

The Role of Communication and Information Dissemination in Healthcare: Assessing Its Impact on Promoting a Healthy Lifestyle

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ABSTRACT

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Introduction: The author describes the main trends in professional interaction between a doctor and a patient and outlines the meaning of the terms "communication in medicine", "communication model", and "communication tactics". The article formulates the main communication tactics in the doctor-patient dialog, the development and implementation of which will help to improve the results of medical care and disease prevention.

Methods: In this study were employed analysis and synthesis methods, comparative and contrastive method, method of forecasting and modeling of situations, generalization method.

Results: The features of the doctor-patient communication model are described in detail. It is proved that this model involves adherence to the ethical principles of communication and knowledge of the psychological features of this type of professional interaction. The doctor's communication with the patient is realized at two levels: linguistic and extralinguistic. It has been established that the modification of the communication model between doctor and patient depends on three areas of interaction: treatment, prevention, and rehabilitation.

Conclusions: Today, one of the most optimal doctor-patient communication models is involving the latter in making a joint medical decision, which reduces the patient's anxiety. This model involves the patient in a dialog and shares responsibility for the treatment process between the doctor and the patient. The prospects for further research include studying ethical issues in medical communication and improving communication tactics in doctor-patient dialog.

Keywords: extralinguistic approach, model of doctor-patient communication, consultative model, types of patients, healthcare sector, communication tactics.

INTRODUCTION

During the last five years, global medicine has faced a significant challenge - the COVID-19 epidemic. This issue required new communication approaches with patients who encountered a previously unknown illness. Thus, they were often scared and inadequately informed about the epidemiological situation in the region. Due to frequent changes in treatment protocols, they didn't always trust the doctors and questioned their competence. This fact forced family doctors to intuitively develop communication tactics with patients in extremely dynamic and stressful situations [1]. A new communication challenge emerged almost simultaneously: how to convince patients to get a vaccine? How can we help them overcome the fear inspired by the "anti-vaccination" information campaign, and how can we help them choose a good vaccine?

With the onset of full-scale war in Ukraine, medicine faced the challenge of effective communication between doctors and military patients. Since military hospitals couldn't provide treatment to all the wounded, hospitals at regional levels were involved in the treatment process. The medical staff there lacked experience and skills in communicating with military patients. For this reason, the study of effective communication in the healthcare sector is highly relevant today for global medicine, particularly the Ukrainian healthcare system.

Despite the importance of scientific discoveries and the use of progressive diagnostic and treatment technologies, the formation of new strategies and tactics for effective communication between doctor and patient is also an integral component of a successful treatment process and maintenance of a healthy lifestyle. Effective communication between the doctor and the patient directly influences the treatment process because the basis of the recovery process lies in the patient's trust in the doctor. Therefore, the comprehensively described "placebo effect" in medicine is based on trust in doctors and faith in them as professionals and, thus, directly depends on communication [2]. According to statistics in the Ukrainian healthcare sector, more than 80% of legal claims and conflicts between doctors and patients are caused by miscommunication [3]. The quality of communication between the doctor and the patient directly influences the patient's agreement to follow the doctor's recommendations. As medical practice shows, only half of the patients adhere to medical recommendations.

This article aims to explore the role of communication in the healthcare sector and to describe the main trends of such verbal interaction within the context of the latest scientific research in the fields of medical communication, bioethics, and communication psychology.

Research goals:

- to define the meaning of the terms "communication in medicine," "communication model," and "communication tactics;"
- to describe the main trends in medical communication research;
- to describe the specifics of doctor-patient communication according to the stages of consultation and treatment;
- to study the main communication tactics in the doctor-patient dialogue, the development and implementation of which will improve the results of medical care and disease prevention.

LITERATURE REVIEW

Modern medicine has an increasingly pragmatic approach to understanding the communicative act between the doctor and the patient. Thus, a pragmatic approach to communication dominates, as most of these studies focus on developing communicative tactics for interacting with different types of patients or tactics according to communicative situations. Communicative tactics refer to the set of linguistic means and techniques to effectively achieve the goal of communication. Communicative tactics, in turn, implement the general strategy of speakers' communicative intentions, which are different for the doctor and the patient. Thus, the communicative strategy for the doctor refers to forming an image of an expert, a specialist whom people can trust with their health.

