

Man Has Always Been in Motion and Seems to Be Created for Movement: Can Everyday Life in Balance Reverse the Process of Ageing?

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Abstract

If 'returning to nature', greater harmony with nature, working and being in contact with the earth, water and forest, as well as the contemplative aspect - admiration for the beauty of creation, will make it possible to stop or even reverse the ageing processes? A study awarded by the 2009 Nobel Prize in Medicine and Physiology 'for the discovery of how chromosomes are protected by telomeres and the enzyme telomerase', gave rise to the search for factors affecting the protection of telomeres and those affecting telomerase activity. The research on the quality of life essentially refers to the assessment of the level of inner balance and harmony of man with the surrounding world of people, animals and plants. Physical activity, taking care of more movement in everyday life, the ability to walk and fully use the muscles, awakening one's consciousness, maintaining moderation and balance between work and private life and relaxation prevent degradation, morbidity, disabilities and the development of civilization diseases.

Keywords: Aging; Life balance; Lifestyle; Obesity; Physical activity; Quality of life; Immunity

more movement in everyday life, while regular gymnastics, e.g., practicing yoga, will additionally balance the mind. The yoga master Iyengar BKS said in an interview that although yoga is a discipline with scientific assumptions, when put into practice, all skills are needed (...) and the internal world must be discovered with the help of external mechanisms. Each asana creates a delicate balance, harmony between the inner and outer world - the mind and the body [4].

Yoga is art and science. It is an ancient Indian set of practices comprising a lifestyle. Yoga also aims at promoting positive health that will help us to tide over health challenges that occur during our lifetime. This concept of positive health is one of the yoga's unique contributions to modern healthcare, as yoga has both promote and preventive role in the healthcare of the masses [5].

Each physical activity affects the human body multidimensional, allows to maintain a slim figure, sustain balance, improve fitness, reduce cellulite, improve self-confidence or even facilitate making new contacts [6] which results in improved health and increased self-esteem. On the other hand, chronic pain and depression, if approached ineffectively, hinder everyday life and functioning, and, as they reflect on the immune system, consequently cause inflammations [7,8].

On its website, WHO refers to the most recent article on Global Health, published by The Lancet (Dated 04 September 2018): the health benefits of physical activity are well established and include a lower risk of cardiovascular disease, hypertension, diabetes, and breast and colon cancer. Additionally, physical activity has positive effects on mental health, delays the onset of dementia, and can help the maintenance of a healthy weight [9]. The study which was carried out in 168 countries in the years 2001-2016, covered the population of 1.9 million people. The control group consisted of 358 cases selected from all continents. We also found a wide variation in country prevalence of insufficient activity both across and within regions. Prevalence of insufficient physical activity varied greatly across regions and income groups in 2016. We found the highest levels in Latin America and the Caribbean, high-income Western countries, and high-income Asia Pacific, and prevalence was more than double in high-income countries than in low-income countries in 2016. In wealthier countries, the

Paths to Retrieve Life Balance - Thanks to Restore Connection to the Nature Still Living in the Modern World

Man has always been in motion and seems to be created for movement. As children, we feel joy participating in any play that involves movement, but the intensity of physical activity decreases with each subsequent stage of our life. When we reach adulthood, the range of movement is very limited, both at work and in everyday life, which is also encouraged by technical inventions, such as cars and remote controls for garage doors, elevators and escalators, as well as delivery of ready meals. Besides walking and cycling, stair walking is another daily life activity that can double as exercise [1,2]. Long hours spent at the desk with an advanced head and rounded spine can shorten the ligaments of the base of the skull, and the attempt to straighten your back can cause pain which sometimes reaches down to the bottom of the spine [3]. It can be prevented by taking care of

transition towards more sedentary occupations and personal motorized transportation probably explains the higher levels of inactivity [9]. WHO's efforts also seem to be justified in Poland due to the increase in hypokinesia in society [6].

The main goal of the Global Recommendations on Physical Activity for Health is to prevent primary non communicable diseases through physical activity at the population level, and the main recipients of these recommendations should be the decision makers at the national level [10]. The recommendations set out in this document address three age groups: 5-17 years old; 18-64 years old; and 65 years old and above, based on the benefits, type, amount, frequency, intensity, duration and total amount of physical activity necessary to achieve health benefits. There are key information for decision-makers who (...) are involved in the development of guidelines and policies at the regional and national level for the prevention and control of non communicable diseases.

