

PRINCIPLES OF HIPPOCRATIC MEDICINE FROM THE PERSPECTIVE OF MODERN MEDICINE

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SUMMARY

In this paper authors described some of the principles and theses of Hippocratic medicine. They emphasized that regardless existing controversial opinions as to whether Hippocrates stated some theses or not, and controversial views on some of his principles, he is often called the "father" of medicine, who laid the foundations in medicine as a science. Hippocrates gave recommendations on the doctor's behavior towards the patient, which is relevant up today. His holistic approach to medicine is becoming more and more relevant in the modern medicine. The application of the Hippocratic Oath today depends on the legislation of individual states, related to how legal solutions in some states are pro or contra to it. Authors opened and discussed his attitudes that mental illnesses are a sign of a diseased brain, his consideration the food as medicine and that the disease came from the intestines. Also issue of prognosis of the disease was opened and discussed as well as and Hippocrates's consideration of work and physical activity as the most appropriate medicine. Furthermore, authors considered importance of Hippocratic medicine related to Creative psychopharmacotherapy based on therapeutic communication and the creative satisfaction of needs in the therapeutic relationship with patients and in the recovery itself. Finally, an example of creatively use of the principle of Hippocratic medicine: "work as the most appropriate medicine" in therapeutic communication with patients through an ecological approach called "Ecopsychiatry", under the slogan presented in the media to the general public: "Cleansing nature improves your mental health" was described.

Key words: Hippocratic medicine - holistic approach - Hippocratic Oath - creative psychopharmacotherapy - Ecopsychiatry

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INTRODUCTION

Hippocrates is the most prominent physician of antiquity, born on the small Greek island of Kos, located off the coast of Asia Minor. Before his era, medicine was practiced as an empirical art and had a religious nature. It is to his credit that he separated medicine from magic and religion, that he freed it from philosophical speculation and thus created the foundation of scientific medicine. He argued that the disease was not a punishment imposed by the gods, but was determined by environmental factors, diet, and heredity. Hippocrates was the first to raise awareness of medicine as a science. He argued that the body is a single whole and stressed the importance of preventive and predictive medicine, encouraging physicians to encourage collaboration with patients. Hippocrates also formulated the first standards and ethical rules to be followed in the medical profession, which are still valid today. This "father" of rational medicine assimilated the accumulated knowledge from the past and formed a diagnostic system based on clinical observation and logical conclusion. He attributed diseases to natural causes, believed in the healing power of nature, and placed special emphasis on the prevention and prognosis of disease outcomes. He treated patients as psychosomatic entities (holistic medical approach) in relation to their natural environment (Marketos and Skiadas 1999).

Hippocrates assumed that mental disorders are the result of a diseased brain and that a "crazy man" is actually a sick man. He insisted that the doctor must

know the conditions in which the patient lives (Anonymous 2020). Hippocrates introduced the concept of "crisis", which is a turning point in medicine in which the disease either kills the patient or the natural healing processes end in improvements (Guidolin et al. 2019)

Hippocratic medicine provided the basis for strict professionalism, discipline, and strict practice (Garrison & Fielding 1966). It recommends a constant good mood, honesty, calmness, comprehensibility, and seriousness to the doctors (Margotta 1968). He considered work to be a more appropriate remedy, and he was often quoted with "Let food be your medicine, and medicine be your food" and "Walking is man's best medicine" (Chishti 1988). He also claimed that all diseases originate from the gut (Round & Mazmanian 2009).

In this paper, we will present some of the principles of Hippocratic medicine and their advantages and disadvantages, and see if we have moved away from Hippocratic principles in modern medical practice.

PROFESSIONALISM, ETHICS AND THE HIPPOCRATIC OATH

Hippocrates formulated the first standards and ethical rules to be followed in the medical profession, which are still valid today. Hippocratic medicine was notable for its strict professionalism, discipline, and strict practice (Garrison 1966). In his work "On Doctors", he recommends that doctors always be in a good mood, honest, calm, understanding, and serious (Margotta 1966).