Meanwhile, the main strategy for the patient is to obtain complete information about their health condition, further treatment, and prospects for recovery or rehabilitation. The patient in the communication process does not pursue the goal of "being liked," as they are consumers, not providers, of medical services. This goal is constant for the doctor, as they are interested in long-term interaction for effective treatment.

Several modern scholars [4] associate effective communication in medicine with reducing economic costs for healthcare funding. In order to lower the risk of repeated health complaints, medical workers must provide patients with adequate information to help them take preventive measures to support their health. If any stage of the treatment process is compromised, the provision of medical care becomes ineffective. This, in turn, increases the likelihood of adverse outcomes for patients. It also improves patients' use of inpatient and emergency care, thus becoming a financial burden on healthcare systems.

Ratna [5] believes that effective communication is vital in providing medical care. With effective communication, the quality of medical care would be significantly improved. She identifies several components of effective communication in a medical facility, including medical literacy, cultural competence, and language barriers. If any

of these components are compromised, effective communication does not occur. The researcher emphasizes that effective communication must be bidirectional and directed both ways between patients and healthcare system workers.

Some scholars [6] note that effective communication is essential in the interaction between a nurse and a patient and is a key component of nursing care [7]. In their view, if communication in the "nurse-patient" dyad is patient-oriented, it becomes therapeutic. The communicative model proposed by the researchers emphasizes the person, not the patient, as it is primarily about the individual, not the patient. Moreover, it is envisaged that if their proposed model is applied to all persons involved in patient care, respect for their personality's dignity will be paramount.

Modern researchers in the theory and practice of communication in medicine [8] have focused their studies on examining the impact of empathy from the doctor on the effectiveness of the communicative act with the patient. Scholars have found that practicing doctors who spend time on empathy and convey positive messages simultaneously improve a range of psychological and physical states of patients and increase overall patient satisfaction with treatment without causing any harm [9]. These effects are similar to the effects of many standard pharmacological treatment methods for patient conditions.

A number of scientists [10] have focused their research on communication when conveying medical data of various kinds. This includes determining strategies for conveying scientific evidence in healthcare to managers and the public. In their opinion, evidence-based health data, as an integral component of health knowledge translation, is a set of essential tools for bridging the gap between science and practice. Digital and social media development has changed the concept of health communication, presenting new direct and powerful communication platforms and gateways between researchers and the public.

METHODS

The following methods were employed in this study:

- analysis and synthesis methods (for a critical review of scientific literature, defining the concepts of "communication in medicine," "communication model," and "communication tactics," as well as describing the specifics of the communication model "doctor-patient");
- comparative and contrastive method (this method allows to distinguish similar, partially similar, and specific modifications of the doctor-patient communication model);
- method of forecasting and modeling of situations (to simulate communication situations between a doctor and a patient according to the stages of diagnostic, therapeutic, or preventive processes or according to the types of patients);
- generalization method (for forming scientific and theoretical conclusions and formulating general recommendations for improving communication tactics in the field of public health).

RESULTS

The formation of communicative competence of healthcare personnel includes mastery of strategies and tactics of professional communication according to different types of patients, communication phases, and stages of the healing process. It also involves the ability to avoid conflict situations during medical practice, thereby shaping not only the positive image of an experienced professional but also the image of the healthcare institution [11].

The communicative model "doctor-patient" involves adherence to ethical principles of communication and knowledge of psychological peculiarities of such professional interaction and is an integral component of the professional-ethical culture of a physician. In the process of their professional activities, a doctor's communication is realized both at the linguistic (verbal) level and at the extralinguistic level (facial expressions, gestures, speech tempo, voice timbre, posture, appearance) [12], [13]. Thus, collecting medical history, elucidating medical, social, and family aspects of health, as well as informing about diagnosis, acquainting with the treatment plan, formulating recommendations, and convincing of the necessity of further treatment or rehabilitation is carried out at the linguistic level of communication [14], [15]. The extralinguistic level of communication is no less critical, as the patient "reads" the doctor's reaction to test results through it. This level also includes the use of medical

instruments, conducting general physical examinations, including palpation, temperature measurement, and monitoring the patient's reaction to the doctor's facial expressions and gestures during their acquaintance with the medical record. Both mentioned levels of communication (linguistic and extralinguistic) are inextricably linked.

