



## COMMUNICATION AS A KEY ISSUE IN THE CARE OF DIABETES MELLITUS

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received: July 24, 2015      accepted: August 23, 2015

available online: September 15, 2015

### Abstract

*The physician-patient communication has an essential role in establishing and supporting the relationship between these two partners. Moreover, modern medicine highlights the patient-centered approach. Publications assessing the impact of an efficient physician-patient communication on medical care results in diseases such as diabetes and hypertension have revealed a positive correlation between patient's satisfaction about the communication with the physician and values of blood pressure, glycated hemoglobin and pain intensity. Interventions needed in both doctors and patients for developing communication abilities were paid special attention in order to achieve an appropriate improvement in their communicative interaction during periodical appointments. In the field of diabetes mellitus, the medical challenge is to improve patients' knowledge about medical care; this aim is achieved only by therapeutic education, using high-quality communication techniques.*

**key words:** *communication, physician-patient relationship, medical care, diabetes*

### Introduction

Communication (a complex phenomenon including ability, knowledge, emotion and values) developed from people's need to exchange information [1]. It also defines the physician-patient relationship and represents the object of interdisciplinary debates, involving not only medicine and bioethics, but also psychology and sociology [2]. The physician-patient relationship lies as a central element of medical practice through which medical care is provided [3], as the professional activity of a

practitioner is dedicated solely to defending life, health and the physical and psychological integrity of the human being.

The physician-patient communication is direct, face to face, unmediated and informal. A continuous exchange of messages takes place between the two subjects involved in the information transfer, leading each of the two partners to achieve the precise objectives of the meeting, namely to find answers about health status changes, proposed curative remedies and practical action modalities [4].

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Bioethical models of the physician-patient relationship evolved from paternalism (communication solely with notifying character – the patient is only informed about his/her diagnosis and the corresponding therapy in order to make him/her consent to the therapeutic plan) to individualism (patient-centered communication – the exchange of information is dominant, aiming for a common decision-making). Nevertheless, studies about physician-patient communication identified patients' dissatisfaction even when doctors consider communication adequate or excellent, as they frequently tend to overestimate their communication abilities [5].

### **Communication in treating chronic diseases**

“Are we under the false impression that we communicate efficiently? Are people as good in communicating as they trust themselves to be?” If we considered such questions as being only rhetorical, we would probably eliminate negative reactions within the medical system, although such reactions were justified by the premise that each doctor is able to communicate. Self-knowledge, admitting and understanding personal style and preferences as well as reflecting on them can impact others [6]. The evaluation of the physician's communication style by the patient he takes care of has been addressed in various inpatient and outpatient studies and a positive correlation between patient satisfaction and general communication abilities of the physicians has been noted [7].

A systematic analysis of articles published on the bidirectional physician-patient communication between 1991 and 2001 led to some specific conclusions. First, patients consider discussions about drug administration important, but they are even more content when feeling encouraged to bring their own preoccupations into discussion, even though physicians tend to have a predominant speaking

role during consultation. Second, patients wish that doctors encourage them and give them time to ask additional questions [8].

Likewise, another source reviews papers signaling the need for intervention in patients' ability to communicate, since patients claim they wish for more information than strictly related to symptomatology, but they don't ask additional questions during the consultation. Thus, studies on 20-minutes intervention (instructions on presenting medically relevant information and assessment of understanding physicians' answers) revealed statistically relevant differences between the intervention group and the placebo-controlled group, leading to significant decreases of glycated hemoglobin (HbA<sub>1c</sub>) in patients with diabetes, blood pressure values in hypertensive patients and pain intensity in ulcer crises [9]. Therefore, practical implications are highly important, since patients which ask for more information from medical professionals and give feed-back about their treatment have the tendency to obtain better results, hence triggering affective improvement (the feeling of control) and better treatment adherence.

Considering the needs of modern patient, physician-patient communication becomes an essential ability in the new patient-centered approach. Approximately twenty research studies on patient's adherence to treatment in USA, Canada and Great Britain revealed correlations between the quality of communication during anamnesis and improvements in blood pressure, glycemia and pain. Methods for improving patient's adherence to treatment comprise a superior efficiency of the physician-patient relationship by gaining one's trust and highlighting the physician's concern towards the patient. Focusing on the patient (in his own perception) also correlated with a high standard of medical care quality [10].

