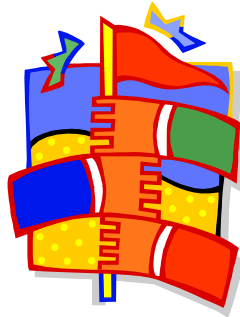


Children's Mental Health



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A Review of the Literature

The congressional Joint Commission on the Mental Health of Children (1969) made the first major national statement of the problem of unmet mental health needs in children. The Joint Commission reported that many children of all ages suffered from significant mental health problems but were either unable to adequately access services or were served in excessively restrictive settings. Critically, the Joint Commission also emphasized that many children have complex needs that would require a coordinated response across multiple systems in the health and social service sectors (Lourie, 2003).

Nevertheless, children's mental health treatment as a field of study received scant attention in the professional literature prior to the early 1980s and even less attention in the practice field. In the landmark study of children's mental health, *Unclaimed Children*, Knitzer and Olson (1982) reported some three million US children had significant mental health needs and two-thirds either received no or inappropriate services; further, fewer than half the states had even one mental health professional devoted to serving children (Duchnowski, Kutash, & Friedman, 2002; Knitzer & Olson, 1982; Lourie, 2003). This study significantly raised public awareness and concern regarding children's mental health, and contributed to a significant increase in national attention from researchers and policymakers alike. Subsequently, the advent of the Children and Adolescent Service System Project (CASSP) movement in 1984 gave rise to the system of care concept (SOC) (Duchnowski, et al., 2002; Neill, 1997; Stroul, 1996; Lourie, Stroul, & Friedman, 1998) and the development of the first national effort to create a system of care around children with mental health needs. To a great degree, system of care principles forms the framework in which the development of public mental response to children is defined.

SYSTEMS OF CARE

A consensus description of the key elements of a 'system of care' developed from the CASSP efforts and serves as a guide for most current policies and programs addressing complex needs in children. Rather than prescribing the specific components of care that had to be in place, system of care describes a set of core values and principles that are recommended to guide communities' and providers' efforts (Lourie, Stroul & Friedman, 1998; Neill, 1997; Stroul, 1996; Stroul & Friedman, 1996).

Systems of care concepts define a model for what good services should look like but not what the services should be. Grounded in clinical experience and a democratic humanistic philosophy, public agencies¹ and providers adopted systems of care standards as a 'best

¹ For example, the mission statement of SAMSHA's Child Adolescent and Family Branch is, "Systems of care are developed on the premise that the mental health needs of children, adolescents, and their families can be met within their home, school, and community environments. These systems are also developed around these principles: child-centered, family-driven, strength-based, and culturally competent with interagency collaboration. The Child, Adolescent and Family Branch embraces and promotes these core principles of systems of care." <http://www.mentalhealth.org/cmhs/ChildrensCampaign/default.asp>

practice' guide in the absence of an empirically validated service and outcome literature. The system of care concept purports a philosophy built on three core values:

1. The inclusion of families in planning services for their children.
2. Integration of cultural competence into children's services.
3. The encouragement of cross-system efforts to meet the range of needs experienced in children.

The model additionally asserts ten guiding principles:

1. Seriously, Emotionally Disturbed (SED) children should have access to services that address their individual physical, emotional, social, and educational needs.
2. Each child should receive individualized services.
3. Services should be the least restrictive available.
4. Family's participation in service planning and delivery is vital.
5. Services should be integrated and coordinated between child-serving agencies.
6. Case management is fundamental to service coordination and integration of services.
7. The system of care should promote early identification to maximize the likelihood of positive outcomes.
8. The system of care should plan for a smooth transition to the adult system if necessary.
9. The rights of SED children should be protected.
10. Children with emotional disturbance should receive services regardless of gender, ethnicity, race, income status, etc. (Paster, 1997; Stroul, 1996; Lourie, Stroul & Friedman, 1998; Winters & Pumariega, 2001).

STRUCTURAL STRATEGIES TO IMPLEMENT SYSTEMS OF CARE SERVICES

In response to the evidence of major gaps in mental health services to children, the federal government in 1984 funded the Child and Adolescent Service System Program (CASSP) to encourage and fund states to develop systems of care for children with severe mental health problems. In this broader effort, the creation of the Child and Adolescent Service System Program (CASSP) is significant because CASSP became the vehicle and organizing force for the federal policy initiative to encourage states to develop policy, cross-system coordination, and local infrastructure in the provision of mental health services to children and adolescents. To this end, a series of federal, state, and private foundation efforts invested in SOC, which included technical assistance to several demonstration projects in independent but complimentary SOC programs in a small number of communities and states. These activities share common approaches in encouraging education, policy development, eligibility and fiscal waivers, and coordination strategies across systems serving children and families

(Lourie, 2003; Lourie, Stroul & Friedman, 1998; Stroul, 1996; Stroul & Friedman, 1996; Winters & Pumariega, 2001).

During the late 1980s and early 1990s, these program principles subsequently were more broadly initiated through the Community Mental Health Services for Children Program, which since 1993 has completed or supports SOC demonstrations in 85 communities. Currently, this work continues through the SAMSHA Center for Mental Health Services in the Planning and System Development Program. SOC principles now are the presumptive “best practice” in public mental health (Lourie, 2003).

In addition to the federal effort, demonstration program investments came from the Robert Wood Johnson Foundation, the Annie E. Casey Foundation, and state-funded demonstrations (e.g., Ventura County California and Kentucky IMPACT). Programs varied in size from single communities to full state programs (Illback, Neill, Call, & Andis, 1993; Lourie, 2003). The early CASSP programs that formed the knowledge base for the broader dissemination of SOC practice shared a focus on changing the structure in which services are provided. Programs focused on coordination of a range of services to meet participant need (including the creation of intermediate level alternative community placement services in some projects), increased planning and coordination across professional systems, reduction of financial barriers to service access, creation of multi-disciplinary teams, and an emphasis on care coordination as a critical professional function. The programs did not address innovation in individual services although arguably the emphasis on multi-disciplinary teams and intensive care coordination around individuals could be called service innovations. All of the programs focused on older children and adolescents and services to children under age 8-10 were rare. Programs addressed a range of problems although most programs shared a common focus on youth who had demonstrated risk or a history of restrictive placements and had needs that cut across multiple systems.

Consistent with SOC values, the demonstration projects were tailored to the community target and did not result in common strategies, common scale in the identified size of the community, or common impact/outcome measures. As a result, it is fair to say that there have been multiple uncontrolled demonstrations of the SOC principles rather than a common body of research studies. Because of the variety of demonstration projects that supported experimentation in the use of SOC principles to structure services, we now have a body of studies that provide evidence of benefit through uncontrolled program evaluations. These studies suggest important implementation lessons in funding, system coordination, and outcome evidence and lessons learned from structural approach to SOC. However, while CASSP-funded and other programs produced several formative evaluation reports that suggested the promise of SOC-inspired programs, the projects were not designed as outcome experiments. CASSP’s legacy program, the Comprehensive Community Mental Health Services for Children Program, has committed to more intensive longitudinal follow-ups of children in services in a multi-site repeated measures study including quasi-experimental comparisons with matched communities that were not systematically implementing SOC reforms and services (Center for Mental Health Services, 1999). As of this review in 2003, no outcome results are available from this CMHS cross-site study.

