



Working together
www.rcis.ro

Revista de cercetare și intervenție socială

ISSN: 1583-3410 (print), ISSN: 1584-5397 (electronic)

Selected by coverage in Social Sciences Citation Index, ISI databases

THE PORTRAIT OF A GOOD DOCTOR: CONCLUSIONS FROM A PATIENTS AND MEDICAL STUDENTS SURVEY

Maria Liliana ILIESCU, Alexandru CARAULEANU

Revista de cercetare și intervenție socială, 2014, vol. 47, pp. 261-271

The online version of this article can be found at:

www.rcis.ro, www.doaj.org and www.scopus.com

Published by:

Expert Projects Publishing House



On behalf of:

„Alexandru Ioan Cuza” University,

Department of Sociology and Social Work

and

Holt Romania Foundation

REVISTA DE CERCETARE SI INTERVENTIE SOCIALA

is indexed by ISI Thomson Reuters - Social Sciences Citation Index

(Sociology and Social Work Domains)



The Portrait of a Good Doctor: Conclusions from a Patients and Medical Students Survey

Maria Liliana ILIESCU¹, Alexandru CARAULEANU²

Abstract

Improving the economic efficiency in health care is not only finding the way of mechanical costs' reduction, but optimization of medical care by promoting rationale use of human, material, financial, and time resources. From this perspective, the rising of expenditure for medical care, while the socio-economic costs are increasing too, can be considered just a "spending money action" only if the quality of health care is not growing or improving. So, it is necessary to make an evaluation of treatments' technical parameters and patients' satisfaction assessment (safety, treatment, relationship with his doctor, amenities, and patients' rights as a societal demand). Essentially, the high-quality health care and, in addition, a high patient' satisfaction, can not be delivered in absence of motivated and well trained professionals. On this background, the patient-doctor relationship - representing the core of medical care, appears highly complex and involves, near the psychological dimensions of individuals, a large scale of socio-cultural aspects, establishing connections among two social groups (patients and doctors), groups which are different from power and prestige. The doctor is the key element in health care system, with a special position both in medical and non-medical culture. This study aims at identifying the qualities which define a "good doctor", using the opinions of patients (inpatients and patients addressing to ambulatory health care units), medical and nurse students. Their opinions underline the importance of forming human resources in health care through developing attitudes and skills to "humanize" the patient-doctor relationship in this era of technology.

Keywords: patient-doctor relationship, qualities, good doctor, disease, compliance, physician competence.

¹ University of Medicine and Pharmacy "Grigore T. Popa", Faculty of Medicine, Discipline of Management and Public Health, Iasi, ROMANIA. E-mail: mliliescu@yahoo.com

² University of Medicine and Pharmacy "Grigore T. Popa", Faculty of Medicine, Discipline of Obstetrics and Gynecology, 16 Universitatii Street, 700115, Iasi, ROMANIA. E-mail: acaraleanu@yahoo.com

Introduction

The doctor-patient relationship essentially defines the content of medical activity. This relationship is highly complex and involves, in addition to the individual psychological dimensions of the above mentioned actors, a wide range of social and cultural aspects, as it establishes links between members of two different social groups, distinct both by their composition, the prestige and power. The physician is the key to health care system having also a special status in extra medical culture. As a professional, the physician is characterized by a high level of abstract and specialized knowledge, his “professional orientation”, which corresponds to a “calling” granting him a monopoly over his activities (Freidson, 1988; Cojocaru & Popa, 2013). The important place of physicians in society is closely tied to the value attached to health, life and death. This status involves an associated social role defined by five elements: technical competence, universalism, functional specificity, affective neutrality and community orientation (Lupu, Zanc, 1999). Technical competence is a priority for an effective medical intervention. Universalism entails doctor’s responsibility to treat all patients alike, regardless of social position, gender, race, religion or ethnicity; doctors cannot refuse patients based on arbitrary criteria. Functional specificity means that the doctor operates in a well-defined field, but his power over the patient must not exceed the medical field, avoiding unprincipled personal relationships, and maintaining professional authority. Affective neutrality requires the doctor to remain emotionally detached and objective in the diagnosis and treatment of disease (Cojocaru, 2012; Halpern, 2007). During this relationship, the patient confesses to the doctor, but confession is not two-way. “One principal set of functional significance of the combination universalism, functional specificity, and affective neutrality is to enable the physician to *penetrate* sufficiently into the *private affairs* or the *particular* nexus of the patients to perform his function” (Lupu *et al* 1999).

