

# Aspects of Dental Health Services for People with Mental Retardation

**KEYWORDS** 

mental retardation, intellectual disability, oral surgery, dental prophylaxis

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Patients with mental retardation (intellectual disability) shows more dental decay and various periodontal dental diseases than general population, mainly due to poor oral hygiene status. Depending on the severity of mental retardation, these patients may benefit from dental or oral surgery services in an outpatient basis under local anesthesia and mild sedation or in hospital conditions under general anesthesia. We present in this paper some particular aspects related to patients with mental retardation, which must be known by the medical staff in dental offices, to achieve optimal results in the treatment of oral cavity diseases common in these patients.

Mental retardation, currently defined as intellectual disability is a mental and adaptative disorder that makes people affected by this develop's failure to present changes in daily routine skills (such as personal care). This mental development disabilities have varying degrees of severity and are usually associated with psychiatric disorders. Thinking and communication difficulties of these subjects makes them dependent on others (family or community), so their medical advice addressing is, in fact, mediated by caregivers.

It is not difficult to understand why patients diagnosed with mental retardation (intellectual disability) have poor oral hygiene and poor health of the oral cavity compared to subjects who don't have this malfunction, leading to a higher incidence of untreated dental caries, gingivitis and other periodontal diseases in comparison to the general population.

Patients with mental retardation may reside in the community or in institutions, so the percentage of those with serious behavioral problems are now, unfortunately, unknown. But it is estimated that 50-75% of these subjects will require special management for dental problems occurring during their existence [1].

Patients with mental delay process both the verbal and visual information at a slower rate than people with normal intelligence. Therefore, the dentist and support staff have to devote more time for any explanations and instructions prior the treatment itself.

Since the subject of mental retardation often has a short-term memory deficit [2], dental services professionals should re-train or re-explain the information about treatment more frequently in subsequent visits to the dental office, than to a child or adult with a normal mental development.

A common characteristic of patients with psychic retardation is the difficulty or inability to understand abstract terminology [2] and, therefore, the instructions addressed to them should be as simple and practical as possible, in order to capture their attention.

Because these patients often have difficulty in receiving verbal informations, the visual instructions prior therapy make the management easier, compared to verbal information alone. This has been proven on uncooperative patients with mental retardation, to whom the visual demonstration of the proposed procedure led to increased cooperation [3]. It can't say with certainty whether this improvement of cooperation was due to differences between presentations (visual versus verbal) or centering of attention.

Many retarded patients, especially those with brain injuries, show a behavioral syndrome characterized by hypermobility and hyperdistractibility [3]. If they are placed in a relatively non-stimulating environment, their cooperation will be better too. An environment unstimulated is one in which auditory, tactile and visual stimuli are minimized. A subject with mental retardation often have difficulties when he is placed in a new environment, unfamiliar, with few general stimuli. Therefore, the best cooperation is obtained when the patient is given treatment in the same operating environment, by the same people (doctors and nurses).

A common feature in the attitude of medical staff (in any specialty of medicine) in front of a patient with mental retardation is the use of rewards [4], more widely for this category of patients. Rewards are usually verbal compliments for cooperative behavior and are more frequent than in patients with normal intelligence. Verbal reward character is dictated by mental age and social level of the patient.

Patient education (before any procedure which will be done) will be made in simple steps. Adding new instructions to old or familiar informations (which were received from previous meetings with medical staff) facilitates this process. Modeling or rewarding successive approximations

of the desired behavior are part of this process.

Communication between doctor and patient with mental retardation should be undertaken to "the social age" of the patient, which reflect his social skills acquired up to that time [5]. For an individual with psychic retardation, "social age" is situated between the chronological and mental age. For patients with multiple disabilities, the changes are more nuanced in communication, visual feedback with the deaf and touch one with the blind being as helpful.

In most cases of patients with mental retardation, solving complex problems of dentistry (fillings for performing dental caries) or oro-maxillo-facial surgery (dental extractions - often several root residues in the same session, the incision of purulent collections because of dental infection, removal of small lesions in the oral and maxillofacial territory or treatment of traumatic facial bones) can not be made only with sedation and local anesthesia, imposing general anesthesia by oro-tracheal intubation. This procedure that counteracts retarded behavior is performed only in a hospital, allowing a patient to proper treatment (dental or surgical) in optimal conditions [3]. To avoid psychological trauma patient and financial expense imposed by hospitalization, providing dental care under general anesthesia should be the last resort, only after other methods have been tried and have failed. The mental retardation does not contraindicate the administration of general anesthesia, except for certain accompanying medical conditions.

Therefore, we believe that prevention of dental disease is more important than treating patients with mental retardation and dental problems. The same preventive measures as in the general population also apply to subjects with mental retardation, its consisting of: reducing diet that causes tooth decay, a good oral hygiene and the establishment of a comprehensive program [6].

A special problem in controlling carbohydrates intake to retarded children is the tendency of parents or supervisors to use excessive amounts of sweets to counteract maladaptive behavior [7, 8]. Professional nutritional counseling is imperative in these cases.

The preventive measures program is of utmost importance when planning the oral health of people with mental retardation. With the loss of a tooth due to dental disease it will be very difficult to be replaced, because many of these patients are unable to cooperate during prolonged dental procedures required to manufacture a dental prosthesis or to properly use and care for such device [9]. Furthermore, removable prosthetic treatment is often contraindicated in these patients because of the increased incidence of seizures [10].

Even maintaining a good oral hygiene is difficult to retarded people, often because they lack coordination and do not recognize the importance of tooth brushing and flossing. In fact, in many cases, oral hygiene becomes the responsibility of another person. It has been demonstrated that using an electric brush can be more easily manipulated by another person who cares for the patient's teeth but also the retarded sujects, so that they can perform this operation without help (those with cerebral palsy, for example) [11].

#### **CONCLUSIONS**

Patients diagnosed with mild and moderate mental retardation can benefit from dentistry and oral surgery in outpatient services, where health care providers need to adapt their behavior accordingly to patient's degree of understanding.

Severe degree of intellectual disability or longer duration of oral surgery procedures require hospitalization of these patients and performing maneuvers under general anesthesia.

Prevention of dental and oral cavity diseases (oral hygiene, avoiding cariogenic food, proper hydration when using drugs that cause dry-mouth) are of paramount importance for patients with mental retardation to avoid unwanted hospitalizations.

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