



EPIDEMIOLOGICAL STUDY OF MALOCCLUSIONS OF 5 AND 6 YEARS OLD CHILDREN FROM NORTHEASTERN REGION OF BULGARIA

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ABSTRACT:

A malocclusion is a misalignment of teeth or incorrect relation between the teeth of the two dental arches. The aim of this presentation is to show the percentage of the children with malocclusions and comparison between children with mild and severe malocclusions from rural and urban regions. Materials and methods: 1200 children between 5 and 6 years old from North-eastern Bulgaria (600 urban and 600 rural) were examined. WHO standards were applied and the data was collected in WHO statistic forms, which were modified accordingly. The children were divided in 3 groups-healthy, with mild and with severe malocclusions according to Angles classification. Results: More than a half of the urban children are healthy – 51,5% and the biggest percentage of the malocclusions are mild – 31,3%, only 17,2% have severe malocclusions. The rural children are without malocclusions – 23,8% and – 39,2% of them are with severe orthodontic deformations. Relative shares of children with malocclusions from the urban – 48,5% and rural regions – 76,2%. The relative share of the healthy children from both urban and rural regions is 37,7%. The relative share of the children with malocclusions from urban and rural regions is 62,3%. Conclusion: A little percent of the rural children are without malocclusions and more of them are with severe ones. We suggest that specialist have to work on better prevention in these regions.

Key words: malocclusion, primary teeth, children, premature extraction

INTRODUCTION:

The children from the rural regions have a poor oral health. Most of the parents are looking for dental help for their children only in cases of emergency [1, 2, 3]. The lack of information of the effects of the neglect of their children oral health leads to underestimation of the problem by the parents [4, 5, 6]. This is how the patients loss their chances for primary orthodontic prophylactics, which is very important for the correct teeth alignment, dental arches formation and occlusion [7, 8].

In year 2010 a dental survey concerning children's

oral health was carried out in North-Eastern Bulgaria. Malocclusion registration was an important part of it, because malocclusions correspond with the whole body health.

The aim of this presentation is to show the percentage of the children with malocclusions and comparison between children with mild and severe malocclusions from rural and urban regions.

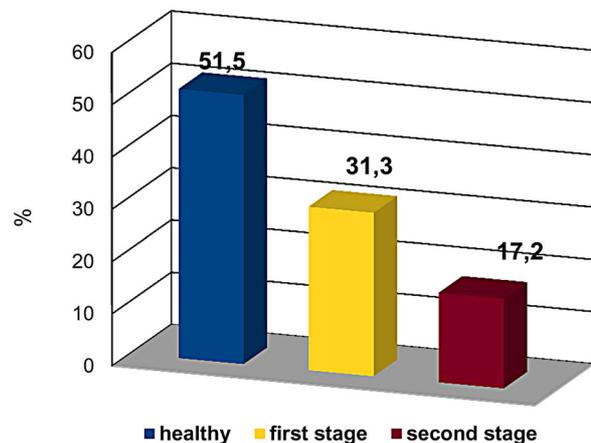
MATERIALS AND METHODS:

1200 children between 5 and 6 years old from North-eastern Bulgaria (600 urban and 600 rural) were examined by a strictly calibrated team of dental specialists. The parents sign informed consent before starting the survey. WHO standarts were applied and the data was collected in WHO statistic forms, which were modified accordingly. The children were divided in 3 groups-healthy, with mild and with severe malocclusions according to Angles classification.

RESULTS:

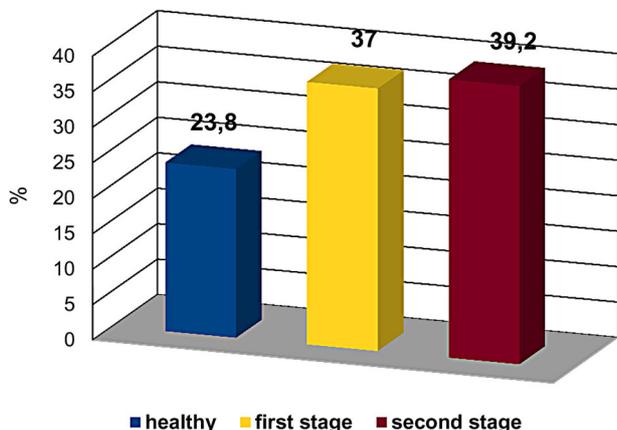
More than a half of the urban children are healthy – 51,5% and the biggest percentage of the malocclusions are mild – 31,3%, only 17,2% have severe malocclusions (Fig. 1.).

