

The Attitudes of General Practitioners in Croatia toward Interpersonal Communication and Adherence

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ABSTRACT

The paper discusses the importance of adherence and the effect of interpersonal communication between the patient and the general practitioner on adherence. According to the World Health Organization, “adherence is the extent to which a person’s behaviour – taking medication, following a diet, and/or executing lifestyle changes, corresponds with the agreed recommendations of a healthcare provider”¹. In order to verify the attitudes of general practitioners in Croatia about the importance of interpersonal communication and its influence on adherence, the authors conducted a survey of general practitioners during 2017 and 2018. This paper presents the results and conclusions of the study. According its results, general practitioners in Croatia consider education in the field of communication useful in the context of everyday communication with the patient. Most general practitioners apply the acquired knowledge in practice, however, they do not seem to believe that the improvement of their communication skills is crucially linked to better medication adherence of their patients. This finding points to the need for new research on the awareness of general practitioners about the extent of their own education and the significant influence they have on the patient’s adherence.

Key words: adherence, interpersonal communication, general practitioners, Croatia

Introduction

Since the middle of the last century, considerable and intensive research has been conducted on the relationship between healthcare providers and patients, as well as their characteristics, in order to answer the question of why it is impossible to achieve a satisfactory level of adherence. Studies of different diseases, chronic and acute, indicate low medication adherence with no deviation, on average about 50%², resulting in a global public health problem and significant financial losses for healthcare systems³. To illustrate the point, we can mention relevant data on chronic cardiac insufficiency or malignant diseases. In chronic cardiac insufficiency, adherence ranges from 7% to 90%⁴. The danger of low and variable medication adherence in such a severe and serious illness is best described by taking into account the data referring to the five-year survival of patients, which is lower than in prostate and bladder cancer in men and breast cancer in women⁵. Medication adherence for oral therapy in malignant diseases, against expectations, is not much better, ranging from a very low 16% to very high numbers of almost 100%⁶. These facts are also of concern given the fact that both in the European Union⁷ and in Croatia, it is precisely these two groups of diseases that are the leading causes

of death among the general population. In Croatia, 70%⁸ of the population is dying from these diseases per year. Despite the fact that there are no accurate financial indicators of non-adherence in Croatia, considering that about 3.5 billion kuna is spent annually on medicine in the pharmacy channel⁹ and that the average medication adherence at the global level is around 50%, the rough estimate is that non-adherence annually costs the Croatian taxpayers' around 1.5 billion kuna. However, the consequences of non-adherence are not only financial – the consequences of non-adherence on the individual and family levels are more far-reaching.

Considerable research into the factors affecting adherence and interventions to improve it draw attention to the field of communications. Interpersonal communication with the patient is repeatedly shown to be crucial for the quality and degree of adherence, so this research attempted to find out the attitudes of general practitioners towards education in the field of communications, the ways they apply the acquired knowledge, and whether they consider that improving their skills and education in this field is important for a better transfer of information to the patients.

This research had four hypothesis, as follows: 1. “General practitioners consider education in the field of communications useful (in the context of everyday communication with patients).” 2. “Most general practitioners apply their knowledge (in the field of communications) in everyday practice.” 3. “Awareness of the importance of improving knowledge in the area of communications as a crucial element in the transfer of information from a physician to a patient is not sufficiently recognized by general practitioners in Croatia.” 4. “General practitioners consider digital opportunities, such as mobile applications, useful in the case of medication adherence.”