### **Barriers and strategies to overcome communications issues**

An inefficient communication within the medical team and between the physician and the patient may sometimes lead to major medical errors. Causes of inefficiency or barriers in the physician-patient communication comprise inexistent or dysfunctional communication channels, non-transmitted information (or misinterpreted information when the former two factors exist and are correct), and the physician's poor communication style [11].

Existing evidence shows that physicians are not able or do not intend to assess psychosocial problems or preoccupations of the patients in approximately 50% of cases, where medical history results in insufficiently relevant information; e.g., the patient seems to be interrupted by the physician 18 seconds after describing the symptoms. In 75% of cases, patients are confronted with misunderstanding of the physician's message. Researches where patients actively participated during consultation showed an improvement in parameters used for diseases such as diabetes or hypertension. A targeted analysis searching for solutions to improve the communicative interaction in both doctors and patients, as to obtain an optimal medical care (and thus, patient satisfaction), brings up a communication adaptation theory asserting that people look to adapt and change communication styles and approaches in order to match the interlocutor's ones [12].

Therefore, specific approaches have been proposed, that physicians providing medical care today should adopt in order to benefit from the advantages of optimal communication. These techniques include encouraging the patient to express concerns freely and uninterrupted, identifying and clarifying those aspects the patient is concerned about (even though insignificant from a medical viewpoint), or

development of a simple and transparent communication style, lacking the medical jargon. Other issues refer to knowledge and implementation of verbal and nonverbal communication techniques, focusing on the patients and approaching them through the impact the disease might have on their family, on life and its quality, on the treatment duration and effect, on the need for changing and adapting to a different lifestyle. All these strategies allow building a stable therapeutic relationship between physicians and patients and reduce misunderstanding of the transmitted information or omission of relevant information [13].

Patient-centered communication comprises exploring the disease, assessing the patient as a whole, establishing a common ground, implementing secondary and tertiary prevention, consolidating the physician-patient relationship, as well as realism. Therefore, providers of medical services should be aware of the impact the disease exerts on the patient in front of them [14].

Moreover, patient-centered communication is based on moral fundamentals requiring physicians to enhance the biomedical approach of patients with the exact purpose of taking them into care, making them feel understood, analysing their needs, perspectives and expectations. This way, the patients' involvement in understanding their illnesses and the assumption of responsibilities for decisions that may affect their lives are extended; some researches reported an inverse correlation between this communication style and the number of required or performed diagnostic tests [15].

### **Communication in the care for diabetes mellitus**

Among chronic diseases, diabetes mellitus exerts the need for high-quality therapeutic

education, offering theoretical and practical support to the patients in order to allow decisions based on the acquired knowledge, skills and abilities. Existing evidence showed the role of education for diabetes self-management in achieving metabolic control and short-term weight loss [16]. Active involvement in disease control must be intended, as to induce increased adherence and compliance to treatment. The concepts presented within the education sessions are important, although the means of communicating them are as important as the former [17].

Consequently, successful interaction in the relationship diabetologist-diabetic patient implies the physician to assume twelve crucial abilities: empathy, use of open-ended and closed-ended questions, practice of active listening, use and identification of nonverbal indices, keeping silent, time management, summarizing, use of common language, clarifying responsibilities, action planning, evaluation of patient's understanding, making decisions together with the patient [10].

Thus, the patient is not a passive receiver of the medical act, but he/she builds the relationship with the physician and the disease based on a common ground of received information and his/her own set of values. In this endeavor, the physician offers the patients all the information they need as to decide for themselves, assuming the physician and the patient have different perspectives on life and health.

Making the physician-patient communication more efficient has been regarded as a valuable measure to improve the self-care behavior of a patient, as research already shown that better communication on both sides induced a 30% increase of daily foot care among diabetic patients [18].

