

# Oral Health Fact Sheet for Dental Professionals

## Children with Anxiety and Depression

*Anxiety is characterized by apprehension or fear of impending actual or imagined danger, vulnerability, or uncertainty and may be accompanied by restlessness, tension, tachycardia, and dyspnea unattached to a clearly identifiable stimulus. (ICD 9 code 300.0)*

*Depression is an unpleasant, but not necessarily irrational or pathological, mood state characterized by sadness, despair or discouragement; it may also involve low self-esteem, social withdrawal, and somatic symptoms such as eating and sleep disturbance. (ICD 9 code 311.0)*

### Prevalence

- Anxiety: 8 – 13%
- Depression: 0.4 – 9.8% of adolescents
- More common among females (approximately 2:1) and as children approach adolescence

### Manifestations

#### Clinical: most common anxiety diagnoses

##### Generalized anxiety

- excessive worry and anxiety for at least 6 months
- may also include restlessness, fatigue, difficulty concentrating, irritability, muscle tension, and disturbed sleep

##### Panic disorder

- recurrent and unexpected episodes which may include: rapid heartbeat, sweating, trembling, or shaking, feeling short of breath or as if choking, chest pain, nausea, feeling dizzy, lightheaded, numbness or tingling, hot flashes or chills
- feeling of unreality or detachment, fear of losing control, fear of dying

##### Social phobia

- persistent fear of social or performance situations provoking anxiety
- may result in crying or tantrums

##### Obsessive compulsive disorder

- obsessions (recurrent thoughts, images, or impulses that cause anxiety or distress); and
- compulsions (repetitive behaviors or mental acts such as ordering and arranging, counting, tapping, touching, or collecting/hoarding) occupying more than one hour per day

##### Post traumatic stress disorder – re-experiencing the trauma (dreams, flashbacks), resulting in:

- avoidance (detachment, decreased interest, decreased participation), and
- increased arousal (difficulty sleeping, irritability, difficulty concentrating)

#### Clinical: most common signs of depression

- Decreased interest or pleasure in activities
- Significant change in weight or appetite
- Insomnia or hypersomnia
- Psychomotor agitation or retardation
- Fatigue
- Feelings of worthlessness or guilt
- Decreased concentration or indecisiveness
- Recurrent thoughts of death

# Children with Anxiety and Depression continued

## Oral

- Neglect of oral hygiene leading to increased risk of dental caries and periodontal disease
- Poor nutrition
- Drug-induced xerostomia

## Other Potential Disorders/Concerns

- Mitral valve prolapse and GERD
- Patients with depression are at increased risk for engaging in high-risk behaviors (promiscuity, smoking, alcohol and drug abuse)

## Management

### Medication

| SYMPTOM    | MEDICATION                                                                    | SIDE EFFECTS                                                                                                                     |
|------------|-------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Depression | <i>SSRIs, Atypical Antidepressants, and Tricyclic Antidepressants (TCA's)</i> | Xerostomia, dysphagia, sialadenitis, dysgeusia, stomatitis, gingivitis, glossitis, tongue edema, discolored tongue, and bruxism. |
| Anxiety    | SSRIs, Atypical Antidepressants, and Benzodiazepines                          | Xerostomia, dysphagia, sialadenitis, dysgeusia, stomatitis, gingivitis, glossitis, tongue edema, discolored tongue, and bruxism. |

## Drug Interactions

### SSRI Interactions

- Use caution when administering sedation due to potential of enhanced CNS depression
- Effects are potentiated with codeine, carbamazepine and erythromycin

### TCA Interactions

- Adrenergic vasoconstrictors (e.g. epinephrine, levonordefrin) can cause cardiac depression and dysrhythmias, therefore use caution and limit dose
- Acetaminophen can increase TCA levels
- Effects are potentiated with sedative-hypnotics, narcotics and acetaminophen

### Benzodiazepines Interactions

- Potential of enhanced CNS depression

## Behavioral

Children with anxiety disorders may have greater dental anxiety. Consider use of behavior guidance techniques, i.e. voice control, distraction, nitrous oxide.

## Dental Treatment and Prevention

- Obtain accurate medical history including medication regimen. Some parents of children with anxiety or depression may be reluctant to admit their child's use of medication for an anxiety disorder or depression. Be supportive and non-judgmental. Discuss dental treatment with treating medical provider if needed.
- Mitral valve prolapse is more common in children with anxiety disorders (8-33%). Current AHA guidelines do not recommend antibiotic prophylaxis.
- Consider artificial salivary products for children with xerostomia.

# Children with Anxiety and Depression continued

- Dental erosion due to gastroesophageal reflux can increase thermal sensitivity and in significant cases cause pain.
- Educate patient on proper oral hygiene (brushing, flossing) and nutrition. Patients with depression are at increased risk of dental caries due to oral hygiene neglect, preference for carbohydrates due to reduced serotonin levels, and drug-induced xerostomia.

Look for signs of physical abuse during the examination. Note findings in chart and report any suspected abuse to Child Protective Services, as required by law. Abuse is more common in children with developmental disabilities and often manifests in oral trauma.

Further information (Medical Anticipatory Guidance, Dental Anticipatory Guidance, Oral Health Guidance for parents/Caregivers and Medical Professional Fact Sheet for Anxiety and Depression) can be found at: [http://dental.washington.edu/departments/omed/decod/special\\_needs\\_facts.php](http://dental.washington.edu/departments/omed/decod/special_needs_facts.php)

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## References

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- Becker, D. E. (2008) Psychotropic drugs: implications for dental practice. *Anesthesia Progress*, 55(3): 89-99.
- Deykin, EY., Buka, S.L., Zeena, T.H. (1992) Depressive illness among chemically dependent adolescents. *Am J Psychiatry*, 149(10):1341-1347.

## Additional Resources

- [NIH Institute for Depression Disorder](#) and [NIH Institute for Anxiety Disorder](#)
- [Special Care: an Oral Health Professionals Guide to Serving Young Children with Special Health Care Needs](#)
- [Bright Futures Oral Health Pocket Guide](#)
- [American Academy of Pediatric Dentistry: 2008-09 Definitions, Oral Health Policies and Clinical Guidelines](#)
- [MCH Resource Center](#)
- [ASTDD-Special Needs](#)
- [Block Oral Disease, MA](#)
- [NOHIC-NIDCR publications](#)
- Free of charge CDE courses: [MCH Oral Health CDE](#) (4 CDE hours); [NIDCR CDE](#) (2 CDE hours)



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