
TRAINING STRATEGIES FOR DEVELOPING PSYCHO-PEDAGOGICAL SKILLS IN INCLUSIVE DENTISTRY

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Abstract

The purpose of this article is to identify among dentists, regardless of professional competence, the need for psycho-pedagogical training to develop their ability to relate to children or adults with psychosomatic disabilities in order to optimize the oral health of these people.

In this context we introduced the term Inclusive Dentistry because there is no structure to develop psycho-pedagogical skills in doctors' career, teaching them how to treat patients with special needs, whether adults or children. In this moment there is no identifiable amount on the needs of dental care of people with special needs, children or adults. Some of them need access to sedation and general anaesthesia services. These services are provided by dental and oral-maxillofacial surgery specialists in hospital wards. But nowadays, more and more patients with disabilities address private dental offices.

For this purpose we applied a questionnaire which we distributed to 120 dentists practicing in the private sector, but also in hospitals or schools for children with special needs. The interpretation of these questionnaires revealed, not just the need for education and training in Inclusive Dentistry of the doctors, but also the need of an effective interdisciplinary collaboration between the dentist, the supporting teacher, the family and patient's psychologist.

Keywords: inclusive education, training schedule, children, SEN, dentist

1. Introduction

In the context of our contemporary society, the social inclusion dimension involves an ongoing process of improving institutions, aimed at capitalizing

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existing resources, to support participation in a high quality of life for all people within a community. Legal support of such community healthcare activities can be found in the Law nr. 95 of 2006 on healthcare reform, whereby, at article 135, paragraph 2, letter d, the persons with “different disabilities” are reported as part of various categories of vulnerable persons, whom should be given special attention in the various healthcare services of the community - from “promoting favourable attitudes and behaviours for a healthy lifestyle” (article 138, letter c) to “prevention activities, primary, secondary and tertiary prophylaxis” (article 138, letter e).

Social inclusion dimension must recognize and respond to the various needs of individuals to harmonize the existent differences. Social inclusion involves a restructuring of the educational, social and health care institutions in all aspects. A communication between a physician and his/her patient is usually established and this interpersonal relationship is based on trust, understanding and sympathy. The physician should empathize with the suffering patient. In this doctor-patient binomial, interaction takes place both in terms of verbal communication and non-verbal gestures, glances, grimace, etc.

2. Method

This article is structured as a qualitative research that proposes a curriculum training and education model for dentists to obtain the necessary skills in inclusive dentistry. In order to support our goal we have identified the problems presented below.

2.1. The usefulness of the training program

The inclusion of people with disabilities strengthens the sense of belonging, through mutual relations spontaneously established with other members, ensures real participation in the learning and the communication process, taking their own social roles in the community, which is expressed by valuing the social image of an individual and their increased social skills in the same environment.

Inclusive orientation is one of the highlights of the Salamanca Declaration on political and practice principles in special educational needs. In this Declaration is mentioned that regular schools with an inclusive orientation are key anti-discrimination instruments and they contribute to the establishment of a welcoming community and an inclusive society that accepts everyone. Inclusive schools provide effective education and improve the efficiency of the education system as a whole [1].

The inclusion of children with special educational needs (SEN) depends on several factors: the teachers, the children’s school, factors outside the school [2], including the health care provided to these children. Due to various disabilities, these children are having serious problems in maintaining oral health. Inclusion requires certain changes in each of the above mentioned factor.

2.2. Analysis of needs

To identify training needs of dental practitioners we distributed a questionnaire to 120 dentists. The most important aspects are found within the objectives and necessary skills contained in this training program, which provide the cornerstones for the structure and organization of the ‘Medical Inclusive Education’ course. To assess the dentists’ opinion about the integration of children with special educational needs in mainstream school and society, a questionnaire was applied that allowed capturing their desires, expectations, and hopes.

The starting point of the research was a well-known fact, that of the existence of children with disabilities and the current existing trends in international and national education for the equalization of the opportunities of these children by their integrating-inclusion in mainstream school and society, giving up the previous policy of their segregation in special schools.

By using this questionnaire we assumed that the dentists’ positive attitude towards children/pupils with SEN favours a more successful adaptation to the provided health care service.