Stroul, McCormack, and Zaro (1996) and Rosenblatt (1998) have provided reviews of the technical reports and small number of peer-reviewed studies (Burchard & Clarke, 1990; Goldman, 1992; Illback, Neill, Call, & Andis, 1993; Jordan & Hernandez, 1990; Lourie, 1992; Rosenblatt & Attkisson, 1997) that comprise the literature on SOC demonstration programs. Two or more programs have contributed evaluation impact results that support the conclusion that SOC practices are associated with the following benefits to participating youth:

1. Reduced use of restrictive placements with particular attention to juvenile justice recidivism and psychiatric inpatient stays.
2. Reduced costs of services primarily associated with the reduction in high-cost restrictive placements.
3. Improved functional and symptom status in participating youth.
4. Improved academic retention and performance.
5. Increased satisfaction with services.

In the last 15 years, multiple demonstration projects evolved with the intention of building the evidence base for the SOC model. ‘Integrated services’ within the context of SOC-inspired service programs were usually funded as demonstration programs to create the evidence for clinical innovations that challenge our deeply rooted policies of categorical funding and service specialization. As stated above, the shared set of ‘systems of care’ values and program principles has engendered both broad policy initiatives and specific local service coordination efforts. Within integrated services, we can again distinguish two levels of service delivery effort. Several SOC integrated service programs are efforts to modify the intensity and quality of agency coordination; in these cases, the act of coordination across systems is the distinctive intervention. Other SOC integrated service models have focused on specific clinical techniques that offer distinctive services to families. However, this inclusive use of the ‘integrated services’ and ‘system of care’ terms has contributed to confusion about strategies and definition of outcomes. Rosenblatt (1998) has made this point effectively in discussing systems, program, and clinical levels of SOC efforts. In large measure, these specific service and coordination strategies have not significantly informed each other in the existing literature, the system of care movement has not resulted in a standard language and its variable application to levels of thought, and practice has led to ambiguous use of multiple terms.

The demonstration programs of the past 15-20 years have shown that staff in multiple systems can change their practice and act with ‘system-ness’ to assist high risk children. Across most of the major demonstrations, there have been statistically significant and frequently individually meaningful changes in the lives of very complex children. Changes in cost, quality of access to services, reductions in the level of restriction in care, and functional resources of children are consistent with the intent of the SOC interventions. Families and children like the model of service better and satisfaction with services may be associated with greater participation and as a result greater therapeutic benefit (Rosen, Heckman, Carro, & Burchard, 1994). These are encouraging results but they do not meet the scientific standards

required to identify SOC structural reform interventions as either ‘well-established’ or ‘probably efficacious’ according to APA guidelines. The demonstration programs do not provide a standard of evidence to justify the broad adoption of SOC as a model of practice. Currently, it may be appropriate to claim SOC as a conceptual and values-based model for how care should be provided but the tests to date have not permitted a standard of evidence to say that SOC principles can be supported on scientific grounds as best practice.

The Fort Bragg and Stark Ohio Studies. The Fort Bragg Study (Bickman, Bryant, & Summerfelt, 1993, 1995; Bickman 1996) has generated more debate and controversy than any other test of the SOC structural approach to practice. The Fort Bragg design is a good reflection of most of the policy elements of SOC that set the structure if not the content of care. In the Fort Bragg community, clinicians and agencies were recruited to provide a range of mental health and support services through a single point of contact agency. Services in the program included a range of services including outpatient psychotherapy, community-based support services (crisis response, home-based counseling, and after-school and day treatment), and more restrictive services for severe problems (specialized group homes, therapeutic homes, and inpatient mental health treatment). Clinicians were assigned families and given freedom to determine the scope and nature of care provided under a cost reimbursement structure with no cost limits. The nature of the interventions and a strategy for integration were not specified and left to the individual decision of the clinician.

Fort Bragg was a quasi-experimental repeated measures study comparing an experimental SOC service program in the Fort Bragg community with existing services in two comparison communities. The Fort Bragg experimental group consisted of 574 children and their families. There were 410 families enrolled across the two comparison communities. Families and children were followed for five years at six-month intervals. The dependent measures included measures of psychological functioning, health status, social functioning, and service satisfaction (Bickman et al., 1993, 1995; Bickman 1996).

The Fort Bragg study findings did not support superior outcomes for children involved in the experimental system of care. Service utilization, quality of service response (duration, speed of access), and service satisfaction all increased in the experimental group. The use of restrictive inpatient services was reduced but children with complex needs were more likely to receive more intensive community services such as therapeutic home care, which negated any cost-savings. Despite these indications of more intensive and flexible services, there were at best marginal increases in the outcomes for children in the experimental group and roughly, an equal number of child level gains were observed to favor the control communities (Bickman et al., 1993, 1995; Bickman 1996).

The Stark County Ohio system of care study (Bickman, Noser, & Summerfelt, 1999) is a companion study to the Fort Bragg research. The Stark County study addressed some of the methodological concerns of the Fort Bragg design. Specifically, the intervention in Stark County described a coordinated effort across providers whereas the Fort Bragg study provided a continuum of services managed by a single principal provider. In a general community sample, children with mental health needs were randomly assigned to a system of care services with professional coordination or families were responsible for finding and

initiating care on their own through the same providers. Experimental families received a higher level of services but again the researchers found no differences in symptom level or functional state 12 months after baseline and found that the cost of services was higher overall for the SOC intervention.

It would be hard to under-estimate the furor Bickman et al.'s findings introduced in the SOC research community. Bickman has argued that the research has demonstrated that system level efforts (changing payment, access, coordination, and range of services) resulted in system level benefits. He has also concluded that these system level indicators of better services are not tied to demonstrable clinical benefits to children and their families. The Fort Bragg/Stark County conclusions challenge the fundamental purpose of systems of care approaches and the proposition that these more intensive, expensive services can be justified by superior outcomes. While SOC values are deeply infused into our thinking about mental health service delivery to children, it appears that broad system strategies are not the solution but rather smaller scale and intensive work to develop specific treatment strategies informed by SOC principles is called for. Several of the best practice strategies identified in this paper (Wraparound, Multisystemic Therapy) reflect the value of using SOC principles to focus on the content and not exclusively the structure of services.

