

Studying the material on the topic and through a survey of USMU students, we made it possible to clearly formulate points, which reflect the need in studying English by Russian doctors and medical students.

**Conclusions:**

In conclusion of the article, it should be noted that importance of English language for Russian doctors is difficult to overestimate. But despite the prospects of knowledge of English, at the medical universities, the foreign language is studied only in first year. All of us should think about increasing the number of hours at the medical universities, because language is necessary for building a future career and for our development. In conclusion, we can point out that English language will soon reach a new level for Russian doctors, which will certainly affect the quality of work and introduction of new technologies in treatment of people.

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**Selivanova A.S., Shaidurova E.V., Zabolotskikh K.I., Yarunina I.V.  
LEONARDO DA VINCI'S CEATIVITY AND ATTENTION DEFICIT  
HYPERACTIVITY DISORDER**

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**Annotation.** The article discusses a correlation between the character and life of Leonardo da Vinci and possible manifestations of his attention deficit disorder.

**Key words:** ADHD, creativity, attention deficit, hyperactivity, anxiety.

**Introduction**

According to statistics, there are more than 1 billion people suffering from various mental disorders in the world.

Recent studies [2] have shown that there is a certain correlation between the creativity and mental abnormalities. Scientists have analyzed the condition of people

with various mental disorders. The results have confirmed that creative professionals are more susceptible to mental illnesses. A conspicuous example of a creative person with a possible mental disorder is Leonardo da Vinci. An article published in Brain [1] draws attention to the work and biography of Leonardo da Vinci and considers cause-and-effect relationships, where the cause is a possible psychopathology, and the result is often unfinished, but nevertheless, great artworks.

### **Statement of purposes**

1. To determine the correlation between the creativity and mental disorders. To study the biography of Leonardo da Vinci for detection of signs of psychopathology in the artist at different stages of his life and to determine their effect on his work.

2. To carry out a survey to identify the prevalence of ADHD symptoms in people of non-creative professions. To update data on the prevalence of attention deficit disorder nowadays.

### **Materials and methods**

Using the biography and statistical methods, we collate episodes of artist's life and clinical signs of ADHD, based on medical literature and historical knowledge about Leonardo da Vinci. Statistics on interrelations of psychiatry and creativity are provided. The results of our online survey are offered and analyzed, based on scientific literature.

### **Results and discussion**

Leonardo da Vinci is a representative of Renaissance art society, a shining example of a "polymath". He has contributed to the development of human medicine, particularly, to one of its branches – anatomy, having examined and sketched a human body in the minutest particulars. It is known that many of his artworks were re-drawn a great many times (for example, Mona Lisa) or not finished at all. What was the cause for it? His temperament, lack of discipline, or we may talk about a diagnosis? A "paradox of Leonardo da Vinci" may be considered not only as his psychophysiological peculiarity, but also as the Attention Deficit Hyperactivity Disorder (ADHD). According to the International Classification of Diseases (ICD-10) the ADHD belongs to hyperkinetic disorders (F90). This is a group of disorders emerging in early childhood (as a rule, in the first five life years) and featuring lack of perseverance in activities involving mental concentration and skipping from one activity to the next without completing any. Concurrently, there has been observed a disorganized, poorly controlled and excessive activity. Could we say that the genius had this disease which is not characteristic of adults? How do its manifestations effect on life? Can this pathology occur in people of non-creative professions, for example, students of a medical university?

After analyzing the biography of da Vinci, we can conclude that he spent much time planning projects, but he was lacking in persistence and perseverance to complete his chef d'oeuvres.

At his early age he tended to move from one matter to another one, and this drawback persisted in adulthood. According to Professor Catani from the Institute of Psychiatry, Psychology and Neuroscience, the characteristic features of the great artist

and anatomist were voracious curiosity, impulsivity, hyperactivity, impaired concentration, and a tendency to procrastination. He also was emotionally unstable; he slept very little and worked without rest by alternating rapid cycles of short naps and waking. The description of his character and everyday life was instrumental for Professor Catani in suggesting the diagnosis of ADHD in the recognized genius.

In order to reveal ADHD signs in da Vinci, we will analyze his paintings and try to identify factors that could influence on creation of masterpieces of his work. The symptoms of mental disorders of da Vinci are well demonstrated by the story of his work on the Last Supper. At the time of beginning his work he was already at the mature age, 43 years old. The ordered fresco painting required a quick execution and excluded the possibility of corrections (specific nature of techniques). Da Vinci agreed to get to work and ventured to modify the technique. This solution may be perceived as a manifestation of a “disruptive side of his mind”, which both encouraged his creative potential and at the same time distracted him, prompting him to remake, think through, and start again. This painting was nevertheless completed, with many interruptions, and three years later (circa 1495-1498), but not without consequences – the painting began to destroy rapidly. Returning to the analysis of the influence of symptoms on life, it can be said that they deprive a person of vigour and cause anxiety both in life and in work. On the one hand, this can serve as an impetus to seeking new solutions, changes, and, on the other hand, as an obstacle to completion of those actions that a person is good at, resulting in fruitless work. “Fruitless” was the work on the earlier painting Saint Jerome (1482). It remained unfinished like many other his artworks. The details and subject were well thought-out, but Leonardo da Vinci lacked perseverance and will. Thus, in contrast to indecision and anxiety, the lack of perseverance does not have positive manifestations, but rather reduces or even deprives one of working capacity. We can also consider one of the most famous paintings of the artist - Mona Lisa or La Gioconda. It was the masterpiece that he created with particular desire, devoted a lot of time to it. Vasari wrote:

‘Leonardo undertook to paint, for Francesco del Gioconda, the portrait of Mona Lisa, his wife; and after he had lingered over it four years, left it unfinished’

This painting is considered the most transcendent, sublime, but it is clear that it did not satisfy the author, that is why he declared it unfinished and did not give it to the customer. There is an opinion that Leonardo da Vinci painted only the lips of Mona Lisa for 12 years. Why did it happen? What could lead to such a long way to create a Renaissance masterpiece? It can be assumed that it was precisely the individual properties of the nervous system and the characterological features of Leonardo, which influenced the creation of his work. It was the desire for the complete ideality of work and problems with planning, which led to procrastination of his projects and at the last to their incompleteness. But these symptoms can be found in people of any type of activity. After conducting a survey among 94 medical students (17-19 years old), we found that 22 of them think that they are very troubled by the symptoms listed, 36 respondents have moderate symptoms, 21 students have weak ones, and 15 persons are not troubled at all (Figure 1).

It can therefore be concluded that this pathology manifests itself not only in great creative personalities, but also in students in the natural-science field of study, which allows us to make an assumption about the prevalence of pathology, regardless of age and field of activity.

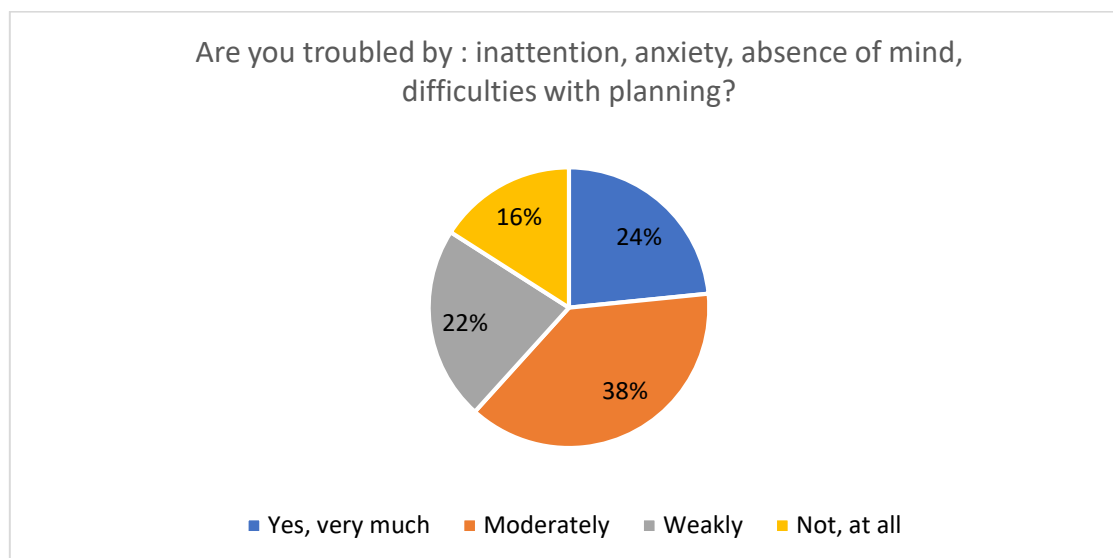


Figure 1 – Survey: Identifying Attention Disorders in Medical Students

### **Conclusions:**

In the process of work, the following conclusions were obtained:

1. Having studied the biography of Leonardo Da Vinci, we can identify signs of psychopathology that began to manifest themselves from his early age and had an impact on the adult life of the artist, preventing him from completing many artworks.
2. After conducting a survey among medical students, it was found that 62% of respondents observed possible symptoms of ADHD. The problem of attention disorder is quite frequent, so we can talk about its relevance.

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## **AWARENESS OF YOUNG WOMEN ABOUT BREASTFEEDING EFFECTS ON INFANTS**

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**Annotation.** The article considers short-term and long-term positive effects of breastfeeding on the state of health. Factors that determine women's adherence to breastfeeding, affecting the mother's decision on how to feed the baby are identified. The analysis of young women awareness of the importance of breastfeeding is carried out.

**Key words:** breastfeeding, effect on the health, young women.

### **Introduction**

According to the founder of scientific obstetrics and pediatrics in Russia N. M. Maksimovich – Ambodik “Mother's milk is the most useful, reliable, irreplaceable food,” - This statement is true nowadays: breast milk is the only optimal type of feeding in the neonatal period and infancy up to 2 years old. According to WHO, about 40% of children in the world under 6 months are breastfed, without any supplement feeding. In the Sverdlovsk region in 2016, 58.9% of children were breast-fed for up to 6 months. The unique composition of breast milk has a multilateral effect on the physical and mental development of children, the formation of their behavior, resistance to the influence of adverse external factors, and provides epigenetic effects in terms of preventing a number of serious diseases [2, 3]. To promote breastfeeding, it is necessary to develop a positive attitude towards breastfeeding and inform mothers about the benefits of natural feeding [1, 4].

**Aim of the study** is to assess the awareness of young women about the importance of breastfeeding.

### **Materials and methods**

We conducted a survey of young women living in Yekaterinburg and the Sverdlovsk Region (n = 161) using the Google Forms online. 65.8% of respondents