

LIVIU GAVRILA-ARDELEAN**"Vasile Goldiș" Western University of Arad, Romania, ROMANIA****PSYCHOLOGICAL ASPECTS OF CHILDREN'S DENTAL TREATMENT****Abstract:**

In this article I present a new concept in dentistry which becomes one of the main branches of contemporary medicine. Attitudes toward medical treatment are influenced by a number of factors related to the child's environment, education, the medical skills and competence.

To highlight the psychological factors involved in attitude towards dental treatment we used a lot of 260 children aged 6-12 years who were asked to make a drawing theme "a child to the dentist". Subjects were divided into three categories of patients: reluctant, docile collaborators and active collaborators. The children's drawings were interpreted in psychological terms to highlight the psychological particular aspects that arise in child-dentist relationship. Interpreting findings show that in reluctant patients, drawings are done in cool colors with changes of components in all cases. In docile collaborators patients drawings contain elements changes and use cool colors to 67.10% of cases, and active collaborators work designs are modified and used cool colors only 35.15% of cases. Following research conducted both hypotheses (H1 - I assumed that emotional states experienced by children to the dentist can be found in their designs, H2: We assumed that the different categories of reluctant patients, docile collaborators and active collaborators will present drawings different features) have been confirmed in practice. The drawing theme used before dental treatment can be an indicator of a child's emotional state and help the dentist to take a proper attitude in dealing with it.

Keywords:

dental treatment, child in treatment, reluctant patient, docile collaborator patients, active collaborators, drawing theme, projection through drawing, drawing design changed elements

JEL Classification: I19, I00

Theoretical frame:

Doctor-child confrontation for a good collaboration during therapeutic methods, are required some knowledge which go beyond the dental profession itself: knowledge development stages of physical, mental and psycho-social aspects of child; knowing psychological protective methods in accordance with development stages of child helps.

Modern dentistry requires the use of all means for a more comfortable treatment for both dentist and patient, which was lacking on the influence of environmental aspects: physical and mental environment and issues related to children's psychosocial transformations. That's why modern medicine has felt the need for a new approach to patient as a human regarded as completely, this new direction is called psychosomatic medicine. It is considered a total-integral medicine, a complete full medicine. This process was re-humanized the medicine¹. In this way knowledge of the psychology and methods of psychological investigation (in our case design theme) helps the physician to know the patient can refer influences related to the physical structure, the type of character and intelligence level of the patient and find an optimal solution for successful treatment.

The physician must consider the patient child comes to him in a state of physical and mental discomfort; most times there is a state of stress, fear both the patient and the doctor as sometimes when it is not well trained or insufficiently empowered in this area. Consequently doctor, besides professional competence, must be armed with a range of psycho-pedagogical concepts to overcome fear of the suffering².

In pediatric dentistry for a good collaboration with the child, specialists must take into account the child's psychosocial transformations and use a number of means psycho-protective stages according to its age³.

The doctor's behavior towards the child, their good cooperation depends which determine the success of treatment. Also doctor with parents and teachers can contribute to the formation of personality and psychosocial behavior of the future man. Unfortunately dental practice uses very little psychotherapy⁴.

Individual treatment means adopting measures in relation to these matters, which respect individual characteristics of the child. Knowing the child's interests and inclinations are of great importance to the doctor because they can achieve a nearby fast and powerful mind of a child⁵.

Hypotheses:

H1: I assumed that emotional states experienced by children to the dentist can be found in their designs;

H2: We assumed that the different categories of patients (reluctant, docile collaborators and active collaborators) will have different features drawings.

