

Art in the inclusion of children with special needs in dentistry

A arte na inclusão da criança especial na odontologia

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Abstract *The purpose of this study was to report the use of art and its segments as a source for inclusion of the children with special needs in dentistry. The application of the Art in social therapy activities and workshops was divided in modules: Session of Socialization, Complementary Workshops of Art and Activities, aiming at the cultural anamnesis and artistic preferences of the 313 participants, prior to their dental care treatment at CAOE (Center of Odontological Assistance to patients with special needs) – FOA – Unesp. According to preference of the participants that answered the questionnaires, the music and the painting are the artistic segments that proved to be most helpful in the activities of inclusion and adaptation. The authors concluded that the use of art in the adaptation and environmental inclusion of the patient, prior to dental procedures is favorable and efficient.*

Key words *Art, Adaptation, Behavioral sciences, Dentistry*

Resumo *A proposta deste estudo é relatar a utilização da arte e seus segmentos, como recurso para inclusão da criança portadora de necessidades especiais ao ambiente odontológico. Foi utilizado como método a aplicação da arte em atividades de socioterapia e oficinas, divididas em módulos: sessão de socialização, oficinas de arte e atividades complementares, visando à elaboração de uma anamnese cultural por meio de questionários e a obtenção das preferências artísticas dos 313 participantes, previamente às suas assistências odontológicas no CAOE (Centro de Assistência Odontológica a Portadores de Necessidades Especiais) – FOA/Unesp. De acordo com os questionários respondidos, a música e a pintura, segundo a preferência dos participantes, são os segmentos artísticos que mais auxiliam nas atividades de inclusão e adaptação. Concluímos que a utilização da arte na adaptação e inclusão ambiental do paciente, previamente à assistência odontológica, é favorável e eficaz.*

Palavras-chave *Arte, Adaptação, Ciências do comportamento, Odontologia*

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Introduction

Studies on art as applied in physical surroundings in the health care area and its relation to human behavior have been increasingly investigated, and the favorable results thereof suggest the use of artistic segments as a positive auxiliary approach in the therapeutic treatment and in the patient's inclusion at the dental care practice¹.

Based on the work carried out by the group of performers "Doctors of Joy", experienced in clown theatricals and circus techniques developed in hospitals, the character and performance of the clown were inserted in the children's stimulation and recovery process; in the participation of parents and to minimize stress on the part of the health care team^{2,3}.

Ludic activity during childhood promotes expression, communication and integration of the individual in social groups, and may be another approach for the orientation and identification of knowledge on health education habits; but as regards disabled children it is little used^{4,5}.

Motivation is a psychological factor related to physical activity, whether under the aspect of learning or performance⁶. Some studies have postulates in common, promoting dentistry motivation and guidance, making use of artistic means such as music, theatricals, puppetry and videos, among others⁷⁻¹⁰.

Regardless of their specific aims (learning, personal development, team management, work meetings, etc), group dynamics definitely contribute towards facilitating and improving group action, thus enhancing integration and better direction for the goals established^{11,12}.

The use of music and dance as ancillary resource for stimulating sensorial experimentation (rhythm, motor development and socialization)⁶ represents a possibility of treatment for children with cerebral palsy¹³, and for people who seek psychiatric help¹⁴.

Music therapy is used for people with some kind of disability, psychical disturbances (depression, autism, schizophrenia)¹⁵⁻¹⁷, and in geriatric care or for those seeking self development, according to the definition given by music therapist Renato Tocantins Sampaio¹⁸.

According to psychologist Elidihara Trigueiro¹⁸, music may not be the main focus of a treatment as in music therapy but, as in the case of psychic music, it can be one of the valuable means of dealing with psychical matters.

Musical art, used in favor of health care, opens new possibilities of communication, starting with

an expression at a concrete level (musical instruments and/or musical stimuli), with the object of attaining the symbolic level. The modality may be used individually, or in a family group, in community works or groups^{16,18}, contributing to the development of the intelligence quotient of individuals¹⁹.

