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# TELEPHONE CONSULTATIONS (lecture for practitioners)

K.V. Logunov

Saint Petersburg University, Saint Petersburg, Russia;
Medicon LLC

The lecture for clinicians discusses over-the-phone medical consulting basic features and analyzes pros and cons of the technology. It formulates main rules for remote communication with consumers of medical services, minimizing the risks for both interacting parties.

**Keywords:** telephone consultations; remote medical care; telemedicine; general practice.

# КОНСУЛЬТИРОВАНИЕ ПО ТЕЛЕФОНУ (лекция для практикующих врачей)

К.В. Логунов

Федеральное государственное бюджетное образовательное учреждение высшего образования «Санкт-Петербургский государственный университет», Санкт-Петербург;
Общество с ограниченной ответственностью «Медикон»



В лекции разобраны принципиальные особенности, положительные и отрицательные стороны технологии медицинского консультирования по каналам современной телефонной связи. Сформулированы главные правила дистанционного общения с потребителями медицинских услуг, позволяющие минимизировать риски для обеих взаимодействующих сторон.

**Ключевые слова:** консультации по телефону; дистанционная медицинская помощь; телемедицина; общая врачебная практика.

The use of modern means of communication is inevitable in any professional activity. Every doctor regardless of their specialty or experience has to consult over the phone from time-to-time. Even its outspoken opponents have to use this technology, for example, if they seek advice from their closest relatives or friends. In primary health care in the UK and US, telephone consultations account for up to a quarter of all communications between doctors and patients [1]. In Russia, the leadership of the Ministry of Health recently expressed the wish that every Russian should know the mobile phone number of their district or family doctor and use it more often (interview with V.I. Skvortsova RIA Novosti on the sidelines of SPIEF-2018 (St. Petersburg International Economic Forum), https://youtube/tvd6nZO-A6rA). The background of an online medical care is not in doubt.

The prevalence, that is, the frequency of use, of telephone communication in medical practice naturally increases [2]. First, telephony improves the availability of medical care. The constantly growing demand for health services in conditions of limited human and other resources makes it necessary to look for alternatives to face-to-face contact between the doctor and the patient, generating interest in telemedicine and its simplest telephone option. It is usually much easier to provide a daily hourly phone call to a specialist than to provide a similar 24-hourly reception in the office [3].

Secondly, this is due to the needs and expectations of the population, especially young people who are already used to online forms of work and rest, who are not surprised by the possibility of 24 h access to banking and government services from anywhere in the world, and who order taxis and buy bread via the Internet. The rapid development and widespread penetration of digital technologies are changing the usual features of the social structure, forcing the medical art to move in the direction of a mobility and constant availability through new-fangled gadgets [4].

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The third reason is related to the management efficiency. The course to assess the quality of medical services through the achievement by providers of certain set targets (for example, the degree of coverage of the attached population with preventive vaccinations, the percentage of medical examinations, the implementation of the outpatient visit plan, etc.) forces us to seek for and implement new forms of active involvement or motivation of the patients. For example, in outpatient practice, it has long been the norm to call people and invite them for an appointment or remind them of an appointment.

The fourth group of factors is included in the circle of an information-analytical and a clinical-statistical support. A large proportion of doctors, especially in the outpatient setting, are collecting general information, tracking, and fixing some of the stages of a disease (in particular, inspections, evaluation of online results, assessment of the effectiveness of preventive measures, etc.). In many cases, these actions are limited to a conversation and do not even involve a simple survey, and therefore may be conducted via a telephone survey [5].

What can be attributed to the positive aspects of a telephone communication? From the point of view of patients, the undoubted advantage is the sense of convenience and availability of the doctor at any time. This form is especially beneficial for those who need advice on self-medication as well as those who have chronic diseases with a stable well-controlled course and without exacerbations or in the remission phase [6]. Online consultations are indispensable for patients who are unable to meet with a doctor personally due to geographical distance and transport inaccessibility. Obviously, the telephone makes it easier to get medical care in a situation of physical and psychosocial isolation that accompanies the daily life of people with disabilities, and in such frequent everyday circumstances when the medical examination is constantly removed due to the banal workload at work and at home of both the patients and the family members caring for them [7].

