactions, if appropriate	Communicate lessons learned and organizational next steps Address outstanding organization liabilities and implications
Social media Traditional media sources (Print, TV, radio)	Communicate on owned social channels (Owned refers to the social pages the organization controls) Respond to feedback on public forums Monitor the reaction of key influencers (patient (s), influencers, healthcare system)	Use social/digital media as a feedback mechanism to determine the potential reputational impact	Education if appropriate Continue to provide information when requested

Ending relationship: The AMA code of ethics recognizes that the physician-patient relationship works best when it is a mutually respectful alliance. Termination of the physician-patient relationship is a 2 step process. First, identify the behaviors or patterns of behavior that trigger termination. Then provide the appropriate notice of termination to the patient. All decisions affecting the care and treatment of patients are taken within the context of this legal and ethical framework. Pharmacists have the authority to exercise professional and clinical judgment including the choice to terminate a pharmacist/patient relationship where warranted. Patients are entitled to dignity and respect when interacting with health professionals. The decision to terminate a pharmacist/patient relationship is a serious one, most often taken because a therapeutic relationship has been compromised and/or there are issues that cannot be resolved and which impact on the ability to provide appropriate pharmaceutical care to the patient. In the

language of ethics and the law, a physician may not abandon a patient. Abandonment has been defined as the physician’s unilateral withdrawal from the relationship without formal transfer of care to another qualified physician (Anonymous, 2018). However, the ethical obligation of the physician to maintain a relationship with a patient is not without limits. A written communication to the patient regarding a termination of the pharmacist/patient relationship contains the patient’s name, the pharmacist’s name and the name of the pharmacy and additional information including for example: affirmation and rationale for the decision to terminate the relationship and date chosen as the last day of care. Direction to the patient to obtain services at another pharmacy and offer to transfer prescriptions. Confirmation that prescriber (s) will be informed of the decision in the event that verbal prescriptions are received if relevant and/or a recommendation that the patient inform his/her prescriber (s) directly.

Acknowledge attachment of patient profile/medication history (if applicable) and any other information considered relevant.

Health disparities: In the United States, health disparities are a well-known problem among ethnic minorities such as African Americans, Asian Americans, Native Americans and Latinos. Studies have shown that these groups have a higher prevalence of chronic conditions along with higher rates of mortality and poorer health outcomes when compared with the white population (Hummer *et al.*, 2004). For example, the incident rate of cancer among African Americans is 10% higher than among whites. African Americans and Latinos are also approximately twice as likely to develop diabetes as white people are. In addition, around 2 million Hispanics/Latinos have asthma and among Puerto Rican Americans, the incidence is around three times higher than in the Hispanic population. Among African Americans, the incident rate of asthma is 28% higher than among whites and the incidence rate of SLE is around 2-3 times greater among African American females than among white females (Escarce *et al.*, 2006). SLE is also more common among Hispanic, Asian and Native American women. Infectious diseases such as hepatitis C are also more prevalent among African-Americans who account for 22% of hepatitis C cases, despite only making up around 13% of the U.S population. In 2007, almost 70% of gonorrhea cases and around 50% of chlamydia and syphilis cases occurred in African Americans (Ananya, 2018). Compared to the white population, African Americans are at an overall greater risk of conditions that lead to end-stage organ failure such as diabetes, chronic kidney disease and cardiovascular disease. The requirement for organ transplant is therefore, greater among this population, a need that is not currently met by the number of organs available. Compared with other ethnic groups, the rate of organ rejection is also higher among African-Americans while the survival rate after transplantation is lower. Developing countries are particularly prone to health disparities and in order to meet the Millennium Development Goals and resolve these health disparities, access to health care must be improved in these countries (Nicholas *et al.*, 2015). There are several factors that lead to these disparities, some of which are listed below:

- Poor access to healthcare
- Poverty
- Exposure to environmental problems
- Inadequate level of education
- Individual and behavioral factors

