

ORODENTAL HEALTH ISSUES IN SIBIU COUNTY. COMPARATIVE STUDY BETWEEN URBAN AND RURAL AREAS

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Abstract: Quality of life of an individual is influenced by its health status, which in turn is interrelated with other dimensions of quality of life, such as income, housing, lifestyle, education, the development of services health, environmental health etc. Within the concept of general health, there is also included the orodental health, which refers essentially to maintain the integrity and health of all components of the dentomaxillary system. According to some studies, tooth decay is the most common disease in the world: “tooth decay is one of the major problems of the health system in the world” (Frank Muller, University of Saarland, Germany). This study aims at highlighting the main aspects of orodental health in Sibiu county population, comparing the oral pathology in the urban and rural areas.

Cuvinte cheie: starea de sănătate, igiena orală, afecțiunile orodentare, mediul urban, mediul rural

Rezumat: Calitatea vieții unui individ este influențată de starea de sănătate a acestuia, care se află la rândul său în interrelație cu alte dimensiuni ale calității vieții, cum sunt: venitul, condițiile de locuit, stilul de viață, nivelul de educație, gradul de dezvoltare al serviciilor medicale, sănătatea mediului ambiant etc. În acest concept de sănătate generală este inclus și acela de sănătate oro-dentară, care se referă în esență la menținerea integrității și sănătății tuturor componentelor aparatului dento – maxilar. Potrivit unor studii de specialitate, caria dentară reprezintă cea mai frecventă afecțiune din lume: „cariile reprezintă una din problemele majore ale sistemului de sănătate din lume” (Frank Muller, Universitatea Saar, Germania). Studiul de față își propune să evidențieze principalele aspecte ale stării de sănătate oro-dentare la populația județului Sibiu, comparând patologia orală din mediile urban și rural.

INTRODUCTION

According to the definition of the World Health Organization adopted in the past 30 years, health status is not merely the absence of disease or disability, but a state of physical mental and social well being. The absence of health is synchronous with disease occurrence. At the same time with the disease occurrence, there also occur a series of threats addressed to the integrity and / or physical ability of an individual, which can lead even to his death, depending on the severity of the disease.

The concept of orodental health is not only healthy teeth, but it refers to all the components of the dento - maxillary system in complex interaction. Oral health affects many daily activities: food preferences, chewing, swallowing, phonation, physiognomy, sleep, facial expressiveness, and even self-esteem. Thus, in many cases, oral health status indicates the overall health status of the organism.

METHODS

This work was made possible through the collaboration with a team made up by a dentist and a student of the Dental Department, year VI, “Victor Papilian” Faculty of Medicine of Sibiu.

As a working method, I used the cross-sectional study conducted between 01.01.2013 - 01.06.2013, on a sample of 60 randomly selected patients from rural and urban areas within the county of Sibiu. As working instruments, I used the clinical examination of the patients followed by filling out a research dental form. The forms aimed at highlighting the following:

- dentition status: caries existence and signs of periodontal disease;
- correctness of treatments already made: fillings or dentures;
- the existence of root debris or toothless.

The last part of the form contains questions about the oral hygiene:

- frequency of tooth brushing;
- hygiene and preventive aids used;
- assessment of oral hygiene when consulted.

Based on individual forms, I have statistically processed the data on the orodental health of subjects, including DMF index calculation (decayed/missing/filled).

RESULTS AND DISCUSSIONS

The patients included in the study come from both geographical environments in a slightly higher percentage of the urban area, 52% versus the rural area 48%. Regarding the distribution of patients by gender, in the investigated group, the proportion of females increased by approximately 10% compared to males. The analyzed subjects were aged 18-75 years old, belonging to all social categories.

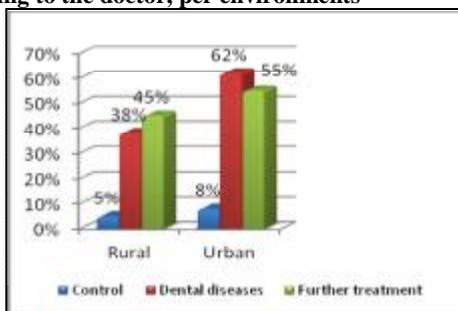
The training levels vary from secondary school or vocational school, especially for the people in the rural areas to high school or above, mainly in urban areas.

The distribution of patients according to the reason for presenting to the doctor show a high percentage for the different painful or inflammatory diseases both in the urban area and the rural one, and a relatively small presence, below 10% of patients present to the doctor just for a check-up. Instead, the

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addressability for continuing the treatment is of about 50% in both study groups (figure no. 1).

Figure no. 1. Patients' repartition according to the reason of presenting to the doctor, per environments



After the statistical calculation of the DMF index (decayed/missing/filled teeth), we found that the index is higher in the urban patients. Also, in the urban patients, there is a high percentage of obturated and restored teeth as against the rural patients, where I found many decayed and /or absent teeth (figures no. 2,3).