PREVALENCE RATES AND CHARACTERISTICS FOR CHILDREN WITH MENTAL HEALTH DISORDERS

Prevalence Rates

There has been only minimal research regarding the prevalence rates of mental health disorders and characteristics of children needing mental health services. Moreover, there has yet to be a national epidemiological study to document officially the number of children needing mental health services and “Little consensus has been achieved in defining emotional and mental disorders in children” (Duchnowski, et al., 2002, p. 19). Current estimates suggest an estimated 20% of the child and adolescent population suffer from a diagnosable mental health disorder. Within this population, 7-13% of these children suffer from severe emotional disturbance that greatly affects functioning during daily living (Center for Mental Health Services, 1998; Costello et al., 1996a, 1996b; Duchnowski, et al., 2002; Roberts, Attkisson, & Rosenblatt, 1998; Narrow et al., 1998; USDHHS, 1999; USPHS, 2002). Despite the high prevalence rates for psychological disorders and SED in children, annually only 10-20% of SED children receive specialized mental health services (Buckner & Bassuk, 1997; Colpe, 2000; Leaf et al., 1996; US DHHS, 1999). Using the estimate that 7% of children ages 0-18 in the US receive some level of mental health services, 2000 US Census population figures result in an estimated 5,633,000 children in mental health services annually. With 1.2 million children receiving some level of service intervention annually because of child welfare investigations, it is probable that the child welfare system is a principal source of referrals to the mental health system for children in the United States.

Characteristics of Children with a Serious Emotional Disturbance

Perhaps the greatest influence of SOC concepts and program has been in the area of understanding children's mental health within an ecological context in which the presence of risk factors may greatly affect the development of mental health disorders in children. Rutter (1990) suggests that risk factors have a negative and aggregating exponential effect if more

than two or three are present. Studies indicate that children with serious emotional disturbances (SED) share a number of characteristics and common risk factors including:

1. Minority status; socio-emotional and behavioral problems in multiple contexts including school, home, peer relationships, and community.
2. Low-normal to normal intellectual functioning and academic performance.
3. A history of abuse, neglect, and/or witnessing violence at home and in the community.
4. A diagnosis of a mood disorder including conduct disorder and/or oppositional defiance disorder.
5. Significant truancy and school retention difficulties.
6. Adjudication through the juvenile justice system (Duchnowski, et al., 2002; Quinn & Epstein, 1997).

Quinn and Epstein (1997) further found in their studies that few families of SED children were intact and half were single-parent households. In addition, families frequently had contact with the child welfare system, juvenile, and/or family courts; a substantial history of mental illness, substance abuse, and criminality; and numerous contacts with multiple social service agencies for a number of years. Similarly, Dulmus & Rapp-Paglicci (2000) found that children with mental health disorders and SED encounter numerous community and familial risk factors including the aggregating presence of parental marital strife, low socio-economic status, overcrowding in family size relative to living space, paternal criminality, maternal psychiatric disorder (particularly depression), and out-of-home foster care placement.

DEFINING EVIDENCED-BASED PRACTICE (EBP)

There is significant debate and a lack of consensus about what constitutes an ‘evidence-based practice’ within the field of mental health and children’s mental health in particular. According to Hoagwood, Burns, Kiser, Ringeisen, and Schoenwald (2001), “the use of the term ‘evidence-based practice’ presupposes agreement as to how the evidence was generated, what the evidence means, and how or when the practice can be implemented” (p. 1179). Still several authors and organizations have put forth varying definitions for evidence-based practice. The American Psychological Association’s (APA) Task Force on the Promotion and Dissemination of Psychological Procedures (1995) provides standards for the development, testing, and dissemination of empirically based psychotherapies, has established criteria for “well established” or “probably efficacious” practices in mental health, which are described in tables 1 and 2 below.

Table 1 - *American Psychological Association's Task Force on Promotion and Dissemination of Psychological Procedures Criteria for Well-Established Treatments.*

- I. At least two good group design studies, conducted by different investigators, demonstrating efficacy in one or more of the following ways:
 - A. Superior to pill or psychological placebo or to another treatment.
 - B. Equivalent to an already established treatment in studies with adequate statistical power.

OR

- II. A large series of single case design studies demonstrating efficacy. These studies must have:
 - A. Used good experimental design and
 - B. Compared the intervention to another treatment as in I. A.

Further Criteria for Both I and II:

- III. Studies must be conducted with treatment manuals.
- IV. Characteristics of the client samples must be clearly specified.

Note: Adapted from Task Force (1995, p. 22)

Table 2 - American Psychological Association's Task Force on Promotion and Dissemination of Psychological Procedures Criteria for Probably Efficacious Treatments.

I. Two studies showing the treatment is more effective than a waiting-list control group.
OR
II. Two studies otherwise meeting the 'well-established treatment' criteria I, III, and IV, but both are conducted by the same investigator
OR
One good study demonstrating effectiveness by these same 'well-established treatment' criteria.
OR
III. At least two good studies demonstrating effectiveness but flawed by heterogeneity of the client samples.
OR
IV. A small series of single case design studies otherwise meeting the well-established treatment criteria II, III, and IV.
Note: Adapted from Task Force (1995, p. 22)

Similarly, the Interdisciplinary Committee on Evidence-Based Youth Mental Health Care (with participation from the American Academy of Pediatrics, the American Academy of Child and Adolescent Psychiatry, and the American Psychological Association) has suggested criteria consistent with the APA definition but is more broadly defined. They suggest that a treatment is an evidence-based practice if it has generated a body of research allowing meta-analyses to support the efficacy of the treatment. Criteria for an evidence-based treatment should include a minimum of two studies using a between-group design of at least 30 participants that are of the same age and receiving the same treatment, or a minimum of two studies using a within-group design or single-case design, or a combination of these designs (Hoagwood, et al., 2001).

However, Hoagwood, et al. (2001) assert that these definitions of evidence-based practice may not be entirely relevant to children. Research studies tend to focus on the efficiency of a treatment and do not address contextual issues unique to the population such as rapid developmental changes, the nature of familial relationships, and the wide-variety of treatment settings that children experience (e.g., school, home, mental health facility). The contrary environmental factors of different venues are likely to affect service delivery for both the clinician and recipient and what constitutes EBP in one setting such as school is not necessary transferable as an EBP to another setting such as home. Hoagwood et al. contend that efficacy is a relative concept as

The central problem is that treatments that have been validated in efficacy studies cannot be assumed effective when implemented under routine practice conditions. For example, the use of treatment manuals, special training by clinicians, and continual clinical monitoring to ensure treatment fidelity are characteristics of many research-based interventions but few community-based treatment practices (2001, p. 1186).

Additionally, controlled studies regarding treatment do not often typically consider the presence and effect nuisance variables such as organizational culture, comorbidity, parental psychopathology and/or substance abuse, and reimbursement structures pose to treatment dissemination and fidelity (Hoagwood et al., 2001; Rogers, 2003).

PROMISING TREATMENT APPROACHES IN CHILDREN’S MENTAL HEALTH

When evaluating ‘promising’ and ‘best’ practices in children’s mental health, one must do so with the knowledge that there is significant lack of consensus around the origins and factors associated with mental health disorders in children, appropriate treatment modalities, and the meaning of ‘evidence-based practice’ (Owens, et al., 2002). Because of the emergent nature of the field, to state unequivocally that any intervention is a ‘best practice’ is presumptuous at best. The scarcity of programs and evaluative research, particularly relating to young children, would indicate that few practices in children’s mental health meet the APA guidelines for a probably efficacious treatment let alone a well-established one.