Below are some considerations for dentists’ attitude towards the integration of children with special needs in mainstream school and society, conclusions drawn from the processing of the questionnaire applied during November-December 2012.

Dentists reported the proposals by the end of the questionnaire:

- the need for preparation and training dentists in inclusive dentistry;
- the need for a clearer, stronger legislative support;
- material support of the schools and hospitals with equipment and supplies to enable the prevention/correction of some disabilities;
- actual involvement of all responsible personnel in identifying and certifying children with SEN;
- efficient collaboration between the dentist, the supporting teacher and the psychologist;
- several training courses for dentists;
- the development of a specialized faculty on the university;
- a greater support from the G.O., N.G.O. and the mass-media.

2.3. The purpose of the program

The program had the aim of training of the participant dentists to learn the skills necessary for optimal cooperation with the children and adults with special needs, to restore functional morphology of the stomatognathic system, to optimize oral health and the health of the entire body. This oral rehabilitation could be one of the external factors necessary for the socioeconomic integration of pupils with SEN in mainstream school and society, ensuring that patients with special needs achieve a level of independence and optimal integration into society.

2.4. Objectives

- Linking the psycho-pedagogical methods and tools used helping these children with special needs and finding ways to apply them in dentistry;
- Learning the defining elements of the inclusive education (documents and inclusive education strategy);
- Familiarization with the general issues in the field of special education (the class of pupils with SEN, describing different types of disabilities);
- The need of dentistry to approach the needs of the community, the awareness of the need to ensure equity in the provision of health services – the vulnerable groups of people must have equal access to a quality early education and treatment, as perception of ‘health for all’ (WHO goal presented in the Ottawa Charter, 1986);
- Develop implementation strategies: intervention methods, techniques, tools specific to the inclusive education (intervention program tailored and adapted curriculum) in order to apply them to the requirements of the inclusive dentistry;
- Learning the basics of medical and dental ethics [3] - the focus is on the need to obtain informed consent from all patients with special needs, for all therapeutic manoeuvres applied and in cases where such an agreement cannot be validly expressed it will be expressed by a legal representative ‘substitute decision’; primary record files should contain written evidence and obtaining signed consent for the applied medical and dental treatments [American Academy of Pediatric Dentistry, *Guideline on Management of Dental Patients with Special Health Care Needs (adopted 2004, revised 2008, 2012)*, www.aapd.org/media/Policies_Guidelines/G-SHCN.pdf, retrieved on 26.02.2013].

2.5. The activities’ content

2.5.1. The issue of inclusive education and inclusive dentistry

Through this module, the familiarization of dentists is achieved by means of elements that define the inclusive education (documents and inclusive education strategy). Completion of this module is important, because it provides a presentation of national and international documents stipulating implementation of inclusive education, presenting basic concepts of inclusive education, presentation of the specialists involved in inclusive education and differentiated pedagogy, watching educational films showing inclusive educational systems.

Integrated education has emerged as a natural reaction of the society to its obligation to ensure the necessary conditions for specific education of people with SEN [4].

According to the principles in education promoted by the international institutes, it is stated that people with disabilities have the same fundamental rights as other citizens of the same age, without discrimination based on sex, language, religion, political opinion, national or social origin, financial state or any other characteristic of that person or his family. These people are also entitled to medical, psychological and functional treatments, medical and social rehabilitation, to education, training and educational/vocational rehabilitation, health, counselling, employment services and other services that enable the development and manifestation of their abilities and facilitate their integration/reintegration [World Conference on Special Education, held under the auspices of UNESCO in Salamanca, Spain, 1994].

The *Salamanca Conference Declaration* stipulates that:

- “people with special needs must have access to regular schools (mainstream schools) and these schools must adapt to a child-centred pedagogy capable of meeting the necessities of each child;
- mainstream schools that have adopted this guidance are the most useful means of combating discriminatory attitudes, building a society based on the spirit of tolerance and acceptance, and providing equal educational opportunities for all: in addition, they provide a useful education for most children, improving the efficiency and the degree of social utility of the entire educational system.”

Considering these aspects, we can say that education is entering a new era - the transition from a segregationist attitude and approach of learning to an integrating, deeply humanistic attitude.

