

A new questionnaire to evaluate the impact of oral disease on the quality of life in children with autistic spectrum disorders.

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Aim

The aim of the present study was to develop a questionnaire for the assessment of oral health related quality of life in children with autistic spectrum disorders (ASD).

Materials and Methods

On the basis of the questionnaires used to evaluate oral health related quality of life in normotypical children (Children Oral Health related Quality of Life, COHQoL and Early Childhood Oral Health Impact Scale, ECOHIS), a novel questionnaire specific for ASD children was developed. 131 children with ASD aged 4 to 17 were divided into a test group, referring oral diseases, and a healthy control group. Both groups underwent a dental visit. Then parents filled in the novel questionnaire. Statistical analyses were carried out using SPSS software.

ORAL SYMPTOMS

How often, in the last month, has your child:

1. Had pain in his/her teeth or mouth?
2. Had bleeding gums?
3. Had bad breath?
4. Had food sticking in or between his/her teeth?
5. Had food sticking in his/her palate?
6. Had mouth ulcers or other oral lesions?
7. Had hypersalivation/lost saliva from the mouth?
8. Had teeth clenching or grinding?
9. Had a mandibular deviation when he/she chews?
10. Had a temporomandibular joint click or noise?

EMOTIONAL AND/OR SOCIAL ALTERATIONS

How often, in the last month, has your child:

1. Been more irritated or frustrated than usual?
2. Been more nervous/scared/anxious than usual?
3. Been worried, with the gaze into the void?
4. Had an unpredictable or irascible behavior?
5. Been sluggish, inactive, farraginous?
6. Been inappropriately noisy and disturbing?
7. Screamed inappropriately?
8. Been disobedient/difficult to control?
9. Been excessively active?
10. Missed school?
11. Been aggressive (verbally or physically)?
12. Got hurt intentionally?
13. Stomped his feet or hit objects or slammed the door?
14. Had stereotyped behaviours, afinalistic and repetitive movements?
15. Cried easily, at the slightest damage or disturbance?
16. Had rapid mood changes?
17. Refused any form of physical contact?
18. Preferred being alone?
19. Bitten his/her hands?
20. Needed antibiotics and analgesics?

FUNCTIONAL LIMITATIONS

How often, in the last month, has your child:

1. Had difficulty eating and drinking cold/hot foods and drinks?
2. Had difficulty eating hard food?
3. Had difficulty eating his/her favorite foods?
4. Preferred soft foods?
5. Eaten slower than usual?
6. Been breathing through his/her mouth?
7. Had difficulty saying certain words?
8. Had difficulty opening the mouth?
9. Had trouble sleeping?
10. Had difficulty keeping his/her teeth clean?

FAMILY IMPACT

In the last month (due to your child's oral health problems):

1. Has your child needed more attentions from you or other family members?
2. Have you had less time for yourself or for other family members?
3. Has your sleep been compromised?
4. Have you had to interrupt family activities?
5. Have you missed your job to look after your child?
6. Have your child's sleep and nutrition been difficult to manage?
7. Has it been more difficult than usual to get your child doing or stop doing something?
8. Has your child annoyed you or other family members more than usual?
9. Have your child's bad mood and agitation disturb family practice?
10. Have you (or other family members) felt unhappy?
11. Has your child's condition caused misunderstandings and discussions in the family?
12. Has your child's condition cause financial difficulties?
13. Have you lost money taking time off work?
14. How often has your child needed expensive dental treatments?

Results

Clinical exam revealed a statistically significant difference between the two groups regarding Decayed Missing and Filled Teeth Index, both in permanent teeth (DMFT) and in primary teeth (dmft), with a p-value of 0.015 and 0.00, respectively. Statistically significant differences were also detected for Visible Plaque Index (VPI) and Gingival Bleeding Index (GBI), with p-values of 0.0036 and 0.0015, respectively. Furthermore, the analysis of the questionnaires demonstrated a statistically significant difference (p=0.00) between test and control groups.

Conclusion

It emerged that ASD children suffering from oral health diseases have a worse quality of life with regards to autistic children without oral diseases. The new questionnaire was able to estimate oral health related quality of life in ASD children.