The research on the quality of life essentially refers to the assessment of the level of internal balance and harmony of man with the surrounding world of people, animals and plants. The biological clock is involved in many aspects of our complex physiology. We now know that all multicellular organisms, including humans, utilize a similar mechanism to control circadian rhythms. A large proportion of our genes are regulated by the biological clock and, consequently, a carefully calibrated circadian rhythm adapts our physiology to the different phases of the day [11].

Undoubtedly, holidays spent in the countryside was of great importance for my development and education, as my grandmother and my aunts taught me how to recognize herbs and use valuable natural healing and culinary methods. Biologists use genetic relatedness between family members to explain the evolution of many behavioral and developmental traits in humans, including altruism, kin investment and longevity. Women's post-menopausal longevity in particular is linked to genetic relatedness between family members. According to the 'grandmother hypothesis', post-menopausal women can increase their genetic contribution to future generations by increasing the survivorship of their grandchildren [12]. Childhood and adolescence are important periods of life, since many physiological and psychological transformations take place at these ages [13].

As a mother of three children, each subsequently breastfed longer than the other - a similar relationship was described in 2018 in Denmark [14], I observed that the idea of classical medicine is based on too frequent and often chronic use of drugs which, by treating one inflammatory process, bring destruction to the whole the body. My search for ways to maintain my family's health led me to dropping the excess of pharmacotherapy in favor of the simplicity of life, simpler eating and returning to nature, looking for ways to heal. I felt I missed my childhood. Can we use the power of nature as a result of the family coexistence? Mother-child food sharing, a practice that allowed aging females to enhance their daughters' fertility - thereby increasing selection against senescence. It has implications for past human habitat choice and social organization and for ideas about the importance of extended

learning and paternal provisioning in human evolution [15]. Grand mothering also alters the longevity that maximizes male reproductive success [16]. Than early childhood interventions that include fathers as parents are needed for harnessing gendered divisions in parenting roles and maximizing the nurturing care that children require from all caregivers to achieve their full developmental potential [17]. We are the part of society coexisting together, but too often we seem to forget about the respect to each other and to ourselves.

Instilling the ideas of sport and physical recreation in my children, sharing part of the parental duties, I also paid more attention to my own lifestyle. I became interested not only in cycling, swimming and aerobics, but also in regaining a broadly understood balance. This motivated me to start practicing yoga regularly at the age of 35 and 5 years later in 2011, I started to teach it.

Today I am sure that the most important thing is moderation in everything; even yoga is not for those who eat too much or starve themselves. It is not for those who sleep too long, or for those who do not know the measure in vigil. Through moderation (...), yoga destroys all pain and sadness [18]. Similarly, in physical recreation, sports or physical activity, it is important not to bring about a paradoxical phenomenon, when the exercises cease to play a protective role, but they become a generator of compulsions and stress [6].

Taking care of the high quality of your life, one should focus on mindfulness - constant presence in every minute, from checking whether I live in my body as a host, not a tenant, and whether I am wondering about the consequences of my lifestyle, whether I care for myself and my body [19]. This also includes taking full responsibility for every thought, action and negligence. Inner progress and development do not depend on external conditions, but rather on how we react to ourselves from the depths of our being [20]. Even if, like in the effectiveness of 'energy healing', none of the studies are of a size or quality that allows to draw reliable conclusions, the results of the studies are, however, interesting and should be considered when developing new studies [21].

The external environment may, however, promote better health. Societies, especially in urban agglomerations, are often deprived of everyday contact with nature, work with the earth, and even the ability to walk and fully use their muscles, which intensifies their progressive degradation, morbidity, disability and the development of so-called civilization diseases. In 2018, there was published an article summarizing current evidence of the effects of gymnastics activities on bone mineral accrual during the growth and describing possible factors that influence bone mineral gains. The PubMed and Sport Discus databases were searched, and a total of 24 articles met the selection criteria and were included in this review [22]. It is an important, contemporary proof of the legitimacy of undertaking physical activity. The increasing prevalence of overweight and obesity in humans is a growing public health concern in the United States. The concomitants include poor health behaviors and reduced psychological well-being. Preliminary evidence suggests yoga and treatment paradigms incorporating mindfulness, self-compassion (SC), acceptance, non-dieting and intuitive eating,

may improve these ancillary correlates which may promote long-term weight loss [23]. It's important to note that obesity currently is considered also as the result of the food contamination of the estrogen disrupters [24]. In respect to that growing attention worth to be paid on non-processed food intake. We cannot exclude the result of atypical depression too [25].