According to doctors, telephone communication can significantly simplify the exchange of information. In the case of patients with bronchial asthma who are registered at a dispensary, regular telephone interviews instead of control check-ups have proven to be highly cost effective while maintaining the main indicators of a clinical performance and the satisfaction of the patients themselves [8]. In the acute shortage of resources (personnel, time, patients' examination room, Procedure Rooms, dressing, etc.) the phone provides a great opportunity of sorting appeals: a few leading questions are enough to urgently invite the patient for a face-to-face appointment out of a turn, or conversely, to ask the patient to wait and record it for a routine examination in the prescribed manner [9].

An online consultation helps to reduce the burden on doctors. According to foreign experience, it is known that up to half of all consultations are completed at this stage and there is no need for further direct contact or additional examinations [2, 3]. The duration of telephone consultations is usually shorter, and this releases additional working time that is always not enough. Reducing the burden on doctors is not only naturally accompanied by an increase in the economic efficiency of healthcare, but also allows you to get additional secondary advantages that are not always obvious. Thus, the reduction in the number of requests, of both visits to a medical organization and doctor's home calls, although weak, correlates with a decrease in the congestion of the local road transport infrastructure and the corresponding positive environmental effect.

However, everything has disadvantages, including telephone consultations. The main flaw of a telephone communication, which is remembered in medicine as the first thing, is clear and obvious even to the layman — the poverty or a complete absence of non-verbal signals and the inability to implement the most of the methods of examination, which limits the diagnosis with all its consequences and carries specific risks for all participants of the process [1]. Visual and tactile channels are excluded from the information exchange: it is not so easy to measure blood pressure over the phone, there is no visual assessment, for example, of the degree of obesity, and the simplest tests are not possible. The potential of so-called intuitive or tram diagnoses is reduced to the limit, the significance of clinical experience and observation is leveled, which explains the viable maintenance in the professional environment of serious doubts concerning the reliability of "conclusions over the phone."

The absence of direct contact between the doctor and the patient does not contribute to the development of a trusting relationship

between them, and also creates difficulties in identifying the parties and ensuring confidentiality. The practice has not yet been established and unambiguous rules for documenting assistance over the phone have not been developed. Its legal status and the limits of the liability of medical professionals have not been fully defined.

Paradoxically, the introduction of telephone consultations has almost no effect on the overall consumption of health services by the population [10]. The downside of promising opportunities to save time and money is associated with the risk of uncontrolled avalanche growth in the number of requests due to completely free and unrestricted access to the communication channel by patients.

As telephony progresses, overhead costs (for example, telephone bills) and opportunity costs inevitably increase (staff working on the phone is excluded from other activities for a while). Diversion of resources to the online work provokes specific types of inequalities for some categories of patients, and it is even possible to limit the availability of medical services. These inequalities could affect people with sensory or cognitive deficits (for example, elderly adults and an old people) [11], migrants who do not speak the language well [12], and situations when citizens do not have a phone for any reason.

The phone can be an additional barrier for contacting a doctor: someone is repelled by the voice menu that automatically meets all callers, someone is stopped by the high cost of paying for every min of phone time that goes to waste while the soulless answering machine promises to "connect with the first available operator," not everyone easily perceives the signal "busy" and therefore are not ready to dial the number again.

The hypothesis about a possible reduction in the burden on doctors is not always supported experimentally [13]. In the UK, in the general medical practice, the introduction of a previous sorting of patients made by nursing staff online has led to a noticeable increase in the volume of work of doctors in subsequent face-to-face consultations due to an increase in the number of complaints analyzed, the number of prescriptions written, and additional studies prescribed. In addition, the phenomenon of reducing the number of patients examined by a doctor in the office or at home has a "hidden price" in the form of an increase in the work load of the ambulance and emergency services in the relevant territory and changes in the safety indicators of medical services and consumer satisfaction [14].

The main most significant negative characteristics of telephone consultations are considered to be the following [15]:

- the subject of the program is biomedical data, and the psychosocial aspects of communication and emotional translation are kept aside;
- the average length of a conversation decreases, which is directly correlated with a decrease in the degree of trust in relationships, the effectiveness of health education and promotion of a healthy lifestyle also decreases;
- medical professionals are significantly less interested in assessing the needs and requirements of the interviewee than in a face-to-face contact.

