#35 PAPER 49 - 
SANOGENETIC AND PATHOGENESIS MANIFESTATIONS SPECIFIC TO DENTAL MEDICINE

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Abstract

The presence of dental diseases have a negative impact on quality of life through the presence of both the pain caused by oral inflammation or advanced caries and congenital defects or premature loss of teeth, which producing alteration of self-image and of good general condition. Sanogenesis oriented research is proactive, based on optimizing the design sense of coereței (SOC), composed of elements such as "understanding" ability "to manage" and "significance" given life events. Reactive character, pathogenetic action is oriented towards risk factors bio-psycho-socio-behavioral involved in the pathogenesis of oro-dental.

Keywords: sanogenesis, pathogenesis, risk factors, resistance resources

1. MODERN PRINCIPLES AND SALUTO - GENETICAL BEHAVIORS IN ORAL HEALTH WITH APPLICATIONS IN ROMANIA

"Oral health represents the absence of dental diseases and chronic facial pain, of oropharyngeal cancer, of oral inflammation, of congenital defects such as the cleft lip or the cleft palate, gum disease, tooth decay and tooth loss, and other diseases that affect the mouth and oral cavity” (WHO Definition).

1.1. Health concept in dental medicine

Diseases from the level of oral cavity are very common presently, and their impact over the individual and society is significant. The interrelation oral health - general health is one side of the quality of life related to health (health-related quality of life) (Dahlgreen, et al., 1990).

Oral health issues have a highly detrimental impact on quality of life by decreasing confidence but also on interpersonal relations.

The assessment of the quality of life from the point of view of health allow the correlation of parameters which refers to how much and how well an individual lives and the oral issues produce alterations in perception of:

- Own image (self-image) (ex. dismorphobies)
- Own considerations (self-esteem);
- The well (well-being) (idem)

The most common problems of the oral area are the caries and the periodontal diseases and according to World Health Organization statistics, represent 5-10% of the total annual costs for the medical services. The tooth decay is one of the most common chronic diseases from the childhood. The most common localisations of the decay in the temporary teeth are:

1. occlusal surfaces of the molars;
2. the maxillary incisors.

The prevalence of caries is based on parents' income, age, sex, race and health status. Children with the highest risk come from low income families or they are children with special needs.
1.2. Modern principles of salutogenesis / sanogenesis in oral health

1.2.1. Applying the concepts of Antonovsky in the assessment of oral health condition

a. The concept of salutogenesis / sanogenesis

Aaron Antonovsky (1979), the creator of the concept of salutogenesis / sanogenesis, started from the idea to study the origin of the health and the ways to create it, enhance, improve both physically and psychologically and socially to reach that coveted good feeling. The concept of pathogenesis studies the factors that generate the disease and the mechanisms by which these factors act, which Engel classified in: biological, psychological and social, but also explain how diseases evolve and affect us, with all their aspects. The salutogenesis / sanogenesis is a new approach, initiated by Antonovsky (1979) in the idea to go beyond the battle with the disease, and that goal to be "disease-free" searching for a specific wellness as a state of good health.

Salutogenesis and pathogenesis are two complementary guidelines, although at present, the latter has a greater preponderance.

In 1979 Aaron Antonovsky was asked "how can we lead a person to a health condition as good?". The answer to this question was provided by professional knowledge acquired through his professional formation - medical sociology - and through the study of the psychological and biographical peculiarities of Holocaust survivors from Israel. "The fact that despite the horrors they went through, their health and general condition prospered after overcoming these events led to the idea of the existence of general health factors. Thus, in the view of this savant, health and disease are not two opposite and antagonistic elements, but parts of a continuum of health - disease in which the emphasis is on health " (www.saliugogenesi.fi).

In his book "Stress and Coping Health" (1979) Antonovsky describes how his experiences from medical and sociological field led him to the analyze of how people survive, adapt and overcome even the most difficult experiences. In another work "Unraveling the Mystery of Health" Antonovsky (1987) showed that women who had survived the concentration camps have a good emotional health compared with a control group, which certifies that they possess general resistance resources "Generalized Resistance Resources" (GRR), able to effectively combat a variety of stressors. These resources depend both the psychological internal factors and external factors, such as social support, but also by a number of material factors. "The key element is the ability to use and reuse GRR for the intended purpose. They provide to that person a set of life experiences significant and consistent "(www.sciencedirect.com).

b. The concept of sense of coherence (SOC)

Another key concept of salutogenesis is the sense of coherence - "sense of Coherence" (SOC) - which refers to the ability to perceive stressful situation as a whole and the ability to use available resources. People with a high SOC identifies and use opportunely their resources that are at hand to them. Three elements are essential in this concept: understanding = Comprehensibility", ability "to manage" = manageableability, and the significance = meaningfulness (Becker, et al.,2010).

- "Comprehensibility" is the belief that things happen in a predictable and orderly, hence the fact that they can understand the events of life and can reasonably predict what the future holds
- "Manageability" refers to the belief that you have the skills or abilities, help, support, resources interact with things that happen and that they are under control
- "Meaningfulness" refers to the belief that life events are interesting and it is a source of satisfaction that they have their intrinsic value, and that is a good reason or purpose for the individual to involve, to care about what happens, for "putting soul" into everything it does.

By Antonovsky(1987) the third element is the most important, because the lack of a meaning or of a sense of what happens, it will lead to the lack of a motivation to try to understand and act on the things that are happening.

