



## Advances in Pediatric Psychopharmacology

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**Q** Could you tell us a little about childhood and adolescent depression??

**A** Among children there has been a secular increase. In clinical samples, there is a 70% recurrence in 5 years. We have also found that 20%-40% become bipolar and the average duration of a depressive episode is 3 to 9

months. Children with depression have earlier smoking and substance use and increased rates of substance dependence, educational underachievement, more depression and anxiety and suicide attempts. Regarding adolescent depression, the point prevalence is 15% to 25%. Females are over represented two to one. Studies have also show that there is an increased rate of pregnancy as compared to non-depressed teens..

**Q** What is the relationship between genes and depression??

Well first of all, gene frequencies change slowly, so genes are not solely responsible for the increased prevalence we have seen. We do know that it is not a single point mutation, and that there could be different genes involved for men and women. We also know environment has a huge impact on risk of depression..

**Q** What is meant by cultural competency in terms of mental health care?

**A** There are numerous issues to consider in the delivery of culturally appropriate care. Some of these issues are illustrated in the table below.

**Q** What do you think about the FDA public hearings?

**A** The FDA is doing a very nice job. They need to see if these medications that are routinely used in children and adolescents are safe or not and how to use them. They are approaching this problem in a superb fashion

**Q** Do you think the US will react as Britain has done?

**A** I think they are reacting different thus far. The US is being more methodological and in depth before making a final decision. The US is taking a more judicious and systematic and in-depth look before making a final decision

**Q** Do the old school TCAs do the same thing as the SSRIs...increase suicide attempts?

**A** There is no specific data to suggest that. But the data do suggest that TCAs are not very effective in children. The TCAs are lethal if there is an over dose so there is little or no role in kids.

**Q** In the United States, how many completed suicides have occurred in all of the clinical trials of all of the antidepressants that have been studied in children and adolescents?

**A** None

**Q** So why has there been such a focus on increased suicide risk among teen taking antidepressants?

**A** The question of increased suicide risk is an important question that needs to be answered. It is also important to keep in mind that by regulatory precedent, side-effects are lumped into groups such as "emotional lability" but these may not be related to the medication. We know that teens are already at increased risk for suicide. In 2001, it was the third leading cause of death for this age group. There is actually a correlation between use of SSRIs and decreased suicide risk. It will be a difficult question to answer because rare events, such as suicide, are much harder to find mathematically

- Q Do you think the prescription of antidepressants by Family MDs and Pediatricians part of the problem?**  
**A** No. I think it is critical that we can find treatment that primary doctors can use. They are the 1st line of therapy and may treat uncomplicated depression
- Q Are mood stabilizers effective in children and adolescents? What does the literature support?**  
**A** Clinically my colleagues and I suspect they work as well in adolescents as they do for adults for Bipolar Disorder. There have only been a few studies thus far but several are ongoing. They are not well studied in kids yet.
- Q Is a 50% placebo response rate among depressed kids your experience?**  
**A** There are several great sources of additional information available on the web. These include: No, that is not my experience. Clinically there are a couple of issues. With placebo, it is not that they get all better. They are not symptoms or impairment free, just improved. In my clinical experiences there is a much smaller improvement on placebo.
- A Should placebo be declared an antidepressant for kids?** There are several great sources of I think that studies of the biological effect of placebo show they have profound effects on the brain. Should be no surprise that they help in treating pain and depression. The ethics of using is a different question, not just in children.
- Q Are there special issues that must be considered when these disorders occur in children and adolescents?**  
**A** Sure, a couple of things are particular to children and adolescents, especially parents and mother who can be linked to drop out in your patients. Also children and adolescents with depression can lead to increased substance abuse and alcohol use and higher rate of suicide attempts and completed suicides. Treating does not address psychosocial impairment.
- Q What types of research is needed in pediatric psychopharmacology?**  
**A** A couple of things are needed. We need to have more centers adequately trained to recruit large numbers so that there is more power. More pharmacodynamic studies are needed. We also need to better survey for rare serious side effects.
- Q Are there new treatments in the pipeline that are being studied for pediatric use?**  
**A** Right now essentially all treatments are studies in pediatric populations only after an approved indication for adults.
- Q Where can we find out more information about the FDA public hearings?**  
**A** The slide presentations are available at <http://www.fda.gov/ohrms/dockets/ac/04/slides/4006s1.htm>. A transcript of the meeting is available at <http://www.fda.gov/ohrms/dockets/ac/04/transcripts/4006T1.pdf>

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Dr. Ryan's main research work is in the nosology, psychobiology, and treatment of children and adolescents with mood and anxiety disorders. He has authored or co-authored over 100 articles and chapters on these subjects. He is currently principal investigator on a large, NIMH-funded Program Project grant entitled, "Psychobiology of Childhood Anxiety and Depression." He also has ongoing studies of the pharmacological treatment of unipolar and bipolar depression in adolescents.

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