Factors affecting adherence

The complexity of adherence is best described by all the factors affecting it. According to the World Health Organization, we can divide these factors into five groups:

1. Social and economic factors
2. Factors related to the health system
3. Factors related to the condition/disease
4. Therapy-related factors
5. Patient-related factors

Social and economic factors that have a negative impact on adherence are: war, poor socio-economic status, poverty, illiteracy, low level of education, unemployment, lack of an efficient social network that offers support to the patient, unstable living conditions, physical distance of the healthcare providers, high transport costs, high costs of treatment, environmental change, culture and basic beliefs about illness and treatment, and disturbed family relationships. The age of the patient is an important but inconsistent factor, since age-related adherence should be investigated separately for each developmental age group: children dependent on parents, adolescents, adults and older patients, where older patients should be given special attention due to comorbidity they are faced with, which is often associated with cognitive and functional disorders. Ethnic backgrounds also one of the key factors affecting adherence, especially due to cultural differences and social inequalities¹⁰. Social and economic factors, therefore, represent the most fundamental factors conditioning adherence. If there is a justified fear for their own life or the life of those close to the patient, if for economic reasons, poverty or deprivation, their existence is at risk, if medication and healthcare are unavailable, then it is clear that adherence may be almost equal to zero¹¹.

Another important group of factors are those related to the health system. In the broadest sense, this group also includes the factors examined in this paper – interpersonal communication between healthcare providers and patients. Aside from the factors that belong in the domains of communications and psychology, many factors of the organisation and functioning of the health systems can adversely affect adherence.

The World Health Organization lists the following: poorly developed health services, inadequate or non-existent health insurance, poor distribution of medication, insufficient knowledge and education of healthcare providers, overburdened healthcare providers, lack of incentives and feedback, short consultations, the insufficient capacity of the system to educate patients, failure to establish adequate social support, lack of knowledge of medication adherence and lack of knowledge on ways to improve adherence¹².

Factors affecting adherence related to the disease itself are the severity of symptoms, level of disability (physical, psychological, social and professional), rate of progression and severity of the disease, as well as the availability of effective treatment. The influence of these factors depends on their effect on the perception of the risk for patients, the importance of continuing treatment and the priority of adherence. If depression, alcoholism or drug abuse are present in addition to the main disease, adherence changes significantly¹³, and it has been proven, for example, that non-adherence is less than three times higher in depressed patients¹⁴, while alcoholics are at a 1.7 to 4.3 times at a greater risk of non-adherence¹⁵. Many factors related to treatment influence medication adherence, the most important being the complexity of treatment, the duration of treatment, earlier treatment failure, frequent changes in therapy, the lack of positive effects of therapy, side effects and availability of support to help the patient cope¹⁶.

Many factors associated with the patients themselves influence adherence, such as resources, knowledge, attitudes, beliefs, perception and the expectations of the patient. The knowledge and beliefs that patients have about their disease, the motivation to manage it, confidence in the ability to take measures to manage their disease, the expected outcome of treatment and the consequences of poor adherence interact with each other and affect adherence in ways that are not yet fully understood. Some of the factors cited by the World Health Organization related to the patients themselves that affect adherence are: forgetfulness, stress, fear of side effects, poor motivation, inadequate knowledge of symptoms and treatment, lack of need for treatment, misunderstanding and non-acceptance of the disease, disbelief in the diagnosis, misunderstanding of the risks associated with the disease, misunderstanding the treatment instructions, low treatment expectations, low attendance at follow-up and counselling, hopelessness and other negative emotions, frustration with healthcare providers, fear of dependence, anxiety due to the complex treatment regimen and fear of the stigma of the disease. Perceptions of the need for treatment are influenced by symptoms, expectations, experiences and the disease situation. Concerns about treatment typically arise from beliefs about side-effects and the disruption of lifestyle, as well as from more abstract worries such as the long-term effects and dependence. A patient’s motivation to adhere to prescribed treatment is influenced by the value that they place on following the regimen and the degree of confidence in being able to follow it¹⁷.

