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DOCTORAL SCHOOL

**Study of active and passive smoking in foster cares after the amendment of the
anti-smoking legislation**

(abstract)

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Introduction: In the 21st century, studies on smoking and the support in trying to quit this habit through intervention programmes, implementing anti-smoking laws, raising the cigarette tax, and awareness campaigns about the danger associated with smoking are elements of indisputable importance. Smoking can be an important risk factor or it can become a major risk factor, not only on smokers, but also on those around them, respectively on passive smokers. Thus, the problem of smoking must be treated as a public health problem, an issue that addresses society as a whole. Smoking is responsible for increased morbidity and mortality, which could be influenced by reducing smoking, because this addiction is responsible for the occurrence and onset of pathologies that can be prevented. In order to contribute to the prevention of diseases caused by smoking, it is essential to understand the habits of smokers, to research and to be aware of these mechanisms. The present thesis was carried out at the level of family-type foster homes belonging to the National Authority for the Protection of the Rights of the Child and Adoption in Romania. Thus, the examinations focused on the short, medium and long-term impact of the anti-smoking law on active and passive smoking among the inhabitants of these above-mentioned houses, taking into account the fact that on March 17, 2016 a new legislation in this regard (law no. 15/2016) was implemented in Romania, which amended the structure of the previous law with no. 349/2002.

The general objective of the study was to analyse the effects of anti-smoking legislation on smoking habits, possible changes due to this legislation regarding smoking cessation and its consequences for employees and children in family homes under the jurisdiction of the National Authority for the Protection of the Rights of Child and Adoption in Romania.

General methodology: In the period 2012-2019, five visits were organized to foster homes, where data were collected based on questionnaires, respectively measurements were performed in order to determine the level of air pollution by measuring the number of particles with the size $\leq 2,5\mu\text{m}$. The number of participants was variable, each visit including a different number of participants. The questionnaire was completed twice by each employee and institutionalized child, included a number of 62 questions and was used to collect data and create a database. Another 25-question questionnaire was used to assess the impact of legislative changes on preventing and combating the effects of tobacco use in children and employees. At the same time, we performed air quality measurements in these foster homes, determinations made 3 times at the level of each home. In the five counties where the study was conducted, 198 placement centres were visited where a total of 368 questionnaires were filled in by children and 787 questionnaires by employees.

Study no. 1: The influence of anti-smoking legislation and smoking prevention intervention on its prevalence and the will to quit among the employees of foster homes in Transylvania

Our objective was to evaluate the influence of anti-smoking legislation on the prevalence of smoking and the will of employees and mothers to quit smoking between 2014-2016, in the counties: Mures, Sibiu and Covasna. At the same time, we analysed the effects of information and awareness campaigns by organizing a smoking prevention intervention in placement centres.

Smoking in terms of daily and occasional users of tobacco products in the 3 counties included in this study exceeds the national average, and the percentage of smokers increased

from the initial to the final assessment. Despite the fact that between the two studies a smoking prevention intervention was organized in the placement centres, an intervention that also benefited from the help of the new anti-smoking law that prohibits smoking indoors, we did not obtain a significant number of smoking cessations. However, there are signs of a positive result, as 85% of respondents expressed a will to quit smoking and 40% reported an intention to quit in the next six months. We still need efforts to promote smoking cessation among foster care workers, efforts that include evidence-based support, and compliance with policies which ban indoor smoking. Together, these evidence-based smoking cessation strategies would benefit both the health of employees and the children in their care, as they smoke more than the general adolescent population and are more exposed to passive smoking.

Study no. 2: The influence of anti-smoking legislation on PM_{2.5} in foster care homes in Transylvania.

Because the main source of air pollution in foster cares is smoking, the aim of this study was to study the impact of implementing anti-smoking legislation (2016) on air pollution in foster care homes in Romania and orphanages in Covasna, Harghita and Mureş counties. At the same time, we compared the data on air quality before the implementation of the anti-smoking law, respectively after this date.

Our study found no significant differences in indoor air pollution (PM_{2.5} values) of placement units before, after 6 months and 3 years after the implementation of anti-smoking legislation. However, the high outdoor values of PM_{2.5} in the air suggest that nursing home residents smoke more outside after the introduction of the 2016 legislation. Also, if we refer to the global measurements (indoor + outdoor) this study showed the fact that the vast majority of the measurements performed described a good and respectively satisfactory air quality. In general, based on the study we can say that, in the short and long term, the legislation has directly influenced the increase of PM_{2.5} values in the open air. The study also showed that Covasna County had the highest values of PM 2.5 both inside and outside the houses, occupying the leading place in terms of air pollution with dust resulting from smoking in all the 3 years analysed. Mureş County, on the other hand, is the best in this respect, with the lowest values of PM 2.5, and the improvement is best observed in 2019.

Study no. 3: The opinion of children and employees in foster care homes in Transylvania about the effects of anti-smoking legislation

The objective of this study was to investigate the opinion of employees and children in foster care placement units in Alba, Mureş and Covasna counties regarding the effects of anti-smoking legislation, 6 months after its implementation.

Half a year after the implementation of the anti-smoking legislation, most employees and children in foster care homes in Romania admitted that they knew about the changes. A quarter of them stated that there was an impact on the frequency of smoking or the intention to quit smoking. Most of them also noticed a series of measures taken against smoking. Despite these measures, 6 months after the entry into force of the legislation, there are still smokers in foster care homes, which means that anti-smoking campaigns are still needed.