Although it has been noted that the author was not Hippocrates (Smith 2005), the famous, ancient medical rule attributed to Hippocrates is *Primum non nocere* ("first, do no harm") (Anonymus 2020a). Another way to interpret it is that "given the existing problem, it may be better not to do something or even do anything than to risk doing more harm than good." It reminds physicians to consider the possible harm that could result from any intervention (Anonymous 2020a).

The question is whether nowadays enough attention is paid to the consequences of certain therapeutic procedures, especially in patients suffering from incurable diseases with a poor prognosis, which can cause them more harm than good?

The oath, more than any other work in the Hippocratic collection, has surpassed the centuries and is still one of the symbols of the medical profession. Despite its age, it still provides insight into some issues of medical ethics (Petit 2002).

Nowadays, there is a contradiction between the Hippocratic oath and the law. For example, while the oath prohibits abortion and euthanasia, abortion for up to 20 weeks is legal under the Abortion Act, and euthanasia is legal in certain countries (Miles 2009).

When assessing its importance in modern psychiatry, the oath seems to be contrary to existing laws. The oath ensures confidentiality and in the case of child sexual abuse, where the child and family are reluctant to disclose information, if psychiatrists follow the oath and remain secret, they would find themselves in danger of being imprisoned. According to the Law on the Protection of Children from Sexual Offenses, information on sexual abuse of children should be immediately reported to the competent authorities, and denial of such information may result in a fine and imprisonment of up to six months (Vishal 2019). The Supreme Court of the United States of America (USA) rejected the oath as a guide to medical ethics and practice, claiming that the oath is not able to cover the latest achievements and methods of medical practice and research (Kumar 2010).

From these examples, we can conclude that today, with the advancement of medicine, the Hippocratic oath has remained only a myth and has been completely obsolete, while ethical principles are dictated by the laws of states.

THE BODY AS A SINGLE WHOLE – HOLISTIC MODEL

Hippocrates treated patients as psychosomatic entities which today represents a holistic approach. Holistic medicine approaches diagnosis and therapy based on the assumption that the disease can affect the whole being, mind, and body (Corsini 2002).

The organism must be described in terms of wholeness, not in individual parts. The basic assumptions are:

- The whole consists of the sum of parts,
- The nature of the parts is determined by the whole,
- Parts cannot be understood independently of the whole,
- There is a dynamic interdependence of parts (Jakovljević 2008).

Holistic medicine is based on the assumption that body, mind, and spirit function in harmony and that the detrimental effect on one part has a negative repercussion on the other part. This approach seeks to treat the whole person to whom the harmonious balance, i.e. the state of mental and physical health, will be restored (Corsini 2002).

A medical interview is a more complex process than taking information to make a diagnosis and is an extremely important factor in establishing a doctor-patient relationship. It is a great opportunity for the patient to share information about themselves with the doctor and for the doctor to get to know the patient as a person, and not just as a medical problem or diagnosis. By understanding the patient as a person and their expectations of the doctor, the doctor can determine what is best for the individual and be satisfied with the establishment of a healthy relationship with the patient. There is more and more talk about person-centered medicine. The earliest roots of person-oriented medicine are present in ancient civilizations, both Eastern (eg Chinese, Ayurvedic) and Western (especially Ancient Greece), which emphasized a holistic approach to the person, health, and disease. This concept is also expressed in the definition of health of the World Health Organization (WHO 1946) as well as in a personalized approach to health care. Unfortunately, the modern development of medicine has pretty much neglected these historical concepts and focused on disease, superspecialization, and fragmentation of services as well as the commercialization of the field.

What is medicine today and to what extent is it knowledge, art, and skill? To what extent is it a humanized activity of comprehensively seeking and restoring ways of the interactive doctor-patient relationship to achieve better health or restore impaired health? The changes have unfortunately reduced attention to the whole of a person, as a natural goal of medical science and practice, as well as to ethical imperatives that promote the autonomy, responsibility, and dignity of each person. But in the past few decades, at the same time, the movement to return to the approach to a person as a whole, i.e. the biological, psychological, social, and spiritual aspects of health and disease, is becoming stronger (Braš et al. 2011).