Interventions to improve adherence

Many studies have been conducted so far to find interventions that might improve adherence and clinical outcomes. Some of the interventions considered include additional instructions for patients (written materials), patient counselling/education, automated telephone calls as reminders to take therapy, various other reminders, family education, simpler dosage regimens, self-monitoring, individualized drug packaging, etc¹⁸. Some interventions, such as simplifying the dosage regimen in the treatment of hypertension are relatively simple and lead to improved medication adherence¹⁹, but most procedures achieve modest results. A key contribution to the systematization of interventions conducted to improve adherence in acute and chronic diseases was made by Haynes et al. who reviewed 78 randomized controlled trials (RCT) and a total of 89 interventions to improve adherence. Their conclusion is that the improvements in adherence are partially positive in acute diseases with the implementation of simple procedures such as better informing of patients about the importance of taking medication to the end. In chronic illness, even complex, multilayer interventions produce limited results, but as the authors themselves conclude, the only thing all interventions with a positive effect on adherence have in common is frequent health provider interaction with the patients while paying special attention to adherence²⁰. The importance of interpersonal communication and the ability to devise interventions that will affect adherence at this level have motivated many authors to explore different aspects of interpersonal communication and the actors themselves (healthcare providers and patients); below is a brief overview of the most important conclusions of such research.

Interpersonal Communication as the Basis of Adherence

There are many definitions of communication. Back in 1976, Dance and Larson counted more than 126 definitions that sought to describe communication and what happens during communication²¹. The characteristics of communication important for this work, and in the context of interpersonal communication between healthcare providers (doctors) and patients define communication as a symbolic transactional process, which means that it is continuous and complex, and that during communication there is a constant interaction and mutual influence between the participants in the communication process. The outcome of the communication process is influenced not only by the participants, but also by the context in which they are located. The most important characteristic of communication for this paper is its social component, which means that it is a process that involves two people with the clear intention of transmitting some information and having some sort of impact²². The symbolic and semiological aspects of communication between patients and healthcare providers are as old as the medical practice itself, because it is the symbolism that allows the diagnos-

tician to link the sign as a symptom and, in the true spirit of the sign, conclude something more about the disease²³.

When we look at the interpersonal communication between healthcare providers (doctors) and patients, we come to the conclusion that this communication contains all of the above described features: it is a symbolic process that is continuous, during which information is exchanged, with the desire to achieve an impact, and the result is influenced by the characteristics of the participants and their environment. When we are talking about the desire to achieve an impact through persuasion, it must be emphasized that there are several different models that describe how information is received and processed, as well as how it achieves an impact. In the context of interpersonal communication between patients and healthcare providers, we can benefit from two models – the elaboration likelihood model developed by two social psychologists Petty and Cacioppo, and a heuristic-systematic model developed by Chaiken in the late 1980s. These models are preferred because they assume the existence of two simultaneous ways or means of changing attitudes and determine the conditions under which they will be used. The ways/means of changing attitudes according to these theories are central or systematic (strength of argument, cognitive pathway) and peripheral or heuristic (the influence of external factors such as the attractiveness or credibility of the message source and learned mental shortcuts that enable decision-making based on experience and beliefs)²⁴. How patients make decisions about their treatment and therapy is best described by these models because, in addition to the message and information about the disease and the treatment (central or systematic mode), the decision is influenced by the source of the message itself, in this case the healthcare provider, who because of their communication skills, empathy and knowledge can be a more or less attractive and credible source, and therefore can influence a change in attitude to a greater or lesser extent affecting the decision to take the prescribed therapy.

In the context of this paper, it is crucial to understand interpersonal communication as a skill, a view we owe to Argyle²⁵ and subsequent updates by Dickson and Hargie²⁶, who have contributed immensely to this outlook and whose work has led to one crucial insight. Specifically, if interpersonal communication is a skill, then it is subject to learning, training and advancement, it can be controlled and is not final, it is not an ability that is somehow innate²⁷.

Numerous studies carried out so far support the importance of interpersonal communication between healthcare providers and patients, and a range of evidence is available to confirm its beneficial effect on medication adherence and consequently the outcomes of the patient, indicating at the same time the need for a deeper investigation of this phenomenon and of the awareness of healthcare providers about its importance.