Figure no. 2. DMF index in the urban area

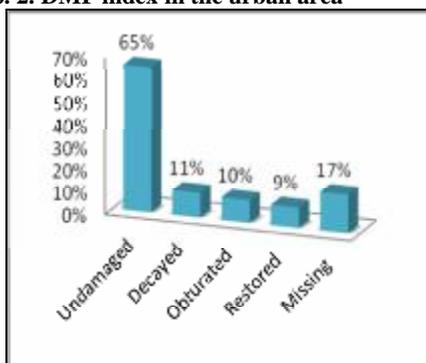
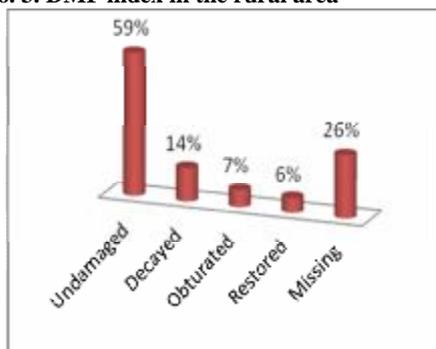


Figure no. 3. DMF index in the rural area



Another studied issue was that of toothless. Patients in the urban area do not present subtotal or total edentulous, just uniterminal and lateral and in lower weight, bilateral edentations. In the rural areas, the biterminal and lateral edentations are more common, as well as the subtotal and total edentations, both in the superior and the inferior maxillary. The lowest share is found in the uniterminal edentation.

Analysing the degree of periodontal impairment, I found that in the rural subjects, marginal periodontitis is present, unlike those in the urban areas, gingivitis and gingival bleeding are more common (figure no. 4).

In terms of presenting to the doctor for check-up, I noticed that this weigh is very small, less than 5% in both areas. The overwhelming majority of patients seek medical care

exclusively for the treatment of dental diseases, often in the late stage.

From the point of view of the frequency of personal and oral hygiene, most of the patients brush their teeth twice a day. About a quarter of them have a daily brushing and 1.3% of the study subjects did not comply with the daily oral hygiene (figure no. 5).

Figure no. 4. Distribution of cases according to the type of periodontal impairment

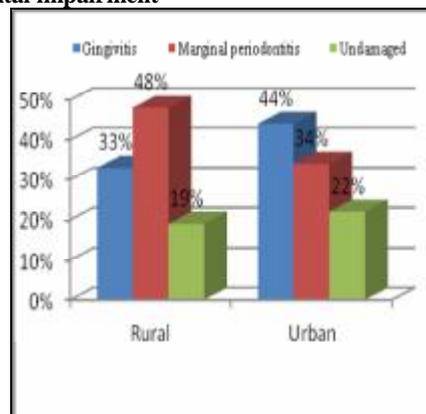
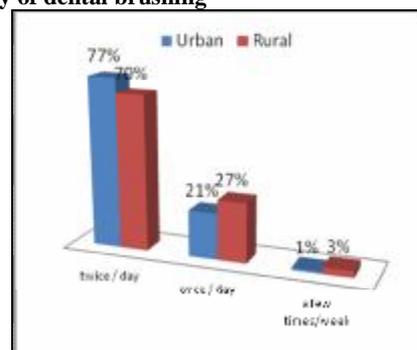


Figure no. 5. Subjects' repartition according to the frequency of dental brushing



When asked about the oral hygiene means, other than brushing, the patients answered as follows: 34% of patients in urban areas mainly used mouthwash and less the floss (19%), while the rural subjects do not use any another means of oral hygiene, except for the tooth brushing.

The study was completed by an overall assessment of the level of oral hygiene in the studied patients. Thus, we found a satisfactory hygiene in the urban subjects compared to rural areas, where the standard of hygiene is poor in more than half of patients.

CONCLUSIONS

1. The subjects in the study group were males and females in the same proportion, coming from urban and rural areas, and aged between 18-75 years old, with varying levels of education.
2. A significant percentage of patients came to the doctor for dental diseases in the painful stage or for further treatment.
3. A small percentage of patients, both in urban and especially in the rural area addresses dental services for periodic inspection.
4. DMF index is higher in the patients in the urban area. These record a higher percentage of the obturated, restored and healthy teeth as against the patients in the rural area, who record a higher frequency of decayed and/or missing

teeth.

5. Patients in the urban area do not show subtotal and total edentations, just uniterminal and lateral and in a small percentage, bilateral edentations. In the rural areas, the biterminal and lateral edentations are more common, as well as the subtotal and total edentations, both in the superior and the inferior maxillary. The lowest share is found in the uniterminal edentation.
6. The degree of periodontal impairment varies by area of origin of the studied patients. In the rural area, marginal periodontitis is prevalent, unlike the patients in the urban areas, in whom gingivitis and bleeding gums are common.
7. In terms of oral hygiene, I have noticed a higher proportion of tooth brushing performed twice a day in the patients from both areas and once a day in some rural patients. There is a very small percentage of patients who do not carry out the daily brushing.
8. The patients in the urban area also use other means of oral hygiene, especially mouthwash and dental floss, while the patients in the rural areas do not use any other form of oral hygiene, except for tooth brushing.
9. The overall dental care is satisfactory in the subjects from the urban area and relatively poor in the rural areas.

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