Describing the communicative model "doctor-patient," it is worth noting the following aspects:

- Such communication belongs to interpersonal communication, particularly in the form of dialogue;
- In terms of duration, it can be short-term (one-act) or long-term (multi-act);
- In terms of communication character, it can be direct (face-to-face) or indirect (phone conversation);
- This communication is threefold, as it includes the communicative aspect (exchange of information, data), interactive (interaction between doctor and patient), and perceptual, as undoubtedly, it involves cognition, perception of each other by the communicants;
- Communication in this model is emotional, as it depends on the emotional state of both the doctor and the patient. Moreover, it entails empathy from the doctor when conveying "bad news" or an unpleasant diagnosis;
- Communication within this model is marked by primary identification since roles are predetermined, so role reversal is not possible;
- It is characterized by tolerance and reflectivity, as the doctor must demonstrate patience when listening to the patient's complaints and reflect, i.e., put themselves in the patient's shoes.

Modification of the communication model between the doctor and the patient depends on three directions of interaction: treatment, prevention, and rehabilitation [16]. Based on them, communicative strategies, tactics, forms, and means of communication will differ. In the communicative situation of prevention, both direct and indirect communication can occur. The communicative goal pursued by the doctor is to prevent the onset of illness. For this reason, the main communicative tactic is to paint a picture of the disease with all possible phases of progress and subsequent health consequences. The doctor sometimes exaggerates, provides specific examples from their experience, and may visualize the perspective of the disease to enhance the emotional impact on the patient. In this case, the goal of preventing illness justifies the choice of so-called "aggressive means."

Contemporary biomedical literature divides medical consultation into separate frames (steps) according to the set tasks. Some models are based on stages of the healing process, while others differentiate communication in the medical field by types of interaction: doctor-centric and patient-oriented models. The communicative model is not constant but can be modified depending on the purpose of the visit – prevention, treatment, or rehabilitation. Today, one of the most optimal communicative models of "doctor-patient" is the model of engaging the patient in making joint medical decisions, which reduces the patient's anxiety. This is the so-called "partnership model." It involves the patient in dialogue and shares responsibility for the treatment process between the doctor and the patient since modern patients often demonstrate a high level of medical literacy. Engaging the active patient in decision-making fosters trust between the doctor and the patient, as by involving the patient in making medical decisions, the doctor emphasizes trust in the patient's existing knowledge [17].

The described communicative model is derived from the advisory model of communication, which most Ukrainian doctors consider the most acceptable. The essence of this model lies in providing freedom of choice to the patient: choosing the doctor themselves, available diagnostic methods, medications, etc. A patient-centered approach to treatment preceded the advisory communication model. It relies on the patient's experience of their illness, involves empathy, and provides full support to the patient by the doctor.

For effective disease prevention in the healthcare system, the main communicative model is considered to be the "educational communication model," in which the doctor primarily assumes a mentoring role. Such a communicative model promotes the individual and social development of the patient through "medical education" and the development of essential life skills [18], [19]. This communicative model allows the patient to take control of their health and develops the ability to make wise choices in lifestyle or medication prevention. The doctor can implement the educational and communicative model independently. However, it becomes most effective when it is part of medical self-government, i.e., involving the public in improving the healthcare system.

During medical communication between a doctor and a patient, the communicative goal may include:

- the patient's satisfaction with the medical care provided (the main goal in most cases);
- the doctor's satisfaction with the work done and the results achieved;
- the patient's understanding and remembering of recommendations.

Effective communication in this area can also have significant clinical outcomes, such as a sustained reduction in blood pressure or improved quality of life in pain syndromes.

Communication between a doctor and a patient is often accompanied by communication, psychological, or sociocultural barriers. The very status of patients implies a psychological barrier due to their unique internal state. It is marked by anxiety, fearfulness, tension, and self-doubt, which prevents both the doctor and the patient from achieving success in communication. Sociocultural barriers are often triggered by professional, age, religious, ethnic, or social differences between the doctor and patient. Communication barriers are most frequently related to cognitive and linguistic reasons [20], [21]. The main communication barriers in the communication process between a doctor and a patient are the following:

1. According to psychological research in the field of medical communication, the doctor interrupts the patient's story most often at the 18th second. Only about 20% of patients complete the formulation of their complaints without interrupting the doctor. Therefore, the main requirements for a doctor in this context should be patience, tolerance, and the ability to listen to the patient.
2. The doctor mainly emphasizes the medical content of the patient's speech while ignoring the emotional component.