One of the key works confirming the importance of communicative skills of healthcare providers is the meta-analysis of American scientists Haskard Zolnierok and Di

Matteo published in 2009, which includes 127 studies conducted from 1949 to 2008²⁸. Most of the studies examined (106) dealt with the relationship between patient adherence and the communication skills of the physician, while a smaller part of the studies (21) was concerned with the improvement of adherence associated with the doctors' communication skills training. The main conclusions of this meta-analysis are the following:

1. Patients are 19% more adherent if their doctors possess good communication skills.
2. The adherence of patients increases by 12% if doctors attend communication skills training and education.

These two findings, based on the large sample of research included, point to the importance of the communication skills of healthcare providers, but perhaps even more important, they speak in favour of education and training for healthcare providers. In addition to communication skills, other characteristics of healthcare providers continue to be important in the context of a positive impact on adherence, such as a higher instance of general medical practice visitation, as well as the satisfaction of healthcare providers with their job and the will/motivation of the doctor to answer the patients' questions makes an important difference in adherence, while the doctor's age, gender and ethnicity did not affect medication adherence²⁹. The importance of good communication skills of healthcare providers is best illustrated by the profiles of patients who are most prone to medication non-adherence. According to the meta-analysis by Di Matteo et al., it is the severely ill (malignant diseases, chronic heart and kidney failure, HIV), who objectively suffer poorer health, that have an 11% higher risk of non-adherence³⁰. The psychological mechanisms underlying the results that the most at risk patients, for whom taking their medication is imperative, are at the greatest risk of medication non-adherence are unclear; it remains to be investigated which of the factors (depression, feeling of hopelessness, side-effects) that are assumed to have an effect on the choice prevails.

The largest and most recent research project, which analysed the behaviour of healthcare providers in the context of medication adherence support conducted in Europe, encompassed ten European countries at the primary healthcare level (general practitioners, nurses and pharmacists) and did not provide encouraging information³¹. According to its results, only about half of the surveyed healthcare providers ask their chronic patients whether they sometimes fail to take the prescribed dose of their medication, a question that is considered key to assessing medication adherence. It is encouraging that healthcare providers who are educated and trained are more inclined to ask this question, which is again in support of the training of healthcare providers³². However, it is clear from the above that there is no single issue or intervention that can improve adherence; the key is a systematic approach presented through the IMS (information, motivation, strategy) model³³. This model highlights what is essential for good adherence, an individual approach to each patient and providing information, motivation, and strategies for

achieving a goal in line with the patient, their situation and capabilities. In the first segment of this model, it is crucial to efficiently transfer information to the patient, a prerequisite for building trust, partnership, listening to the patient, answering questions and not giving up until the patient is completely familiar with their illness and treatment. This opens up the possibility for the second segment – motivation, where it is crucial that the patient understands and believes in the efficacy of the treatment and that it will ultimately lead to improvement, and that the patient discusses with the healthcare provider any possible negative attitudes towards treatment. It is important to reach an agreement with the patient and motivate them that it is possible to follow the agreed treatment plan. The third segment of the model is motivation. At this stage, the patient's healthcare provider arranges a strategy to effectively adhere to the agreed treatment plan, helps them overcome barriers, helps identify other people who can be of assistance, provides written instructions or other types of materials and strategies that can be helpful to a patient (e.g. reminders via text message, mobile applications, contacts with affiliated organizations), and does not neglect the economic aspect of the treatment, but adjusts the therapy to the patient's capabilities. Good interpersonal skills of healthcare providers are critical at every stage of the IMS model. That is why it is crucial for healthcare providers to understand the importance of communication skills, to realize that it is possible to work on improving these skills through education and training, which together can significantly affect adherence and, consequently, the results³⁴ of their patients.

Material and methods

The study encompassed 229 general practitioners from the whole of Croatia and was conducted during 2017 and 2018. Respondents from the basic set of 2338³⁵ general practitioners provided data in questionnaires that contained the following two sets of data:

- five general facts on doctors (gender, age, work experience, county, approximate number of patients in care);
- five questions about education in communications (when did it take place, usefulness of education, the application of acquired knowledge, the most useful effects of the acquired knowledge, the use of mobile applications).

