

COMPLEMENTARY AND ALTERNATIVE MEDICINE IN THE TREATMENT OF SCHIZOPHRENIA

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SUMMARY

During the past century, many scientific discoveries and industrialization greatly contributed to the progress in medicine and significantly improved a quality of life of psychiatric patients. Schizophrenia is a serious mental disorder. Due to synthesis of numerous high quality antipsychotic medications, a great progress in the treatment of it has been made during the last 50 years. In five thousand years of the recorded history, it is known that in the early times, people used different methods and procedures in the treatment of various psychiatric disorders including schizophrenia. In recent decades after great discoveries, medicine based on facts has also faced a number of disappointments. The medicine gradually begins to understand that some of the alternatives used earlier in centuries are complementary methods that were unnecessarily suppressed and excluded from the treatment. On the other hand, a number of countries where this is legally possible is growing and there is also an increasing number of patients seeking alternative and complementary methods in the treatment of schizophrenia.

The aim of this paper is to encourage and reflect upon the meaning of alternative and complementary methods in the treatment of schizophrenia as well as to try and prevent forgetting their meaning whenever it is justified and based on facts.

Key words: schizophrenia – complementary and alternative medicine

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INTRODUCTION

In the course of education at a medical school and specialization in neuropsychiatry, various books, which were used by students during their studies, noted that psychological disorders are treated by different biological, psychological and socio-therapeutic methods. In recent decades, "the modern psychiatry" has introduced herbal medicine and spiritual therapy for the treatment, while in recent years physicians have often mentioned alternative and complementary methods in the treatment of psychiatric disorders including schizophrenia. Furthermore, in the latest edition of the American Psychiatry, "Synopsis of Psychiatry", the 29th chapter titled „Complementary and Alternative Medicine in Psychiatry“ elaborates and describes 44 alternative and complementary methods in the treatment of mental disorders (Caplan & Sadock 2007).

Medicine, which today some call an alternative medicine, is as old as mankind, while the written documentation on treatments dates back

5000 years. For example, ancient Chinese and Egyptian history abounds with records of natural medicine - from herbs to acupuncture treatments, providing valuable data for a person's healthcare even today. For thousands of years, only natural remedies and alternative methods were available to people for treating diverse psychological problems. Alternative medicine (AM) is now a term that implies other types of treatments, except for conventional, i.e. formal, orthodox medicine. Today for this type of a treatment, a better term to use is complementary, which supplements the modern medicine in ways of treatments, lead by different principles whose results and success are evident.

After the rise of a pharmaceutical industry in the last century and significant progress in the treatment, a period of disappointment comes in accepting the fact that synthetic drugs are not almighty. Due to this fact, there has been a growing interest in the last decades for the treatment of psychiatric disorders including schizophrenia by using alternative and complementary methods.

COMPLEMENTARY AND ALTERNATIVE MEDICINE: PRO ET CONTRA

Using the benefits of many scientific discoveries over the past century, the pharmaceutical industry has made a significant progress and synthesized a number of very good quality psychoactive drugs that have significantly enhanced the recovery and improved a quality of life of schizophrenic patients. At the same time, in many developed countries, there is suppression and rejection of natural remedies and methods that were available to people for thousands of years and whose efficiency and effectiveness is indisputable. Some people, especially the Chinese, never stopped using herbal remedies in folk medicine. Unlike in Western methods of treatments, they still use traditional recipes, which are often a few thousand years old.

Despite an increase in material prosperity and the growing success of medicine in recent decades, there is an increase in mental disorders. The situation in psychiatry is such that it has better resources for the treatment than ever before, while discovery of the diseases either by the quality or quantity has never been wider (Sartorius 2006).

On the other hand, we have increasing expectations for healthcare quality and dissatisfaction of psychiatric patients who not only wish for the disappearance of the symptoms but also want to continue a normal life with their families and community (Jakovljević 2005). However, due to frequent disappointments in synthetic drugs, particularly due to serious and unpleasant side effects including high prices, in recent years we have witnessed an increasing growth of alternative and complementary methods in the treatment of mental patients. Today we can no longer ignore the global trend of the return of alternative and complementary methods. From Canada and the USA, over a number of European countries to Israel and China, many universities legally conduct research on chiropractics, massage, acupuncture, homeopathy, iridology and many other types of alternative medicine. The doctrine of the treatment of psychiatric patients that has been multi-dimensional and integral in recent decades also contributed to this. Furthermore, the treatment uses more therapeutic procedures affecting the patients and the environment. In addition to synthetic remedies, natural remedies prescribed either

individually or in a combination with synthetic drugs have an increasingly important role. Dissatisfied with the possibilities offered by traditional medicine and synthetic drugs, many psychiatric patients seek help from so called healers with suspicious knowledge and moral. They also seek help from exorcists, spell breakers, herbalists, and other various individuals (Jakovljević et al. 2002, Babić 2007).

