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Evidence-Based Therapies in Child and Adolescent Psychiatry

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Consumer, professional, legislative and regulatory organizations are increasingly calling for the development and adoption of evidence-based therapies, based on demands for quality services and expectations that outpouring of dollars and time are rewarded by beneficial outcomes. In child and adolescent mental health, growing public concerns over safety, in particular with psychotropic medications, and the recognition that psychiatric impairment is a major factor within other social service systems has further fueled the demand for empirically based interventions.

Randomized, controlled trials (RCTs) with adequate sample sizes and defined study populations are the standard for characterizing an intervention as evidence-based (Cochrane Collaboration, 2002). A listing of all RCTs in child and adolescent psychiatry is beyond the scope of this commentary (for a review, see McClellan and Werry [2003]). This review will outline interventions with the best research support. Fortunately, although the literature remains limited, the number of well-conducted studies is increasing.

Psychopharmacology

An estimated 6% of young people under the age of 20 in the United States receive prescriptions for psychotropic medication. This represents approximately a threefold increase since 1987 (Zito et al., 2003), and includes a substantial rise in prescriptions for preschoolers (Zito et al., 2000). The majority of prescriptions are off-label (i.e., not U.S. Food and Drug Administration-approved). Pediatricians and family practice physicians issue the majority of prescriptions for psychotropic drugs, in part due to the scarcity of child psychiatrists (Goodwin et al., 2001).

Stimulant medications for attention-deficit/hyperactivity disorder are the best-supported treatment, with more than 160 published, randomized, controlled trials (Greenhill et al., 2002). In addition, well-designed, National Institutes of Health-funded, multisite, randomized, controlled trials support the use of stimulant medications for ADHD (MTA Cooperative Group, 2004); fluoxetine (Prozac) plus cognitive-behavioral therapy (CBT) for major depression (March et al., 2004); risperidone (Risperdal) for behavioral disturbances in youth with autism (McCracken et al., 2002); and fluvoxamine (Luvox) for childhood anxiety disorders (Research Unit on Pediatric Psychopharmacology Anxiety Study Group, 2001). There are also several large trials supporting the use of selective serotonin reuptake inhibitors for obsessive-compulsive disorder (American Academy of Child and Adolescent Psychiatry, 1998). Beyond that, the research literature supporting most pediatric psychopharmacologic practices is limited in terms of the number of studies, sampling limitations and/or variability in results.

Perhaps the greatest area of recent concern is the use of antidepressants. For pediatric depression, published

trials report efficacy for fluoxetine (Emslie et al., 1997; March et al., 2004), sertraline (Zoloft) (Wagner et al., 2003) and citalopram (Celexa) (Wagner et al., 2004). Paroxetine (Paxil) was superior to placebo on some, but not all, primary outcome measures of depression in one multisite trial (Keller et al., 2001). High placebo response rates and unpublished negative trials raise questions about whether the use of SSRIs for pediatric depression is clinically justified (see Whittington et al., 2004).

A large NIH-sponsored multisite trial found fluoxetine plus CBT superior to fluoxetine alone, CBT alone or placebo (March et al., 2004). Neither fluoxetine monotherapy nor CBT demonstrated greater efficacy than placebo on primary outcome measures. At this time, fluoxetine is the only agent approved by the FDA to treat depression in juveniles.

The Psychopharmacologic Drugs and Pediatrics Advisory Committees reviewed 24 trials (n=4,400), and found a 4% risk of suicidality during the first few months of antidepressant treatment, compared to a 2% risk with placebo (FDA, 2004). A black box warning was issued, with recommendations for informed consent and frequency of monitoring. Yet, there are also concerns over not treating depressed youth, since pharmaco-epidemiological data suggest that the use of SSRIs may be associated with an overall decreased risk in suicide (Brent, 2004). Ongoing research is needed to address these concerns.

Finally, although mood stabilizers and atypical antipsychotics are widely used in treating young patients, the number of controlled trials examining their use in this population is inadequate (Pappadopulos et al., 2004). In clinical settings, aggression is probably the most commonly targeted symptom. The number of children and adolescents being diagnosed with bipolar disorder, an area of debate within child psychiatry (see McClellan, 2005), has helped drive this practice, with a significant rate of polypharmacy (Duffy et al., 2005).

Psychosocial Interventions

Although psychotherapy remains a mainstay of psychiatric treatment, current evidence suggests that the most widely used traditional therapies are not effective in youth (Weiss et al., 2000, 1999; Weisz and Jensen, 2001). Research-based psychotherapeutic interventions have documented effectiveness, yet are generally not used in clinical practice.