All the questionnaires were completed on a voluntary basis during educational conventions organised by the pharmaceutical company Sandoz. All the data obtained from the survey was systematized in an Excel file and converted into an SPSS file. All types of statistical analyses were derived based on an SPSS file. Conclusions regarding differences and correlations among variables were made at the usual level of significance of 0.05 – that is, with a reliability of 95%.

The sample consisted of 42 male doctors (18%) and 181 female doctors (79%). For six doctors (3%), information

about sex was not known. Those surveyed are predominantly between 50 and 59 years of age (37%). The work experience of the doctors surveyed ranges from 0 to 49 years. The mean work experience is 20.7 years, the median is 26.0 and the mode is 1. The standard deviation is 14.45 years, i.e. 70%, which shows a bigger spread. The most doctors surveyed practice medicine in Zagreb (24%), while others practice medicine in various counties in Croatia. Only two counties were not represented among the doctors surveyed: Koprivnica-Križevci County and Dubrovnik-Neretva County. Most of the doctors surveyed care for 1500 to 1799 patients.

Results

Table 1 shows that most of the physicians participated in some form of communications education – most of them, 62%, in only one education – while as many as 19% of doctors did not attend any education programme related to communicating with the patients. The largest number of general practitioners interviewed (54%) were educated by pharmaceutical companies. Based on the data in Table 2, an average of 1.06 educations per doctor can be calculated, while the median and mode equal 1. When asked whether they consider the education useful for everyday communication with patients, the general practitioners surveyed gave the following answers:

Yes	219 doctors	(95,6%)
No	–	
Partially	9 doctors	(3,9%)
Unknown	1 doctor	

TABLE 1
NUMBER OF GENERAL PRACTITIONERS SURVEYED ACCORDING TO PARTICIPATION IN COMMUNICATIONS EDUCATION

Participation in education	Number of general practitioners	% of general practitioners
Yes, during undergraduate and graduate studies	29	13
Yes, during postgraduate studies	41	18
Yes, organised by professional societies	40	17
Yes, organise by pharmaceutical companies	124	54
Yes, somewhere else	6	3
No	44	19
Total	284	–

The vast majority of doctors find education to be useful (around 96%), while no answer was recorded as to the lack of usefulness. However, looking at the application of the acquired knowledge in everyday practice (as seen in Chart 1), the answers are less polarised:

Yes	137 doctors (60%)
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Partially	56 doctors (24%)
No	9 doctors (4%)
Unknown	27 doctors (12%)

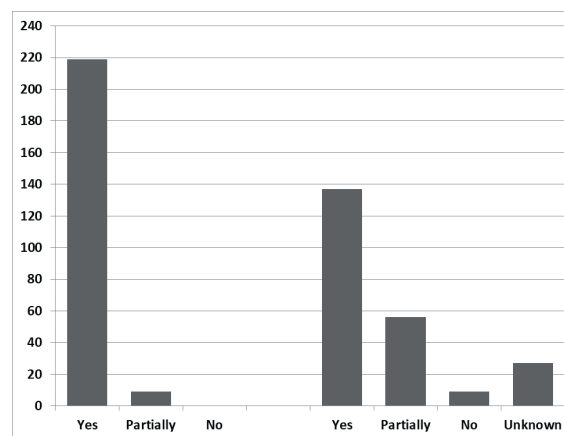


Fig 1. Number of general practitioners surveyed according to their attitudes on the use of communications education (first three columns) and application in practice (last four columns)

TABLE 2
NUMBER OF EDUCATION PROGRAMMES ATTENDED BY GENERAL PRACTITIONERS

Number of education programmes	Number of general practitioners	% of general practitioners
0	44	19
1	143	62
2	28	12
3	7	3
4	5	2
Unknown	2	1
Total	229	100

This difference between the perception of the usefulness of communications education and its application in everyday practice during communication with the patient points to the need for further education in this segment, since the possibility of the impact of a well-educated and qualified communicator/doctor on the patient is much higher if the doctor is aware of this, if they are trained and apply what they have learned in practice.

