Expert opinion on the Ph.D. Thesis

**Title of Thesis:** Comparison of smoking patterns of different population groups - implications for interventions

**The author of the Thesis:** Biljana Kilibarda

**Field of study:** Addictology

**Author of the Expert review:** Assoc. Prof. Petr Kachlík, M.D., Ph.D.

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**Ph.D. Thesis Review**

Tobacco smoking poses a serious threat to health, both for the smoker and for his surroundings. In addition to health considerations, social, economic and environmental aspects are not negligible - the consequences of tobacco smoking affect not only individuals, but also their immediate family and society in general. Tracking the scope of the tobacco epidemic and analyzing its attributes in different regions and population segments are key to proper planning and implementation of effective measures to control, treat and prevent smoking.

In her dissertation the author deals with very current issues of mapping the occurrence and signs of smoking in different population groups, comparing epidemiological data, smoking cessation and prevention of tobacco epidemics. The text brings new, interesting and comprehensive knowledge about the situation in Serbia, which can be used by those interested in clinical and theoretical fields.

The author outlined the 5 objectives of her dissertation and identified 5 working hypotheses, which were further analyzed. They related to differences in prevalence, patterns and exposure to tobacco smoke in the general population, depending on sociodemographic and psychosocial factors, the popularity of electronic cigarettes among young people in Serbia, and their control, higher incidence of smokers and users of other addictive substances in vulnerable population groups compared to the general population, compliance with prevalence and differences in the smoking behavior of different population groups and gaps in data needed for effective tobacco control.
The use of descriptive statistics methods was used to express the prevalence of smoking in selected population groups. SPSS software was used to statistically analyze collected data, but should be quoted in sources, also referenced to relevant methods and tests, in particular mentioned and applied test of good agreement (chisquare) and regression analysis. These statistical tools are adequate to the objectives and nature of the research data. The detailed characteristics of the research samples, the circumstances of their selection and the inclusion in the study were given by the author both in the methodology and in Annex 8.1. The questionnaire used in the research is contained in Annex 8.2. Research data are sufficiently described, the study respects the professional and ethical standards of scientific work. The author for her research in all monitored population groups obtained the approval of the Ethics Committee of the Serbian Public Health Institute.

The author has demonstrated the ability to properly manipulate literary sources, uses and quotes 355 articles of professional literature using the author's name and publication of his work. The resources used are sufficiently representative and recent in relation to the topic. The theoretical bases are appropriately processed by a monographic procedure, they contain the basic concepts and essential facts with which the author continues to operate. The text demonstrates the author's great interest and deep knowledge of the subject.

The author, using an anonymous questionnaire, conducted several cross-sectional studies to collect and analyze data from 3,299 respondents. The population segment of homosexual men, prostitutes, prisoners, Roma youths, people in institutional care, and people with HIV in Serbia was addressed.

The results of the study are clearly presented with a text comment supplemented by 41 tables and 6 column charts. The results of the statistical analysis are properly described. In the Annex 8.3, the author lists her key publications, including 4 articles in journals with Impact Factor, 8 research reports, 7 papers in reviewed proceedings.

The author compares her results with the four representative studies conducted in Serbia in 2013-2014, focusing on health, lifestyle, tobacco smoking and HIV issues, especially among young people, and discusses them with a number of foreign studies, as evidenced by a large number of literary references and citations.

The author has demonstrated the ability to look at the topic of her work in a wider scientific context and from different angles. This is evidenced by its rich publishing activity.

The text of the work is original, it is logically assembled, the individual sections are properly connected to each other. The objectives of the work were fulfilled, working hypotheses analyzed, results described in detail and discussed. The author demonstrated the ability of scientific thinking, planning, realization of research, processing of acquired data and their presentation.

The text is divided into a theoretical and empirical part, its structure is logical and balanced. The first chapter consists of 6 subchapters. It includes a theoretical introduction to the issue of epidemiology, control, cessation and prevention of tobacco smoking (tobacco-related hazards, smoking prevalence and exposure to tobacco smoke, risk factors of smoking, the link between smoking and mental health and use of other addictive substances, new opportunities and challenges in control, treatment and prevention of tobacco dependence, with an emphasis on the situation in Serbia).
The second chapter presents the main objectives and working hypotheses; in the third chapter the research tools and characteristics of the research sample are described. The fourth chapter contains 4 subchapters. It consists of an overview of tobacco smoking research results and related factors among adolescents, among youth, vulnerable population groups, comparison of smoking behavior among different population groups.

The fifth chapter - the discussion is composed of nine subchapters. It is dedicated to the specifics of adolescents and young people (electronic cigarettes, exposure to tobacco smoke, smoking cessation), mental health and vulnerable population groups. The sixth chapter presents the conclusions of the survey, the seventh chapter contains the bibliography and the eighth annexes (characteristic of the sample under examination, the questionnaire used and the author’s publication).

The scope of the submitted dissertation thesis is appropriate to the requirements. It has a total of 114 pages, out of which 95 pages make the text of the dissertation, including formal pages, 19 pages offering 3 annexes with a close relation to the solved theme. An extensive bibliography contains a total of 355 items with literary titles mainly in English. Their selection is representative and includes recent sources. Their inventory respects the APA citation standard.

**Conclusion**
The assessed text of the dissertation thesis by Mrs. Biljana Kilibarda *Comparison of the smoking patterns of different population groups - implications for interventions* fulfills both the content and the formal requirements of this type of qualification work.

I recommend the work for the defense.

**Questions and remarks on the defense of work:**
1. What measures to control, cessation and prevent tobacco smoking in vulnerable population groups do you consider effective?

2. What other risk behaviors (mainly substance abuse) is associated with tobacco smoking in monitored persons?

3. What measures can be taken to regulate the use of electronic cigarettes in young people in Serbia?

Brno, August 23, 2018

Petr Kachlík