Pharmacists in patient care management

The changing role of pharmacists: Pharmacist's professional roles have matured to include provision of information, education and pharmaceutical care services. These changes have resulted in a focus on collaborative pharmacist-patient professional relationships in which pharmacists and patients both have roles and responsibilities. The goal of high quality, cost-effective and accessible health care for patients is achieved through team-based patient-centered care. Pharmacists are essential members of the health care team. The profession of pharmacy is continuing its evolution from a principal focus on medication product distribution to expanded clinically-oriented patient care services. As a result of this professional evolution, the importance of and need for, a consistent process of care in the delivery of patient care services has been increasingly recognized by the profession at large (Worley *et al.*, 2007). Pharmacists have unique training and expertise in the appropriate use of medications and provide a wide array of patient care services in many different practice settings. These services reduce adverse drug events, improve patient safety and optimize medication use and health outcomes. Pharmacists contribute to improving patient's health by providing patient care services as authorized under their scope of practice and facilitated by collaborative practice agreements. However, there is variability in how this process is taught and practiced. To promote consistency across the profession, national pharmacy associations used a consensus-based approach to articulate the patient care process for pharmacists to use as a framework for delivering patient care in any practice setting. If pharmacists and patients agree on relationship roles, the functionality and outcomes of this relationship will be optimized. Future research is needed to monitor trends in pharmacist's and patient's views of their relationship roles and to develop strategies as needed to ensure that pharmacists and patients are following the same relationship script (JCPP., 2014).

Relationship with patients: Optimal medication management requires an effective relationship between the patient and health care professional. As pharmacists move from the traditional dispensing role to become more actively involved in patient care, factors influencing their relationship with patients need to be identified. A better understanding of these factors will facilitate more effective relationships. Pharmacists use a patient-centered approach in collaboration with other providers on the health care team to optimize patient health and

medication outcomes. An essential first step is the establishment of a patient-pharmacist relationship that supports engagement and effective communication with patients, families and caregivers throughout the process (AlGhurair *et al.*, 2012). In addition, at the core of the process, pharmacists continually collaborate, document and communicate with physicians, other pharmacists and other health care professionals in the provision of safe, effective and coordinated care. This process is enhanced through the use of interoperable information technology systems that facilitate efficient and effective communication among all individuals involved in patient care. The process includes the development of abilities to collect, assess, plan, implement and follow-up (monitor and evaluate) but also to then repeat the process for each patient. Each of those abilities is related to other knowledge, skills and behaviors. Many if not all of these components require students to have sophisticated knowledge of drugs, diseases and disorders and laboratory and other clinical studies in addition to informatics, critical thinking and problem-solving skills. Professionalism, communication, education, interaction, cultural competence and interprofessional abilities also are needed for successful implementation of the process. Additionally, motivation, initiation, valuing, awareness, compliance and other behaviors and attitudes of the affective domain are also key to effective implementation of the process.

CONCLUSION

More than 50% of primary care providers believe that efforts to measure quality related outcomes actually make quality worse it seems there may be something missing from the equation. Relationships may be the key. Studies consistently demonstrate that patients prioritize both the interpersonal attributes of their providers and their individual relationships with providers above all else. Physicians also ascribe great value to relationships. Kurt Stange, an expert in family medicine and health systems, calls relationships “the antidote to an increasingly fragmented and depersonalized health care system.” The importance of trust and communication in a provider-patient relationship carry the same importance for both developed and developing countries in terms of patient satisfaction and quality of health care services, though the determinants may differ slightly. Conducting regular patient satisfaction surveys and further research on this topic will help health facilities to evaluate their services and help with strategic planning to better their services.