The greatest benefit general practitioners report is motivating patients to begin taking therapy, as well as to continue taking it regularly, while taking therapy as long as necessary appears in 12%. These answers were given by 60% of respondents. The second group of effects consists of those focused on changing lifestyle habits (exer-

cise/physical activity, nutrition, smoking cessation), which is reported by 37% of respondents. Both groups of effects (related to therapy and lifestyle changes) were reported by 48% of doctors surveyed as can be seen in Table 3.

TABLE 3
THE MOST USEFUL EFFECTS OF THE KNOWLEDGE ACQUIRED

Effect	Number of general practitioners	% of general practitioners
Motivating patients to start treatment	52	23
Motivating patients to keep taking the prescribed medication	57	25
Motivating patients to keep taking the prescribed medication as long as necessary	27	12
Lifestyle change (exercise, physical activity)	28	12
Lifestyle change (nutrition)	37	16
Lifestyle change (smoking cessation)	20	16
Other	2	1
All of the above	111	48
Not useful	-	-
Total	334	-

From the above analysis, it is apparent that general practitioners believe that the greatest benefit of what they have learned is for patients to start therapy and continue taking it regularly, The lifestyle changes are the most difficult to change according to the general practitioners surveyed. The same is confirmed by research – e.g. in patients with malignant diseases where a change in lifestyle (measured by smoking cessation, greater fruit and vegetable intake and physical activity) is achieved in as low as 5%³⁶of cases.

The last question in the questionnaire was related to the use of mobile applications, which, as an additional channel of communication, provides a range of options depending on their structure – not just reminders for therapy but also keeping track of measurements and so on, and allowing for an upgrade of the basic interpersonal communication between doctors and patients. Doctors were asked about the use of mobile applications for the purpose of medication adherence. The answers were as follows:

can improve medication adherence	108 doctors	(47%)
useful only with younger patients	112 doctors	(49%)
not useful	5 doctors	(2%)
other and no answer (2 + 2)	4 doctors	(2%)

Therefore, opinions about the usefulness of mobile applications (47%) and conditional usefulness (only in young people, 49%) prevail. These two findings were further analysed by inferential statistical methods.

Based on the tests presented in Table 4, it can be concluded that there is a statistically significant correlation

between the awareness of the doctor about the importance of improving knowledge in the field of communications and the application of this knowledge in practice ($p < 0.001$).

TABLE 4
CHI - SQUARE TEST RESULTS

Variables in the contingency table	Format of cont. table	N	χ^2	df	p	Correction
Attended Education (yes, no)	2 x 3	136	1.487	2	0.476	no (33%)
Patient motivation (start, regular intake of medication, continuing treatment)						
Doctor's age (under 50 y.o., over 50 y.o.)	2 x 2	218	0.005	1	1.000	yes
Attitude on the usefulness of mobile applications						
Finds education useful (yes, partially)	2 x 3	202	17.596	2	<0.001***	no (33%)
Application of knowledge (yes, partially, no)						

Note: *statistical significance up to 5%; **statistical significance up to 1%; *** statistical significance up to 0.1%

Out of the total number of doctors who consider education to be useful in Table 5, it is apparent that 71% apply their acquired knowledge in practice, 25% apply the knowledge partially, and 4% do not apply the acquired knowledge. Of the total number of doctors who consider education to be partially useful, no one applies the acquired knowledge in practice, 88% of them partially apply the knowledge in practice, and 12% do not apply the acquired knowledge in practice. Consequently, a positive attitude to the usefulness of education is accompanied by a higher degree of acquired knowledge applied in practice, while a less positive attitude correlates to a lesser degree of its application in practice.