One of the most essential stages of doctor-patient communication is the stage of establishing initial contact. Typically, such contact takes place directly in the doctor's office during the first appointment and much less often indirectly during a telephone conversation. The main purpose of establishing initial contact with a patient is to create a trusting atmosphere and form professional interaction based on mutual respect and parity.

Establishing initial contact occurs through the following phases of communication:

- Contact phase – the shortest one (introduction – psychological contact – first impressions - prerequisite for communication – interpersonal interaction);
- Orientation phase - finding out the reason for the patient's visit – observing the patient's non-verbal behavior – determining the interpersonal distance: life experience, social status – active listening to the patient: equal facial and partially gestural reaction of the doctor to the patient's information, aimed at the process of psychological approaching of patients, calming them down, reducing tension, partial relief – establishing mutual understanding/antipathy;
- The argumentation phase is the most active, involving obtaining additional information by verbal or non-verbal means (verbal: additional questions to clarify the information obtained during the conversation with the patient; non-verbal (examination of the patient));
- The correction or feedback phase is the final phase, during which the doctor summarizes the conversation, ensuring that patients understand them correctly. The doctor allows the patient to ask questions that arise during the conversation. The doctor emphasizes the main stages of treatment. Finally, the doctor informs the patient about the time and date of the next visit and always optimistically sets patients up, wishing them a quick recovery.

When clarifying the features of the disease, the term "open-closed cone" is used. It represents the algorithm of the consultation and illustrates the process of collecting information (the cone gradually "narrows" as you move from open to closed questions). Thus, the consultation should begin with open-ended questions that require a detailed answer ("Could you tell me more about?") to allow the patient to speak and then move on to leading questions ("Does it hurt more in the front or back?") and closing questions ("Do you smoke?"), which are used to clarify details. It is crucial to summarize at the end of the conversation: "Let's summarize...", "So, your main concern is.....", "The main reason for your visit is...."

Doctor-patient communication involves explaining and planning treatment during the stage of diagnosis. The doctor's presentation of information to the extent necessary for the patient and in the correct form is the key to a trustful relationship and understanding the need to comply with the prescribed treatment.^(22,23) Effective communication at this stage should include the following steps:

1. Determining the extent to which the patient is interested in receiving information (patients with medical education, patients who are not directly related to medicine, etc.)
2. Presenting information in a dosed manner and checking whether patients understand it according to their needs.
3. Asking the patient about the need to explain additional aspects (etiology, prognosis, etc.).

The focus of communication lies in the doctor's reasoning for choosing a special course of treatment for the patient. The doctor should explain the advantages and disadvantages of such treatment according to the specific medical case, taking into account the patient-centered approach. It can be difficult for a patient to undergo long-term treatment. The patient may be tired, desperate for a positive treatment outcome, afraid of side effects and reactions from procedures and manipulations, or influenced by other factors [24], [25]. These include information from third parties or other sources, as well as the Internet. In these cases, it is necessary to use techniques to convince the patient of the importance of continuing treatment by arguing the strategy chosen by the doctor.

When explaining the following stages of treatment or rehabilitation, it is vital to use the chronological method. This method corresponds to the natural sequence of events, the order of the various elements as a whole, and the inductive method. During this process, the doctor presents certain facts, analyzes and evaluates them, and then summarizes them. A deductive method is recommended to persuade, prove, and substantiate one's opinion, which involves moving from general to specific, from thesis to arguments. The method of analogy, which involves comparing medical cases, symptoms, treatment practices, etc., is effective in the process of persuasion.

A difficult communication challenge for a doctor is to conduct a dialog with an aggressive patient. The following methods can help reduce the conflict:

- to keep an eye contact;
- to pay attention to the patient's words and non-verbal language;
- to repeat and clarify;
- to show concern for the situation, not the person;
- to summarize and confirm.

The communication model "doctor-aggressive patient" involves the use of the following techniques to reduce aggression:

1. Emphasizing the patient's importance: "Thank you for your frankness. Let's think together what we can do in this situation." "Thank you for telling me what you don't like. This will help us find a better solution."
2. Naming the patient's feelings: "You feel indignant when you think about this...", "If I understand you correctly, you are upset about the situation with..."
3. Emphasizing commonality and unity: "It is important for me, as well as for you, that you feel better..." "We both want to resolve this situation..."
4. Active listening: "Do you think the problem is...?"
5. Encourage the person to continue the story. "Did I understand correctly that..." "Sure, what else...?"
6. Emotional involvement and affection: "I'm glad I could help."