According to the World Health Organization (WHO) data, in recent decades about 80% of people in the world have relied on herbs in satisfying their needs for a better health where consumption of herbal remedies has increased in the most developed countries such as, Germany, France, Italy, Japan, Australia, even the USA. The data show that more than 1/3 population in the United States has tried a natural remedy at least once in their lifetime. It is estimated that "Americans" pay 425 million visits per year to "an individual practicing alternative medicine", which is a higher number of visits they pay to a general practice physician. There are about 20000 medicinal plants where 1100 have been well researched, and 250 species of medicinal plants are used for obtaining modern drugs in medicine. According to WHO data, homeopathy is by the number of users the second method of treatment in the world.

While ideas about legal work of individuals practicing alternative medicine in Bosnia and Herzegovina are still in their infancy, in developed European countries the state has assigned the rules of the game: the ways of financing are determined and law defines who can practice alternative methods of a treatment. There are more prestigious medical institutions around the world today that offer an integrative and complementary approach in the treatment by using synthetic and natural medicines. Curriculums in many medical schools have subjects on natural and traditional methods of the treatment. Many natural medicines have already been synthesized by pharmaceutical industries and are often tested in controlled clinical trials. In addition to their efficacy, they show that even natural medicines have side effects and possible interactions with synthetic drugs (Jakovljević et al. 2002)

There is no doubt that classical medicine has resulted from a natural medicine, but over the past century, it has completely and without a reason drifted away from its source. The fact is that many

drugs in the officially acknowledged medicine were originally obtained by a natural and not a synthetic route. During the past decades, there has been a gradual shift and a partial return to “mother nature” as well as a reuse of everything from nature, which despite the long period of time, has remained useful. Numerous controlled clinical studies have in some cases shown a greater efficiency of alternative methods compared to placebo and equal effectiveness in comparison with some psychoactive chemical drugs. They have demonstrated unquestionable effects, good tolerability, and a known mechanism of action with very mild and rare side effects. As such they can be used in a daily practice in treating mental disorders.

Alternative therapies are often called holistic. This means that the therapist heals the “entire” person, not just the symptom, disease or a condition. Modern medicine is too sub-specialized and sometimes so much that it often loses the individual as a unit. Unlike some other psychiatric disorders (anxiety or depression, addiction), there is no independent alternative medicine treatment for schizophrenia and it is best to talk about complementary medicine and complementary methods in the treatment of schizophrenia.

Given the seriousness of the disease and the lack of high quality studies on alternatives for a conventional treatment, it is best to first seek help from a conventional care psychiatrist. After the conventional treatment, an individual may consult with a qualified complementary and alternative medicine practitioner (CAM) of a healthcare practice to determine whether adding complementary alternative therapies to the treatment can be recommended. There is a lot of evidence that complementary alternative medications with a conventional treatment may reduce a dose of antipsychotics, accelerate stabilization of the disease, reduce the length of remission as well as cure co-morbid somatic diseases.

According to the European Commission experts’ report on the distribution of alternative medicine in Europe and its legal status from 1998, there are three types of countries. The largest part is located in a so-called monopolistic system, where it is permitted to practice only modern and scientifically based medicine. However, - according to the conclusion - a general trend in the EU and beyond is a growing acceptance of alternative

methods and their inclusion into a healthcare system. The majority of alternative therapies exist outside medical centers and offices, and there is an increasing number of doctors who refer their patients to “colleagues who practice alternative medicine.” There are integrated clinics in the US where doctors and those practicing alternative medicine work together, however, such clinics here still do not exist. The concept of AM is much deeper than using medication and therapy, which is insisted by the modern medicine. While conventional medicine is strictly based only on a physical symptom, AM takes into account the condition of a body and soul. Patients often turn to alternative when conventional methods prove insufficient, or when conventional medicine has no cure. AM helps to ease pain, reduce stress and tension, free the body of deadly viruses and parasites and it increases the organism’s natural resistance to fight against diseases.

Countries that have monopolistic systems include: Austria, Belgium, France, Greece, Iceland, Italy, Lithuania, Luxembourg, Malta, Poland, Portugal, Spain and Ukraine. States with a tolerant system only recognize official medical treatments, but their legislation recognizes some types of alternative medicine treatments. Three European countries where such forms of treatment are practiced include Germany, United Kingdom and Ireland. The third group of countries has a mixed system with individuals who have completed a school or got certified by attending alternative medicine courses. They can legally engage in the treatment of patients. These countries are Denmark, Finland, Hungary, Liechtenstein, Netherlands, Norway and Sweden.