Medical literature most often describes correlations between physician-patient

communication (involving both transmission of information and engagement of the patient in the decision-making process) and glycemic control or other self-management areas (physical exercise, diet, treatment adherence, foot care), even after adjustments based on socio-demographic data, disease severity and other comorbidities [19].

Other research proved that therapeutic education provided by a specialized trainer during hospital stay reduces the rate of new hospitalizations in patients with uncontrolled diabetes (HbA<sub>1c</sub> above 9%) by 34% during a 30-days period and 20% during a 180-days period, after the final model was adjusted for other variables. Therapeutic education also decreased HbA<sub>1c</sub> and improved medication adherence, as well as glucose monitoring [20].

An observational study examining the relationship between the physician's communication competency and glycemic control in diabetic patients revealed correlations between high communication abilities and self-reported diet-related behaviors. However, this paper found correlations between communication and HbA<sub>1c</sub> only among Hispanic patients, but not in non-Hispanic whites; the improvement of glycemic control was analyzed after adjusting for age, ethnic group and treatment adherence factors [21].

A research performed in 2003 on 752 type 2 diabetes patients questioned "How do differences in patients', doctors' and health systems' characteristics influence the general and specific diabetes-related communication process?" and "What influence do these two dimensions have on the self-care of the diabetes patient?" General and specific communication (as diabetes-related information transmitted during the medical consultation is in fact the patient's education) were reported as unique facets of the interaction between the patient and

the medical service provider. These dimensions presented moderate correlations, as the patients receiving more information from the diabetes trainers reported improved general communication [18].

Regardless of the spatial context, the temporal context is important in trying to explain communication. In the physician's perspective, this is a limited-time meeting. The relationship becomes altered in overcrowded medical offices, situations associated to an increased number of patients or physicians' overburdening with other tasks: completing medical sheets and registries, online electronic database entries for medical information, but also for bureaucratic data such as patient's health insurance category or presentation type. These result in drastically limiting the time dedicated to the interaction with the patient. Hence, the doctor may be faced with situations of discriminating in the relationship with the patients, by focusing on critical cases or those attracting attention by other elements, not necessarily in the professional interest of the relationship (for example the lack of medical documents, incorrectly or incompletely filling them in).

Situations where the physician evaluates a patient already reaching the glycemic targets and has the time to concentrate on different communication techniques (building the report, actively listening and addressing feelings) are also possible, as the practitioner focused before on educating the patient and intensifying the treatment scheme. Patients labeling the doctors as high-level communication competency may also be less resistant to ideas of intensifying the treatment, including insulin initiation where needed for metabolic control.

### **Conclusions**

In conclusion, communication's aims are: to learn, transmit or receive knowledge; to influence somebody's behaviour; to express

feelings; to explain or understand one's own or somebody else's behaviour; to maintain connections with those around us or to integrate in collectivities or social groups; to clarify problems; to achieve proposed objectives; to reduce tensions or solve conflicts; to stimulate one's or other's own interests.

Considering this, the evaluation and analysis of the factors mentioned above by a questionnaire might be important in order to describe the two dimensions of communication. This method should point out the key abilities for efficient interaction: patient's perception of the medical act (does it have educational value – knowledge transmission, adequate language, non-verbal communication, patient's understanding of the received information, teaching abilities, taking responsibility, establishing short term and long term objectives) and the perception of the physician-patient relationship (empathy, identifying patient's reactions, active listening, full attention, respect, psychological support and counseling abilities: physician's interest and acceptance of the adaptation difficulties to a new lifestyle, awareness of patient's feelings, common decision-making – collaborative negotiation, synchronization – time perception).

Nevertheless, extended research is still needed to elucidate the complex relationship between the physician's and patient's communication competencies and therapeutic targets and, of course, to identify factors influencing the configuration of an efficient physician-patient relationship. The results of such research would allow investing in programmes to facilitate communication, as it is the link to bring together all the physician-patient relationship values, all the more so as the patient-centered communication approach is mentioned as a strategy to improve the management plan of diabetic patients.

**Acknowledgements and conflicts of interest:** No commercial association was involved for this paper. The authors have no

conflicts of interest to declare in relation to this article.