In this context, physical recreation as a family, associated with moderate physical effort which is popular in Poland, e.g., in the form of community gardens, plays a special role. These gardens facilitate active rest, give their users the opportunity to cultivate horticultural crops mainly for their own needs, while they constitute an element of green and recreational areas. They are also an element of environmental protection. They are used to improve the ecological conditions of cities and the living conditions of their residents [26]. The immunological advantages of working with the soil are also noteworthy. As shown by recent studies, the immune system is equipped with an intricate system of germ line encoded pattern recognition receptors (PRRs) that recognize microbial molecular patterns. Many of the genes are found to affect the micro biome are PRRs, suggesting that gardening is an active process in which mucosal cells adjust their gardening activity in response to microbial composition [27]. Today, we can barely make hypotheses about the knowledge of those who came up with the idea of community gardens, but it is worth mentioning here that the first community gardens in Poland (ROD "Sunbaths") were founded in 1897 in Grudziądz by Jan Jalkowski MD, followed by the oldest community gardens in Warsaw Garden of Tramjers in Odyniec street, founded in 1902 [26].

At the same time, since the beginning of existence, man has been naturally adapted to walking, and for millennia, it mostly functioned in the forest in this geographical area, not only because of food. Recent studies on the impact of forest trips on the immune function in humans and phytoncides on the activity of natural killers (NK), have shown that forest trips can prevent the occurrence and development of tumours, because NK cells can kill cancer cells [28], releasing anti-cancer proteins such as perforin, GRN and GrA/B, and forest trips increase the NK activity and intracellular levels of anticancer proteins [29]. These studies are even more interesting, because they use the achievements of immunology to study the dependence; in the study, the participants took a series of walks, followed by a completion of a questionnaire and collection of blood samples for immune cells subsets enumeration.

Modern man can take solace in the awakening of one's own deep awareness of oneself and others, and acceptance of the body's possibilities and limitations. The ability to use pranayama (breathing techniques) turns out to be very useful for lowering the level of tension, improving concentration and breaking the stress wave. The author of the book "Urban Monk", doctor of oriental medicine, emphasizes that 'the world has gone crazy. Our life is ruled by panic. We are lost like children in the fog. The trick is to learn how to live in the eye of a cyclone, where there is blissful peace, not total chaos' [30]. In various religions are known different types of meditations aiming to lower frequency

of breathing [31]. It shows benefits for cardiovascular system, stress reduction and mental condition.

It should be considered whether directing the activities promoting a healthy lifestyle should be more focused on natural methods. Restoring the rightful place of traditional methods of maintaining health, along with the development of the habit of a healthy lifestyle and care for physical activity, such as a daily walk, in the society's awareness, should become a priority in order to reduce mortality rates due to any reason, high blood pressure (BP), coronary heart disease heart and stroke, metabolic syndrome, type 2 diabetes, breast and colon cancer, depression and fall rate [32].

We can seek help also in returning to natural the natural goods of the earth, the so far commonly used natural healing methods based on the experience of many generations, human symbiosis with the surrounding natural environment, and life and work according to the circadian rhythm, the rhythm of the seasons, as well as herbal medicine, hydrotherapy and mineral therapy. There can be observed a slow return to the use of the richness of the natural environment in a place where a given person has grown against the unification of customs, solutions and therapies, regardless of the environmental and individual variables. In Poland, there operate few monk's medical centers which treat with herbs prepared according to old monastic recipes. They attract the attention thanks to their research on antibacterial properties of amber conducted by young Polish scientist, inspired by Polish folk tradition and a record in Chamber's Encyclopedia from 1728 which says: 'during the plague, people who extracted amber did not get sick' [33]. In the neighboring countries, in Ukraine, Belarus and Russia, there is used traditional Russian medicine, and in Germany-traditional Germanic medicine. At the VI International Congress of Traditional Medicine attended by 800 participants, noted that although the economic costs of survival of folk, alternative and complementary medicine far outweighed the academic ones, it is very important for the country, with its multinational population and a very significant difference in the levels of social and economic development of different regions, as well as the differences in the indicators of the health status of the population, to use the means and methods of traditional medicine. The lack of side effects and the relatively low cost of treatment with traditional medicine allow every Russian to significantly reduce the cost of regeneration and prevention [34].

The position of the Government of India is worth mentioning here. In 2016, on the eve of the International Day of Yoga established on June 21, the Prime Minister of India, decided to practice yoga together with the 35,000 residents of Chandigarh. This prompted the local administration to undertake a series of activities, including yoga in good life practices, and to call for an analysis of changes in the health parameters resulting from the universal AYUSH yoga protocol, while thousands of those gathered joined the prime minister [35]. On this occasion, he insisted on maintaining the philosophical approach, according to which yoga does not demand personal gain, but seeks freedom from material life and instills the spirit of work in others. Nevertheless, it can be observed that together with the launch

of the world's largest clinical trial of Patanjali Research Foundation, with the emergence of modern molecular techniques such as microarray analysis, real-time PCR analysis and whole-genome sequencing, there is a growing interest in undertaking research which allows the correlation of genomic, proteomic and epigenetic changes in the blood of yoga practitioners [35].