What is the situation in Bosnia and Herzegovina? The existing law on health care does not regulate in any part of it either “paramedicine” or CAM. The Ministry says that according to the new draft of the Law on Health Protection and Regulation, AM encompasses traditional and alternative methods and procedures for diagnosis, treatment and rehabilitation, which have a beneficial effect or that may beneficially affect human health or the health condition of an individual, which so far with a valid medical doctrine, have not been covered by health care services. After the law is adopted, the Ministry will regulate the methods and procedures of AM in health care institutions.

THE MOST COMMON COMPLIMENTARY METHODS USED IN THE TREATMENT OF SCHIZOPHRENIA

Omega 3 – fatty acids (DHA and EPA)

This is recommended as a complementary therapy to a standard psycho pharmacotherapy with various forms of depression, and in the treatment of a bipolar affective disorder and schizophrenia, as well as for those who work in stressful environments. The popularity of this supplement is based on the fact that the Eskimos, despite the intake of extremely fattening foods, are protected of a heart disease due to multiple unsaturated fatty acids known as Omega 3. Research shows that people with schizophrenia can have up to 25% reduction in symptoms when taking Omega-3 (Emsley et al. 2003). Omega 3 fatty acids (FA) have a major role in the way we think and feel (Amen, 2003; Amen, 2007). The recommended dose is 1-2 grams for the prevention and 4-6 grams a day for the treatment.

Ginkgo – Ginkgo biloba

The representative of the Ginkgocea family was the only one that survived the ice age and the atomic bomb in Hiroshima. It has been very popular in the Western medicine and it received a name "the antidote for the fear of aging." The active substances are glycosides (bioflavonoides), which are strong antioxidants and may slow down blood clotting and glycolides that improve blood circulation and have protective effects on neurons (Kulier 2000). It alleviates or eliminates the symptoms of dizziness, headache, memory deficiency, lack of concentration, insomnia, moodiness, feelings of anxiety and fear (Itil TM. et al. 1996). It is also used in the treatment of dementia, depression, dizziness, migraine and impotence with vascular types. In a combination with standard antipsychotics it is recommended for schizophrenia. There are studies that show improved efficacy and reduced extra pyramidal side effects. The usual dose is 360 mg / day (Olson S. 2000).

Lecithin

Lecithin is a fundamental substance in cell membranes. When there is shortage, the membrane

becomes weak, especially the brain system. Therefore, it can be used when there is a reduction in concentration and memory. It has a much broader function in protecting other cells in our body and a soothing effect on the nervous system. It also reduces the amount of cholesterol, cleanses the walls of blood vessels, and increases the work of the heart muscle. The recommended dose is 1-2 capsules of 1250 mg a day.

Glycine

There are several studies that show that nonessential amino acid glycine increases the activity of neurotransmitters and reduces the negative symptoms of schizophrenia when used with an antipsychotic therapy, especially with haloperidol, thioridazine and perphenazine (Waziri 1996, Heresco et al. 1999, Javitt et al. 1994). In the treatment of schizophrenia, the recommended dose is 40-90 grams per day (Kaplan & Sadock's 2007).

Gluten

Diet that has no gluten (from wheat) and casein (from milk) improves a condition in schizophrenic people. Dr. Curtis Dohan and his followers in the three studies examined the relationship between nutrition and mental illnesses, especially schizophrenia. From 65,000 respondents in Papua, the Solomon Islands and Micronesia there were only two recorded cases of schizophrenia, while the expected number in the same sample in Europe would be 130. This prompted them to conduct a thorough research that showed that these people do not eat cereal. Radical scientists believe that schizophrenics whose disease is not hereditary, can significantly improve their condition if they remove bread, rice paste, starch and refined sugar from their diets (Potkin et al. 1981, Ross-Smith Nero 1980).

Multivitamin products

For the majority of patients suffering from schizophrenia it is recommended to use multivitamin products due to their poor diet. People do not produce vitamins - vitamin D is an exception - and they must be taken from an outside source to properly feed the brain and other organs. B vitamins have an integrative role in functioning of the nervous system. They help the brain in the synthesis of neurotransmitters, which affect mood

and judgment and can be useful in the treatment of schizophrenic patients. Vitamin C plays an important role in the synthesis of a norepinephrine neurotransmitter, and neurotransmitters are of critical importance for the brain and can affect behavior. Vitamin C is also a very effective antioxidant. Vitamin E stabilizes the fatty membranes in the brain and protects it from a damage that occurs through the formation of free radicals in cells and thus it slows down the loss of mental abilities.