Collectivity orientation is the result of medical profession ideology that focuses on devotion to sick people. D. Field (quoted by Lupu *et al*, 1999) mentions the moral dimension of medical profession, dimension manifested in the certification of sickness. Unlike the physician, the patient is faced with a different existential situation which affects his physical, mental and social abilities (Iamandescu, 1996; Torjuul, Nordam & Sjørli, 2005). Sick role is characterized by five main features (Iamandescu, 1996, 1999): (1) Marginal situation of the patient, which makes him unstable, dominated by conflictual situations; (2) Being ill gives them the (relative) sense of being in danger; (3) Activity limitations and participation restrictions; (4) Egocentrism; (5) Anxiety increased by the prospect of long-term disease. The nature of doctor-patient relationship has a significant influence on diagnostic and therapeutic success. Three types of doctor-patient relationships dependent of patient’s organic symptoms have been identified: (1) Active –

passive: in severe trauma, coma; (2) Leadership – cooperation: in acute diseases; (3) Mutual participation/cooperation: in chronic diseases.

In practice, the type of relationship depends on both patient's condition and treatment, according to disease progression (Nakanishi, 2014). Often, the nature of doctor-patient relationship is subject to "negotiation" between them, and not necessarily an expression of disease severity or intensity. Social background and cultural context play an important role in developing this relationship, it being optimized when both the doctor and the patient are closer in these respects (Lupu *et al*, 1996). The most important issue, at least initially, is that of communication. Communication difficulties may arise due to different views on disease state and goals of consultation. The doctor attaches importance to scientific reasoning, while the patient values the subjective experience of the disease. From this point of view, the patient has a mental and emotional representation of the ideal physician, endowed with the human and professional qualities required to develop an optimal and effective relationship. In this respect, the evaluation performed by the patients is valuable.

The notion of evaluation was introduced in 1960 by the American Public Health Association being defined as „the process of determining the value or degree of effectiveness of applied measures relative to a given purpose or objective”. What are the determinants of performance in medicine? Exigency in the medical profession is compulsorily learned during medical school and is the essential condition of performance. Skill is equally important but is not the only element that propels to success. Equally important to successfully meet the needs of patients are theoretical and practical training, compassion, correct reasoning, communication skills, clinical sense and, an exemplary professional conduct (Frunza, 2011; Garcia – Barbero & Goicoechea, 2000).

Therapeutic compliance is a general problem in medical practice, as the situation in which the patient follows closely and in any circumstances a prescribed course of treatment remains ideal. In recent years, the term therapeutic compliance tends to be progressively replaced by therapeutic adherence, insisting on the idea that the classic definition of compliance implies blind obedience without patient's acceptance and especially understanding of the therapeutic regimen. Whatever we call it, the modern approach to the disease and patient designed to increase compliance (adherence) to treatment remains patient-centered, respecting his system of values and beliefs, as well as his existential routines, and aimed at maintaining or improving his quality of life, even in case of deteriorated health status. The main cause of non-compliance is the poor doctor-patient relationship (in all its forms). The classic example is the closed interview, being calculated that the doctor interrupts the patient on average after 18 seconds to ask specific questions designed to clarify the diagnosis. Once the prescription is written the appointment ends, many times leaving the patient wonder and doubt about the effectiveness of treatment. In contrast, open interview gives the patient the

possibility to speak. Platt summarizes in three words the essence of open interview: “Find out more” (Platt, 1992). This could be expressed in the following few principles: (1) doctor-patient agreement on the problem/problems, or prioritizing the problems to be addressed; (2) suggestion of alternative treatments (if any), and discussing the possible weaknesses and strengths of each of them; (3) treatment cost estimation and selecting the most suitable alternative for the patient; (4) ensuring family collaboration; (5) assessment of patient knowledge and/or beliefs about the disease, as well as his understanding of the explanations given by the doctor; (6) assessment of patient motivation to follow the prescribed treatment, in all its aspects, and his susceptibility to noncompliance; (7) rewarding the patient (real, symbolic) for correctly following the therapeutic regimen.