The best-supported psychotherapy interventions in youth are CBT, parent training and psycho-educational strategies. Cognitive-behavioral therapy has been found helpful for depression, anxiety, posttraumatic stress disorder and conduct problems (Cohen, 2003; Compton et al., 2004; Kazdin, 2000). Interpersonal psychotherapy has also been shown to be beneficial for adolescent depression (Mufson et al., 2004). Parent training programs have been developed to improve parent-child interactions, enhance parenting effectiveness and reduce coercive interactions (Brestan and Eyberg, 1998).

For more seriously impaired youth, including those with conduct problems and substance abuse, multisystemic therapy (MST) utilizes aggressive case management, comprehensive psychiatric services and targeted family interventions to maintain youth in their home communities (Henggeler et al., 2003, 2002). A meta-analysis of MST outcome studies noted positive benefits, although maintenance of treatment fidelity when transporting the intervention to different community settings remains a challenge (Curtis et al., 2004; Henggeler, 2004).

Discussion

The number of research-supported treatments for mental health problems in youth has increased substantially over the last decade. However, because patient populations are more complicated and diverse than research samples (and also because clinicians are not always trained in, or willing to use, evidence-based modalities), the justification for most practice is based on the adult literature or clinical consensus. Ultimately, pediatric mental health services need to be defined by research, rather than the current state whereby studies, if done at all, are initiated to justify existing practices. Variability in diagnostic and treatment practices, coupled with a lack of research, makes it is difficult to stipulate which practices fall within or outside consensus or community standards.

The limited validity for most childhood psychiatric disorders further complicates this issue (McClellan and Werry, 2000). Many studies use narrowly defined exclusion criteria to address the question of efficacy for a specific condition. Therefore, results may not reflect the more common clinical situations seen in everyday practice. Diagnostic comorbidity, associated risk factors and cultural/social variables all influence treatment decisions and effectiveness.

Future research needs include establishing the effectiveness of commonly used unstudied interventions; determining the effectiveness of evidence-based treatments in nonacademic clinical settings and populations; and developing methods for promoting the use of existing evidence-based practices in community settings. Complicated treatment algorithms should be incorporated into study designs, such as systematically

combining pharmaco- and psychotherapy to address more complex cases. The potential influences of relevant clinical, family, community and social-service factors on the type, dose and/or timing of specific interventions also need to be examined. Finally, efforts are needed to better understand how to train evidence-based practitioners, since maintaining treatment fidelity in community settings is a major challenge.

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References

American Academy of Child and Adolescent Psychiatry (1998), Practice parameters for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry 37(10 suppl):27S-45S [see comment].

Brent DA (2004), Antidepressants and pediatric depression--the risk of doing nothing. N Engl J Med 351 (16):1598-1601.

Brestan EV, Eyberg SM (1998), Effective psychosocial treatments of conduct-disordered children and adolescents: 29 years, 82 studies, and 5,272 kids. J Clin Child Psychol 27(2):180-189 [see comments].

Cochrane Collaboration (2002), Preparing, maintaining and promoting the accessibility of systematic reviews of the effects of health care interventions. Available at: www.cochrane.org. Accessed July 7, 2005.

Cohen JA (2003), Treating acute posttraumatic reactions in children and adolescents. Biol Psychiatry 53 (9):827-833.

Compton SN, March JS, Brent D et al. (2004), Cognitive-behavioral psychotherapy for anxiety and depressive disorders in children and adolescents: an evidence-based medicine review. J Am Acad Child Adolesc Psychiatry 43(8):930-959.

Curtis NM, Ronan KR, Borduin CM (2004), Multisystemic treatment: a meta-analysis of outcome studies. J Fam Psychol 18(3):411-419.

Duffy FF, Narrow WE, Rae DS et al. (2005), Concomitant pharmacotherapy among youths treated in routine psychiatric practice. J Child Adolesc Psychopharmacol 15(1):12-25.

Emslie GJ, Rush AJ, Weinberg WA et al. (1997), A double-blind, randomized, placebo-controlled trial of fluoxetine in children and adolescents with depression. Arch Gen Psychiatry 54(11):1031-1037.

FDA (2004), FDA Statement on Recommendations of the Psychopharmacologic Drugs and Pediatric Advisory Committees. Available at: www.fda.gov/bbs/topics/news/2004/NEW01116.html. Accessed July 7, 2005.

Goodwin R, Gould MS, Blanco C, Olfson M (2001), Prescription of psychotropic medications to youths in office-based practice. Psychiatr Serv 52(8):1081-1087 [see comment].

Greenhill LL, Pliszka S, Dulcan MK et al. (2002), Practice parameter for the use of stimulant medications in the treatment of children, adolescents, and adults. J Am Acad Child Adolesc Psychiatry 41(2 suppl):26S-49S [see comments].