Definitional issues notwithstanding, there has been progress in the development of potentially promising interventions in children’s mental health. Of the nearly 300 sources examined to conduct this literature review, six promising practices were identified including the *Diagnostic Classification Of Mental Health and Development Disorder of Infancy and Early Childhood (DC: 0-3)*, Parent-Infant Psychotherapy, the Wraparound Process, the Fast Track Project, Functional Family Therapy, and Multisystemic Therapy. Criteria used to determine if a treatment intervention is promising includes its basis in established theory, a well-articulated model of treatment, the capacity for the intervention to address multi-dimensional problems, quality of evaluative research, and the potential to be replicated and/or implemented at the agency level. Currently only one intervention, Multi-Systemic Therapy, meets the APA criteria for a well-established practice. Nevertheless, the interventions described below are innovative in nature and incorporate the spirit and intent of the Systems of Care movement by being strengths-based, acknowledging the centrality of the child and family as partners in the treatment process, providing individualized and culturally appropriate treatment, and recognizing the importance of community-based services to ensure relevance and maximize effectiveness of the intervention for the child.

The DC: 0-3

Prior to the *Diagnostic Classification of Mental Health and Developmental Disorders or Infancy and Early Childhood (DC: 0-3)*, there was no classification system describing the mental health disorders of infancy and early childhood. The purpose of the *DC: 0-3* is to provide a basis from which a clinician and/or researcher may identify, assess, and classify early childhood disorders and to develop appropriate treatment interventions. Based in developmental, psychodynamic, family systems, relationship, and attachment theories, it

seeks to create a common language among clinicians and researchers to better understand the nature of early childhood disorders, and finally, to be an initial framework that serves as a first step in the development of a comprehensive classification system. Its basis is in the psychodynamic and psychoanalytical traditions including developmental, family systems, relationship, and attachment theories. The *DC: 0-3* is a multi-axial categorization system that was designed to compliment the *DSM-IV*, which is focused mainly on adolescents and adults rather than young children. However, unlike the *DSM-IV* which concentrates on the pathology of the individual, the assessment process of the *DC: 0-3* employs a bio/psychosocial and developmental approach by examining the relational context of the child, particularly the primary care-giving dyad. Each axis has equal weight in the diagnostic process that emphasizes the identification of risk factors that contribute to the development of psychopathology, and resilience or protective factors that can help define potential treatment interventions (Eppright, Bradley, & Sanfacon, 1998; Guédény & Maestro, 2003; Keren, Feldman, Tyano, 2001; Thomas & Guskin, 2001; Zero-to-Three, 1994).

Initial studies addressing the reliability and validity of the *DC: 0-3* are promising albeit significantly limited considering its publication in 1994. Indeed prior to July 2003 with the publishing of a special *DC: 0-3* issue of the *Infant Mental Health Journal*, there were only three published studies in the literature. With the publishing of this special issue, twelve clinical studies are available for review but are primarily descriptive and exploratory in nature (Aoki, Zeanah, Heller, & Bakshi, 2002; Cesari, et al., 2003; Cordeiro, Caldeira da Silva, & Goldschmidt, 2003; Emde & Wise, 2003; Guédény, et al., 2003; Keren, Feldman, & Tyano, 2001; Keren, Feldman, & Tyano, 2003; Luby & Morgan, 2003; Minde & Tidmarsh, 1997; Scheer, Dunitz-Scheer, Schein, & Wilken, 2003; Stafford, Zeanah, Scheeringa, 2003; Stafford, Zeanah, & Scheeringa, 2003; Thomas & Guskin, 2001; Weston, et al., 2003). Nevertheless, the *DC: 0-3* is the first manual of its kind that seeks to address and classify disorders of early life and will no doubt be an impetus for further research and development in the field of infant mental health (Zeanah, Boris, Larrieu, 1997).

Parent-Infant Psychotherapy

Developed in the 1980s, parent-infant psychotherapy is based on the premise that caregivers tend to replicate their insecure early childhood attachments and parenting behaviors that they experienced with their own parents. The purpose of parent-infant psychotherapy is to protect the infant-toddler's developing mental health by changing a caregiver's developmentally inappropriate perceptions and care giving behaviors towards their child (Lieberman, 2002; Lieberman, Silverman, & Pawl, 2000; Marvin, Cooper, Hoffman, & Powell, 2002; Weatherston, 2001). Theoretical foundations of parent-infant psychotherapy include relational-support, attachment, inter-subjective, object relations, and self-psychology theories. Using a combination of interpretive and empathic support techniques, clinicians assist caregivers in linking their past experiences with the current behavioral transactions occurring with their infants. Generally, the caregiver and child are present during the treatment sessions but the therapeutic emphasis is towards the parent to assist them in recognizing and integrating previously unresolved histories of past negative experiences to facilitate improvement and development of parenting abilities. Very often, interactive guidance in the form of videotaping the dyad during a play session is used as well. Treatment may last from two to six months with 10-20 sessions (Beebe, 2003; Cordeiro, 1997; Lieberman, 2002; Lieberman, Silverman, & Pawl, 2000; Marvin, Cooper, Hoffman, &

Powell, 2002; McDonough, 1995; McDonough, 2000; Sexson, Glanville, & Kaslow, 2001; Weatherston, 2001).

Outcome evaluation and research are in the earliest stages and somewhat limited as a randomized control design has not yet been employed. Nevertheless, initial trials have demonstrated that improved maternal empathy achieved through therapeutic integration were significantly linked to decreased child avoidant and angry behavior, more secure care giving-child attachment, and improved goal-corrected partnership behavior within the dyad. Current research is focusing on children from Head Start and on those preschoolers who have witnessed domestic violence. (Lieberman, Silverman, & Pawl, 2000; Marvin, Cooper, Hoffman, & Powell, 2002).

Wraparound Services

Wraparound is a philosophy and service process that of all the practices described by this paper most closely resembles the systems of care concept. It purports a philosophy of integrated and collaborative service provision that is child-centered and family focused, community-based versus institutional in nature, and culturally competent. Using a strengths-based approach, the child and caregivers are a vital part of the treatment planning process. To this end, services are highly individualized, tailored, and comprehensive to meet the specific needs of the child and ensure that child continues to reside in their community with their family. This model is particularly effective when a comprehensive plan is necessary to address emotional and behavioral issues in the school, home, and community environments. Service plans are need-based rather than service-based and focus on the needs of the child in several life domains including family, living situation, financial, educational/vocational, social/recreational, behavioral/emotional, psychological, health, legal, cultural, safety, and others. Since the practice is a “process” versus a “model”, service duration is one to three years. (Borduin, Heiblum, Jones, & Grabe, 2000; Burchard, Bruns, & Burchard, 2002; Huffine, 2002; Kendziora, Burns, Osher, Pachhiano, & Meija, 2001; Malysiak, 1997; VanDenBerg & Grealish, 1996; Woolston, 1998).