## REFERENCES

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1. **Sarfoleanu D.** Comunicarea interumană. In: *Comunicare Voce-limbaj-artă-tehnologie*. Sarfoleanu D (ed). Viața Medicală Românească, București, pp 9-24, 2013.
2. **Duggan PS, Geller G, Cooper LA, Beach MC.** The moral nature of patient-centeredness: is it "just the right thing to do"? *Patient Educ Couns* 62: 271-276, 2006.
3. **Mead N, Bower P.** Patient-centeredness: a conceptual framework and review of the empirical literature. *Soc Sci Med* 51: 1087-1110, 2000.
4. **Pașca MD.** Comunicarea medic-pacient. In: *Comunicarea în relația medic-pacient*. Pașca MD (ed). Editura University Press, Târgu-Mureș, pp 57-228, 2012.
5. **Ha JF, Longnecker N.** Doctor-patient communication: a review. *Ochsner J* 10: 38-43, 2010.
6. **Jelphs K.** Communication: soft skill, hard impact? *Clinician in Management* 14: 33-37, 2006.
7. **Clever SL, Jin L, Levinson W, Meltzer DO.** Does doctor-patient communication affect patient satisfaction with hospital care? Results of an analysis with a novel instrumental variable. *Health Serv Res* 43: 1505-1519, 2008.
8. **Stevenson FA, Cox K, Britten N, Dundar Y.** A systematic review of the research on communication between patients and health care professionals about medicines: the consequences for concordance. *Health Expect* 7: 235-245, 2004.
9. **Post D.** Building communication skills in primary care. *Biofeedback* 34: 134-136, 2006.
10. **Cârstoiu C, Stroe M, Szekely A.** *Comunicarea medic-pacient. Știința întâlnește compasiunea. Audiobook*. Editura Audiosfera, București, 2011.
11. **Manning ML.** Improving clinical communication through structured conversation. *Nurs Econ* 24: 268-271, 2006.
12. **Breen GM, Wan TT, Zhang NJ, Marathe SS, Seblega BK, Paek SC.** Improving doctor-patient communication: examining innovative modalities vis-a-vis effective patient-centric care management technology. *J Med Syst* 33: 155-162, 2009.
13. **Diab P.** Communication in diabetes management: overcoming the challenges. *JEMDSA* 17: 52-54, 2012.
14. **Wensing M, Elwyn G, Edwards A, Vingerhoets E, Grol R.** Deconstructing patient centered communication and uncovering shared decision making: an observational study. *BMC Med Inform Decis Mak* 2: 2, 2002.
15. **Epstein RM, Franks P, Shields CG et al.** Patient-centered communication and diagnostic testing. *Ann Fam Med* 3: 415-421, 2005.
16. **Yuan C, Lai CWK, Chan LWC, Chow M, Law HKW, Ying M.** The effect of diabetes self-management education on body weight, glycemic control, and other metabolic markers in patients with type 2 diabetes mellitus. *J Diabetes Res* 2014: 789761, 2014.
17. **American Diabetes Association.** Standards of Medical Care in Diabetes – 2015. *Diabetes Care* 38 [Suppl. 1]: S5-S7, 2015.
18. **Piette JD, Schillinger D, Potter MB, Heisler M.** Dimensions of patient-provider communication and diabetes self-care in an ethnically diverse population. *J Gen Intern Med* 18: 624-633, 2003.
19. **Heisler M, Cole I, Weir D, Kerr EA, Hayward RA.** Does physician communication influence older patients' diabetes self-management and glycemic control? Results from the health and retirement study (HRS). *J Gerontol A Biol Sci Med Sci* 62: 1435-1442, 2007.
20. **Healy SJ, Black D, Harris C, Lorenz A, Dungan KM.** Inpatient diabetes education is associated with less frequent hospital readmission among patients with poor glycemic control. *Diabetes Care* 36: 2960-2967, 2013.
21. **Parchman ML, Flannagan D, Ferrer RL, Matamoras M.** Communication competence, self-care behaviors and glucose control in patients with type 2 diabetes. *Patient Educ Couns* 77: 55-59, 2009.