Table 1. *Factors that may influence compliance (according to Iamandescu, 1996)*

Nature of therapeutic prescriptions	<ul style="list-style-type: none"> - task-related difficulties: exercise, environment, household pet, hobby restrictions, possible frustrations; - prescription complexity: numerous, complicated; - side-effects inherent to treatment; - failure of some prescriptions or previous hospitalizations.
Doctor qualities	<ul style="list-style-type: none"> - intelligence (synthesis ability, intuition, clinical sense); - relational abilities: affective (optimism, human warmth, empathy); ethical (task involvement, resistance to tendency for patients to abandon treatment); - authority and prestige.
Patient	<ul style="list-style-type: none"> - level of understanding: low (naturally, by emotional blockage); - personality type: optimistic, conformist; depressed, highly anxious; - preconceptions about the doctor and/or treatment; - responsibility and motivation for following the treatment.
Disease	<ul style="list-style-type: none"> - evolutive phase: acute or chronic; severity; - disease-related limitations (on professional life, intimate life)
Peer influence	<ul style="list-style-type: none"> - social support: affective; material; information; active intervention, family incentives; - negative examples: information contagion - the patient obtains medical information from unauthorized sources and shares it with other patients.

If the patient understands the goal of treatment, a high level of adhesion to therapy is obtained. In this respect, important are the “intensity” of patient confidence in the doctor along with doctor’s support throughout the therapeutic process. Ley’s predictive cognitive hypothesis model of patient compliance, showing that adherence can be predicted by the combination of patient satisfaction with the consultation process, understanding of the information given, and his ability to recall this information. Patient dissatisfaction stems from various aspects, including some affective aspects (lack of emotional support and understanding) or behavioral aspects related to physician competence (prescribing, lack of adequate explanation, diagnosis) (Lewis, Noyes, Mackereth, 2010; Zuger 2004; Bankauskaite Saarelma 2003). The patient satisfaction is determined by the content of the consultation. Patients are more “information seekers” (wanted to know as much possible information as possible, even if this is bad news) than information “blunders”. Even if patients report high levels of satisfaction with the

consultation and a good understanding of their condition, if they do not recall the information, compliance will be affected in a negative way. It was found that after the consultation about one third of patients could not recall the name of the prescribed drug, frequency of the dose or duration of treatment (Bass, DeVoge, Waggoner-Fountain & Borowitz, 2013; Protičre, Moumjid, Bouhnik, Le Corroller Soriano & Moatti, 2012).

Stable interpersonal relationships and an adequate social support network positively influence compliance. Stigma and isolation negatively affect patients' ability to adhere to treatment, to understand the rationale of treatment and follow it. Mental illnesses are still regarded as stigmatizing for the patient and family. Patients with chronic illnesses feel an improvement, and may discontinue the administration of drugs because they think they do no longer need them. Certain behaviors can affect the ability to continue the treatment (the use of alcohol or psychoactive substances) (Lupu *et al*, 1999). As patient's beliefs influence compliance or adherence to a specific treatment, the same is true for doctor's attitude, those who believe in the administered treatment transmitting this trust to patients. The most important factor influencing compliance seems to be patient's perception of doctor's interest in him along with how much time he dedicates to him. Adhesion is improved when the doctor gives clear explanations, provides encouragement, support, and systematic follow-up of the disease course (Vermeire, Hearnshaw, Van Royen & Denekens, 2001; van Dulmen, Sluijs, van Dijk, de Ridder, Heerdink & Bensing, 2007).

In discussing any treatment it is necessary to evaluate the clinical efficacy concept that includes effectiveness, tolerability, patient compliance, quality of life and the impact on patient's family and society. The early side effects lead to a substantial lack of compliance over time (Rudd, 1994). Compliance depends not only on the administered drugs but fundamentally on the person taking these drugs, i.e. on his conscious attitudes, unconscious fantasies and attitude of his family or social group towards disease and medication (Sumartojo, 1993).

Doctor awareness of these variables could contribute to a better doctor-patient relationship, which would lead to improved compliance to treatment, and thus to a more effective long-term treatment. Strategies to enhance compliance have a great potential to reduce healthcare costs, alleviate personal suffering, and diminish the psychological impact on the family (Olson & Windish 2010; *Jackevicius, Li & Tu 2008*).

Methods

The aim of this study was to outline the profile of the doctor who by his professional and human qualities corresponds to the educational and cultural model of the patient in our country. We also wanted to underline the differences about qualities of a good doctor between patients and medical professionals. Although our aim was that patients receiving outpatient or hospital care to assess the qualities of a good doctor, we wanted to identify differences of opinion, if any, differences resulting from the different roles of the participants in the study.