INTEGRATIVE PSYCHIATRY

A new type of psychiatry, called integrative psychiatry, selectively incorporates elements of complementary and alternative medicine into practice methods (Caplan & Sadock 2007). Depending on the type of schizophrenia, its phase, or expression of sequelae in a remission phase, the wishes and needs of each patient, the cultural characteristics of the environment in which he or she lives should be considered. It is desirable in some stage of the disease to recommend some form of a complementary therapy. It is certain that there is a large number of patients for whom the modern medicine methods and listed complementary methods may also help such as, some kind of diet and nutritional therapy, herbal therapy, manipulative therapy, or for example energetic therapy. It certainly cannot be harmful if a properly treated schizophrenic patient goes to a bioenergetics massage, takes certain herbal medicine or a multivitamin product. There is growing evidence that this kind of a complementary therapy helps in the treatment.

CONCLUSION

Due to an increasing public interest in complementary methods of the treatment as well as some evidence of their therapeutic effectiveness, it requires doctors not only to have the knowledge but also to be able to appropriately advise. We recommend complementary treatment methods that are proven safe, thoroughly examined and with scientifically confirmed effects. They are not a substitute for traditional methods of treatment. With the appropriate use, the seriousness of the appropriate approach to treatment of schizophrenia is not reduced. They should be recommended with

caution, and consulted with the therapy recommended by the modern medicine to people who do not like or have difficulties accepting "chemical" drugs as an additional therapy to standard psychoactive drugs. It is necessary to continue research and fully examine the effectiveness and the mechanism effects on complementary and alternative healing methods.

REFERENCES

1. Amen DG: *Making a good brain great*. VBZ d.o.o. Zagreb. 2007.
2. Amen DG: *Healing the hardware of the soul*. VBZ d.o.o. Zagreb. 2003.
3. Babić D: *Herbal medicine in the treatment of mental disorders*. *Psychiatria Danubina* 2007; 19:241-244.
4. Bloomfield H: *Healing Anxiety with Herbs*. Thorsons. An Imprint of Harper Collins Publishers, 1998.
5. Emsley R, Oosthuizen P, van Rensburg SJ. *Clinical potential of omega-3 fatty acids in the treatment of schizophrenia*. *CNS Drugs*. 2003; 17:1081-91.
6. Heresco Levy-U, Javitt DC, Ermilov M et al. *Efficacy of high-dose glycine in the treatment of enduring negative symptoms of schizophrenia*. *Arch Gen Psychiatry* 1999; 56:29-36.
7. Itil TM, Eralp E, Tsambis E et al. *Central Nervous System Effects of Ginkgo Biloba, a Plant Extract*. *Am J Therapeutics* 1996; (3)63-73.
8. Jakovljević M: *Mihaljević-Peleš A, Šagud M, Rajačić M: Herbal Medicine in Treatment of Mental Disorders – Medicus*, 2002; 11:263-269.
9. Jakovljević M: *Modern psyhofarmacotherapy and new concepts of treatment: from treatment nihilism to treatment renaissance and complete reintegration*. *Psychiatria Danubina*, 2005; 17(3-4): 243-245.
10. Jakovljević M: *Koncept nove psihijatrije – od liječenja simptoma do savezništva s bolesnikom – Medix*, 2006;(12)51-52. *Psychiatria*. Tenth Edition.
11. Javitt DC, Zilberman I, Zukin SR et al. *Amelioration of negative symptoms in schizophrenia by glycine*. *Psychiatry Am J* 1994; 151:1234-6.
12. Kaplan & Sadock's: *Synopsis of Psychiatry*. Behavioral Sciences/Clinical. LW&W. Philadelphia. PA191006 USA, 2007.
13. Kulier I: *Suplementi u prehrani i sportu*. Zagreb. 2000.
14. Olson S: *Integrative Therapies for Schizophrenia - Tryptophan and Ginkgo*. 2000. www.Life.watch.eap.com
15. Potkin SG, Weinberger D, Kleinman J, et al. *Wheat gluten challenge in schizophrenic patients*. *Am J Psychiatry* 1981; 138:1208-11. *Wheat gluten*

- challenge in schizophrenic patients. Psihijatriju Am J* 1981; 138:1208-11.
16. Ross Smith-P, Jenner FA. Diet (gluten) and schizophrenia. *J Hum Nutr* 1980; 34:107-12 (review). Diet (gluten) and schizofrenia. *J Hum Nutr* 1980; 34:107-12.
17. Sartorius N: *Izazovi suvremene psihijatrije: mentalno zdravlje i socijalni kapital - Medix*, 2006; (12):56-57.
18. Waziri R: *Glycine therapy of schizophrenia: some caveatus. Psychiatria Biol* 1996; 39:155-6.

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