TABLE 5
RELATIONSHIP BETWEEN THE GENERAL PRACTITIONERS' ATTITUDE ON THE USEFULNESS OF COMMUNICATIONS EDUCATION AND THE APPLICATION OF THE ACQUIRED KNOWLEDGE

Finds education useful	Application of knowledge			Total
	Yes	Partial.	No	
Yes	137	49	8	194
Partially	-	7	1	8
Total	137	56	9	202

In Table 6, row 1 and the first test refer to the doctors who attended education programmes in patient communication. In the remaining three tests, the proportions refer to doctors who have applied the acquired knowledge in practice. Conclusions based on the results of the tests are as follows: 72.0% of doctors with less work experience (up to 20 years) attended education programmes in patient communication, while 86.3% of doctors with more work experience (more than 20 years) attended such programmes. This difference in proportions (0.720 and 0.863) is not random but statistically significant ($p = 0.009$). Namely, among the doctors with more work experience, there is a statistically significantly higher number of those who attended education programmes ($0.863 > 0.720$). Regarding the application of the acquired knowledge, work experience, age and gender of the doctors did not prove to be a significant factor the doctors applied the acquired knowledge alike.

TABLE 6
RESULTS OF T-TEST COMPARING PROPORTIONS

Variable	Group of respondents	N1 N2	Proportion	t	p
Work experience ^a	less than 20 years.	93	67 / 93 = 0.720	2.639	0.009**
	more than 20 years.	131	113/131 = 0.863		
Work experience ^b	less than 20 years.	94	53 / 94 = 0.564	0.867	0.387
	more than 20 years.	132	82/132 = 0.621		
Age	under 50 y.o.	95	55 / 95 = 0.579	0.526	0.599
	over 50 y.o.	132	81/132 = 0.614		
Sex	male	42	26 / 42 = 0.619	0.332	0.740
	female	181	107/181 = 0.591		

^aThe first test refers to doctors who attended education programmes in patient communication.

^bThe proportions refer to doctors who have applied the acquired knowledge in practice.

*statistical significance up to 5%; **statistical significance up to 1%; *** statistical significance up to 0.1%

The aim of this paper was to verify whether general practitioners in Croatia perceive the importance of education in the field of interpersonal communication, whether they apply the knowledge in communication with the patient, whether the knowledge can positively influence one of the aspects of adherence and whether new digital opportunities, such as mobile applications, are a useful tool in this communication process.

This paper presented four hypotheses. The first hypothesis is as follows: “General practitioners consider education in the field of communications useful (in the context of everyday communication with patients).” The fact that 219 (96%) general practitioners of the 229 surveyed believe that communications education is useful acts as evidence in favour of the hypothesis.

The second hypothesis is as follows: “Most general practitioners apply their knowledge (in the field of communications) in everyday practice.” The questionnaire results showed that two-thirds of doctors, 60% to be exact, apply the acquired knowledge, 24% partially apply the knowledge and a mere 4% do not apply the knowledge in everyday practice.

The third hypothesis is as follows: “Awareness of the importance of improving knowledge in the area of communications as a crucial element in the transfer of information from a physician to a patient is not sufficiently recognized by general practitioners in Croatia.” To prove this hypothesis, a chi-square test was used in which one nominal variable was the attitude to the usefulness of attending communications education programmes (yes, partially), and the other nominal variable was the application of acquired knowledge in practice (yes, partially, no). The 2 x 3 contingency table revealed (results in Table 4, row 3) that there is a statistically significant link between the aforementioned nominal variables ($p < 0.001$). Therefore, it can be concluded that this hypothesis is accepted as true because even doctors who consider communications education useful do not always implement the acquired knowledge in practice – but only in 71% of cases – while those who consider such education to be partially useful, do not apply the acquired knowledge in practice.

The fourth hypothesis is as follows: “General practitioners consider digital opportunities, such as mobile applications, useful in the case of medication adherence.” As to the use of mobile applications in the survey, it was found that 108 doctors believe mobile applications can improve medication adherence, while 112 doctors believe that they are useful only in younger people. It follows that 220 doctors out of 229 (96%) do not dispute the usefulness of mobile applications.

