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## ANALYSIS OF DENTAL STATUS IN PREGNANT WOMEN IN URGENCH.

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**Abstract.** The somatic status, culture of life and the level of hygienic knowledge of a pregnant woman affect the physiological formation of the child's dentoalveolar system. Timely rehabilitation, prevention of dental diseases and health education of expectant mothers is an integral part of antenatal prevention of carious disease in young children. In order to analyze the level of hygienic knowledge of expectant mothers and optimize the prevention of dental diseases among the child population, a dental examination and a survey of pregnant women in Urgench were carried out.

**Key words:** pregnant women; caries; dento-jaw system; children; CPU index

抽象的。孕妇的身体状况、生活文化和卫生知识水平影响着孩子牙槽系统的生理形成。及时康复、预防牙病和对准妈妈进行健康教育是幼儿龋病产前预防的重要组成部分。为分析孕妇卫生知识水平，优化儿童口腔疾病预防工作，对乌尔根奇市孕妇进行口腔检查和调查。

关键词：孕妇；龋齿；牙颌系统；孩子们；中央处理器指数

**Introduction.** The somatic status, culture of life and the level of hygienic knowledge of a pregnant woman affect the physiological formation of the child's dentoalveolar system. Timely rehabilitation, prevention of dental diseases and health education of expectant mothers is an integral part of antenatal prevention of carious disease in young children. In order to analyze the level of hygienic knowledge of expectant mothers and optimize the prevention of dental diseases among the child population, a dental examination and a survey of pregnant women in Urgench were carried out.

Despite the targeted improvement in basic dental parameters, in countries with a high standard of living, the problem of dental morbidity is urgent: statistics change from 1% in economically stable to 98% in underdeveloped countries [6, 10]. In the EU countries, early childhood caries (ECD) is not a self-evident dilemma: the prevalence of carious disease in children under three years of age varies from 1% to 32% [2, 4], in Australia it does not exceed 17.0% [5], in Switzerland the rate is 24.8% [7]. In Poland, the prevalence of caries in children under 3 years old reaches 56% [3], in the USA the level increases from 9% to 77% [1], in the Middle East in children 3 years old from 22% to 61% [7], epidemiological observations in India showed the prevalence of caries in children under six years of age - 33.1.

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Insufficient sanitation of the oral cavity and the initiation of inflammatory processes affect the nature of the life of the individual and the immediate environment.

lead to functional disorders, destabilize the psycho-neurological status of children, exacerbate chronic infections and lead to socio-economic consequences. Early loss of teeth is accompanied by a disorder of occlusion, prevents the formation of speech, and increases the feeling of inferiority. Casamassimo P. S. et al. have documented the relationship between RDD and cases of parental neglect, including it in the list of diseases equated with child abuse

**The aim of the study.** To assess the dental status of pregnant women in Urgench in order to prevent the development of early childhood caries in children.

**Materials and research methods.** To consider the influence of antenatal risk factors for the initiation of dental diseases in young children, pregnant women were examined. To assess the course of the carious process in pregnant women, the prevalence in %, the intensity of caries according to the KPU parameter were determined. The level of oral hygiene was assessed using the simplified OHI-S index (Green J. C, Vermillion J. R., 1964).

The prevalence and intensity of inflammatory periodontal diseases were determined by the PMA index in the modification of Parma % and the index - CPITN.

The organization of groups by age is determined according to the representativeness of the sample. [99]. For the entire contingent of the examined, the level of dental care was calculated according to the method of Leus P.A.

Statistical processing of the results was carried out using the Student-Fisher test.

**Research results.** To study antenatal and postnatal risk factors for the initiation of dental diseases in young children, 40 pregnant women aged 18–40 years were examined.

