Expert Panel Discussion and Recommendations

Selected clinical issues - polypharmacy and co-pharmacy

There has been a marked increase in the rate of polypharmacy (the prescription of more than one psychotropic medication) and co-pharmacy (the prescription of more than one psychotropic medication from the same class of medications such as two antidepressants or two antipsychotics) in children and adolescents with psychiatric illnesses over the past decade. The use of polypharmacy in children and adolescents draws intense attention from the lay press, fuels anti-psychiatry sentiment and is a major motivating factor behind the push for greater oversight of pharmacotherapy in children by regulatory and government agencies. Unfortunately, many of the of polypharmacy and co-pharmacy practices are not supported by research in either the pediatric or the adult medical literature. This break-out group will address the following issues:

- 1) What are the stated reasons for the use of polypharmacy and co-pharmacy in children and adolescents? What reasons are supported by the literature?
- 2) At what point in the treatment of a youngster with severe emotional or behavioral disturbances should polypharmacy be considered? Co-pharmacy?
- 3) At what point should the use of concomitant psychotropic medications be considered as being excessive? Is there an absolute number of medications that should be considered as being too many? Does this determination vary by age or diagnosis? At what point should polypharmacy prompt a clinical review of a child's or adolescent's management?
- 4) What clinical data should the consent unit and the DCFS Psychopharmacology Consultation Program use to determine the appropriateness of a polypharmacy regimen? What research data? How should these determinations be made?
- 5) Many instances of polypharmacy are not warranted by clinical circumstances or research data to support the intervention. What can the DCFS Consent Unit and the DCFS Psychopharmacology Consultation Program do to decrease the inappropriate use of polypharmacy?

Panel Report

1) The panel discussed state of Illinois data from the Department of Healthcare and Family Services showing that rates of death were greater for patients in state operated mental health/developmental disorders treatment facilities treated with polypharmacy than those on monotherapy. The panel felt strongly that monotherapy was preferable to polypharmacy when possible and discussed several ways to avoid polypharmacy. They emphasized the need for adequate medication trials to prevent unnecessary medication changes and polypharmacy. An adequate trial was defined as the appropriate medication dose for an adequate length of time. They also addressed the need to accurately identify target symptoms.

The panel discussed several clinical factors that support the use of polypharmacy which the panel referred to as "logical polypharmacy"):

- improvement in clinical status without resolution of symptoms;
- lithium augmentation of antidepressants in partial responders;
- concurrent use of mood stabilizers and antipsychotics in psychotic mania;
- concurrent use of alpha-agonists and stimulants to treat treatment resistant ADHD; and
- concurrent use of SSRI's and antipsychotics for OCD.

In keeping with theme of "logical polypharmacy", prescribers need to keep mechanisms of action, receptor affinity, and metabolic systems in mind when considering choice of agents.

Evaluation of who may benefit from polypharmacy should include:

- in depth history;
- family and social history;
- past medication trials; and
- treatment history
- 2) The panel thought that polypharmacy and co-pharmacy should be considered when monotherapy fails assuming that the medication trial was adequate as related to dosage and duration of treatment. They recommended three failed trials of monotherapy before considering polypharmacy. One panelist suggested providing peer review or education when polypharmacy is requested.
- 3) The panel thought that four psychotropic medications prescribed concurrently is excessive. According to the TRAAY Guidelines^{1,2}, four or more psychotropic medications may not be beneficial. There should be a process of reviewing target symptoms addressed by the psychotropic medication in a complicated regimen. The panel felt that preschool age children should receive monotherapy. They recommended careful monitoring of the child's response to treatment, especially improvement in target symptoms. If symptoms are in remission for 12-18 months, the clinician should consider tapering and discontinuing one medication at a time.
- 4) Clinical data to be considered by the consent team centers around target symptoms and medications addressing those symptoms. Structured assessment tools should be put in place to gauge progress. The assessment tools could be global or specific to each psychiatric disorder.

¹ Schur SB. Sikich L. Findling RL. Malone RP. Crismon ML. Derivan A. Macintyre Ii JC. Pappadopulos E. Greenhill L. Schooler N. Van Orden K. Jensen PS. Treatment recommendations for the use of antipsychotics for aggressive youth (TRAAY). Part I: a review. Journal of the American Academy of Child & Adolescent Psychiatry. 42(2):132-44, 2003 Feb.

² Pappadopulos E. Macintyre Ii JC. Crismon ML. Findling RL. Malone RP. Derivan A. Schooler N. Sikich L. Greenhill L. Schur SB. Felton CJ. Kranzler H. Rube DM. Sverd J. Finnerty M. Ketner S. Siennick SE. Jensen PS. Treatment recommendations for the use of antipsychotics for aggressive youth (TRAAY). Part II. Journal of the American Academy of Child & Adolescent Psychiatry. 42(2):145-61, 2003 Feb.

- 5) Perhaps the best way for the DCFS Consent Unit to decrease inappropriate use of polypharmacy is through improving the 180 day review of consent. Crises and hospitalizations result in more aggressive use of medication. If a child ahs been stable and has not been hospitalized the 180 day evaluation presents an opportunity to reduce the practice of polypharmacy. Other recommendations to decrease the utilization of polypharmacy include:
 - Providing education and consultation when requests for polypharmacy arise may curtail the practice or ensure appropriations.
 - Administrative case review is mandated by the government. The 180 day review is part of this process. Blood levels, EKG, metabolic screening should be part of this process.