By analogy, it must be said that medical services, foremost the dental surgeries can be performed in modern cabinets, with a pleasant ambience and a skilful management team of physician-nurse with expertise in dealing with these patients with special needs. The exception will be of course the very severe cases, medically compromised, whose solution requires equipments specific to the hospital environment. Modern inhalation sedation equipment that can be installed and used in cabinets allows complex treatments to the highest professional standards.

2.5.2. Ensuring equity in education and health and the importance of early intervention

Through this course we aim to familiarize dentists with research findings showing the importance of early education and their role in fostering children, especially those coming from families with a low potential of education or are in risk situation.

Early education is internationally defined as educational made during the period of a child’s life from conception to the age of 8 years old, a period in which the brain is developing the fastest. The holistic concept of early development combines elements as: the child stimulation, his health, nutrition and early education. The researches from the fields of Neuroscience, on the

development of the central nervous system, and Developmental psychology emphasize the importance of the first years for developing skills needed throughout life. Direct experiences of learning generate new neural pathways in children's brain. Parents and educators behaviour is a predictor of the children's skills.

Doctors, educators and other professionals have a key role in supporting children's development at all levels. In this context, the training of dentists becomes crucial, responding to the requirements set out by the national health policy. Oral health education should be started already during pre-school children. Developing the habit of a minimal technical dental hygiene, brushing teeth, leads to a significant reduction in dental cavities and periodontitis.

It must be said that patients with special needs, such as motor function disabilities - spastic paraplegia, post stroke status, etc. - have problems to provide alone, by themselves, general and oral hygiene. Therefore parents and/or nurses will need to replace their motor skills, taking on these tasks. Children often know what the most important factor in dental hygiene is tooth brushing, but do not know exactly how to do it [5]. Dentists should advise caregivers about how to brush teeth and the means of brushing teeth - the usage of round electric toothbrushes, regular toothbrushes, and oral showers.

These patients need a more frequent application of prophylaxis methods as local and general fluoridation for prevention of cavities, therefore these patients dispensary should be more frequent than other people of similar age, because the risk of dental disease is increased.

Another factor increasing the risk of cavities at children with disabilities is that their disability is often accompanied by changes in dento-maxillary structures (e.g. in Down syndrome we can observe dental crowding, deep palate, etc.).

Medication, where it is appropriate, especially if we are talking about children receiving medication in the form of syrups with sugar can lead to cavities [www.aapd.org/media/Policies_Guidelines/G-SHCN.pdf]. In the case of medically compromised old adults, the drug combination often leads to a decreased salivary secretion, sensation of dry mouth, and thereby cavities or oral mucosal lesions.

Primary, secondary and tertiary prevention of dental diseases - cavities, gum disease, partial or total edentulous – should be started as early as possible and dentists should be trained to be able to inform the patients and their families of the special prevention features.

2.5.3. Characteristics of children with SEN (special educational needs) and their education

Throughout this course module dentists acquire the characteristics specific to the categories of students with SEN, information, specific educational theories and their teaching instruments. Attending this course is important because it provides a complex presentation of the specific characteristics of the students

with mental, sensorial, psychomotor or mixed disabilities, Down syndrome, ADHD and of their learning process.

Learning is a complex and dynamic phenomenon with a wide range of coverage that is the research subject for professionals from various fields: Psychology, Pedagogy, Biology, etc.

From the perspective of Psychology, learning performance amend the modification of a specific situation, being objectified at both elementary and complex level. Learning at elementary level includes reactions in response to environmental stimuli, physical stimuli, perceptible, with immediate action. At a more complex level, learning develops the 'symbolic representation' of stimuli which intervene on long-term bases at different levels of conceptualization, expressed as: structured knowledge (structuring, factual, notional and procedural notions).

In terms of pedagogical procedure, learning represents a specific characteristic of human through which they acquire knowledge, habits, skills and competencies. From the same perspective, learning involves a series of activities designed and carried out by the teacher in order to induce behavioural changes in the student's personality by putting in good use his ability to acquire knowledge, skills and cognitive strategies.

Broadly speaking, learning represents the acquisition of a new behaviour by the individual as a result of special training. Learning targets the adaptive behaviour of an individual, the change resulting from the interaction of the organism with the environment. The term 'learning' means different situations, such as: learning to walk, to speak, to read, to write, the hygiene skills, the physical and intellectual skills requested by a job, etc.