Results obtained by Bustillo *et al.*²⁰ indicated the inclusion of Music therapy and/or children stories as two major aids for pediatric dentistry treatment by helping children to relax.

Painting is another form of expression that enables the understanding of the human being in its bio-psychosocial development and in the contextualization of data, the history of psychological aspects²¹. In the treatment of psychoses, expressive, non-verbal techniques of therapeutic nature have been used, the main object of which is to enable patients to build their own process, in which they can recognize themselves²².

Cinema renders the spectator in a special psycho-physiological state (physical state of sensorial fascination), to introduce its messages by means of images, words, music and silence; and is considered, among all others, the most complete means of artistic communication²³.

Fairy tales have the capacity to interlink the conscious and unconscious mind. In ancient times, they were part of one's upbringing, crammed with mystery and affections in the quest for psychic totality²⁴. Traditional children's games led to the discovery of a "spontaneous" phenomenon, with no adult planning or written approach²⁵.

Figueira²⁶ dealt with disabled patients' relationships with many forms of art: dance, plastic arts, music, Brazilian Baroque and movies, even revealing some names of well known personalities who had been involved with some type of disability.

Thus, it is believed that the investigation of such factors is important, not only for a better description of the benefits brought about by art and its artistic segments, but also for the understanding of the relationships among members of the group and as the transmission of culture by way of play.

The purpose of this study was to report on the use of art and its artistic segments, as a resource for inclusion of special needs children in dentistry, because most of them not cooperating and does not allow the realization of their dental treatment, so the team of CAO (Center of Dentistry Care for Special Needs Patients) – FOA/UNESP, use techniques, resources and recreational activities to achieve their cooperation.

Material and methods

In this project participated 92 patients with special needs, of both sexes, aged 8 to 18 years, and 221 accompanying adults, also of both sexes. It was selected patients with mental retardation from mild to moderate, so they could participate actively in the activities and who agreed to be part of the project, after receiving all information regarding the activities to be developed and their families signed the authorization to participate. All patients gave informed consent and the study was approved by the Ethics Committee.

Although not all patients who participated in this project were children, professionals working at CAOÉ usually treat them like children, because in reality they like and feel happy to be treated as such. Routinely the professionals use some resources of entertainment, like children's games to attract their attention to conditioning them to achieve the desired dental procedures.

With basis on the Psycho Music philosophy, the activities of this project were organized in modules and stages, called socialization sessions, art workshops and cultural-pedagogic activities (complementary), every Tuesday morning, from 8 a.m. to 11.30 a.m.

Psycho music

The psychology of music deals with the nature of perceptual processes, cognitive, motor, psycho emotional and spiritual exercise of the activity involved in musical.

"The utilization of music as a resource an intervening, preventive and rehabilitating element, through relaxation sessions, will depend on the clinical case. In the initial sessions, the person talks about his life history, his childhood, drawing up an anamnesis, including his musical identity. It is important to make it clear that the utilization of music is not bound by music therapy work, which has its own theoretical basis. There are other models that work with music and which are equally scientific, differing in techniques", according to Elidihara Trigueiro¹⁸, a psychologist from the State of Ceará, Brazil.

Socialization sessions

Group meetings, with the purpose of presenting the members' opinion and their relation with music and art in general, thus facilitating per-

sonal introductions, establishing contact and the first bonds of friendship, and where each person comes to know a little more about the others. In these sessions, apart from names and places of origin, the members express their artistic tastes, making comments about the same, thus creating a close and friendly atmosphere among the group (Figure 1).

Art workshops

In these meetings, the group is encouraged to take interest in the musical instruments, handling them in rhythmical exercises, uttering the sound produced by elaborating musical phrases and melody lines, respecting knowledge and coordination limitations, and stimulating creative capacity (Figures 2 and 3).



Figure 1. Socialization session.



Figure 2. Stimulating the production of sounds.