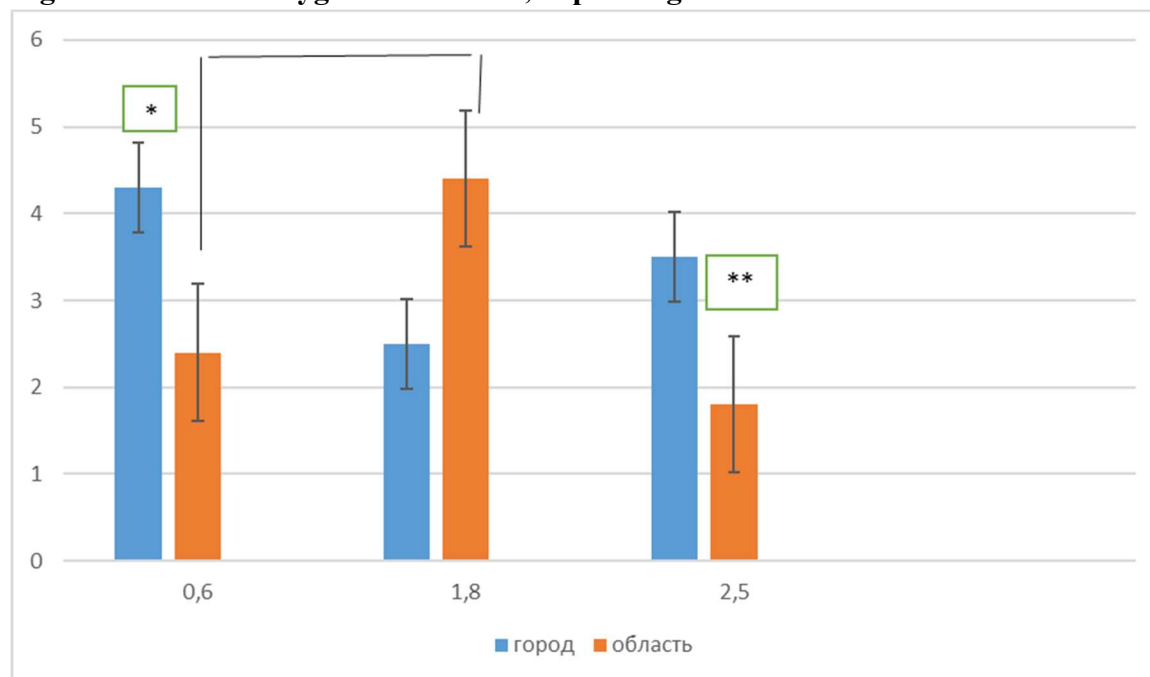
The average age of pregnant women was  $28.5 \pm 1.07$  years, women aged 20-29 years prevailed -  $73.11 \pm 3.14\%$ , the second place was occupied by pregnant women aged 30-39 years -  $22.03 \pm 2.93\%$ , this trend was characteristic of all the studied territories. Dental examination showed that the prevalence of dental caries in expectant mothers in Urgench was  $97.50 \pm 1.10\%$ , with an average intensity of  $8.77 \pm 0.56$  teeth, which is regarded as a high indicator according to WHO gradation. In the structure of the KPU index, the “K” component was equal to  $4.71 \pm 0.32$ , “P” was  $2.54 \pm 0.12$ , with an average value of extracted teeth equal to  $0.86 \pm 0.17$ . An in-depth analysis showed that the proportion of complicated caries accounted for  $0.28 \pm 0.07$ , and the proportion of cases of caries recurrence after rehabilitation treatment was  $0.71 \pm 0.12$ . The analysis of indicators demonstrates flaws in the provision of assistance to expectant mothers. Evaluation of the KPU indicator depending on the age of the examined (Table 1) revealed significantly significant differences.

**Table 1. The structure of the KPU of pregnant women depending on age.**

Indicator	20-29 years	30-39 years	p
Carious sealed remote	$6,93 \pm 0,26$	$14,77 \pm 0,45$	$<0,01$
C	$2,40 \pm 0,17$	$5,67 \pm 0,48$	$<0,05$
S	$4,30 \pm 0,18$	$7,27 \pm 0,43$	$<0,05$
R	$0,23 \pm 0,03$	$1,83 \pm 0,22$	$<0,05$

In pregnant women up to 29 years old, the KPU index is  $6.93 \pm 0.26$ , in the group of 30-39 years old, the values increase sharply to  $14.77 \pm 0.45$  teeth ( $p < 0.05$ ), with a predominance of extracted teeth:  $1.83 \pm 0.22$  vs.  $0.23 \pm 0.03$  ( $p < 0.05$ ). The high proportion of "K" -  $53.71 \pm 3.73\%$  in the structure of the KPU indicates a high need for pregnant women in sanitation, characterizes the coverage of the population with dental care and the remoteness of rural areas. SVR for pregnant women in rural areas is insufficient and amounted to  $28.4 \pm 1.64\%$  compared to a good SVR for women living in the city -  $76.1 \pm 3.52\%$  ( $p < 0.01$ ). The state of oral hygiene of expectant mothers differs depending on the area of residence (Fig. 1).