Fig. 1. Relative shares of healthy children and children with first and second stage malocclusions in urban regions



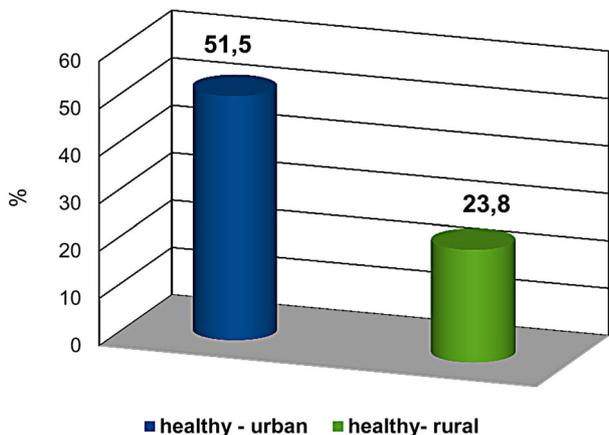
A little percent of the rural children are without malocclusions – 23,8% and more of them are with severe ones – 39,2%. The percentage of rural children with mild orthodontic deformations is 37% (Fig. 2.).

Fig. 2. Relative shares of healthy children and children with first and second stage malocclusions in rural regions



The comparison between the relative shares of healthy children from urban and rural regions is demonstrated on the Figure 3.

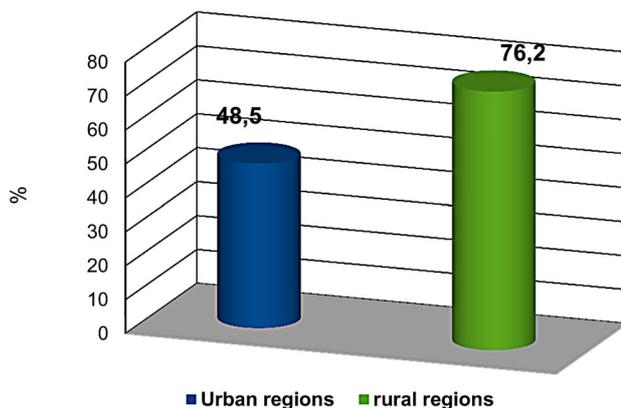
Fig. 3. Relative shares of healthy children from urban and rural regions



Statistical significance of the differences is observed between values of healthy children in urban and rural regions. The healthy urban children are 51,5% and the healthy rural are 23,85%.

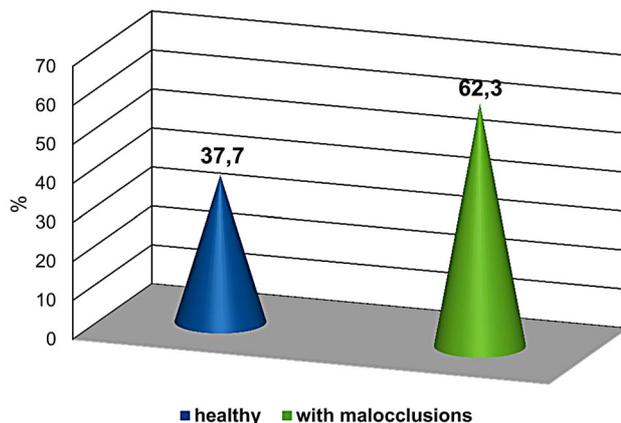
There is a statistically significant difference between relative shares of children with malocclusions from the urban – 48,5% and rural regions – 76,2% (Fig. 4.).

Fig. 4. Relative shares of children with malocclusions from urban rural regions



The comparison between the relative shares of healthy children and these with malocclusions is shown on Figure 5.

Fig. 5. Comparison between the relative shares of healthy children and these with malocclusions



The relative share of the healthy children from both urban and rural regions is 37,7%. The relative share of the children with malocclusions from urban and rural regions is 62,3%.

DISCUSSION:

Many of the surveyed patients have a kind of malocclusions. The more significant part of the examined children with malocclusions are from the rural regions. This is due to the difficult access of children from these regions to specialized dental help [9, 10, 11, 12]. Prevention regarding malocclusions is missing or poorly concerned. Dental health of rural children is neglected.

CONCLUSION:

A little percent of the rural children are without malocclusions and more of them are with severe ones. We suggest that specialist have to work on better prevention in these regions.

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