Quality of work is measured by two key elements: accuracy and absence of defects or errors in the work product or service provided. Assessments are most commonly used as a criterion of professional efficiency, their frequency of use being prevalent both in concrete practical activities and in scientific research. The attempts at classifying the assessment techniques relied on several criteria. Thus, one of these classifications is based on the distribution of the following criteria: (1) Objective (measurable); (2) Subjective (based on feedback); (3) Status-related (number of promotions, seniority); (4) Physiological (blood pressure, galvanic skin response, oxygen consumption).

Rating scales are among the most suitable systems for assessing individuals. In essence, the task of the evaluator is to estimate the degree to which a person possesses or not a certain quality. The basic principle is to assess subjects separately for every item in the set of employee attributes characteristic of a particular profession. (Kreitz, 1971; Morgen, 1997). Based on these rating scales, we built an evaluation model that consists of a list of qualities that a competent physician should possess, with the mention that these qualities were not specified *a priori*, but listed in the order chosen by the evaluator, in this case the evaluator being the questioned person.

The study was conducted on four groups of 80 subjects each, each representing an investigation on the qualities considered essential in a good doctor:

- Group I - 80 patients treated in ambulatory care units;
- Group II - 80 hospitalized patients;
- Group III - 80 medical students, thus future doctors;
- Group IV - 80 future nurses.

After completion, to increase the accuracy of interpretation, the attributes were grouped into: (1) Technical skills; (2) Qualities characteristic to the affective, subjective nature of the doctor-patient relationship. Each person listed in order of importance six qualities that a good doctor should possess. Six points were assigned to the first listed quality and one point to the last one. Based on the total score obtained for each listed quality, score obtained by summing all numeric values in the questionnaires, for each study group, a hierarchy of qualities was established, and an ordinal scale was obtained. Based on

this scale, we calculated the average value of each listed quality, obtained by adding up the scores recorded in the 4 study groups. The rank or place of each quality was determined based on the average value.

The aim of this study was to outline the profile of the doctor who by his professional and human qualities corresponds to the educational and cultural model of the patient in our country. We believe it was necessary because a better doctor-patient relationship essentially leads to improving the quality of healthcare services, with minimum investment and immediately visible results, but with sustained efforts from professionals.

Results and discussions

After the quantitative and qualitative processing the 320 questionnaires, the obtained results were synthesized as follows:

Technical skills

In the opinion of patients (both hospital and outpatient) and medical students (future doctors) the most important technical skill of a doctor is professional competence, even though their motivations differ: patients trusts the diagnosis and the proposed treatment, while the future doctors see in it the “passport” to professional and social fulfillment. For future nurses patience ranks first (point of view of an entry-level nurse, positioned below the doctor in hospital hierarchy who needs doctor’s understanding and patience to acquire job skills) and professional competence ranks third, after patience and attention. Compared to outpatients, inpatients see professionalism as the most important quality because in hospital are treated only the (more) severe forms of disease that require diagnosis and treatment planning skills, a prerequisite for short hospital stay, avoidance of complications and implicitly better prognosis. The professional qualities and the obtained scores by study group are as follows (Table 2):

Table 2. *Distribution and score of professional qualities by study group*

No	Professional qualities	Group I (patients treated in ambulatory care units)	Group II hospitalize d patients	Group III medical student	Group IV future nurses
		Score	Score	Score	Score
1	Professional competence	229	280	352	175
2	Attention	86	100	72	200
3	Patience	65	190	130	210
4	Consistency	60	30	40	60
5	Courage	50	57	50	84
6	Ambition	48	35	53	14

7	Clinical sense	45	60	50	30
8	Passion for profession	60	100	58	30
9	Responsibility	38	42	40	27
10	Wish to improve his knowledge/skills	33	39	39	13
11	Rapidity of decision making	37	39	47	26
12	Experience	17	20	60	11
13	Collegiality	15	7	42	12
14	Reliability	11	8	29	5

Of course, the points of view of all participants are valuable, but when it comes to assessing the activity of a medical service, and implicitly of the involved professionals, patients are the most entitled to do it. We noted that clinical sense, professional experience, responsibility to the patient and the desire to become more competent in healthcare delivery are not assimilated to professionalism but considered attributes characterizing technical competence. Also important for patients is doctor's passion for the profession, as it can flatten asperities, sometimes inherent, in the doctor-patient relationship. Students believe that passion for this profession was the prerequisite for choosing to study medicine. The comparative analysis between groups outlines the basics characteristics of a good doctor.