Similarly, the Russian Ministry of Health also cares for its national heritage; in the early 1990s it adopted an attitude of openness to traditional medicine, and presently, it actively promotes the introduction of its most effective tools and methods to the national healthcare system. Almost all fields of traditional medicine have entered the register of medical specialties and are subject to licensing [34].

In 1999 in Belarus, as a part of the course "Traditional methods of psychophysical training of Belarusians", the staff of the faculty of the theory of physical culture methods and preventive and health-promoting activities of the M. Tank State Pedagogical University developed and published a training manual [36]. This initiated a return to two traditional Slavonic systems collected and edited there [37], propagating of Slavic tradition in the field of physical culture and psychophysical Belorussian gymnastics, in the promotion of physical activity in the countries of Central and Eastern Europe [38]. The first of them is a Slavic system of martial arts for men 'Krivich', which is little known in Poland, named after a Slavic tribe which came to the territory of the Pskov region in the 6th century. This subject is also taught at Belarusian universities - since 1994 [39]. As was pointed out, the importance of studying traditional physical culture in reconstructing the folk traditions of physical education of the Slavs, stems from the place it occupies both in the history of the people's culture, and in its modern cultural life and physical education processes of new generations [40]. Similarly to the old Slavic abdominal massage known today as visceral therapy or abdominal chiropractic, it is the centuries-old heritage of the Slavic people, and maybe not only Slavic. According to the knowledge of Slavic healers, the stomach responds by experiencing tension and contractions of its structures well in advance of the vast majority of diseases. 'Removing the spasms' activates the cells of the immune system in the intestines and the body activates the mechanism of self-healing. As a consequence, the body is able to prevent the developing disease itself or experience the symptoms more mildly [41].

Slavic gymnastics for women, also is known as Slavic yoga, is the second of the systems described in the manual, and although it has been promoted in Poland since the year 2015, there can be observed a growing interest in this form of training. In the years 1995-1998, thanks to oral traditions of old Belarusian old women, there were collected and restored 27 physical and respiratory exercises aimed to improve the appearance and fitness of the female body - activating the endocrine system by self-massaging the adrenal glands and the lymphatic glands around the breast and thymus which significantly reduces the stress level, plays a role in the prevention of breast cancer and strengthens the body's immune system [42]. The benefits of Slavic gymnastics were examined on

meridian points for the purpose of the manual in 1998 [36]. Despite of the positive reviews of professors of pedagogy and medicine, the publication on the description of gymnastics has not been noticed in a wider circle and has not been examined by ethnographers. Today, it seems reasonable to re-observe and research women practicing Slavic gymnastics using modern diagnostic methods.

Poland is a country striving for the West at the crossroads of cultures, which often means cutting off its the Eastern roots. Therefore, already in earlier centuries, all known Polish-language printed sources from the second half of the 18th century referred to the gymnastics tradition understood as the art of gymnastic, in the context of the physical culture of ancient Greece and Rome (...), they aimed at improving physical fitness, as well as moral and civic education [43-45]. Perhaps it is time to combine the traditional diet and old techniques to improve the state of health of the society?

Summary

The aim of this study is to illustrate and review the problem. It is also intended as an incentive for regional researchers to restore natural, traditional systems, and by implementing research programs on their effectiveness and using the latest diagnostic methods, persuade the governments of more countries to restore national heritage in the field of natural therapies. And if 'returning to nature', greater harmony with nature, working and being in contact with the earth, water and forest and the contemplative aspect - admiration for the beauty of creation, will make it possible to stop or even reverse the ageing processes? A study by Barbara Blackburn, winner of the 2009 Nobel Prize in Medicine and Physiology 'for the discovery of how chromosomes are protected by telomeres and the enzyme telomerase', gave rise to the search for factors affecting the protection of telomeres and those affecting telomerase activity. It turned out that stress was an important factor in shortening telomeres, and this could be related to lifestyle. Further research conducted by Barbara Blackburn indicates that exercises such as 'mindfulness meditation' and yoga, affect the increase in telomerase activity and thus increase the stability of telomeres. This effect affects the inhibition of ageing processes and protects against civilization diseases such as diabetes and atherosclerosis. Can we in natural way reverse the ageing processes?

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