

Technologies For Preventing Occupational Diseases In Educators

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Abstract: This article analyzes the causes of occupational diseases in the work of teachers and technologies for their prevention. The specifics of pedagogical work, factors leading to physical and mental stress, methods for reducing them and strengthening health are considered. Based on the researchers' opinions, effective ways to maintain health, manage stress, create ergonomic conditions, and use innovative technologies are recommended.

Keywords: Pedagogical activity, occupational diseases, preventive technologies, stress management, ergonomics, health culture, psychoprophylaxis, occupational stress.

Introduction

As a result of the large-scale social, economic and spiritual reforms being implemented in the education system today, as well as the high demands and needs of modern society in the field of education, great responsibility is being placed on the shoulders of educators. One of the most important tasks facing the education system is to educate a competitive, healthy and comprehensively mature generation, and this process requires educators not only high professional skills, but also constant emotional and intellectual activity.

The high level of emotional and intellectual demands of work negatively affects the health of many teachers. Prolonged psycho-emotional stress, stress factors arising in the work process, a high level of responsibility and the need for constant self-development lead to the development of occupational stress and chronic fatigue syndrome in teachers.

According to statistics, occupational stress and chronic fatigue syndrome are widespread, especially among school teachers and higher education teachers (Kuznetsova, 2018). Studies show that this condition directly affects not only the physical and mental health of teachers, but also the quality of education. Increased levels of stress and fatigue lead to a decrease in motivation, reduced labor productivity, and an increase in errors in professional activities.

Therefore, today, preserving and strengthening the health of teachers, developing stress management skills in their professional activities, and forming a

healthy lifestyle are recognized as one of the priority tasks facing the education system. In this direction, a systematic approach, the development and implementation of special programs aimed at strengthening pedagogical health are of urgent importance.

The specific features of pedagogical activity - a high level of mental and emotional activity, a long process of communication, static physical activity and the need to use modern technologies - have a significant impact on the health of teachers. According to research, the following occupational diseases are most common among teachers:

1. Chronic stress and psychovegetative disorders. Constantly working under high emotional and psychological pressure in the process of pedagogical work leads to a decrease in the level of stress resistance in teachers. The chronic form of stress leads to a disruption of the functioning of the autonomic nervous system, deterioration of sleep quality, the development of depressive states, and a decrease in labor efficiency. (Kuznetsova, 2018). This situation not only causes individual health problems, but also negatively affects the quality of education.
2. Diseases of the vocal apparatus. The professional activity of teachers requires speaking loudly and for a long time. As a result, excessive tension of the vocal cords leads to the development of inflammatory diseases such as laryngitis and pharyngitis. Against the background of constant vocal load, hoarseness of the

voice, narrowing of the vocal range, and chronic respiratory diseases are observed. If preventive measures are not taken, these diseases can develop into more severe forms.

3. Spinal and musculoskeletal problems. Long periods of static posture or poor ergonomics among teachers can lead to the development of spinal and musculoskeletal diseases. In particular, osteochondrosis, radiculitis, and neck and back pain are common problems among teachers. This, in turn, leads to a decrease in physical activity and a deterioration in overall health.

4. Decreased vision and hearing. As a result of the widespread introduction of information and communication technologies into the educational process, teachers are forced to use computers, tablets and other electronic devices for a long time. As a result, eye strain (asthenopia), decreased vision, and sometimes hearing loss are observed. Working in front of the screen for a long time can lead to dry eye syndrome and spasm of the neck muscles.

The specific features of pedagogical activity, namely high emotional stress, static physical condition and intensive use of the vocal apparatus, increase the risk of developing certain occupational diseases. Studies conducted in recent years show alarming trends in the health of teachers.

According to the results of medical examinations, more than 70% of teachers aged 45–50 have problems with the spine and musculoskeletal system (Salieva, 2020). Also, almost half of teachers over 30 suffer from speech disorders (Ivanova, Petrova, 2021). These statistics indicate the need for a systematic approach to maintaining and strengthening professional health.

Preservation of teachers' health and prevention of occupational diseases is carried out based on the following technologies and approaches:

Stress management techniques: Reducing stress in teaching is one of the key factors in maintaining health. The following techniques have been found to be effective for stress management:

Autotraining: Daily psychological exercises to calm yourself and increase immunity to stress.

Breathing exercises: Activate the parasympathetic nervous system, reducing physiological stress responses.

Relaxation techniques: Restoring psychological balance through visualization and meditation.

Studies have shown that teachers who meditated for 10 minutes before starting work each day had a 20% reduction in stress levels (Sidorova, 2022). This data confirms the practical benefits of regularly maintaining psychological hygiene.