CARE AND PROGNOSIS

One of the advantages of Hippocratic medicine was its emphasis on disease prognosis. The focus was on care and prognosis rather than diagnosis. In the time of Hippocrates, medical therapy was quite immature and

often the best that physicians could do was to assess the disease and predict its likely progress based on data collected in detailed medical histories (Garrison 1966).

For a large number of scientists, the prognosis of the disease is the main scientific achievement of the Hippocratic tradition. The earliest treatise on this topic, "On Prognostics", defines prognosis in a broad sense as predictions of the present, past, and future of patients. This definition makes it clear that prognosis refers not only to predicting the future, but also includes acknowledging the continuity of past, present, and future as a series of related events or trajectories that can be put together into a comprehensive patient health story. In modern medicine, the prognosis has lagged behind diagnosis and treatment as a central component of medical care. An important basis for understanding this lies in the paradigm shift that has occurred with the discovery of pathogens as the cause of disease and the diversion of attention to individual diseases. With this shift, diagnostics and treatments have progressed dramatically, so the prognosis of the disease has lost its significance.

Today, disease prognosis focuses on narrower uses of terms, such as life expectancy estimates and mortality risk, but physicians are hesitant to use such estimates in treating patients, while patients emphasize a desire for a wide range of information. By adopting the breadth of the Hippocratic principle, it can enable physicians to overcome indecision and provide much-needed information to their patients (John 2019).

Mental disorders as a result of a diseased brain?

Hippocrates assumed that mental disorders are the result of a diseased brain and that a "crazy man" is actually a sick man. One of the main arguments in favor of reconceptualizing mental disorders as brain disorders are that psychiatry seems more like other branches of medicine and reduces the stigma associated with "mental" illness (Banner 2013). There has been much astonishing progress in our understanding of neuroscience, genetics, and epigenetics, and neurodevelopment, but there is no single identifying biomarker for any mental disorder (Stein 2010). As advances in neuroscience and genetics reveal complex links between brain structures, functions, and symptoms of mental disorders, calls have emerged to reconfigure psychiatric classifications to conceptualize mental disorders as brain disorders. I argue that this view is wrong and that the level at which we identify a person's mental disorders is not the brain (Banner 2013).

The notions of shame and guilt are central to depression; child abuse or neglect and socioeconomic factors such as unemployment are strong predictors of mental illness. Undoubtedly, these factors have effects on the brain, perhaps altering certain nerve pathways from the way they would otherwise develop. However, this does not imply the existence of established brain pathologies associated with such complex sociocultural and psycho-

logical factors. "They have effects on the brain, but brain effects vary by class of individuals in ways that depend on other environmental and genetic contexts" (Kim et al. 2011, Murphy 2010).

Take, for example, a person who is a single parent with low-paid service work that provides few opportunities. They go to their general practitioner complaining of fatigue, feelings of helplessness and hopelessness, loss of appetite, and loss of pleasure. A diagnosis of depression would not be surprising under these circumstances, and the probable outcome is to offer antidepressants and possibly psychotherapy. Here it can be argued that the patient has lowered serotonin levels in his brain, and therapy with selective serotonin reuptake inhibitors can help them remove the black and gloomy feelings that have descended on them. But is that where we think the place of the disorder is? Is the brain corrupt in any way? It is socially acceptable to list stress as a cause of fatigue or hypertension, and psychological trauma is known to cause striking physiological reactions. However, the idea that someone's symptoms may be psychological in a certain sense continues to create a stigma (Banner 2013).

This does not mean that biological explanations are ignored or social and psychological causes are abandoned; on the contrary, many attempts to develop biological explanations explicitly seek to explain the causal influences of the social and psychological environment, finding visible influences on brain function (White et al. 2012). Although there are controversial opinions regarding this claim of Hippocrates even today, after the huge progress of medical technology compared to his time, again it cannot be scientifically proven that mental disorders are a sign of a diseased brain or not.