Cultural pedagogical activities (complementary)

During the period in which the patients remain at the “Centrinho”, affectionate name by which the CAOÉ center is called, other complementary activities are given, such as: painting with dentistry teaching materials, videoke (singing in accompaniment to a video program), playing games simulating a situation at the dentistry clinic using a miniature consultation room, dancing, story teller, dentist of joy, magician, and other activities (Figures 4 and 5).

While this study was carried out, the sessions were coordinated by members of CAOÉ’s multi-disciplinary and interdisciplinary team, by artists, and internship graduation and post-graduation students at the Araçatuba Dentistry College – UNESP, who, by means of question forms specially designed to be answered by the participants, evaluated and registered diverse personal



Figure 3. Working on motor coordination.



Figure 4. Doctor of Happiness.

information, such as: place of origin (State), preference of musical styles, knowledge of musical instruments, artistic activities and segments, and the benefits thereof.

The data collected by the 313 question forms answered were stored in computer and later drawn up in discussion, enabling a better understanding of the results verified and how it relates with literature.

Results and discussion

Under direct influence of “Patch Adams” philosophy, that means contagious love and enthusiasm to help people, and adjusting it to our reality and culture, the physical space at the CAOÉ was adapted for the development of activities and dynamics covering the various artistic segments (music, painting, dance, story telling, puppetry, etc), providing our population with a special type of patient care.

Like Sager¹, we noticed that children established greater associative and parallel interactions in larger physical spaces. The results were similar to those of the artistic group “Doctors of Joy”³ and to the experience of the “Laughter Company”², where some changes in the daily routine were observed: the “hospital” setting became more informal and easy going, the sound of laughter was frequently heard and objects, sounds, movements, colors, spaces and characters became objects of play.

The argument in favor of the healthy recovery of each child, stimulating it to “get better”, is achieved with the happy atmosphere that the artists and dynamics create in the actual setting³, enabling the patients and their chaperones to feel



Figure 5. Use of imagination and fantasy.

relaxed and by directing their attention to other stimuli during the waiting period, thus making the waiting room atmosphere a pleasant and welcoming one².

The confirmation that motivation, brought about by the use of artistic segments and group dynamics, is really effective and that it gives the person a more positive state of mind, coincides with the reports of several authors⁶⁻¹², as the ludic component enhances sociability, facilitating and improving group action, enabling integration amongst the members and directing them to the goals established. The stimulus of sound and rhythm perceptions acts on memorization, on the display of emotions and sensibility, helping patients to become more independent in daily life activities, by way of exercises and play activities that promote the development of motor coordination.

By combining play and imagery to transform reality, and by developing educational health care habits with children, by means of activities such as theater plays, children stories and puppets, we are corroborating with Castro *et al.*⁴ and Jurdi⁵, as they have reported that in this manner it is possible to enable the special needs child, in particular, to fulfill its place in the family group, social, school and other groups.

The person's exercise of listening, of talking about a globalized idea and expressing images by way of drawings is, undoubtedly, a precious means for the transformation of the being into a higher emotional state, broadening its socialization²⁴ capacity.

Having prior knowledge of the participants' preferences, according to information supplied by the artistic anamnesis, enabled us to meet their needs as observed during the dynamics. Concern for each participant's limitations and stimulation of their artistic potentials, made leisure and recreation the facilitating links, by which the artistic segments used enabled the participants to adapt themselves to the surroundings, in an effective and affectionate manner of welcoming people to our "home" of work.

As regards the place of origin of the participants in this project, it was observed that the majority came from counties of practically every region of the State of São Paulo, probably due to easy road access and geographical localization, and the remainder came from 4 other Brazilian states (Mato Grosso do Sul, Minas Gerais, Paraná and Bahia).

However, at present the Center receives patients from 9 states and from over 380 counties, main-

taining the CAOÉ as reference for dentistry care for people with special needs over the last 23 years.