Good clinical thinking and prudent risk management are necessary to eliminate the shortcomings and ensure the safety and a high quality of an online medical care. Special techniques help to reduce possible dangers for both the patient and the doctor.

All the facts of the information exchange concerning the patients should be recorded: conversations during incoming calls and calls coming from a healthcare professional, contacts with third parties, and even a fleeting exchange of a few words in some situations can be critical. Verbatim records of what was said by the parties are often useful [16].

In everyday work, it is convenient to use a standardized form to register telephone conversations. It is important that records of online consultations are chronologically included in the regular medical record of an outpatient or inpatient (paper or electronic). The requirements for storing and processing such records do not differ from the rules of document management when providing face-to-face assistance. In recent years, mandatory audio recording (voice recorder) of any telephone conversations "in order to improve the quality of service" has become widespread in the daily life and practices of state and commercial organizations. It seems reasonable to transfer this practice to the medical sphere.

Communication over the phone should be organized such that the conversation is not interrupted by anything, that is, the doctor or nurse is not distracted from the subject of the conversation. Management decisions to allocate special time for processing phone calls

are useful. Pre-sorting of incoming calls by specially trained personnel and the ability to organize a callback at a time agreed with the patient contributes to increase the efficiency.

Information concerning a citizen's health is confidential and the law protects its secrecy. When conducting telephone conversations, a medical professional is always required to identify the person who is talking to them.

The identification procedure can and should be complex and multi-staged. It is recommended to start by identifying the subscriber's number: if it corresponds to the phone number specified in the medical record for contacting the patient, this allows a more or less free discussion of certain topics; if an incoming call comes from an unknown or undetermined number, this should arouse suspicion, and in this case, increased attention is necessary. Additional and clarifying questions help to dispel doubts, the correct answers to which should not create difficulties for the interlocutor if he is really the person as he introduced himself. Some specialists use pre-prepared passwords or secret words in the practice of a telephone consulting [17].

Before answering a question concerning health, a health professional should decide whether it is appropriate to discuss this particular situation over the phone and whether it is justified to continue the conversation in those circumstances. The phone is not the best way to solve medical problems; it is used forcibly and exclusively within the limits determined by the patient's preferences, the severity and danger of symptoms of the disease, and the presumed working diagnosis. Moreover, all estimates have a high probability of error since they are based only on the anamnesis and the results of the analysis of a limited number of phonation non-verbal signals.

The nature and content of specific information, depending on the circumstances, may imply a different degree of importance for the patient and accordingly, a different level of confidentiality: some information can be freely transmitted over the telephone, for example, satisfactory results of a laboratory examination, while for some facts such as a message regarding a pregnancy and the diagnosis of a disease with an unsatisfactory prognosis, personal meetings are recommended even with absolute confidence in the identity of the interlocutor.

Every doctor knows the basic models, principles, and technologies for building a conversation with a patient, and they are universal. However, talking on the phone brings nuances to these processes, due to the psychological effect of distancing partners and the relative poverty of the spectrum of information exchange, limited exclusively by phonation categories (verbal and non-verbal). That is why all those who participate in various types of telephone conversations should undergo appropriate training. Specialized trainings aimed at developing special communication skills that are critical for successful communication, as well as collective classes that foster teamwork skills, are of great benefit [18].

Techniques of a proactive listening and detailed questioning played a huge role; they involve repeated explanations and paraphrasing of key points, mandatory encouragement, and even provoking questions from the interlocutor and the ability to analyze phonational non-verbal signals (extralinguistics — pauses, speech tempo, sighs, crying, coughing, heloscopy; paralinguistics — vocal qualities of the voice, range, timbre, volume of speech, pause placeholders, prosody-phrasal stress, syntagmatic stress, logical stress, tone, intonation).

In the communication over the phone, you should use simple and clear algorithms and schemes, and clearly define the goals, tasks, and responsibilities for all participants (for collecting and evaluating additional data, planning and performing necessary actions or interventions). The purpose of the conversation is to convey useful information to the patient; therefore, recommendations or instructions must be formulated positively and clearly, and they must comply with officially established procedures for providing medical care. This will help to significantly reduce the risk of possible legal or other claims.

In all cases of negotiation, make sure that the interlocutor understands the words addressed to him and does not hesitate to ask questions and get explanations about everything that is not clear to him. As a result of the conversation, the patient who made the call has an understanding of how to cope with the situation that caused the call, and when and where to contact again.