PHYSICAL ACTIVITY AND FOOD AS A MEDICINE

Hippocrates considered work to be the most appropriate medicine, and many quote him with "walking is man's best medicine." More than 2,500 years ago, Hippocrates noticed the potential health benefits of daily exercise of moderate intensity, such as a simple walk (Kokkinos 2012).

Regular physical activity can improve health and reduce the risk of premature death in the following ways: by reducing the risk of developing coronary heart disease (CHD) and the risk of dying from CHD, by reducing the risk of stroke, by reducing the risk of another heart attack in people who have already had one, reducing the total blood cholesterol and triglycerides and by increasing the concentration of 'good' high-density lipoprotein (HDL), by reducing the risk of developing high blood pressure, helping to lower blood pressure in people with high blood pressure, reducing the risk of developing insulin-independent diabetes (NIDDM-type 2), reducing the risk of developing colon cancer, helping to achieve

and maintain a healthy weight, reducing feelings of depression and fear by improving psychological stability and reducing sensitivity to stress, helping to build and maintain healthy bones, muscles and joints, helping the elderly to be stronger and move easier without falling and severe fatigue (Heimer et al. 2006). These data agree with the data of the World Health Organization, which recommends daily physical activity of moderate intensity for at least half an hour, carried out at once or in several smaller segments. Therefore, daily exercise or exercise at least three times a week, for one hour, is the best, simplest, and cheapest medicine (Bungić et al. 2009).

Several epidemiological studies have shown that exercise and physical activity can prevent or delay the onset of various mental disorders and have therapeutic benefits if used as a stand-alone or adjunctive treatment for mental disorders (Zschucke et al. 2013). In the adult U.S. population, regular physical activity is associated with a significantly reduced incidence of depression, panic disorder, agoraphobia, social phobia, and specific phobia (Goodwin 2003).

Different mechanisms of action during physical activity and exercise in psychiatric patients were discussed. Numerous acute changes occur at the neurochemical and physiological levels during and after exercise. Exercise has been found to normalize reduced levels of brain-derived neurotrophic factor (BDNF) and therefore have neuroprotective or even neurotrophic effects (Seifert et al. 2010). Potential psychological mechanisms of action include learning, changes in body patterns and health attitudes/behaviors, social empowerment, mastery experience, shifting the external locus of control toward more internal, improved coping strategies, or simply distractions (Brown et al. 2003, Stathopoulou 2006).

Aerobic and anaerobic exercise have been found to be similar to cognitive-behavioral therapy and to be more effective than most other anxiety reduction activities (Wipfli et al. 2008). One of the first studies compared running and walking in patients with panic disorder, finding a reduction in symptoms after eight weeks, and a negative correlation between increased fitness and anxiety outcomes (Sexton et al. 1989). In bipolar disorder, exercise helps manage mood fluctuations on the one hand, but on the other hand, there is no specific risk of exacerbation of manic symptoms (Wright et al. 2012). Studies have shown a positive effect of exercise on some eating disorders (Zschucke et al. 2013). Exercise of all kinds is also useful for slowing down cognitive decline, the best effects can be found by exercising with moderate intensity (e.g. brisk walking) for at least 30 minutes, five days a week (Denkinger et al. 2012).

Have et al. (2011) in their epidemiological study, after three years of follow-up, reported that patients, who engage in regular physical activity, are more likely to recover from mental illness (Have et al. 2011). Prospectively, the overall incidence of mental disorders and comorbid mental disorders, as well as the incidence of anxiety,

somatoform, and dysthymic disorders, decreases with physical activity (Ströhle et al. 2007).

Patients with mental disorders show high comorbidity of physical conditions such as respiratory, metabolic, cardiovascular, and neurological diseases (Lin et al. 2011). Many of the comorbidities mentioned are associated with being overweight, smoking, and unhealthy lifestyles (Scott et al. 2011). Therefore, life interventions based on diet and exercise are promising approaches to reduce physical comorbidity in people with mental disorders (Chacón et al. 2011).