The study group:

¹ Grivu, O., Gavrilă-Ardelean, M., Mancaș, Călin Tudor, Faur, Adrian Stelian, Curtuzan, Vlad, Hossu, Tiberiu, (2007), *Community Dental Medicine*, Editura Waldpress, Timișoara

² Gafar, M., Iliescu, A., (2007a), *Endodonție clinică și practică*, Editura Medicală, București, p. 138

³ Cherlea, V., (2009), *Tratamentul endodontic*, Editura Național, București, p. 87

⁴ Iliescu, A., Gafar, M., (2007b), *Cariologie și odontoterapie restauratoare*, Editura Medicală, București, p. 108

⁵ Gavrilă-Ardelean, M., Gavrilă-Ardelean, L., (2010), *Neuropsychophysiology*, Editura Mirton, Timișoara

We used a sample of 260 children, aged between 6 and 12 years, students in the first class of primary school, which was at least once in contact with the dental office, so the dentist. Depending cooperative attitude they showed during treatment children were divided into three groups: reluctant, docile collaborators and active contributors (see Table 1).

Table 1

The distribution of the patients fonction to their colaboration degree

The patient type	Number	Percentage
reluctant	56	21,54
docile collaborators	76	29,23
active collaborators	128	49,23
Total	260	100%

Methodology:

Children were to carry charge for a design theme " a child to the dentist ". Projection of emotional states in representation of the design allows you to individualize how the child lives a determined situation, in our case the dental treatment. Drawing gives us information on the power of representation of the real world around him. Because children in the dental office will design drawings after conception, intellect, emotions and their personality.

Psychological adaptation situation dental treatment is evidenced by the drawings faithfully reproduce reality without deformation. After Canton, Tassarotti, Vicinti and Asuntosi (1969) ⁶, significant elements of the design can be grouped into 4 categories:

- Significant items on the composition of the drawing: the presence or absence of the child, the doctor, the mother of the device;
- Significant elements of construction graphic design: treatment, figures, dimensions, perspective;
- Significant elements on the structure design: spatial relationship between the characters and between the human figure and device, a link between these materials, mixing human figures, dynamism existing relationships (child runs away);
- Symbolic elements: the child with a closed mouth, no hands dentist, dentist identification device, exaggerating certain elements and replacing others.

This group is for guidance only. If absence deformities of this type is considered as an adaptation to dental treatment, the presence of one or more of the above represents a block of maladjustment, whether it's a state of fear, be preceded by bad experiences or to child maladjustment as seen in other children, especially in cases of poor family relationships and prolonged mental conflict.

Results and discussions:

Hypothesis 1:

The analysis drawing "A child at the dentist" may find that it provides an indication of the type of child psychological situation dental treatment. Not a maladaptive corresponding multiline fearful behavior, but it may be imprinted in shyness.

Colours give affection and relationships on the child's personality in the sense that a rich color reflects a high activity, while drawing in black and white or dark colors reflect reduced activity and poor imagination. If we interpret the meaning of the colors used in

⁶ apud Gafar, M., Iliescu, A., (2007a), *Endodonție clinică și practică*, Editura Medicală, București, p. 201

the sense of Max Luscher Color Test⁷, we can say that children's emotional feelings were reflected in their design (see Table 2).

Table 2

The emotional state of the children reflected in their pictures

Emotions	Culour used	Number
fear	Cold colours	56
anxiety	Cold colours	76
collaboration	Warm colours	128
Total		260

We can see that: the type of colours used by the children is identical with their degree of collaboration with the dentist. In this way we can state that our first hypothesis is confirmed by our research: the emotional state of the children towards the medical treatment is reflected in their pictures.

Hypothesis 2:

Absence the characteristic elements of design can mean slow adaptation to the environment and the presence of several human characters denote sociable child.

Tests used by Kunzel (1965) in examining the child's attitude toward medical and dental treatment have proven that little meeting with the dentist patient lives dramatically, especially dental treatment and dental extraction is experienced as an attack on the integrity of the body. When the doctor is considered a being very aggressive in children's drawings can sometimes get a distorted appearance by assigning the property right animal.

Of the 260 children screened 109 drawings (42%) are no modified elements and 151 (58%) shows the modified elements (see Table 3).

Table 3

The analysis of the children's picture

Changes	Number	Percentages
without changes	109	42%
with changes	151	58%
Total	260	100%

To better illustrate this, in Table 4 present situation designs altered according to the three types of patients: refractory docile collaborators and active collaborators.