Sometimes, it is important to go beyond the telephone contact and actively use additional channels to transmit information [1]. For example, to supplement a telephone conversation by sending the patient an email that duplicates the information about the inadmissibility of the so-called aspirin prevention while taking warfarin.

During phone conversations, sometimes, the patient and the doctor can perceive and evaluate the main reason for the conversation completely differently. Mutual misunderstandings can lead to both serious consequences, from which anecdotes are born and to dangerous incidents. There are four most characteristic types of errors [19]. There are specific ways to effectively warn people.

The first type includes errors related to inadequacies of the data collection methods. An example is the perverse style of building a conversation when key questions about the history of illness or drug intolerance are not asked. Formalized algorithms and questionnaires, as well as the use of open question techniques in conversations, help to prevent such mistakes.

The second type of omission involves communication defects that disturb mutual understanding and undermine trust. The appearance will be a feeling of dissatisfaction or even direct resentment from the side of the patient and anger and frustration from the side of the doctor. To avoid excesses, it is important to pay special attention to both verbal and non-verbal details of speech, actively express empathy and do not forget to clarify the reason for the appeal in all cases. Communication skills can and should be continuously improved; this is helped by periodic audits and unbiased analysis of records.

The third type of error involves disbalances of the procedure or logic of making decisions. In particular, a false diagnostic conclusion based on the results of the conversation or even its absence, or an incorrect assessment of the severity of the patient's condition. Avoiding such situations helps logical analysis of problems related to the patient's disease within the framework of nosological units, as well as active involvement of the interlocutor in the decision-making process.

The last and fourth category of errors is when the patient does not understand the explanation of the conclusions and recommendations from the doctor. Here strict dosing of explanations, consistent delivery of information in small portions, and repeated duplication of key points throughout the conversation are important. Also, it is mandatory to check the patient's understanding of medical appointments through requests to repeat the main provisions.

According to experts, the risk of providing poor-quality medical care is maximum in three cases [11]: a) when interacting with a patient with whom the doctor has never met before; b) when there is an obvious need for an examination and at least the simplest physical examination; c) when it is not possible to provide further monitoring of the patient's condition and subsequent care. In such situations, the medical professional should be particularly careful and cautious.

In general, the basic rules for organizing and conducting telephone consultations are summarized in the following recommendations [1].

- Answer an incoming call quickly and avoid delays. The speech of a medical professional should inspire confidence and demonstrate a willingness to help. On the phone, you should speak benevolently, calmly, slowly, and clearly pronouncing all the words. It is important to show interest and express emotional support, and empathize with the interlocutor.
- When accepting a call, you must positively and clearly introduce yourself and further clarify the main personal data of the caller (last name, first name, patronymic, gender, age) and his phone number (in case of a callback as well as for identification purposes), always write down the date, time, and other details of the conversation.
- It is necessary to record the formal reason for the request, as well as the caller's expectations of the upcoming conversation. For clear understanding of the problems that caused the appeal, it is useful to clarify them several times, articulate them and get confirmation from the interlocutor.
- In all cases, when third parties call in someone's interests, you should try to get an opportunity to talk with the person whose problems are being discussed.
- Conversations about someone's health should, if possible, be conducted with the patient's medical record at hand.
- Anamnesis should be collected very carefully, strictly adhering to the established formal structured schemes. Questions should be as clear as possible to the interlocutor and assume the informative significance of the answers. During the conversation, you should regularly check whether the other person hears and understands the speech addressed to them.
- Do not forget about the possibility of extra examinations made by the patient himself or someone from his company. With a thoughtful attitude and competent methodological guidance, you can get not so little information: you can always ask for a detailed description of the nature of respiratory movements, and measure

the pulse rate and blood pressure level. Similarly, even palpation of the abdomen for soreness of different parts, the presence and localization of protective muscle tension and symptoms of peritoneal irritation are often successful.

• Conclusions should be formulated in a simple everyday language, avoiding special medical terms, always explaining the connection of complaints and symptoms with the intended diagnosis.

• The main diagnostic decision or order for immediate action must always be clearly expressed in a separate independent phrase. You need to formulate and voice the nearest prognosis of the course of the disease, the expected scenario.