If we know the positive effects of exercise and physical activity on both the somatic and mental state of the patient, the question arises whether we recommend physical activity to patients enough or have we fallen under the influence of the pharmaceutical industry and rely more on pharmacotherapy (Pajević et al. 2017)?

"Let food be your medicine, and let medicine be your food", all diseases start from the intestines

This phrase, often attributed to Hippocrates (400 BC), is used to emphasize the importance of diet for the prevention or cure of disease (Witkamp & Norren 2018). Hippocrates believed that all diseases originate from the gut (Round & Mazmanian 2009).

Scientists have discovered a new organ in the human body that governs every aspect of human health. Namely, it is a microbiome that involves a community of bacteria, fungi, and viruses that live in the gut. The composition of the microbiome may be crucial for a healthy immune response or predispose to disease (Round & Mazmanian 2009). The composition of the microbiome is mostly influenced by diet (Begenmark 2013). Autoimmune diseases are particularly prevalent in the Western world because it is significantly damaged by microbiome nutrition. In an Italian study from 2010, scientists compared stool samples from children from African tribes with children from Europe and noticed significant differences. Children from African tribes who still eat like their ancestors (a plant-based diet rich in fiber) do not suffer from autoimmune diseases at all (allergies, asthma, eczema, rheumatoid arthritis, psoriasis, multiple sclerosis) unlike children in Europe. This significant difference is attributed to the microbiome. Scientists believe that butyric acid, which is produced by good bacteria from fiber-rich foods and protects against inflammation, plays a major role (de Filippo et al. 2010).

Foods that create a healthy microbiome are foods rich in polyphenols and these are fruits (grapes, blueberries, raspberries, blackberries, currants), vegetables (tomatoes, spinach, kale), dark chocolate, green tea, foods that contain healthy fats such as avocado, olive oil, coconut oil, nuts, fish, free-range chicken, fermenting foods (kefir, kombucha) (Hayek 2013). The importance of the creation of useful substances in the intestines during the intake of substances rich in polyphenols

and their influence on the reduction of cardiovascular diseases was published in the *British Medical Journal* in 2003 under the title "A Strategy to Reduce Cardiovascular Disease by More Than 80%".

Namely, daily consumption of foods rich in polyphenols (dark chocolate, garlic, almonds, vegetables, grapes) reduces the risk of cardiovascular disease by more than 75% (Franco et al. 2004).

Foods that feed bad bacteria in the intestines and that should be avoided are chips, french fries, bread, white rice, different types of biscuits, and crackers, sugar.

A study by the Department of Twin Research and Genetic Epidemiology at King's College London in London in 2016 found that the bacteria produced by ingesting these foods were clearly linked to the occurrence of immune and other diseases (Jackson et al. 2016).

In the last decade, an epidemiological study that investigates the connection between dietary patterns and mental states has been constantly increasing. Studies have shown that the more Western or highly processed foods are eaten, the greater the risk of developing psychiatric symptoms, such as depression and anxiety. In contrast, the more Mediterranean food is eaten, the more is one protected from the development of the mental disorder (Jacka et al. 2012).

Two-way communication between the intestinal microbiome and the brain has been shown to affect neurotransmission and behavior that is often associated with neuropsychiatric conditions, and also the microbiome is associated with multiple systemic pathologies and obesity (Carding et al. 2015).

It is clear that food can play an important role in preventing or curing the disease but from a regulatory point of view, the big difference between food and medicine stems from the primary goal of the diet, which is to provide essential nutrients that allow normal development and functioning of the whole human body. This is a major difference from drugs, which are mainly developed to treat or prevent disease (Kruizenga et al. 2016).

