

**SELECTED POSTERS IN LIFESTYLE FOR PUBLIC HEALTH  
AT THE 2024' CONGRESS OF THE POLISH PUBLIC HEALTH  
SOCIETY**

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**ABSTRACT**

This lifestyle poster session, presented at the VII International Congress of the Polish Public Health Society with supplementation sleep hygiene and other focuses. The importance of Type D personality in mental adaptation to cancer in patients with colorectal cancer. The session also explored a strategic partnership between Zoo Wrocław and health empowerment initiatives for seniors, highlighting the impact of zoo visits on their quality of life. Furthermore, the session addressed the role of diet and supplements in

cancer treatment, discussing when supplementation is necessary versus when diet alone may suffice. The importance of sleep hygiene as a public health challenge was examined, emphasising its impact on daily functioning and overall health. The presented research underscores the significance of psychological factors in health outcomes, innovative community partnerships for health promotion, personalised approaches to cancer treatment, the foundational role of sleep in well-being, and the need for ethical considerations in research related to infant nutrition.

**Keywords:** mental adaptation, seniors, health empowerment, zoo, supplements, cancer treatment, sleep hygiene

## INTRODUCTION

The following posters on lifestyle were presented within the prevention section at the VII International Congress of the Polish Public Health Society, themed "Prevention - A Great Investment in Public Health," held on November 27-28, 2024, at the MSWiA National Medical Institute, Warsaw (\*) edited by. A primary focus in talks and posters in this area was the analysis of environmental factors and lifestyle elements, including obesity, dietary habits, smoking, and alcohol consumption, and their respective impacts on health such as obesity or fertility. The importance of educating the public regarding fertility preservation options was strongly emphasised. With particular topics such as healthy lifestyle for seniors and another Health behaviour of Poles. Challenges related to the prevention of overweight and obesity in various groups have gained a lot of attention from future medical practitioners. Role of diet and physical activity in the prevention of civilization diseases and showcased practical examples with selected risk factors for the development of lifestyle diseases and the possibility of their modification through lifestyle changes. Discussion was opened with "Modern lifestyle of Poles - a challenge for public health.". Congress discussed results of a yearly project on the health of Poles (medonet, 2024). Psychological wellbeing was addressed in both days as addictions - the shame of modern medicine with a general question: what to do, where is the evidence to support it, who should lead, what are the guidelines that should guide the population, and what is the role of social media. As every year the mental health of children and adolescents was discussed with psychologists and police. The whole topic was summarised with a panel on the first day the need to create interdisciplinary teams dealing with the treatment of lifestyle diseases". Special session co-organised with specialists from Wrocław University was on triangulating commercial and noncommercial studies on pharmaceuticals, special food (i.e. breastmilk substitutes) and supplement with problem of Conflicts of interest (CoI) of authors of publications on clinical trials (Rollins et al., 2016). The research of selected posters addresses crucial areas, including: the role of Type D personality in the psychological adaptation of colorectal cancer patients, a significant factor influencing patient well-being and potentially treatment outcomes, as explored in studies on personality and health (Denollet, 2005). Authors examine an innovative partnership

between the Wrocław Zoo and health empowerment programmes for seniors, reflecting the growing recognition of the positive impact of nature and social engagement on the well-being of older adults (Bratman et al., 2019). The session also covers the ongoing debate surrounding diet and supplementation in cancer treatment, an area requiring careful consideration of individual patient needs and potential risks, as highlighted in research on integrative oncology (Deng et al., 2009). We further investigate the critical importance of sleep hygiene for overall health, a fundamental aspect of well-being often overlooked in public health initiatives (Chaput et al., 2020).

### **CHAPTER 1: THE IMPORTANCE OF TYPE D PERSONALITY FOR MENTAL ADAPTATION TO CANCER IN PATIENTS WITH COLORECTAL CANCER**

The poster was presented by Angelina Kaleta-Pilarska, who is the sole author.

Cancer diagnosis is a source of long-term stress for the patient. The patient's mental attitude to the disease directly affects the quality of their life and may also determine the effectiveness of the final therapeutic effects. Determining the significance of Type D Personality for mental adaptation to cancer may have not only cognitive value. The study involved 200 patients diagnosed with colon cancer. The study used the Author's Personal Questionnaire, the Mini-MAC questionnaire, and the DS-14. The majority of the respondents (56.4%) with Type D Personality present a Destructive Style of Mental Adaptation to Cancer Disease. The significance of Type D Personality is evident after taking into account the presence of other cancer diseases, the patient's fitness level and alcohol consumption before the cancer diagnosis in the case of the Destructive Style of Mental Adaptation to Cancer Disease dominating the picture.

### **CHAPTER 2: ZOO WROCLAW STRATEGIC PARTNER FOR HEALTH EMPOWERMENT OF SENIORS**

The poster was presented by Dagmara Gawel-Dąbrowska, who prepared it with co-authors: Tomasz Zatoński, Katarzyna Zatońska, and Marta Zajac-Ossowska.