Conclusions

A significant shift in adherence, with existing medication, would be tantamount to some of the biggest discoveries in medicine for most chronic illnesses. With its impact on treatment outcomes, quality of life and life extension, as well as savings for health systems, it is equal to the discovery of new drugs to treat the same chronic diseases. Simply put, we do not necessarily need new medication, we need to find ways to make patients take the medication already available because even the best treatment is ineffective if not taken as prescribed.

In Croatia today, we do not have a strategy to improve adherence. Although there is sufficient interest in the matter and we can estimate the scale of the problem, it is

necessary to investigate it in more detail so that we can purposely and effectively address it, which involves all stakeholders in the health process – specialists, general practitioners, nurses, pharmacists and finally patients. In addition to providing strategies and initiatives to improve adherence, it is also important to ensure education in the area of interpersonal communication for healthcare providers so that they can effectively communicate their chosen initiative to the patient, as well as to motivate them to adhere to the initiative. What is imperative is that solving or alleviating this problem is supported by the system; education should not be left only to interested and enthusiastic individuals.

As emphasized in this paper, patients need to be systematically informed, then motivated and eventually supported according to their individual characteristics in order to provide them with a strategy of increasing adherence that will work best for them. The system should educate, motivate and provide effective support for the system shareholders aiding the patients in order to ensure a quality approach to the problem with long-term viability. But prior to educa-

tion aimed at improving the skills of interpersonal communication, it is necessary to raise awareness in those healthcare providers who have no perception of the importance of interpersonal patient communication because, as we have seen from the research conducted among general practitioners, a greater appreciation of the usefulness of improving their knowledge is followed by the willingness to use the acquired knowledge in practice. After that, it is necessary to build and improve interpersonal communication skills in a systematic way that is appropriate for this specific situation. The generated cost should not, in fact, be considered a cost, but as an investment in health.

Interpersonal communication in health is the foundation of all relationships; it is a special kind of relationship that develops between a person who is ill and the person helping them, while communication between them is the key to success. In order for any therapy to have any chance of success, it is essential that these two parties understand each other; communication skills are not innate but learned, and therefore subject to improvement for anyone internally or externally motivated to do so.

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STAVOVI LIJEČNIKA OBITELJSKE MEDICINE U HRVATSKOJ PREMA INTERPERSONALNOJ KOMUNIKACIJI I ADHERENCIJI

SAŽETAK

U članku se razmatra važnost adherencije i utjecaj interpersonalne komunikacije na relaciji bolesnik – liječnik obiteljske medicine na adherenciju. Prema definiciji Svjetske zdravstvene organizacije „adherencija predstavlja mjeru u kojoj je ponašanje pacijenata – uzimanje lijekova, pridržavanje dijeti i/ili mijenjanje životnih navika u skladu s preporukama dogovorenim s pružateljem zdravstvene skrbi“¹. Kako bi provjerili stavove liječnika obiteljske medicine u Hrvatskoj o važnosti interpersonalne komunikacije i njenom utjecaju na adherenciju, autori su proveli istraživanje liječnika obiteljske medicine tijekom 2017. i 2018. godine, metodom ankete i u ovom radu se donose rezultati i zaključci tog istraživanja. Prema rezultatima ovog istraživanja liječnici obiteljske medicine u Hrvatskoj smatraju edukaciju iz područja komunikologije korisnom u kontekstu svakodnevnice komunikacije s bolesnicima. Većina liječnika obiteljske medicine naučeno primjenjuje u svojoj praksi, međutim kod liječnika obiteljske medicine ne postoji percepcija da je poboljšanje njihovih znanja iz područja komunikologije ključno i povezano s poboljšanjem adherencije njihovih bolesnika. Ovaj zadnji nalaz ukazuje na potrebu novih istraživanja o svjesnosti liječnika obiteljske medicine o mjeri vlastite educiranosti i značajnog utjecaja koji imaju na adherenciju bolesnika.