Among the participants, 98.2% said they liked music, and we found 1.2% with total amusia. Regarding the artistic segments, music was found to be the preference of our population, and proved to be a valuable artistic resource for working with psychical problems, particularly when concerning people with some kind of disability, psychical disorders, autism, schizophrenia, syndromes¹⁵⁻¹⁷, similar to the results reported by the music therapist from São Paulo, Renato Tocantins Sampaio¹⁸, and by other authors¹⁹, as our population under study falls under similar neurological diagnoses.

On comparing data regarding musical preferences, a few differences were noted as, in our study, the participants gave preference to country style music, these results differ from those obtained by Bustillo *et al.*²⁰, by which the predominant choice was for eclectic music and children's music. We must take into consideration that these evaluations were made in different periods, which certainly justifies both results, since in any occasion there will be a predominant musical style.

In our culture, the guitar is characteristically considered a popular musical instrument, so much so that it was mentioned by most of the participants, and particularly by rousing their interest in learning to play the instrument.

In relation to preferences for the artistic activities (singing, painting and dancing), the patients showed greater interest in drawing (82.6%), results similar to those reached by Pulchinelli *et al.*²², and Tabaquim *et al.*²¹, who reported painting as another form of expression and approach in the non-verbal techniques. However, singing was the patients' second choice option (73.9%), but many times they were unable to do so due to difficulty of expression by means of speech, or not being able to read and also due to shyness. Dancing was the third choice option, mainly due to the religious beliefs of their chaperones and to the patients' physical and motor impairment. This result brought forth suggestions for reevaluation regarding the utilization of dance, in order to enable new and pleasant stimulus experiences for psychomotor development, as those obtained by Bracciali¹³ and Castro¹⁴ in their studies.

And regarding cinema, we agree with Acosta Nodal²³ in the sense that this is the most complete means of artistic communication but, according to our results, this option lacked interest when compared to other artistic segments, probably due to the participants' socio-economic

circumstances and lack of opportunity or conditions to enjoy this artistic modality.

Approval of the project is justified by the participants' physical and emotional well-being as, after taking part in the activities, they reported feeling happy, calm and relaxed. Therefore, we believe that after participating in these activities, the patients' tend to have a better conduct during dentistry care treatment. This study is being carried out with focus on the evaluation of behavioral control, and physiological analyses of the changes that art and its segments bring about in the person's body and emotions, and on the patients' inclusion in the dentistry care setting.

However, a small percentage of unfavorable emotional conditions and nervousness was observed, nevertheless this did not compromise the advantages of the project as these few patients habitually have this kind of behavior, as reported by their relatives. We also observed, though in minor scale, that some patients became anxious due to stimulus and opportunities created by the project, though this did not cause any negative changes in behavior, only acceleration of speech and the wish to repeat the activities or to stay a little longer doing certain exercises.

The vast experience acquired and the changes observed, stress the need to emphasize the importance of innovating in search of resources to stimulate the process of inclusion, so that patients may feel at ease during their visits to the CAOÉ for dental treatment.

Figueira's²⁶ approach on the disabled patients' relationship with the most diverse arts en-

abled us to observe the talent of some participants, not only in music but also in theater play and in painting.

According to Pontes and Magalhães²⁵, and results gathered in this study, we can infer that playing games and artistic manifestations represent important functions and benefits for the development of the human being.

By developing dynamics and recreational activities, and employing group techniques, methods and exercises with the participants assisted at the CAOÉ, we aimed at rousing interest, contact and ability with arts, with a view to stimulating, directing, giving guidance and help and, in some cases, meeting the therapeutic needs of patients, persons in charge, entities and other people concerned with care to the special needs patient; stimulating in a global manner the behavioral development of these persons, and also contributing toward the adaptation, inclusion and integration of the group analyzed in the project, and acting as another source of information for the evolution of scientific studies on the matter.

Conclusion

Face to the obtained results in this study, we concluded that the use of art and its artistic segments had facilitated integration amongst the participants, promoting welfare and making them to feel happy. Thus, social inclusion facilitated the adaptation to the dentistry environment.

Collaborators

MJP Santos and SMHCA Aguiar participated equally in all the steps of the elaboration of the article.

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