Structured training materials and studies that document fidelity in training and oversight support the Wraparound Service model. Although fidelity and oversight vary across locations, there are published curricula with common core elements and implementation manuals to guide fidelity. As a result, Wraparound Services may meet one of the qualifying conditions (a treatment manual) to be considered as ‘potentially efficacious’ or ‘well-established’ treatment approach (Epstein, et al., 1998; Overstreet, Casel, Saunders, & Armstrong, 2001). Additionally, several quantitative and qualitative studies demonstrated positive outcomes associated with the implementation of wraparound services. Quantitative studies have used pre/post, randomized clinical trials, and quasi-experimental designs. Findings indicate seriously emotionally disturbed children and youth served through wraparound demonstrate improvements in their behavior, academics, and social and familial relationships and are less likely to need out-of-home placements (Burchard, Bruns, & Burchard, 2002; Clark, et al., 1998; Myaard, Crawford, Jackson, & Alessi, 2000; Yoe, Sqantarcangelo, Atkins, & Burchard, 1996).

The Fast Track Model

The Fast Track Project is a ten-year, school-based prevention and intervention program based on developmental theory that suggests antisocial behavior results from a multitude of determining risk factors such as ineffective parenting, high community crime rates, poverty, and negative peer influences. The primary hypothesis of Fast Track is that by intervening with school-age children to promote and augment protective factors will prevent and/or mitigate the occurrence of antisocial behavior. The intervention thus focuses on effective parenting, promoting pro-social peer contacts, improving communication between school and caregivers, and improving child competencies (Conduct Problems Prevention Group [CPPG], 2002; Fast Track Project Overview, para. 1, n.d.; Hinshaw, 2002; Prinz, 2002). The first intervention phase components include a standard curriculum called PATHS (Providing Alternative Thinking Strategies, Kusche & Greenberg, 1994); parent training groups that target teaching parents behavior management; home visits to assist caregivers in problem-solving, self-efficacy, and life skills management, child social skill training groups; child tutoring if necessary; and child friendship enrichment in the classroom (CPPG, 2002; Prinz, 2002).

Initial three-year outcome trials indicate that fewer children are receiving special education diagnoses a modest to moderate improvement in conduct-related behavior including aggression and disruptiveness at home and at school. The first three cohorts of children from the ten-year longitudinal study are scheduled to conclude the Fast Track intervention in August 2003 (CPPG, 2002; Fast Track Project Overview, para. 4, n.d.; Prinz, 2002).

Functional Family Therapy (FFT)

Functional Family Therapy is a family-based, multi-systemic prevention/intervention treatment model for at-risk youth and adolescents with complex, multidimensional mental health and/or substance abuse issues. Its foundation is established clinical theory, evidence-based treatments, and clinical experience. Using culturally competent practices, FFT is a short-term treatment intervention that seeks to identify and maximize the positive and protective factors within the youth and their family (Bourduin, Heiblum, Jones, & Grabe, 2000; Kashani, Bumby, & Thomas, 1999; Kumpfer, 1999; Sexton & Alexander, 2000; Sexton & Alexander, 2002). The structure of FFT is systematic using a three-stage intervention schema called the "Phase Task Analysis" to provide services which includes the early phase of engagement and motivation, a middle phase of behavior change, and a third phase of treatment generalization. The three-phase process allows the clinician to focus on the specific treatment context but ensures flexibility to accommodate families' changing needs. Assessment occurs throughout the process and is relevant to the specific treatment phase, which follows a set of established precepts set forth in a manual (Sexton & Alexander, 2000; Sexton & Alexander, 2002). Sexton and Alexandria (2000) assert that FFT has demonstrated promising outcomes from 1973 to present. In randomized and non-randomized trials, FFT is more effective at reducing juvenile offender recidivism (Alexander, Robbins, & Sexton, 2000; Alexander et al., cited in Sexton and Alexander, 2000).

Multisystemic Therapy (MST)

Multisystemic therapy (MST) is a family- and community-based treatment model that addresses the mental health needs of children and adolescents. Developed in the 1970s, MST

initially targeted juvenile offenders with antisocial behaviors and mental health issues. Its purpose was to reduce long-term rearrests and out-of-home placement for chronic juvenile offenders. Currently, the target population is children and adolescents who exhibit serious emotional disturbance, anti-social behavior, and mental health and/or substance abuse problems that are at imminent risk for out-of-home placement. The use of MST is indicated for youth with multidimensional issues rather than a single-issue problem. Based on Broffebrenner's theory of social ecology, MST assumes that the emotional and behavioral problems in children and adolescents are multidimensional and multi-determined, thus these problems are best understood within the context of the child's social environment using a risk and protective factor framework. The model predicates that a child's behavior is influenced by their interaction with their primary social systems including family, peer groups, school, neighborhood, and community. Nine principles (table 3) serve as the basis of MST intervention (Borduin, Heiblum, Jones, & Grabe, 2000; Brown, et al., 1997; Brown, Henggeler, 1997; Henggeler, 2001; Henggeler, Schoenwald, Brondino, & Pickrel, 1999; Burns, Schoenwald, Burchard, Faw, & Santos, 2000; Henggeler, 1999; Henggeler, et al., 1996; Henggeler, Cunningham, Pickrel, Schoenwald, & Brondino, 1996; Henggeler, Lee, & Burns, 2002; Henggeler, Schoenwald, Rowland, & Cunningham, 2002; Pickrel & Henggeler, 1996; Rogers, 2003; Schoenwald & Rowland, 2002; Swenson, Henggeler, Schoenwald, Kaufman, & Randall, 1998).

Of all the promising practices in children's mental health, MST is arguably the only well-established or truly evidenced-based practice that exists within the children's mental health field. MST Services of the MUSC have conducted eight experimental trials and one quasi-experimental trial that were cross-sectional and longitudinal in nature. Outcome effects have been quite strong that demonstrate the efficacy of the MST program for improved family functioning and relationships, decreased adolescent mental health and chemical dependency symptoms, increased adolescent school attendance, decreased re-arrest rates with juvenile offender populations, and out-home-placement rates. Additionally, four studies were recently completed by other community-based providers and universities to determine the efficacy of the model when implemented in a "real-world" location (Borduin, et al., 1995; Brown, Henggeler, 1999; Henggeler, et al., 1996; Henggeler, et al., 1999; Henggeler, et al., 2003; Henggeler, Melton, Smith, Schoenwald, & Hanley, 1993; Henggeler, Pickrel, Brondino, & Crouch, 1996; Henggeler, et al., 2002; Randall, Henggeler, Cunningham, Rowland, & Swenson, 2001; Huey, Henggeler, Brondino, & Pickrel, 2000; Schoenwald, Borduin, & Henggeler, 1998; Schoenwald, Ward, Henggeler, & Rowland, 2000; Rowland, et al., 2000).

Table 3 – MST Treatment Principles

American Psychological Association’s Task Force on Promotion and Dissemination of Psychological Procedures Criteria for Well-Established Treatments.