CREATIVE PSYCHOPHARMACOTHERAPY AND ECOPSYCHIATRY

Although both psychiatry and psychopharmacotherapy have advanced today, sometimes we cannot achieve the desired results in treating patients. What to do at that moment? During the education in Creative Psychopharmacotherapy, we realized that therapeutic communication and the creative satisfaction of needs are important in the therapeutic relationship with patients and in the recovery itself. Communication is crucial for meeting biological and psychosocial needs, on which the experience of oneself and the environment largely depends. A person is born with a set of needs and depending on how their needs are recognized and met, they develop the experience of themselves and the world, that is, their existential position. Mental health is associated with positive

motivation, a focus on positive goals, and the creative satisfaction of one's needs. Motives are incentives that drive a person's activities and direct them towards a certain goal, maintain that activity, and increase its intensity. The need for stimulation is a fundamental need of the nervous system and brain for normal functioning. Deprivation of stimuli leads to degenerative changes in the nervous system. The need for excitement is an important driver of behavior. The need for stimulation and excitement can manifest in a variety of ways including the need for change and fun. Therapeutic communication includes positive stimulation and motivation of the patient. A person has a persistent need for contact, belonging, love, and respect. Satisfying the need for contact, intimacy, and belonging through therapeutic communication helps patients overcome feelings of alienation, loneliness, and abandonment. The need for recognition can manifest itself as a need for self-esteem and a need for respect by others. The human brain needs to organize and structure the experience. In therapeutic communication, the patient feels safe, respected, and accepted by the doctor (Jakovljević 2016, 2021)).

How could we use the principles of Hippocratic medicine creatively in therapeutic communication with patients?

It is obvious that some of Hippocrates' principles have been neglected today. At least some of the principles can be used in today's treatment. Hippocrates considered work and physical activity as the most appropriate medicine.

Attending several psychiatric congresses and workshops, where we also had case reports of certain patients, it was noticed that of all the case reports, only one case report in a patient in therapy recommended physical activity or walking. The outcome of the treatment was successful.

We wonder why in today's findings from doctors, we can rarely see instructions to patients for physical activity? Why don't we give patients work assignments? If we use creativity and give a certain task to the patient in a creative way, we reach a therapeutic agreement that the patient will want to fulfill and come to the check-up in a better mood for at least two reasons. One is that the patient will be happy that he fulfilled the agreement and thus showed respect to their doctor and the other is that we have scientifically proven that physical activity or work will have a beneficial effect on both the physical and mental health of the patient because it triggers potential mechanisms of action mediated by increased neurogenesis and decreased allostatic load (Sylvia et al. 2010).

At the Clinic for Psychiatry in Tuzla, we creatively use the principle of Hippocratic medicine: "Work as the most appropriate medicine" in therapeutic communication with patients through an ecological approach called "Ecopsy psychiatry", under the slogan presented in the media to the general public: "Cleansing nature improves your mental health." Namely, at the clinic and especially at the

Department of Social Psychiatry under the leadership of doctors and medics, work actions are organized with the participation of patients who were hospitalized at that time or were hospitalized at that time, but also patients who are treated on an outpatient basis and attend group psychotherapies. The purpose and goal of ecopsychiatry are explained to the patients in the ward, and no one is conditioned to be involved in work actions. Mostly, work actions are based on cleaning the surroundings of the clinic and work actions are always attended by several members of the therapeutic team belonging to the medical staff. Ecopsychiatry is based on three goals:

- Enlightening and educating the public that the natural environment in which each individual lives is extremely important and essential for good mental health; that by cleaning nature - the environment from everything destructive and harmful to the environment and by preserving nature, we protect our mental health and take care of it.
- Build a relationship based on partnership and cooperation with patients, users of mental health services, citizens, civil society, the city of Tuzla, and the authorities of Tuzla Canton, to establish an "Eco Park" as one of the best ways to bring psychiatric services to individuals with psychological problems as well as those who want to improve their growth and development, develop capacities and improve coping strategies with life problems.
- Promote solidarity, volunteerism, and reciprocity in the field of preservation and care for mental health, and reduction of stigma and discrimination of persons with mental disorders as well as health institutions that provide the treatment and general care for the mental health of the entire population (Hasanović et al. 2016).