Table 4

The pictures' modifications function to the type of patients

Types of patients	With modifications	Without modifications	Percentage of modifications

⁷ Dumitraşcu, N., (2005), *Testul culorilor Luscher*, in Dumitraşcu, N., Dragomir, S., Zamfirescu V.D., *Tehnicile proiective în evaluarea personalităţii*, Editura Trei, Bucureşti, p. 79-86

reluctant	50	0	100%
docile collaborators	51	25	67.10%
active collaborators	45	83	35.15%

Note that most designs change occurring in reluctant patients 100% of their group. Docile collaborators register a rate of 67.10% modified drawings and to actively work with the patients, the percentage drops to 35.15% modified designs.

Reluctant patients: all the drawings show the changes. Interpretation of the theme design provides the following issues: the most frequent changes were: self-mutilation, self-exclusion, exclusion doctor sizing apparatus or instruments, apparatus aggression, female doctor presented as a spirit of evil; refusal to draw, the patient has wings to flee, patient seizure by machine, use cold colors.

Docile collaborators patients, out of 76 children, 25 normal and 51 shows drawings shows the modified drawings, changes indicating state of fear. In these cases docility collaborators patients are driven by fear and mental inhibition. In most designs exclude six patients, hence the fear to participate in treatment. As elements of the design changed to meet this patient: patient exclusion, exclusion doctor flee cabinet, self-mutilation, sizing tools, cool colors. In the normal designs of pediatric patients we meet: warm colors, the presence of the doctor as a character in the stories enjoyable, pleasant cabinet. In these cases the children were able to overcome their fear; if at first they were anxious feeling of fear disappears while remaining pleasant.

In case of active collaborators patients out of 128 cases, 83 cases showed normal designs and only 45 shows drawings modified elements. In normal designs meet: warm colors, are pleased to participate in treatment, proportion and symmetry details reproduced correctly, go to cabinet, cabinet atmosphere.

In designs with elements changed most common self-exclusion with or without exclusion doctor, probably caused by reactions after treatment.

Thus the second hypothesis was formulated new research confirmed the deal.

Conclusions:

Psychological investigation methods such as drawing dentist help topic to know his pediatric patient, thus finding optimal solutions depending on the type of character, level intelligence and psychic structure of the small patient. Thus it can be seen that there is a significant project in the doctor-patient relationship drawing on "a child at the dentist", 58 % of children presenting some elements that lean toward iatrogenic phobia these trends being more marked children being more refractory than docile collaborators or active collaborators patients.

Doctor-patient relationship is decisive in developing the correct treatment, the initiative in this direction always belongs doctor. The dentist must have some knowledge of psychology and possess qualities necessary pedagogical small patient treatment, which almost always is distrustful and anxious.

It is necessary to know the child's mental particularities to establish easy collaboration with the patient, this conditioning the success of the treatment. Gaining a thorough patient motivation and reasons for using these relations are established between the patient and physician, have beneficial effects during treatment.

In the treatment, as well as its relationship with the patient, the dentist must always bear in mind that although his actions are carried out on somatic, they echo the patient's psychic structure. The physician should be caring, courteous, have the necessary understanding and discernment adoption most appropriate therapeutic measures. Treatment successes his good conduct are conditioned by the tact and medical skills to work with the patient.

References:

- Cherlea, V., (2009), *Tratamentul endodontic*, Editura Național, București;
- Cosman, D., (2010), *Psihologie medicală*, Editura Polirom, Iași;
- Dumitrașcu, N., (2005), *Testul culorilor Luscher*, în Dumitrașcu, N., Dragomir, S., Zamfirescu V.D., *Tehnicile proiective în evaluarea personalității*, Editura Trei, București;
- Gafar, M., Iliescu, A., (2007a), *Endodonție clinică și practică*, Editura Medicală, București;
- Gavrilă-Ardelean, M., Gavrilă-Ardelean, L., (2010), *Neuropsychophysiology*, Editura Mirton, Timișoara;
- Grivu, O., Gavrilă-Ardelean, M., (2007), *Community Dental Medicine*, Editura Waldpress, Timișoara;
- Iliescu, A., Gafar, M., (2007b), *Cariologie și odontoterapie restauratoare*, Editura Medicală, București.