DISCUSSION

We totally agree with the Ukrainian scholar Humenna [12] that the most common clinical communication algorithm is the Calgary-Cambridge medical consultation model. It is used to establish effective communication and covers the entire consultation process. This model of communication consists of five stages that are carried out

sequentially, each of which involves tasks that require certain skills. The Calgary-Cambridge model of medical consultation has the following steps:

1. The beginning of the consultation, which includes preparation for the consultation, establishing initial rapport, and determining the reason for the consultation.
2. Collecting anamnesis (asking open and closed questions, active listening, picking up on verbal and non-verbal signals).
3. Examination (clarification of whether the patient is ready, explanation of the physical examination procedure).
4. Explanation and planning (clear explanations in the language of the patient, answering questions, psychological support of the patient).
5. Ending the consultation (clarification, summarizing, and announcing further treatment plans).

When collecting anamnesis, communication tactics include:

- the correct formulation of questions;
- the doctor's ability to listen to the patient to the end, to recode medical information in a language that the patient can understand, taking into account the psychological characteristics of the patient by age and gender, to avoid excessive emotionality so as not to frighten the patient;
- to stick to the subject and topic of the conversation.

To collect primary information, it is essential to use the "active listening" technique, which consists of pauses, generalizations, repetitions, and clarifications of the information provided by the patient, as well as summarizing the data obtained.

We also partially agree with Ratna [5] that healthcare practitioners may commit mistakes due to a lack of understanding of the patient's concerns. The most likely scenario involves relying on the patient's current medical history. This can make healthcare personnel overly focused on a particular differential diagnosis. It isn't easy to agree with the proposed three-pronged approach to effective communication in healthcare settings, which requires healthcare systems to include:

- assessment methods such as patient health literacy;
- cultural understanding and language barriers.

In our opinion, this approach is quite challenging to implement in practice.

CONCLUSIONS

Thus, based on the aforementioned, we can assert that the effectiveness of communication between a doctor and a patient directly influences the healing process and ensures the patient's return in case of subsequent medical cases. The communicative model "doctor-patient" belongs to specific communicative models that undergo constant modifications and transformations in various communicative acts. This model is characterized by the following features:

- it belongs to models of interpersonal communication,
- primarily takes the form of a dialog;
- can be either short-term (single-act) or long-term (multi-act) and direct or indirect;
- includes communicative, interactive, and perceptual aspects,
- it is marked by emotionalism, professional tolerance, and reflexivity.

The "doctor-patient" communicative model involves adhering to ethical communication principles and understanding the psychological peculiarities of such professional interaction and is an integral component of the medical professional-ethical culture [26], [27]. Doctor-patient communication is realized on two levels: linguistic and extralinguistic. Communicative tactics, in turn, implement the overall strategy of communicative intentions of speakers, where these intentions differ for the doctor and the patient (for the doctor, the communicative strategy

boils down to forming an image of a professional, a specialist whom one can trust with their health, while for the patient, the main strategy is to obtain the fullest information about their health status and further treatment, prospects of recovery or rehabilitation) [28].

The communicative model "doctor-patient" is not static but can be modified depending on the purpose of the visit—prevention, treatment, or rehabilitation. Today, one of the most optimal communicative models of "doctor-patient" is the model involving the patient in making joint medical decisions, which reduces the patient's anxiety level, called the "partnership model." This model engages the patient in dialogue and shares responsibility for the treatment process between the doctor and the patient. The primary communicative model for effective disease prevention in the healthcare system is the "educational communication model," in which the doctor primarily assumes a mentoring role. This communicative model contributes to the individual and social development of the patient through "medical education" and the development of essential life skills. It allows the patient to control their health and develops the ability to make wise choices in lifestyle or medical prevention. The doctor can implement the educational and communicative model independently. However, it becomes most effective when it is part of medical self-governance, i.e., involving the public in improving the healthcare system.

The prospects for further research include:

- Exploring ethical issues in medical communication.
- Improving communicative tactics in the dialogue between doctors and patients.
- Supplementing this dialogue with communication between patients and junior medical staff.

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