From the medical perspective, characterizing people with disabilities includes the identification of diseases, their classification, etiopathogenesis and symptomatology, with particularities at dento-facial level. Developmental disorders, genetic disorders, behavioural disorders, cognitive disorders and debilitating systemic diseases may increase the child's risk of developing oral disease [6]. For example, in the case of babies with Down syndrome the duration of tooth eruption may be delayed (e.g. there are situations when it begins around the age of 18 months old or later). Disturbances can also occur in the eruption sequence. Children with Down syndrome have dental-maxillary disharmonies, usually crowding, the premise for cavities, the palate arch is deep and ogival, which means less space for the tongue, tongue's tonus is lower, and this makes it to seem bigger. Tongue movements depend on the action of several muscles and play an important role in the process of chewing, swallowing, breathing and speaking. Children with Down syndrome have difficulties producing and coordinating the movements needed to control their tongue, which can make a dental treatment very difficult. Many children with Down syndrome have delayed mental and motor development and therefore they are likely to experience difficulties in learning oral hygiene techniques.

2.5.4. Specific intervention strategies of inclusive education

A completion of this course module provides dentists the opportunity to develop and implement specific strategies and tools of inclusive education: developing customized intervention program, developing an adapted curriculum, application of specific strategies in inclusive education.

The main instruments used on planning and coordinating the psychological and pedagogical interventions in the case of inclusion are: the customized service plan (CSP) and the personalized intervention program (PIP). If CSP sets the objectives and priorities to meet the global needs of the individual, PIP clarifies the intervention, through which the intended purposes are achieved. The service plan aims to meet all requirements of the individual's needs, having a very wide field of application. The scope of the intervention program is limited to a single purpose of development and its learning [1, p. ?].

Service plans are carried out for a longer time compared to the intervention programs, which are only a step or a part of the whole. To develop a service plan that includes several fields, an interdisciplinary team must be formed, while the implementation of an intervention program requires a small team, which may consist of only few qualified persons. Where the service program ends, the intervention program begins. The planning process is incomplete if one or the other of these two elements is not done.

Because the service program serves as direction for each intervention program, each team member must be involved into an intervention program. Each contribution is determined by member's skills, his participation in ongoing programs, his professional orientation, and by specific particularities (human and material resources, etc.). The resulting intervention program will depend on the actual requirements of the individual, the availability of the local resources and the community services.

If the two instruments are professionally applied we can identify the needs of people with disabilities and ensure continuity, complementarity and quality in our services as response to various requirements.

PIP is a component of the personalized service plan, as a permanent instrument for one or more team members who coordinate their interventions towards achieving the aimed target. PIP has the following components:

- learning objectives;
- learning and intervention strategies for each pursued objective;
- assessment strategies for the acquired skills and interventions;
- a continuous mechanism for reviewing the intervention program and for making decisions regarding the program continuity.

3. Conclusion

The results show that experience is often confused as being synonymous with age, but, especially in the case of the patients with special needs, a proper

training, supplemented by didactic-pedagogic and professional skills can be an asset for the young doctors in the treatment of patients with disabilities.

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References

- [1] D. Mara, *Strategii didactice în educația incluzivă (Teaching Strategies in Inclusive Education)*, Editura Didactica si Pedagogica, Bucharest, 2009, 102-209.
- [2] D.V. Popovici, *Elemente de psihopedagogia integrării (Elements of Psycho-Pedagogy of Integration)*, Pro Humanitate, Bucharest, 1999, 72.
- [3] A. Conti, P. Delbon, L. Laffranchi and C. Papanelli, *J. Med. Ethics*, **39(1)** (2013) 59-61.
- [4] T. Vărășmaș, *Învățământul integrat și/sau incluziv (Integrated Education and/or Inclusive)*, Aramis, Bucharest, 2001.
- [5] M. Ionaș, D. Mârza and M. Sabău, *Revista de Cercetare si Interventie Sociala*, **31** (2010) 35-44.
- [6] A. Maxim, A. Balan, M. Pasareanu and M. Nica, *Stomatologie comportamentală Pediatrică (Behavioral Pediatric Dentistry)*, Contact Internațional, Iasi, 1998, 89-96.