1. The primary purpose of the assessment is to understand the “fit” between the identified problems and their broader systemic context.
2. Therapeutic contacts should emphasize the positive and should use systemic strengths as levers for change.
3. Interventions should be designed to promote responsible behavior and decrease irresponsible behavior among family members.
4. Interventions should be present-focused and action-oriented, targeting specific and well-defined problems.
5. Interventions should target sequences of behavior within and between multiple systems that maintain the identified problem.
6. Interventions should be developmentally appropriate and fit the developmental needs of the youth.
7. Interventions should be designed to require daily or weekly effort by family members
8. Intervention efficacy is evaluated continuously from multiple perspectives with providers assuming accountability for overcoming barriers to successful outcomes.
9. Interventions should be designed to promote treatment generalization and long-term maintenance of therapeutic change by empowering caregivers to address family members’ needs across multiple system contexts (Henggeler, 1999, p. 3).

CONCLUSION

Twenty years after *Unclaimed Children*, significant disparities and barriers affect the quality and capacity of our social service response to children. Currently, no primary mental health system for children exists and service is provided through a highly fragmented process by various sectors including education, child welfare, juvenile justice, health care, pediatric health care, and specialty health care (Owens, et al., 2002). Further, recent national surveys (National Workgroup, 2001) demonstrate that the service access disparity for young children is particularly acute, “...between 5 percent and 7 percent of children used any mental health specialty services in a year. This average rate is similar to the rate among adults, but it obscures the major differences across age groups. Only 1 to 2 percent of preschoolers used any services; the average rates increased in older children—6 to 8 percent of children ages 6 to 11, and 8 to 9 percent of adolescents ages 12 to 17.” (National Workgroup, 2001; p 34). Diagnostic challenges and the traditional orientation of public systems to adult mental health needs contribute to these service gaps. The lack of evidence-based treatments for children has contributed to reluctance by public systems to adopt services to children and may account in part for the gap between children’s need and service access (Lonigan et al, 1998).

Although there have been some promising developments in children's mental health during the last decade there is still significant work to do. The author examined over 300 articles and books for this review. The literature and systems of care concepts typically target children above the age of nine. Specifically, there is far less emphasis and research concerning infants and latency-age children than for adolescents (Knitzer, 1996). Further, to effectively treat children with multidimensional and multi-determined mental health and behavioral problems, the gap between research and practice must be narrowed by altering "business as usual" through the adoption of clearly effective and innovative child-centered, family-focused interventions in which services are delivered in the community or home versus the traditional center-based model. In doing so, there will be "reason to hope in the field of children's mental health" (Burns, 2002, p. 3).

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Resource Guide

The Diagnostic Classification of Mental Health and Developmental Disorders or Infancy and Early Childhood (DC:0-3)

Description:

1. **Primary purpose:** Prior to the *Diagnostic Classification of Mental Health and Developmental Disorders or Infancy and Early Childhood (DC: 0-3)*, there was no classification system describing the mental health disorders of infancy and early childhood. The purpose of the *DC: 0-3* is to provide a basis from which a clinician and/or researcher may identify, assess, and classify early childhood disorders and to develop appropriate treatment interventions. Additionally, it seeks to create a common language among clinicians and researchers to better understand the nature of early childhood disorders, and finally, to be an initial framework that serves as a first step in the development of a comprehensive classification system. It is based in both psychodynamic and psychoanalytical traditions including developmental, family systems, relationship, and attachment theories. However, unlike the *DSM-IV* which concentrates on the pathology of the individual, the assessment process of the *DC: 0-3* employs a bio/psychosocial and developmental approach by examining the relational context of the child, particularly the primary care-giving dyad.

The *DC: 0-3* is a multi-axial categorization system that was designed to compliment the *DSM-IV*, which is focused mainly on adolescents and adults rather than young children. Each axis is given equal weight in the diagnostic process that emphasizes the identification of risk factors that contribute to the development of psychopathology, and resilience or protective factors that can help define potential treatment interventions. The five axes are as follows:

- Axis I – Primary diagnosis: The child’s primary diagnosis which may include traumatic stress disorder; disorders of affect including anxiety, mood, gender identity, and reactive attachment deprivation/maltreatment, and adjustment regulatory disorders including hypersensitive, under-reactive, and motorically disorganized and

impulsive disorders; sleep disorders; eating behavior disorders; and disorders of relating and communicating.

- **Axis II – Relationship classification:** Examines the behavioral quality of the interaction between child and caregiver, affective tone of the dyad, and the type of psychological involvement between the dyad. Relationships are classified as over involved, under involved, anxious/tense, angry/hostile, mixed, or abusive. The Parent-Infant Relationship Global Assessment Scale (PIR-GAS) is the instrument used to rate the nature of the care giving dyad.
- **Axis III – Co-existing medical and developmental disorders** that were determined through the DSM-IV and/or diagnoses from OT, PT, and special education providers.
- **Axis IV – Psychosocial stressors:** Axis IV seeks to identify stressors and risk factors present in a child's environment and the overall effects these risk factors have on the child. Stressors may be predominately acute or predominately enduring depending on the chronicity of the problem. The overall impact may be diagnosed as mild, moderate, or severe.
- **Axis V – Functional Emotional Developmental Level:** This axis describes the manner in which an infant or young child organizes experience to determine if the child has acquired appropriate capacities, skills, and maturity for their age level.

1. **Target population:** Infants and young children ages zero to five.

Evaluating this practice:

1. **Outcome measures used to evaluate practice:** Although the DC: 0-3 was published in 1994, there have been few outcomes studies conducted to address its reliability and validity as a diagnostic and classification system. Moreover, since the traditional American funding sources do not yet support its use as an assessment and treatment instrument, most of the research to date has been conducted in Canada, Europe, S. America, and Israel. Despite limited research, however, preliminary outcome studies have been positive.
2. **Qualitative evaluation:** None known.

Evidence supporting practice:

1. **Peer-reviewed research:** Initial studies addressing the reliability and validity of the DC: 0-3 are promising and indicate that inter-rater reliability for Axis II (relationship classification) diagnoses are strong particularly when using the Parent Infant Relationship Global Assessment Scale (PIR-GAS). Additionally, the PIR-GAS has been shown to share concurrent validity with the Achenbach CBCL ages 1½- 5.
2. **Other supporting documents:** There is an accompanying casebook manual that illustrates appropriate use of the various diagnostic categories of the DC: 0-3.

Practice implementation:

1. **Staffing requirements:** There are no specific staffing requirements to implement the *DC: 0-3*.
2. **Training requirements:** The Zero-to-Three organization and the research literature do not delineate a training protocol associated with the implementation of the *DC: 0-3*.
3. **Cost of program:** There is no information available on the costs associated with the implementation of the *DC: 0-3*. The *DC: 0-3* manual costs \$27.00 and the accompanying casebook is \$37.00.
4. **Use of natural funding:** The traditional funding sources do not yet support its use as an assessment and treatment instrument.