REFERENCES

- AAMC., 2017. Professionalism in medicine and medical education foundational research and key writings 2010-2016. Association of American Medical Colleges, Washington, DC., USA.
- Adams, R.J., 2010. Improving health outcomes with better patient understanding and education. *Risk Manage. Healthcare Policy*, 3: 61-72.
- AlGhurair, S.A., S.H. Simpson and L.M. Guirguis, 2012. What elements of the patient-pharmacist relationship are associated with patient satisfaction?. *Pat. Preference Adherence*, 6: 663-676.
- Ananya, M., 2018. What are health disparities?. *News Medical Life Sciences USA*. <https://www.news-medical.net/health/What-are-Health-Disparities.asp> 0078.
- Anonymous, 2015. Creating sustainable 21st century health systems: eHealth and health information technology. InterSystem, Cambridge, Massachusetts, USA. <https://www.intersystems.com/resources/detail/creating-sustainable-21st-century-health-systems-ehealth-and-health-information-technology/>
- Anonymous, 2018. Terminating the physician-patient relationship. Crozer-Keystone Health System, Pennsylvania, USA. <http://www.crozerkeystone.org/healthcare-professionals/medical-staff/physician-info/cme/articles/terminating-the-physician-patient-relationship/>
- Aravind, V.K., V.D. Krishnam and Z. Thasneem, 2012. Boundary crossings and violations in clinical settings. *Indian J. Psychol. Med.*, 34: 21-24.
- Aveling, E.L. and G. Martin, 2013. Realising the transformative potential of healthcare partnerships: Insights from divergent literatures and contrasting cases in high-and low-income country contexts. *Soc. Sci. Med.*, 92: 74-82.
- Barry, E., 2007. Empathy. In: *Behavioral Medicine: A Guide for Clinical Practice*, Feldman, M.D. and J.F. Christensen (Eds.). McGraw-Hill Education, New York, USA., ISBN:10-0071438602, pp: 10-18.
- Broom, A., 2005. Virtually healthy: The impact of internet use on disease experience and the doctor-patient relationship. *Qual. Health Res.*, 15: 325-345.
- Brown, M.T. and J.K. Bussell, 2011. Medication adherence: WHO cares?. *Mayo Clin. Proc.*, 86: 304-314.
- Brown, R.F., P.N. Butow, M. Henman, S.M. Dunn and F. Boyle *et al.*, 2002. Responding to the active and passive patient: Flexibility is the key. *Health Expectations*, 5: 236-245.