Improving ergonomic conditions; Ergonomic conditions in the workplace play an important role in ensuring a

healthy lifestyle for educators:

Proper lighting and ventilation of classrooms reduces strain on the eyes and respiratory tract.

Ergonomically designed desks and chairs reduce excessive pressure on the musculoskeletal system. Taking regular breaks during work prevents static muscle tension. As Morozova (2021) notes, back pain among teachers in schools where ergonomic furniture was introduced has decreased by 30%.

Increasing physical activity Regular physical activity in the process of pedagogical work is an important factor in maintaining health:

Specially designed gymnastic exercises strengthen the back and neck muscles. Short breaks after each 45-minute class to perform light physical exercises will improve blood circulation in the muscles and prevent fatigue.

Healthy speech technologies. The following measures are used to protect the vocal apparatus: The elasticity and endurance of the vocal cords are increased with the help of phonopedic exercises. The use of microphones reduces the load on the voice of teachers and protects the speech apparatus from strain.

Psychoprophylaxis and psychological support. To ensure the psychological stability of teachers: Trainings and seminars will be organized to increase stress resistance. The organization of permanent psychological support services in pedagogical teams will support the mental health of teachers.

Innovative approaches. Modern digital technologies are creating new opportunities in the field of health care for educators: Daily stress monitoring and health indicators are monitored using mobile applications. The opportunity to receive qualified help is being created through remote psychological counseling. Virtual relaxation programs and psychological training are being used as effective tools for reducing stress and increasing psychological resilience.

Conclusion. Pedagogical activity requires occupational health protection. The use of technologies to reduce stress, improve ergonomic conditions, increase physical activity, and develop healthy speech makes the professional activities of teachers more effective and safe from a health point of view. The widespread introduction of innovative health-preserving technologies should be considered an important part of the modern educational process.

REFERENCES

- Kuznetsova, NV (2018). Occupational diseases of teachers and methods of their prevention. Moscow: Pedagogical Publishing House.
- Salieva, MR (2020). Methodology of stress management in teachers. Tashkent: Science and Technology.

Ivanova, TV, Petrova, AS (2021). Health technologies in pedagogical activity. St. Petersburg: Pedagogical Publishing House.

Sidorova, LV (2022). Digital Health: The Effectiveness of Mobile Applications for Educators. Moscow: Innovative Technologies.

Morozova, AN (2021). School Ergonomics: Comfortable Working Conditions for the New Generation. Novosibirsk: Education and Health Publishing House.

Маматханова, Н. (2021). Особенности процесса подготовки будущих учителей к социально-педагогической деятельности. Общество и инновации, 2(6/S), 261-268.

Rustamova, G. X. Q. (2025). Oilaning tarixiy rivojlanishi va bola tarbiyasidagi ijtimoiy psixologik o'rnini. Science and Education, 6(3), 205-208.

Азимаксон, К. (2025). Профессиональное здоровье учителей как ключевой фактор развития современного образования. Европейский международный журнал педагогики, 5 (01), 121-124.

Kamolova, A. (2024). KASBIY KASALIKLARNI OLDINI OLISHDA VA OLIY TA'LIM MUASSASASI TALABALARINING SALOMATLIK MADANIYATINI SHAKLLANTIRISH. " ПЕДАГОГИЧЕСКАЯ АКМЕОЛОГИЯ" международный научно-методический журнал, 16(8).

Aliqulov, S. D. O. G. L., & Kamolova, A. O. (2025). Talabalar salomatligini saqlashda pedagogik faoliyatning ahamiyati. Science and Education, 6(2), 313-319.

G'oiipova, N. B. Q. va Uraimjonova, Z. I. Q. (2025). Nutqning kelib chiqish sabablari. Fan va ta'lim, 6 (5), 387-392.

.Oribboyeva, D. D. (2024). PSIXOLOGINVESTIKA VA LINGVISTIK KOMPETENSIYA. Academic research in educational sciences, 5(CSPU Conference 1), 346-349.

Oriboeva, D. D. va Rafiqova, R. A. (2024). O'zbekiston Respublikasida inklyuziv ta'limni amalga oshirishning xususiyatlari. Fan va ta'lim, 5 (6), 290-293.

Dilshoda, I., & Oribboyeva, D. D. (2024). ALALIYA NUTQ NUQSONLARI VA UNING TURLARI. Yangi asr innovatsiyalari jurnali, 63 (3), 70-73.

Oribboyeva, D. (2024). BULLING O 'SMIRLARDA DOLZARB MUAMMO SIFATIDA. Universal xalqaro ilmiy jurnal, 1(12), 115-117.

Dilshoda, I., & Oribboyeva, D. D. (2024). AUTIZM NAMOYON BOLISHINING PSIXOLOGIK XUSUSIYATLARI. Journal of new century innovations, 63(3), 74-77.

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