Affective qualities with a role in improving doctor-patient relationship and communication

The doctor-patient relationship has a potential for conflict. This conflict is the result of a divergence of perspectives and interests between the doctor and the patient. It is, as a profession, one of many groups of interest in the society. Physician's personal interest may preclude altruism included *per se* in medical profession. The doctor perceives the patient and his needs according to the model and categories of his/her specialized knowledge. The doctor feels that he has to define the content and forms of the service he provides to the patient. The patient perceives his illness in relation with the demands of his daily life, and in agreement with his cultural background.

Patients perceive their role as "obedient to the doctor", and accept this role more or less consciously, in accordance with the cultural model inherited from parents or of the society they live in. They are still not (fully) aware of rights they have, by virtue of their role of "first party payer" of health care services which they seek when needed. Of course, neither an extreme is good, here including the change of doctor-patient relationship into a commercial customer-supplier relationship

Patients want collaboration with the physicians as smooth as possible, and according to traditional cultural image, attributing to a good doctor the ability to give love to people, quality with a significant role in preventing possible conflicts (Table 3).

Table 3. *Distribution of affective qualities*

No	Qualities	Group I	Group II	Group III	Group IV
		Score	Score	Score	Score
1	Love for people	366	234	145	303
2	Modesty	111	70	54	58
3	Honesty, ethics	73	75	54	101
4	Lack of financial interest	72	89	19	23
5	Empathy	30	22	133	89
6	Kindness	67	55	19	42
7	Good psychologist	26	44	66	27
8	Wish to do good	33	17	31	44
9	Optimism	17	10	15	8
10	Personality	17	11	23	5
11	Abnegation	14	10	7	23
12	Hygiene	14	17	4	15
13	Pleasant physical appearance	10	8	1	18
14	Promptitude	10	18	10	25

A model of “ideal” doctor implies for the hospital patients the coexistence of love for those who suffer honesty and modesty. Future nurses see in the doctor qualities deemed essential for them to successfully perform; hence the high score for love for people and ethics. Outpatients, subject to the time limit of doctor’s appointments and dependent on waiting list give a greater importance to “kindness” (Table 4).

Table 4. *Final classification of technical skills and affective-relational qualities*

Final classification	Technical skills	Affective-relational qualities
1	Professional competence	Love for people
2	Patience	Modesty, honesty, ethics
3	Attention	Empathy
4	Passion for profession	Absence of material self-interest
5	Courage	Good psychologist, kindness
6	Clinical sense	Desire to do good deeds/altruism
7	Consistency, ambition	Promptness
8	Responsibility	Personality
9	Experience	Optimism, spirit of sacrifice
10	Desire to improve	Hygiene
11	Collegiality	Good looking

Professional competence, patience and attention, coupled with love for people and strong ethical principles, in the presence of an adequate empathic flow, break down class and status barriers between the doctor and the patient, and the efficacy of a drug or procedure increases due to doctor's ability to inspire confidence and dispel anxieties positively influencing the therapeutic act.

Conclusions

The differences between patients and physicians regarding the value and importance of certain professional or emotional qualities of the "good doctor" are generated on the one hand by the different positions of the two actors in the health system, the particularities of the medical profession, and on the other hand by patient's level of education and previous experience, generated by his contact with other physicians.

Customizing the doctor-patient relationship (and by extension "humanizing" the hospital environment by emphasizing the quality of human factor), is positive for both parties, generating with minimal effort (money) major benefits: increased addressability, improved quality of care, increased patient compliance and shorter hospital stays.

Increased economic efficiency in health care does not only mean finding ways of mechanically reducing hospital costs as the primary goal aim is to improve medical by using the existing human, financial, material and time resources more effectively. From this point of view, the increase in health care spending on the background of increased socio-economic costs is considered as a lack of savings only when it is not accompanied by any improvement in the quality of health care. Consequently, a parametric evaluation of treatment techniques and patient satisfaction is imperative, a medico-economic evaluation being complete only in these circumstances.