- Burcher, P.Q., 2011. Re-Thinking the doctor-patient relationship: A physicians philosophical perspective. PhD Thesis, Department of Philosophy, University of Oregon, Eugene, Oregon.
- Chevalier, B., 2017. Investigating the effectiveness of communication taking place between hospital pharmacists and patients during medication counselling. Ph.D Thesis, University of Queensland, Brisbane, Australia.
- Collins, A.S., 2008. Preventing Health Care-Associated Infections. In: Patient Safety and Quality: An Evidence-Based Handbook for Nurses, Hughes, R.G. (Ed.). Agency for Healthcare Research and Quality, Rockville, Maryland, USA., ISBN:9781587633539, pp: 2-547-2-575.
- Debono, D. and J. Travaglia, 2009. Complaints and patient satisfaction: A comprehensive review of the literature. Australia. University of New South Wales, Sydney, Australia.
- Duclos, C.W., M. Eichler, L. Taylor, J. Quintela and D.S. Main *et al.*, 2005. Patient perspectives of patient-provider communication after adverse events. Intl. J. Qual. Health Care, 17: 479-486.
- Dugdale, D.C., R. Epstein and S.Z. Pantilat, 1999. Time and the patient-physician relationship. J. Gen. Intl. Med., 14: 34-40.
- Emanuel, E.J. and L.L. Emanuel, 1992. Four models of the physician-patient relationship. JAMA., 267: 2221-2226.
- Escarce, J.J., L.S. Morales and R.G. Rumbaut, 2006. The Health Status and Health Behaviors of Hispanics. In: Hispanics and the Future of America, National Research Council (US) Panel on Hispanics in the United States, Tienda, M. and F. Mitchell (Eds.). National Academies Press (US), Washington, DC, USA., ISBN:9780309100519, pp: 362-409.
- FitzGerald, R.J., 2009. Medication errors: The importance of an accurate drug history. Br. J. Clin. Pharm., 67: 671-675.
- Goami, H., 2007. The physician-patient relationship desired by society. J. Japan Med. Assoc., 50: 259-263.
- Goold, S.D. and M. Lipkin, 1999. The doctor-patient relationship: Challenges, opportunities and strategies. J. Gen. Inter. Med., 14: 26-33.
- Gutheil, T.G. and G.O. Gabbard, 1998. Misuses and misunderstandings of boundary theory in clinical and regulatory settings. Am. J. Psychiatry, 155: 409-414.
- Hart, A., F. Henwood, S. Wyatt and A. Marshall, 2003. The internet, HRT and viagra: Transformations in information seeking practices?. Ph.D Thesis, Amsterdam School of Communications Research (ASCoR), University of Amsterdam, ?Amsterdam, North Holland, Netherlands.
- Henriksen, K., E. Dayton, M.A. Keyes and others, 2008. Understanding Adverse Events: A Human Factors Framework. In: Patient Safety and Quality: An Evidence-Based Handbook for Nurses, Hughes, R. (Ed.). Agency for Healthcare Research and Quality, Rockville, Maryland, USA., ISBN:9781587633539, pp: 67-85.
- Hummer, R.A., M.R. Benjamins and R.G. Rogers, 2004. Racial and Ethnic Disparities in Health and Mortality among the US Elderly Population. In: Critical Perspectives on Racial and Ethnic Differences in Health in Late Life, Anderson, N.B., R.A. Bulatao and B. Cohen (Eds.). National Academies Press, Washington, DC, USA., ISBN: 9780309092111, pp: 53-94.
- Institute of Medicine, Board on Neuroscience and Behavioral Health, Committee on Health and Behavior: Research, Practice and Policy, 2001. Health and Behavior: The Interplay of Biological, Behavioral and Societal Influences. National Academy Press, Washington, DC., USA., ISBN: 9780309132879, Pages: 395.
- JCPP., 2014. Pharmacist's patient care process. Joint Commission of Pharmacy Practitioners, Washington, DC., USA. <https://jcphp.net/patient-care-process/>
- Kerse, N., S. Buetow, A.G. Mainous, G. Young and G. Coster *et al.*, 2004. Physician-patient relationship and medication compliance: A primary care investigation. Ann. Family Med., 2: 455-461.
- Krishnan, V., 2014. Medical Education vis-à-vis Medical Practice. In: Textbook of Forensic Medicine and Toxicology: Principles and Practice, Krishnan, V. (Ed.). Elsevier Publisher, India, ISBN: 9788131236239, pp: 346-360.
- Lampkin, S.J., B. Gildon, S. Benavides, K. Walls and L. Briars, 2018. Considerations for providing ambulatory pharmacy services for pediatric patients. J. Pediatr. Pharmacol. Ther., 23: 4-17.
- LeBaron, S., J. Reyher and J.M. Stack, 1985. Paternalistic vs egalitarian physician styles: The treatment of patients in crisis. J. Family Pract., 21: 56-62.
- Lipkin, M., 1987. The medical interview as core clinical skill. J. Gen. Inter. Med., 2: 363-365.
- Mackintosh, M. and M. Koivusalo, 2005. Commercialization of Health Care: Global and Local Dynamics and Policy Responses. Palgrave Macmillan, Basingstoke, UK., ISBN: 9780230523616, Pages: 322.
- Manolakis, P.G. and J.B. Skelton, 2010. Pharmacists contributions to primary care in the united states collaborating to address unmet patient care needs: The emerging role for pharmacists to address the shortage of primary care providers. Am. J. Pharm. Educ., 74: 1-9.