The Wrocław Zoo as a place for family, social gatherings is part of the history of almost every Wrocław family. Nowadays, however, zoos are not only places of entertainment, but also organisations actively involved in conservation and health research. For many years, public health has been facing serious problems related to the ageing population and their quality of life. The aim of our project is to investigate the impact of zoo visits on the assessment of health and quality of life by visiting seniors, and to highlight the role of the zoo in undertaking activities of health-promoting importance. In the project, we observed a group

of 214 people aged 60+, who visited the Wrocław Zoo once a quarter on three occasions. The controlled visit consisted of walking 6,000 steps. Before and after the visit, they completed the WHO QOL-26 questionnaire and Physical Activity Questionnaire (IPAQ-short). The participants in the study were a group of 214 seniors (women 186 - 81%, men 43 - 19%) aged between 61 and 92 years, of whom nearly 70% were aged 65 to 74 years. The WHO QOL-26 questionnaire allows the assessment of quality of life in 4 domains: somatic, psychological, social and environmental. Analysis of the project's results indicated an increase in the quality of life of seniors - participants in the study - in all domains. In the study of physical activity, assessed by the IPAQ-short questionnaire, an increase in moderate and vigorous activity (according to the WHO guidelines for seniors) was also observed. Visits to the zoo can be an attractive way of activating senior citizens in the form of educational and health trails.

### **CHAPTER 3: SUPPLEMENTATION OR DIET? - WHEN ARE SUPPLEMENTS NECESSARY AND WHEN CAN DIET BE AN ALTERNATIVE DURING CANCER TREATMENT?**

The poster was presented by Marta Jarosz, who prepared it with co-author Julia Głuszek.

The aim of this study is to evaluate the role of diet and supplements in cancer treatment and to determine when supplementation is necessary and when diet may be an alternative (Gerasimidis et al., 2021). Analysis of studies from PubMed indicates that supplementation with zinc, selenium and copper supports the immune response and cellular processes, which improves treatment efficacy.

Analysis based on studies from the PubMed database on the effect of diet and supplementation on cancer therapy. Papers on zinc (Skrajnowska & Bobrowska, 2019), selenium, copper, vitamin D3 and branched-chain amino acids were selected. The methodology involved searching the literature for the effectiveness of supplements, their interaction with chemotherapy and their impact on survival and quality of life of patients. Studies have shown that supplementation with zinc, selenium and copper supports the immune response and cellular processes, which improves treatment efficacy. A diet rich in fibre, fruit and vegetables with branched chain amino acids increases survival in HCC, reducing the risk of encephalopathy. Certain supplements, such as vitamins A, C, E and iron, may increase the risk of relapse. Vitamin D3 reduced mortality by 12%. Supporting cancer therapy requires a personalised approach, combining an antioxidant-rich diet with appropriate supplementation. Zinc, selenium and vitamin D3 improve treatment efficacy and survival. Supplements that may increase the risk of recurrence should be avoided. Patient education is key to understanding the benefits and risks of supplementation in cancer therapy.

#### CHAPTER 4: TAKING CARE OF SLEEP HYGIENE AS A PUBLIC HEALTH CHALLENGE

The poster was presented by Natalia Gąsiorowska, who prepared it with co-authors: Justyna Niżyńska and Natalia Szarwaryn.

Sleep plays a key role in maintaining physical and mental health, providing the foundation for daily functioning and quality of life. Proper sleep hygiene habits have a significant impact on the body's ability to recover, concentration, emotional balance and performance in work and study. However, modern difficulties such as stress, excess digital stimuli and improper organisation of time lead to widespread sleep disorders. The research for the study warranted a review and analysis of the literature related to the topic at hand, based on keywords-i.e. (sleep, hygiene, sleep disorders, insomnia, environmental factors, sleep length)- contained in the Google Scholar search engine database and scientific databases such as Pubmed between 2012 and 2017. The level of sleep hygiene depends on physical activity, the time of going to bed, access to TV and Internet in the bedroom, and the meals, drinks consumed before going to sleep. The causes of sleeplessness can be stimulants such as alcohol, caffeine and medications. Shift work and poor health can also lead to insomnia. Both too little sleep and overly prolonged sleep can carry serious consequences. Maintaining proper sleep duration (7-8 hours per night) is also important for the effectiveness of treating disorders and the coexisting obesity. Increased sleep duration can result in lower blood pressure in hypertensive patients. The daily functioning of society is determined by the maintenance of adequate sleep hygiene which ultimately translates into productivity, concentration, efficiency and quality of health. Maintaining proper sleep duration (7-8 hours) serves to improve recovery, cognitive function and overall physical and mental health, while reducing the risk of developing chronic diseases.

#### CONCLUSION

These presentations have not only expanded our understanding but also sparked important conversations about the future directions of public health. The research presented today exemplifies the dedication and innovation driving our field forward. Let us carry the knowledge and inspiration gained here as we continue our work towards creating healthier, safer, and more equitable health-care systems for all. Lifestyle change in the context of secondary prevention of lifestyle diseases is currently the most challenging area of research inquiry. This approach addresses the unmet need for scalable, accessible telerehabilitation options in the context of Europe's aging population and strained health-care resources, where the biggest problem is adherence to the programmes (Klisowska, et al., 2023). The city of Wrocław is a witness of every year conference on lifestyle, which links social sciences with public health.

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