References

- Bankauskaite, V. & Saarelma, O. (2003). Why are people dissatisfied with medical care services in Lithuania? A qualitative study using responses to open-ended questions. *International Journal for Quality in Health Care*, 15(1), 23-29.
- Bass, E.J., DeVoge, J.M., Waggoner-Fountain L.A. & Borowitz, S.M. (2013). *Journal of the American Medical Informatics Association*, 20(4), 736-742.
- Cojocaru, D. & Popa R.F. (2013). Self-care in chronic diseases: dimensions, actors involved and the distribution of responsibilities, role and expectations. *Revista Romana de Bioetica*, 11(4), 79-86.
- Cojocaru, D. (2012). The issue of trust in the doctor-patient relationship: construct and necessity. *Revista Romana de Bioetica*, 10(3), 63-65.

- Freidson, E. (1988). *Profession of Medicine: A Study of the Sociology of Applied Knowledge*, Chicago: University of Chicago Press Edition.
- Frunza, S. (2011). Ethical responsibility and social responsibility of organizations involved in the public health system. *Revista de Cercetare si Interventie Sociala*, 32, 155-171.
- Garcia - Barbero, M., & Goicoechea, J. (2000). *Health care delivery profiles and innovations in selected european countries*, Copenhagen: World Health Organization.
- Halpern, J. (2007). Empathy and Patient–Physician Conflicts. *Journal of General Internal Medicine*, 22(5), 696–700.
- Iamandescu, B.I. (1996). *Psihologie medicală*, București: Infomedica.
- Iamandescu, B.I.(1999). *Elemente de psihosomatică generală și aplicată*, București: Infomedica.
- Jackevicius, C.A., Li, P. & Tu, J.V. (2008) Prevalence, predictors, and outcomes of primary nonadherence after acute myocardial infarction. *Circulation*, 117, 1028-1036.
- Kreitz, H.J. (1971). *Methodes d'appréciation des cadres*. Paris: Les Editions d'Organisation.
- Lewis, S.A., Noyes, J., & Mackereth, S. (2010). *Knowledge and information needs of young people with epilepsy and their parents: Mixed-method systematic review*. *BMC Pediatrics*, 10, 103.
- Lupu, I., & Zanc, I.S. (1999). *Sociologie medicală. Teorie și aplicație*, Iași: Polirom.
- Morgen, M. (1997). Sociological investigation. In *Oxford Textbook of Public Health*, 3rd, Ed. vol. 2, p. 765 – 782, Oxford: Oxford University Press.
- Nakanishi, T. (2014). Disclosing unavoidable causes of adverse events improves patients' feelings towards doctors. *Tohoku Journal of Experimental Medicine*, 234(2), 161-168.
- Olson, D.P. & Windish, D.M. (2010). Communication discrepancies between physicians and hospitalized patients. *Archives of Internal Medicine*, 170(15), 1302-1307.
- Platt, F.W. (1992). *Conversation failure: case studies in doctor-patient communication*, New York: Essential Science Publishing.
- Protičre, C., Moumjid, N., Bouhnik, A.D., Le Corroller Soriano, A.G. & Moatti, J.P. (2012). Heterogeneity of cancer patient information-seeking behaviors. *Medical Decision Making*. 32(2), 362-75.
- Rudd, P. (1994). Medication compliance: correlation with clinical outcomes. *P&T*, 19(4S), 10S-18S.
- Sumartojo, E. (1993). When Tuberculosis Treatment Fails: A Social Behavioral Account of Patient Adherence. *American Review of Respiratory Disease*, 147, 1311-1320.
- Torjuul, K., Nordam, A., & Šrlie, V. (2005). Action ethical dilemmas in surgery: an interview study of practicing surgeons. *BMC Medical Ethics*, 6, 7, doi:10.1186/1472-6939-6-7.
- van Dulmen, S., Sluijs, E., van Dijk, L., de Ridder, D., Heerdink, R. & Bensing, J. (2007). Patient adherence to medical treatment: a review of reviews. *BMC Health Services Research*, 7, 55 doi:10.1186/1472-6963-7-55.
- Vermeire, E., Hearnshaw, H., Van Royen, P. & Denekens, J. (2001) Patient adherence to treatment: three decades of research: a comprehensive review. *Journal of Clinical Pharmacy and Therapeutics*, 26, 331-342.
- Zuger, A. (2004). Dissatisfaction with Medical Practice. *The New England Journal of Medicine*, 350, 69-75.