- Maree, D.C., 2005. Informed Consent: Ethical theory, legal obligations and the physiotherapy clinical encounter. Ph.D Thesis, University of Melbourne, Melbourne, Australia.
- Marsden, A., 2014. Empathetic consultation skills in undergraduate medical education: A qualitative approach. Ph.D Thesis, University of East Anglia, Norwich, Norfolk, UK.
- McKinstry, B., 1992. Paternalism and the doctor-patient relationship in general practice. *Br. J. Gen. Pract.*, 42: 340-342.
- Medical Board of Australia, 2014. Good medical practice: A code of conduct for doctors in Australia. Australian Medical Council, Australia.
- Nicholas, S.B., K. Kalantar-Zadeh and K.C. Norris, 2015. Socioeconomic disparities in chronic kidney disease. *Adv. Chron. Kidney Dis.*, 22: 6-15.
- Osorio, J.H., 2011. Evolution and changes in the physician-patient relationship. *Colomb. Med.*, 42: 400-405.
- PSYCH, 2003. Psychiatrists support service manager psychiatrists support service©. Royal College of Psychiatrists, London, UK.
- Petronio, S., M.J. DiCorcia and A. Duggan, 2012. Navigating ethics of physician-patient confidentiality: A communication privacy management analysis. *Permanente J.*, 16: 41-45.
- Piyush, R., K. Archana and C. Avinash, 2015. How can physicians improve their communication skills?. *J. Clin. Diagn. Res.*, 9: JE01-JE04.
- Portmann, J., 2000. Physician-patient relationship: Like marriage, without the romance. *Western J. Med.*, 173: 279-282.
- Rafia, R., 2016. A theoretical review on correspondence of doctor patient relationship and treatment decision making models. *Intl. J. Multi. Res. Mod. Educ.*, 2: 534-539.
- Raina, R.S., P. Singh, A. Chaturvedi, H. Thakur and D. Parihar, 2014. Emerging ethical perspective in physician-patient relationship. *J. Clin. Diagn. Res.*, 8: XI01-XI04.
- Rajesh, B., 2011. Principles of Forensic Medicine and Toxicology. Jaypee Brothers Medical Publishers, New Delhi, India, ISBN:9789350254936, Pages: 580.
- Ramchandra, D.L., 2008. Duties of Physicians to other Patients. In: *Essentials of Hospital Management and Administration*, Ramchandra, D.L. (Ed.), Education Publishing, Delhi, India, ISBN:9781545718841, pp: 205-205.
- Raveesh, B.N., R.B. Nayak and S.F. Kumbar, 2016. Preventing medico-legal issues in clinical practice. *Ann. Indian Acad. Neurol.*, 19: 15-20.
- Ray, N., 2007. Introduction to medical ethics. Centre for Reproductive Ethics and Rights UCL Institute for Women's Health, London.
- Ritu, A., 2013. Importance of patient centered communication in lifestyle diseases. Sliceshare, Canada.
- Schmittiel, J., K. Grumbach, J.V. Selby and C.P. Quesenberry, 2000. Effect of physician and patient gender concordance on patient satisfaction and preventive care practices. *J. Gen. Inter. Med.*, 15: 761-769.
- Shachak, A. and S. Reis, 2009. The impact of electronic medical records on patient-doctor communication during consultation: A narrative literature review. *J. Eval. Clin. Pract.*, 15: 641-649.
- Shan, L., Y. Li, D. Ding, Q. Wu and C. Liu *et al.*, 2016. Patient satisfaction with hospital inpatient care: Effects of trust, medical insurance and perceived quality of care. *PloS One*, 11: 1-18.
- Shenton, A.K., 2004. Strategies for ensuring trustworthiness in qualitative research projects. *Educ. Inf.*, 22: 63-75.
- Sorensen, K., S. Van den Broucke, J. Fullam, G. Doyle and J. Pelikan *et al.*, 2012. Health literacy and public health: A systematic review and integration of definitions and models. *BMC. Pub. Health*, 12: 1-13.
- Souliotis, K., 2016. Patient participation in contemporary health care: Promoting a versatile patient role. *Health Expectations*, 19: 175-178.
- Stewart, M., 2005. Reflections on the doctor-patient relationship: From evidence and experience. *Br. J. Gen. Pract.*, 55: 793-801.
- Walter, W.R., 2004. Applying Information Mastery and Evidence in Practice. In: *Information Mastery: Evidence-Based Family Medicine*, Rosser, W., David C. Slawson and A.F. Shaughnessy (Eds.). PMPH, Raleigh, North Carolina, USA., ISBN: 9781550091823, pp: 133-138.
- Weiner, S.J. and S. Auster, 2007. From empathy to caring: Defining the ideal approach to a healing relationship. *Yale J. Bio. Med.*, 80: 123-130.
- Worley, M.M., J.C. Schommer, L.M. Brown, R.S. Hadsall and P.L. Ranelli *et al.*, 2007. Pharmacists and patients roles in the pharmacist-patient relationship: Are pharmacists and patients reading from the same relationship script?. *Res. Soc. Administrative Pharm.*, 3: 47-69.
- Wyatt, S., 2001. Turned on or turned off?: Accessing health information on the internet. Master Thesis, University of Twente, Enschede, Netherlands.
- Zeng-Treitler, Q., H. Kim and M. Hunter, 2008. Improving patient comprehension and recall of discharge instructions by supplementing free texts with pictographs. *AMIA. Ann. Symp. Proc.*, 2008: 849-853.