Current measures concerning the psycho-behavioral approach to orodontal health (for Silva - 2008)

In a study published by "Cadernos de Salud Publica" - report on public health, vol. 24 Rio de Janeiro in 2008, a team of researchers led by Andreea Neiva de Silva made a review of promoting the oral hygiene from perspective salutogenics. It also is highlighted the importance SOC and positive correlation between a high level of SOC and a good oral health, specifically to overcome the problems and social inequities, external and internal problems, in short stress factors for achieving an oral health status as better.

Five directions of action are mentioned in this field:

1. Promoting health through public policy. This had as a starting point the identification of the main problems and the risk factors in the community and the adoption by it of some measures which also is addressing
to the entire community. Some of these measures could be: a. the control of the production of processed food and sugary drinks and support the production of traditional food at local and national level, b. discourage sugar production and replacement with other healthier products. c. eliminating added sugars in milk for children and other pediatric products d. Control of advertisements concerning food for children, etc.

2. Creating supportive environments where foods and drinks with low-risk for denture to be available and ensuring social support group, reducing anxiety, encourage adoption of behaviors beneficial in terms of oral health.

3. Strengthen community action: by its actions, the community can enhance the level of control over the factors that affect their health and increasing the promoting of health.

4. Increase personal skills and control over their own decisions in terms of health, it with the medical staff contribution from that community, which constitutes a catalyst of this process through educational activities.

5. The reorientation of health services from a simple treating of the problems at early detection of the areas and risk factors, education and increasing the understanding level of the populations concerned to reduce these factors. Also, the establishment of closer links between medical staff, community and other stakeholders. The joint establishment of strategies, identification of resources of that community, increase the level for decision of the community enroll in this direction.

2. BEHAVIOUR PATHOGENETIC - RISK FACTORS FOR ORAL HEALTH

2.1. Bio-psycho-social risk factors

These factors involved in the pathogenesis of oro-dental are represented by genetic predisposition, but also by oro-dental acquired changes affecting the overall health of the individual (biological factors) and psychosocial risk factors, which work towards aggravating conditioning the appearance - to children and later adults - of oro-dental diseases.

We list below all these risk factors.

a) biological risk factors
- Prematurity;
- Low birth weight;
- Genetic mutations
- CNS disorders, etc.

b) social and psycho-behavioral risk factors
- Socio-economic low conditions;
- Uniparentale families;
- Totally broken families;
- Mothers with low schooling;
- Poor maternal education;
- Parental psychopathology, etc.
- Child abuse (forms of abuse: psychological / emotional, financial, physical, sexual).

2.2. Risk factors determined by diet and lifestyle / dietary habits

POOR ORAL HYGIENE includes the insufficient use (or lack) of daily tooth brushing and the use of toothpaste with an inadequate composition of substances necessary for the proper functioning of the oro-dental appliance in various stages of its development, coupled with other factors mentioned above contribute to rampant tooth decay.

DIET rich in sugar and fat and low in fiber as well as strict diets or eating disorders (anorexia, bulimia), lack of certain vitamins (vitamin B, C, Ca, etc.) from the diet but also nutrition and poor oral hygiene of the mother during pregnancy can have serious consequences on teeth and gums. Regarding drinks these can be classified into: caloric (high sugar content) and non-caloric (without sugar). The frequency of consumption of refreshing drinks is associated with increased DMFT scores. Consumption of carbonated drinks increased caries risk, while diet carbonated drinks have potential cariogenic containing no carbohydrate substrate for bacteria.

SMOKING is involved in numerous periodontal disease and other tissues in the oral cavity, tooth loss, but also the oropharynx cancer. The American Cancer Society reports that about 90% of people suffering by mouth cancer and certain types of neck cancer have smoked. The risk of these cancers increases with the quantity of cigarettes smoked and the length of the period in which they have smoked.
EXCESSIVE CONSUMPTION OF ALCOHOL AND DRUGS

The alcohol has the potential to damage the systemic and oral health, metabolized provides energy with decrease of food intake by creating a high risk of malnutrition. The use of addictive drugs: marijuana, cocaine, nicotine - influences food preferences in addiction and withdrawal.

DIABETES

This affection increases the risk of gum disease, tooth decay, tooth loss, xerostomia (dry mouth) and various oral infections and a poor oral health may hinder diabetes control. Infections may cause and increase the level of blood sugar and thus is needed more insulin.

LACK OF PROTECTIVE EQUIPMENT

during the practice of certain sports may be the cause of some facial trauma.

3. IMPLEMENTATION STRATEGIES AND METHODS IN PROPHYLAXIS OF ILLNESSES OF THE ORAL CAVITY (PRIMARY, SECONDARY AND TERTIARY PROPHYLAXIS)

Preventive measures on individually level (by each individual and by professionals) and in the level of a population:

a. Knowing the risk factors mentioned above, possible preventive measures at the individual level, alongside tooth brushing and flossing, are:
   • The decrease in consumption of sugar from the diet
   • Balanced nutrition
   • Consumption of fruit and vegetables
   • Smoking cessation
   • Deterring children and young people to smoke
   • Reducing of alcohol consumption

b. Measures to prevent by professionals (dentists)
   • Applications of gels / varnishes, seals, patient education: training the parents and children regarding food hygiene and brushing correctly and consistently
   • Individualized fluoride supplements, to those "increased risk of caries"

c. Measures to prevent at a population level:
   • water fluoridation, salt, milk;
   • fluoridated toothpaste
   • health promotion campaigns, patient education

Tertiary prevention includes:
   • surprise, avoidance of disease progression
   • prevent the relapses

4. REFERENCES


Website: http://www.salutogenesis.fi/eng/SOC_questionnaire.19.html
Website: http://www.sciencedirect.com/science/article/pii/S1877042810016800