Other considerations:

The *DC: 0-3* has been criticized for failing to provide enough specific descriptive criteria of the various disorders and syndromes, which results in seemingly ambiguous boundaries, and overlap between the diagnoses.

Contact information:

Zero to Three: National Center for Infants, Toddlers, and Families
2000 M Street, NW, Suite 200
Washington, DC 20036
(202) 638-1144

Relevant websites:

Zero-to-Three: <http://www.zerotothree.org/>

References:

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Parent-Infant Psychotherapy

Description:

1. **Primary purpose:** Developed in the 1980s, parent-infant psychotherapy is based on the premise that caregivers tend to replicate their insecure early childhood attachments and parenting behaviors that they experienced with their own parents. The infant, in essence, becomes the representative and an object of transference of negative past experiences, which may result in the infant-toddler absorbing this dysfunction, which could engender psychopathology. Therefore, the purpose of parent-infant psychotherapy is to protect the infant-toddler's developing mental health by changing a caregiver's developmentally inappropriate perceptions and care giving behaviors towards their child.

Theoretical foundations of parent-infant psychotherapy include relational-support, attachment, intersubjective, object relations, and self-psychology theories. Using a combination of interpretive and empathic support techniques, clinicians assist caregivers in linking their experiences with the current behavioral transactions occurring with their infants. Generally, the caregiver and child are present during the treatment sessions. However, the therapeutic emphasis is towards the parent to assist them in recognizing and integrating previously unresolved histories of past negative experiences to facilitate improvement and development of parenting abilities.

The provision of parent-infant psychotherapy may be center-based or home-based. Center-based models may use either individual dyad or a group psycho-educational design. Difficult to engage families are more likely to participate in home-based services; observation and assessment of the dyad in a home-based setting may yield a more accurate picture of the relational context within the dyad. Very often, interactive guidance in the form of videotaping the dyad during a play session is used to facilitate the caregiver's understanding of their relational behaviors with their child. Treatment may last from two to six months with 10-20 sessions.

2. **Target population:** Parent and infant-toddler dyads with dysfunctional attachment and relational problems are the main target population. However, if a second caregiver and/or siblings are present they may be included in the therapeutic process.

Evaluating this practice:

1. **Outcome measures used to evaluate practice:** Outcomes are measured by the improvement in the social-emotional wellbeing of the infant-toddler achieved through the improved parenting skills of their caregiver.
2. **Qualitative evaluation:** Case study descriptions of treatment sessions are embedded in the literature describing parent-infant psychotherapy models.

Evidence supporting practice:

1. **Peer-reviewed research:** Outcome evaluation and research are in the earliest stages and somewhat limited as a randomized control design has not yet been employed. Nevertheless, initial trials have demonstrated that improved maternal empathy achieved through therapeutic integration were significantly linked to decreased child avoidant and angry behavior, more secure care giving-child attachment, and improved goal-corrected partnership behavior within the dyad.

Current research is focusing on children from Head Start and on those preschoolers who have witnessed domestic violence.

2. **Other supporting documents:** The infant-mother relationship is often assessed through the Strange Situation procedure by Ainsworth, Blehar, Waters, & Wall (1978).

Practice implementation:

1. **Staffing requirements:** There are no specific staffing requirements to implement the parent-infant psychotherapy.
2. **Training requirements:** The research literature does not delineate an agency-based training protocol associated with this treatment model for professionals currently working in the field. Professional training is available through degree/certification programs offered through higher education institutions.
3. **Cost of program:** The literature does not specify costs associated with this treatment.
4. **Use of natural funding:** Using a DSM-IV “V” code [V61.90 (relational problem related to a mental disorder); V61.20 (parent-child relational problem); V61.1 (partner relational problem); V61.8 (sibling relational problem); V61.81 (relational problem not otherwise specified)], parent-infant psychotherapy is usually a reimbursable activity through third-party insurance providers and public funding sources.

Other considerations:

Contact information and relevant websites:

Because this treatment modality is not owned by any one organization or agency, there is no central contact location or website available.

References:

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The Wraparound Process

Description:

1. **Primary purpose:** Wraparound is a philosophy and service process that is based on the systems of care concept that purports a philosophy of integrated and collaborative service provision that is child-centered and family focused, community-based versus institutional in nature, and culturally competent. This strengths-based approach focuses on the strengths of families in contrast to focusing on a child's deficits. The child and caregivers are a vital part of the treatment planning process and services are highly individualized, tailored, and comprehensive to meet the specific needs of the child and ensure that child continues to reside in their community with their family.

This model is particularly effective when a comprehensive plan is necessary to address emotional and behavioral issues in the school, home, and community environments. Service plans are need-based rather than service-based and focus on the needs in several life domains including family, living situation, financial, educational/vocational, social/recreational, behavioral/emotional, psychological, health, legal, cultural, safety, and others. Since the practice is a "process" versus a "model", services duration is one to three years.

Wraparound has a set of elements that serve as a philosophical basis for the process:

- Wraparound efforts must be based in the community.
- Services and supports must be individualized to meet the needs of the children and families and not designed to reflect the priorities of the service systems.
- The process must be culturally competent and build on the unique values, strengths, and social and racial make-up of children and families.
- Parents must be included in every level of development of the process.
- Agencies must have access to flexible, non-categorized funding.
- The process must be implemented on an inter-agency basis and be owned by the larger community.

- Services must be unconditional. If the needs of the child and family change, the child and family are not to be rejected from services. Instead, the services must be changed.
- Outcomes must be measured.

Additionally, the wraparound philosophy suggests implementing the following steps to create a wraparound process:

- Develop a team with broad representations that includes both informal and formal resources from the community. Develop subcommittees to define identification, referral, and confidentiality issues.
 - Identify a designated agency or agencies and a wraparound coordinator serve as a “broker” to work with referral agencies and manage a pool of flexible funding.
 - Once a child and family are identified, conduct a strengths assessment to determine the values and preferences of the family. Create a plan that is based on the needs and preferences of the family.
 - Create an individualized team of four to ten members that are comprised of the family, child, and any other individuals the family deems appropriate. The team should be no more than half professionals.
 - Ensure regular team contact during plan implementation and set outcomes indicators that are frequently evaluated.
2. **Target population:** The target population are children of all ages with emotional and behavioral disturbances and their families. Emotional and behavioral disturbances may include depression, attention- deficit/hyperactivity disorder, anxiety disorders, conduct and oppositional disorders, and eating disorders.

The Substance Abuse and Mental Health Administration have designated the wraparound process as a promising practice.

Evaluating this practice:

1. **Outcome measures used to evaluate practice:** Several quantitative and qualitative studies have been undertaken that demonstrate positive outcomes associated with wraparound. Quantitative studies have used pre/post, randomized clinical trials, and quasi-experimental designs. Findings indicate children and youth served through wraparound demonstrate improvements in their behavior, academics, and social and familial relationships. Further, children who receive wraparound services are less likely to need out-of-home placements.

Because the wraparound approach is a philosophy embedded in the system of care concept, it is not “owned” by any one organization and the process has been implemented in numerous states and other countries. As such, outcomes studies have been undertaken by numerous researchers rather than one individual or group, which operates as ‘principal investigator’.

