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## The Intensity Of Dental Caries In Workers Is Harmful Industry

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### ABSTRACT

Among the production of harmful industry all over the world, including in our republic, tobacco production occupies a significant place. In Uzbekistan, tobacco cultivation is carried out by workers of the Urgut district of the Samarkand region, which accounts for a large share in agriculture and brings significant economic profit.

The available literature does not cover the issue of the effect of tobacco dust and pesticides in combination with uncomfortable microclimatic conditions on the organs and tissues of the oral cavity of tobacco growers.

Some aspects of the mechanism of development of pathological changes in the oral cavity of tobacco growers are not specified in the conditions of Uzbekistan, and accordingly there is no data on adequate methods of their prevention and treatment [1,3]. In this regard, there is a need to study the features of the clinic and the course of the main dental diseases in tobacco growers in order to develop a set of organizational, sanitary, hygienic and therapeutic and preventive measures aimed at improving the quality of the production environment, preventing the development and reducing the frequency of dental morbidity among tobacco growers.

### KEYWORDS

Dental caries, prevalence and intensity of caries, harmful factors of production.

## INTRODUCTION

It turns out that the role of the non-productive eco-GIC environment that is generated in the process of tobacco delivery in the development of dental CA-Ries among workers engaged in tobacco production would be great. And this requires the perfection of existing treatment-prophylactic measures for workers engaged in tobacco production.

Our research on the state of the oral organs and the taste analyzer when exposed to tobacco dust and pesticides in combination with unfavorable microclimatic conditions is of scientific, theoretical and practical interest on the scale of dental and hygienic science.

The aim of this study was to study the frequency and nature of dental caries in tobacco workers in comparison with the control group of the examined patients.

### Research materials and methods

To study the condition of the teeth, 1215 workers were examined in the Urgut tobacco-growing district of the Samarkand viloyat, engaged in the technological process on tobacco plantations – growing, breaking, cleaning, drying, stringing (the main group), and for control, a similar survey was conducted in 1198 workers and the population in the Samarkand vegetable-growing district of the same viloyat, who had similar microclimatic, social and living conditions, but there were no production-harmful factors (the control group). The examination was conducted in accordance with the dental status assessment

map (WHO, 1995) with the following analysis of the prevalence, intensity of caries and its components-the CPI index, which means the number of carious (K), filled (N) and removed (Y) teeth per one examined person.

## RESULTS AND DISCUSSION

When analyzing the incidence of dental caries in the same age and experience subgroups of the compared groups of subjects, it was found that the prevalence (87.3±22.9%) and intensity (CPI index = 7.3±0.6) of dental caries lesions were significantly higher ( $P<0.01$ ) than in the control group of subjects (73.3±2.5% and 5.5±0.5%, respectively). It is characteristic that in most cases, the initial caries of tobacco workers was asymptomatic, and the transition from a superficial form to a deep one occurred without any subjective sensations and in a short time. It was also revealed that in some of the examined patients, the localization of carious lesions was atypical due to an increase in the specific weight of cavities in the contact and cervical areas of the teeth.

The analysis of the frequency of dental caries in the main and control groups of the examined in the age aspect revealed (Table 1) that the difference in the prevalence of dental caries in the compared groups of the examined was significant ( $P<0.05-0.001$ ) in all age groups.

Table 1

The frequency of dental caries in tobacco workers (the main group) in comparison with the control group in the age aspect ( $M \pm m$ , per 100 surveyed)

Age (in years)	The group of the examined		
	main	control	P
Up to 20	77,4 $\pm$ 2,7	73,8 $\pm$ 3,2	<0,05
21-30	85,5 $\pm$ 3,0	74,2 $\pm$ 2,7	<0,01
31-40	90,5 $\pm$ 3,2	79,1 $\pm$ 2,8	<0,001
41-50	83,2 $\pm$ 2,9	71,4 $\pm$ 2,2	<0,01
51-60	80,5 $\pm$ 1,7	70,5 $\pm$ 1,9	<0,01
61 and older	68,4 $\pm$ 1,8	64,4 $\pm$ 1,6	<0,05
Total	87,4 $\pm$ 2,9	73,3 $\pm$ 2,5	<0,01

A comparative assessment of the condition of the teeth in tobacco growers, depending on the length of work in the tobacco industry, revealed a direct relationship between the intensity of dental caries and the duration of work in the tobacco industry (Table 2).

Table 2

Indicators of dental caries in tobacco workers, depending on the length of service ( $M \pm m$ , per 100 examined patients)

Caries indicators	Work experience, years					Control group
	up to 5	5-9	10-14	15-19	20 and higher	
						73,3 $\pm$ 2,5

Prevalence, %	80,5±6,2	83,5±6,5	88,3± 3,3	95,4± 3,1	96,5± 3,3	5,5± 0,5
KPU index	5,9± 0,6	6,6± 0,7	8,2± 0,8	9,5± 0,7	9,7± 0,6	73,3± 2,5

As can be seen from the data in Table 2, as the work experience in tobacco production increased, the average value of the prevalence of caries and the index of KPU significantly increased. If we take into account that in the tobacco industry, most of the employees are people who have passed the turn of the third decade, then they are at an age when, under normal conditions, the relative stabilization of the carious process should occur, then among tobacco growers, on the contrary, there is an increase in the number of teeth affected by caries. However, it should be noted that the indicators of dental caries in tobacco growers with an experience of 5 to 9 years did not differ significantly from those in the group with an experience of up to 5 years, but significantly increased with an experience of more than 10 years. In the following age groups – 15-19 years and 20 years or more – the increase in caries indicators was also not observed.

It is characteristic that when examining the oral cavity of tobacco growers in most cases, a small hole and a significant amount of poorly pigmented softened dentin in the cavities were found in the carious teeth. This circumstance indicates the severity of the course of the carious process. This was also evidenced by a greater proportion of complicated caries among tobacco workers (52.3±2.9%) than its uncomplicated forms (36.1±2.0%).

## CONCLUSIONS

Thus, based on the results of these studies, it can be said that in the development of dental caries in tobacco growers, an unfavorable production environment in tobacco production has a certain significance. This is evidenced by a comparative assessment of the data obtained in tobacco growers with the control group of the examined, an increase in the indicators of dental caries with age, and a direct correlation between the intensity of dental caries and the duration of work in tobacco farming.

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