• Recommendations about follow-up actions, treatment, procedure, and timing of repeated requests should be highlighted in a special part of the conversation.

• You must require the person to repeat the recommendations and confirm their consent to the appointments, and several times during the conversation.

• In all cases, it is necessary to summarize the conversation with a repetition of key points that will be recorded in the files that are performed in parallel with the conversation or immediately after it ends.

• It is necessary to inform the caller about other opportunities to get help at the place of residence, other than contacting by phone, and it is necessary to clarify the possibility of organizing support and care for the patient by third parties.

• At the end, you should always check whether the person you are talking to has any unresolved issues or questions.

• As a general rule, the person who opened it turns off the communication channel, that is, the caller must hang up the phone.

• At the end of a session when necessary in the prescribed manner to register the fact and content of advice to consider involving other employees or third-party organizations to solve problems, to determine the feasibility of active tracking situations (for example, to schedule a test callback to pass information to the local emergency or urgent care, etc.).

It is useful to practice daily self-checks, when after completing the conversation, the doctor or nurse additionally fills out a standardized questionnaire or a checklist, noting their own mistakes and omissions, and evaluating the success of the main elements of the conversation. Did not the consultant forget to introduce himself in time? Was he able to gather enough information to understand the main reason for the request? What actions completed the communication — was it possible to formulate an assumed diagnosis, give the necessary advice, and appoint a consultation with a specific specialist? Did the patient understand the recommendations? What security measures were (or were not) taken against the caller? Was the patient satisfied with the consultation?

Foreign colleagues consider it possible to use the phone for the following medical purposes [1, 3, 5, 6, 10]:

• Providing the general information that is indirectly related to health care: contact details of reference services and various hotlines, psychological support services, etc.;

• Epidemiological studies (for example, assessment of the prevalence of bad habits among the fixed population, etc.);

• Marketing activity: Inviting patients to routine preventive measures (medical examinations, vaccinations, screening tests, etc.);

• Optimization of routine processes. Accepting orders for reissuing prescriptions, making certificates and extracts from medical documents;

• Optimization of a regular medical checkup of certain categories of patients (e.g., quizzes patients with depression, organization of care for patients with diabetes mellitus, control condition discharged from the hospital, the adjustment of appointments for chronic patients based on their observation at home, etc.);

• Optimization of medical and diagnostic work. Continuation of the conversation that was started earlier at the face-to-face reception, but in a comfortable home environment for the patient, which allows you to clarify questions that remain unclear, report the results of laboratory studies, and get a “deferred” answer (when a time-out for reflection is necessary);

• Pre-sorting of emergency calls and home calls (so-called extramural diagnostics);

• Online methodological guidance of rescue measures at the scene of an accident or acute illness.

So far, telephone communication mainly provides the exchange of audio information. Technologies do not stand still, video conferencing is included in everyday life, all citizens have smartphones and gadgets that can transmit and

receive the readings of simple diagnostic devices, opening up the possibility of organizing online monitoring of many important indicators of human vital functions. How will all this affect the practice of telephone consultations? Wait and see.

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**Note from the editor**

Dear colleagues! While the issue of the journal was being prepared for publication, the problem of consulting patients over the phone in an unfavorable epidemic situation caused by the spread of SARS-CoV-2 (COVID-2019) became particularly relevant both in connection with the large number of citizens who are quarantined with the suspicion of this infection, and in connection with the restrictions on routine admission of patients with chronic diseases introduced in most regions of Russia.

*Information about the author*

*Konstantin V. Logunov* — DSc, Professor, N.N. Pirogov Advanced Medical Technologies Clinic, Department Head, Saint Petersburg University; Medical College Head; Chief Doctor Consultant, Saint Petersburg, Russia. https://orcid.org/0000-0001-8284-8678. SPIN-code: 7840-9578. E-mail: k.logunov@spbu.ru.

*Информация об авторе*

*Константин Валерьевич Логунов* — д-р мед. наук, профессор, начальник отдела клиники высоких медицинских технологий им. Н.И. Пирогова, ФГБОУ ВО «Санкт-Петербургский государственный университет; директор медицинского колледжа; руководитель консультационной службы. https://orcid.org/0000-0001-8284-8678. SPIN-код: 7840-9578. E-mail: k.logunov@spbu.ru.