Henggeler SW (2004), Decreasing effect sizes for effectiveness studies-implications for the transport of evidence-based treatments: comment on Curtis, Ronan, and Borduin (2004). J Fam Psychol 18(3):420-423 [comment].

Henggeler SW, Clingempeel WG, Brondino MJ, Pickrel SG (2002), Four-year follow-up of multisystemic therapy with substance-abusing and substance-dependent juvenile offenders. J Am Acad Child Adolesc Psychiatry 41 (7):868-874.

Henggeler SW, Rowland MD, Halliday-Boykins C et al. (2003), One-year follow-up of multisystemic therapy as an alternative to the hospitalization of youths in psychiatric crisis. J Am Acad Child Adolesc Psychiatry 42 (5):543-551.

Kazdin AE (2000), Treatments for aggressive and antisocial children. Child Adolesc Psychiatr Clin N Am 9 (4):841-858.

Keller MB, Ryan ND, Strober M et al. (2001), Efficacy of paroxetine in the treatment of adolescent major depression: a randomized, controlled trial. J Am Acad Child Adolesc Psychiatry 40(7):762-772 [see comments].

March J, Silva S, Petrycki S et al. (2004), Fluoxetine, cognitive-behavioral therapy, and their combination for adolescents with depression: Treatment for Adolescents With Depression Study (TADS) randomized controlled trial. JAMA 292(7):807-820 [see comments].

McClellan J (2005), Commentary: treatment guidelines for child and adolescent bipolar disorder. J Am Acad Child Adolesc Psychiatry 44(3):236-239 [comment].

McClellan JM, Werry JS (2000), Introduction-research psychiatric diagnostic interviews for children and adolescents. J Am Acad Child Adolesc Psychiatry 39(1):19-27.

McClellan J, Werry JS (2003), Evidence-based treatments in child and adolescent psychiatry: an inventory. J Am Acad Child Adolescent Psychiatry 42(12):1388-1400.

McCracken JT, McGough J, Shah B et al. (2002), Risperidone in children with autism and serious behavioral problems. N Engl J Med 347(5):314-321 [see comments].

MTA Cooperative Group (2004), National Institute of Mental Health Multimodal Treatment Study of ADHD follow-up: 24-month outcomes of treatment strategies for attention-deficit/hyperactivity disorder. Pediatrics 113(4):754-761.

Mufson L, Dorta KP, Wickramaratne P et al. (2004), A randomized effectiveness trial of interpersonal psychotherapy for depressed adolescents. Arch Gen Psychiatry 61(6):577-584 [see comment].

Pappadopulos EA, Tate Guelzow B, Wong C et al. (2004), A review of the growing evidence base for pediatric psychopharmacology. Child Adolesc Psychiatr Clin N Am 13(4):817-855, vi.

Research Unit on Pediatric Psychopharmacology Anxiety Study Group (2001), Fluvoxamine for the treatment of anxiety disorders in children and adolescents. N Engl J Med 344(17):1279-1285 [see comments].

Wagner KD, Ambrosini P, Rynn M et al. (2003), Efficacy of sertraline in the treatment of children and adolescents with major depressive disorder: two randomized controlled trials. JAMA 290(8):1033-1041 [see comments].

Wagner KD, Robb AS, Findling RL et al. (2004), A randomized, placebo-controlled trial of citalopram for the treatment of major depression in children and adolescents. Am J Psychiatry 161(6):1079-1083 [see comments].

Weiss B, Catron T, Harris V (2000), A 2-year follow-up of the effectiveness of traditional child psychotherapy. J Consult Clin Psychol 68(6):1094-1101.

Weiss B, Catron T, Harris V, Phung TM (1999), The effectiveness of traditional child psychotherapy. J Consult Clin Psychol 67(1):82-94.

Weisz JR, Jensen AL (2001), Child and adolescent psychotherapy in research and practice contexts: review of the evidence and suggestions for improving the field. Eur Child Adolesc Psychiatry 10(suppl 1):I12-I18.

Whittington CJ, Kendall T, Fonagy P et al. (2004), Selective serotonin reuptake inhibitors in childhood depression: systematic review of published versus unpublished data. Lancet 363(9418):1341-1345 [see comments].

Zito JM, Safer DJ, dosReis S et al. (2000), Trends in the prescribing of psychotropic medications to preschoolers. JAMA 283(8):1025-1030 [see comment].

Zito JM, Safer DJ, dosReis S et al. (2003), Psychotropic practice patterns for youth: a 10-year perspective. Arch Pediatr Adolesc Med 157(1):17-25 [see comments].