**Fig 1. Index of oral hygiene in women, depending on the area of residence.**



Good hygiene is observed in  $46.0 \pm 4.07\%$  of pregnant women in the city – IG  $1.1 \pm 0.1$  and in  $26.00 \pm 2.90\%$  of women living in rural areas ( $p < 0.01$ ). Satisfactory hygiene, IG  $1.8 \pm 0.4$  — in  $35.5 \pm 3.90\%$  of urban women versus  $50.00 \pm 4.03\%$  of residents of the region ( $p < 0.05$ ). A poor hygiene level of  $2.5 \pm 0.9$  was found in  $18.67 \pm 3.18\%$  of pregnant women in the city and in  $24.00 \pm 2.90\%$  of women in the village ( $p > 0.05$ ). The state of periodontal tissues during pregnancy is due to hormonal changes in the body. At the time of examination of pregnant women, the average value of RMA for all examined was  $32.14 \pm 2.01\%$ . The absence of gingival inflammation was noted in  $39.0 \pm 2.75\%$  of cases in urban pregnant women and in  $31.0 \pm 3.15\%$  of pregnant women living in the village ( $p > 0.05$ ). A mild degree of gingivitis was recorded in  $34.0 \pm 2.24\%$  and  $28.0 \pm 3.14\%$ , respectively ( $p > 0.05$ ). The average degree - in  $18.0 \pm 2.06\%$  in urban pregnant women and in  $27.0 \pm 2.45\%$  in rural ones, ( $p < 0.05$ ); severe — in  $7.0 \pm 0.15\%$  of cases and in  $14.0 \pm 0.45\%$ , respectively ( $p < 0.05$ ). The hygienic state of the oral cavity, the structure of the KPU and the features of the USP are reflected in the clinical manifestations of periodontal diseases. The conducted studies indicate a high prevalence of periodontal diseases among pregnant women of the region, especially in rural areas. The structure of periodontal diseases is shown in fig. 2.

**Fig 2. The structure of periodontal diseases in pregnant women depending on the area of residence. Indicators characterizing the state of periodontal tissues.**



In urban and rural women, the average number of sextants with no periodontal disease was  $10.04 \pm 0.13\%$ , and with hard dental deposits -  $35.30 \pm 0.10\%$  ( $p > 0.05$ ). The value of sextants with pathological pockets averaged  $12.35 \pm 0.04\%$  ( $p > 0.05$ ). Analysis of the prevalence of periodontal diseases depending on the area of residence revealed a statistically significant difference in the prevalence of bleeding between urban and rural areas:  $23.9 \pm 0.06\%$  and  $43.6 \pm 2.41\%$  ( $p < 0.05$ ) and excluded sextants:  $6.70 \pm 0.04\%$  and  $14.80 \pm 0.10\%$  ( $p < 0.05$ ), respectively. The results obtained are due to the lack of awareness of pregnant women, the high percentage of extracted teeth and hormonal changes in the body. Dental examination data showed satisfactory oral hygiene, a high prevalence of periodontal diseases, especially in rural areas, which may be associated with low USP, insufficient level of hygienic knowledge and skills.

**Conclusions.** In expectant mothers - residents of Urgench, the prevalence of dental caries was  $97.50 \pm 1.10\%$ , with an intensity of  $8.77 \pm 0.56$  teeth, in rural areas the indicators are higher and the “K” component dominates -  $4.71 \pm 0.32$ ; satisfactory oral hygiene; high prevalence of periodontal disease; insufficient SSP in rural areas -  $28.4 \pm 1.64\%$ , good SSP in the city -  $76.1 \pm 3.52\%$ .

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