It brought together for the first time the psychiatrists, nurses, psychologists, therapists, social workers and other employees of the Clinic for Psychiatry and UCC Tuzla, doctors and other health workers from the Health Center Tuzla and other municipalities, citizens of Tuzla municipality, persons disabled during the war and demobilized fighters from the area of Tuzla Canton, ORVI Srebrenica, beneficiaries from the associations "Fenix" and "Stećak", the Club of Treated Alcoholics, students of the Faculty of Medicine and other faculties of the University of Tuzla, students of medical and other high schools, members of several citizens' associations, citizens of local community Solina, youth associations of political parties SBB, SDA, and SDP, members of the Association of High School Students of BiH (ASU BiH), OB Tuzla, employees of "Bosnalijek", "Krka", the Ministry of Health of the Government of Tuzla Canton and other citizens from the area of Tuzla Canton. It can be said that the spirit of togetherness, solidarity, and some inexplicable connection among all participants flooded the space where this complex activity was carried out (Hasanović et al. 2016).

By actively participating in these work actions, we gained the belief that ecopsychiatry helps our patients in this way. Why? During each work action, one of the doctors is present, patients feel the full support of the doctor, and the therapeutic relationship improves. If they have their negative thoughts, they focus on work and, in that way, they are able to relax. They regulate the environment that is seen with each approach to our clinic and they feel more useful and thus raise their self-confidence, and we know that the feeling of worthlessness is one of the important problems in mental illness. We can say with certainty that ecopsychiatry has a positive impact on the mental and physical health of patients, it is shown to us by patients themselves and as evidence of this can be better sleep, better socialization, reduction of hypnotics and sedatives, reduced hospitalizations, patients happily attending our weekly psychosocial group gatherings. Patients bring their tools and accessories and come from places as far as 60 km away from the Clinic.

CONCLUSION

Some of the principles of Hippocratic medicine and the theses used by Hippocrates are presented. Although there are controversial opinions as to whether Hippocrates stated some theses or not, and controversial views on some of his principles, he is often called the "father" of medicine, who laid the foundations in medicine as a science. Hippocrates gave recommendations on the doctor's behavior towards the patient, which have remained relevant to this day. Hippocrates' holistic approach to medicine, which was previously unjustifiably neglected, is becoming more and more relevant. The application of the Hippocratic oath today depends on the dictation of the legislation of individual states; today there are legal solutions in some states that are often contrary to it. Hippocrates claimed that mental illnesses are a sign of a diseased brain, and for this principle, today's medicine is not completely contrary, because it has not been proven that mental illnesses are a sign of a diseased brain, but neither are they. He also gave importance to food, it is often mentioned that he considered food as medicine and that the disease came from the intestines. Today's research is increasingly focused on the impact of food on both mental and physical health, and there are recommendations as to which foods are desirable but which we should avoid. Despite the proven positive effects of food on health, it seems that today's population believes more in pharmacotherapy and is pessimistic about the impact of diet. The reason for that could be the lack of education by health workers. The prognosis of the disease was important to Hippocrates, while today it is put in the background. Hippocrates considered work and physical activity as the most appropriate medicine. Creative psychopharmacotherapy is based on therapeutic communication and the creative satisfaction of needs in the therapeutic rela-

tionship with patients and in the recovery itself. At the Clinic for Psychiatry in Tuzla, we creatively use the principle of Hippocratic medicine: "work as the most appropriate medicine" in therapeutic communication with patients through an ecological approach called "Ecopsychiatry", under the slogan presented in the media to the general public: "Cleansing nature improves your mental health." Today's medicine has advanced with the development of medical technologies and seems to have partially moved away from the principles of Hippocrates, which are also the foundations of medicine. As the saying goes "A house is built from the ground up and is as strong as its foundations are".

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Contribution of individual authors:

Anel Brigić: conception and design of the manuscript, collecting data and literature searches, analyses and interpretation of literature, manuscript preparation and writing the paper; and gave final approval of the version to be submitted.

Mevludin Hasanović: made substantial contributions to conception and design, literature searches, participated in revising the manuscript and gave final approval of the version to be submitted.

Izet Pajević: made substantial contributions to conception and design, and interpretation of data, participated in revising the manuscript and gave final approval of the version to be submitted.

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Jasmin Hamidović: participated in revising the manuscript and gave final approval of the version to be submitted.

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