



Fund “Nauka” Project № 22018 Resume – Competition-Based Session 2022:
“Integrated strategies and models for preventing professional burnout and coping with stress among healthcare professionals”

Project leader: Assoc. prof. Anna Hristova Todorova, MPharm, MD, PhD

The goals of the project are to study the factors that have an impact on the level of occupational stress and burnout among frontline healthcare professionals and based on that to develop a strategy and specific models for the prevention of professional burnout.

The research tasks are:

1. To analyze the international experience and best practices for reducing burnout levels in healthcare professionals;
2. To study the level of occupational stress and burnout in frontline healthcare professionals who have face-to-face interactions and interpersonal contacts: GPs, emergency physicians, pharmacists and public health inspectors;
3. To study the working environment factors that affect burnout;
4. To assess the quality of life and degree of anxiety and depression in healthcare professionals and their relation to burnout;
5. To propose a strategy and specific models for the prevention of professional burnout.

Materials and methods: The survey will cover the Northeastern region. Anonymous questionnaires will be used including validated tools: MBI for burnout, HADS for anxiety and depression, EQ-5Q-5D for a quality of life assessment and the Perceived Stress Scale, as well as a personalized questionnaire to assess the risk of occupational factors.

Expected results:

1. The best practices for reducing occupational stress can be adapted to Bulgaria;
2. Occupational stress among healthcare professionals is high and this is a pre-condition for burnout;
3. Burnout affects healthcare professionals’ mental health and quality of life;
4. The development of a strategy and specific models based on the identified risk factors will contribute to improving the efficiency of healthcare professionals.

As a result of the project activities, a comprehensive investigation was conducted into the factors influencing occupational burnout among healthcare professionals, with a primary focus on community pharmacists, pharmacy assistants, and public health inspectors. The findings confirmed a high prevalence of emotional exhaustion and depersonalization across the studied professional groups and highlighted the detrimental impact of occupational burnout on the quality of healthcare services provided.

The analysis identified key organizational and psychosocial risk factors, including excessive administrative workload, insufficient organizational support, an unfavorable psychosocial work environment, time constraints, and inadequate recognition of professional contributions. In addition, a comparative analysis of the legislative and regulatory frameworks governing the pharmaceutical sector in Bulgaria and the Republic of North Macedonia was undertaken, demonstrating the influence of legislative and organizational characteristics on pharmacists' professional workload and mental well-being.

Based on the research findings, an innovative original model for the assessment and management of occupational burnout risk was developed. The model incorporates both an individual risk assessment algorithm and an organizational work environment assessment algorithm, providing a comprehensive framework for the identification and management of burnout risk. Furthermore, evidence-based practical recommendations were formulated to optimize work processes, reduce administrative burden, strengthen organizational support, enhance leadership competencies, and implement structured educational initiatives and psychological screening programs. The proposed model has been applied within educational initiatives involving community pharmacists and provides a sustainable foundation for the implementation of occupational burnout prevention strategies within the healthcare system.

The project outcomes have been widely disseminated through nine scientific publications in peer-reviewed international journals, presentations at national and international scientific conferences, the publication of a scientific monograph, and the development of an original evidence-based occupational burnout prevention program. Collectively, these achievements demonstrate the substantial scientific contribution, practical relevance, and long-term applicability of the project results.