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2. **Qualitative evaluation:** Qualitative evaluations indicate that clients and families have a high level of satisfaction with wraparound because they are an integral part of the team.

Evidence supporting practice:

1. **Peer-reviewed research:** See section 2(a) above.
2. **Other supporting documents:** Numerous articles, books, and manuals are available that describe the wraparound model. Some of the most comprehensive monographs regarding wraparound services are available through SAMHSA's publication web site. See address below.

Practice implementation:

1. **Staffing requirements:** The family team is typically organized and led by a designated family team coordinator working for a broker agency. The process relies heavily upon case management services.
2. **Training requirements:** There are no specific training requirements.
3. **Cost of program:** In a five-year study conducted in Kentucky, cost ranged from a mean of \$1,224 per child in the first year of service to a mean of \$2,455 per child in the fifth year of service. Expenses are consistent across ages 0-21 years.
4. **Use of natural funding:** Blended funding is the most conducive mechanism to developing integrated services for children to avoid duplication of services by providers. However, the development of flexible funding pools is a complicated undertaking as state legislation, the application of waivers, and the development of administrative structures to oversee the funding pool is usually necessary. To some, flexible funding is only truly flexible if readily available for use within one hour. Additionally, within the context of a wraparound service delivery model, the use of flexible funding is generally a last resort after all other categorical funding mechanisms are exhausted.

Contact information:

None available

Relevant websites:

Center for Effective Collaboration and Practice – Wraparound Planning:
<http://cecp.air.org/wraparound/default.htm>

Substance Abuse and Mental Health Administration Services:
http://www.mentalhealth.org/publications/publications_browse.asp?ID=14&Sort=

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The Fast Track Project

Description:

1. **Primary purpose:** The Fast Tract Project is a ten-year, school-based prevention and intervention program based on developmental theory that suggests antisocial behavior results from a multitude of determining risk factors such as ineffective parenting, high community crime rates, poverty, and negative peer influences. The primary hypothesis of Fast Track is that by intervening with school-age children to promote and augment protective factors will prevent and/or mitigate the occurrence of antisocial behavior. The intervention thus focuses on effective parenting, promoting pro-social peer contacts, improving communication between school and caregivers, and improving child competencies. Program content is modified to ensure the appropriate developmental context.

The first intervention phase targeting children in grades 1-5 includes six components:

- A standard curriculum (PATHS; grades 1-3) conducted by the teacher focusing on emotional concepts, self control, social understanding, and problem solving;
- Parent training groups that target teaching parents behavior management skills and the development of positive school-caregiver relationships;
- Home visits to assist caregivers in problem-solving, self-efficacy, and life skills management;
- Child social skill training groups;
- Child tutoring if necessary;
- Child friendship enrichment in the classroom.

The adolescent phase targets children in grades 6-10. This phase is more individualized in content and de-emphasizes group-based interactions to discourage deviant peer relationships. Staff and families identify risk factors specific to the individual and counter these risk factors with a strategy that may include tutoring, home visiting, mentoring, positive peer-group associations and social networks, family problem solving, and increasing communication between home and school.

The following agencies are currently providing funding for the Fast Track project: the National Institute of Mental Health (NIMH), the Center for Substance Abuse Prevention, National Institute of Drug Abuse, and the Department of Education Safe and Drug Free Schools Program.

2. **Target population:** School-age children from first grade through the tenth grade.

Evaluating this practice:

1. **Outcome measures used to evaluate practice:** There are currently four Fast Track school sites in the United States including Durham, NC; Nashville, TN; Seattle, WA; and Central PA. Schools, rather than the children, were the unit of randomization and were chosen based upon community risk for poverty and crime. Within these four schools, 10,000 kindergarten children were screened and 891 children identified who were at high risk for developing conduct and oppositional disorders. Four-hundred forty-five children were assigned to the intervention group and 446 were assigned to the control group.

To monitor behavioral development, standardized assessments are conducted with caregivers and the at-risk youth at the end of grades 3, 5, 6, 9, and 12. Other data collection strategies include parent and teacher report, self-report, peer-review, and archival review of school, police, and court records.

2. **Qualitative evaluation:** None available.

Evidence supporting practice:

1. **Peer-reviewed research:** Three-year outcome trials indicate that children receiving the intervention demonstrated a modest to moderate but statistically significant improvement in conduct-related behavior including aggression and disruptiveness at home and at school. By grade three, 37% of the intervention group was free of conduct-related problems versus 27% in the control group. Notably, those in the intervention group received 25% fewer special education diagnoses than those in the control group. Further, intervention children exhibited improved cognitive, academic, and social skills and that their parents used considerably less harsh discipline at home. The first three cohorts of children from the ten-year longitudinal study will conclude the Fast Track intervention in August 2003.
2. **Other supporting documents:** The PATHS (Providing Alternative Thinking Strategies) Curriculum is available from the Channing Bete Company. See contact information and homepage web address below.

Practice implementation:

1. **Staffing requirements.** Information regarding staffing requirements in the Fast Track literature is limited. A Fast Track consultant provides support to the teacher during implementation of the PATHS curriculum. In addition to the teacher to conduct the PATHS curriculum, staff are necessary to conduct home visits and group-based activities for the caregivers.

2. **Training requirements:** Information regarding training requirements is limited. Fast Track staff in the PATHS Curriculum train teachers in the intervention group.
3. **Cost of program:** To date, there are no cost-benefit data available. However, the investigators have included a cost-benefit review as part of the longitudinal research component that will focus on the effect the program has on participants' use of traditional and expensive services including inpatient hospitalization, juvenile detention, and special education.
4. **Use of natural funding.** None identified.

Other considerations:

The Conduct Problems Prevention Research Group, a collaborative partnership between Duke University, Pennsylvania State University, University of Washington, and Vanderbilt University, is conducting the Fast Track research.

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Resource Guide

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Fax: 800-499-6464
E-mail: PrevSci@channing-bete.com
Web-site: www.channing-bete.com

Relevant websites:

The Fast Track Project: <http://Fasttrackproject.org>

National Institute of Mental Health: <http://www.nimh.nih.gov/publicat/violenceresfact.cfm>

PATHS Curriculum Homepage: <http://www.prevention.psu.edu/PATHS/>

References:

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The Conduct Problems Prevention Group. (2002). Evaluation of the first 3 years of the Fast Track prevention trial with children at high risk for adolescent conduct problems. *Journal of Abnormal Child Psychology*, 30(1), 19-35.

This research is based on data from the study entitled ["Fast Track," or "Multi-Site Prevention of Adolescent Problem Behaviors," or "Multisite Prevention of Conduct Disorder"], supported by National Institute of Mental Health (NIMH) Grants R18 MH48043, R18 MH50951, R18 MH50952, R18 MH50953, and R01 MH62988. The Center for Substance Abuse Prevention and the National Institute on Drug Abuse also have provided support through a memorandum of agreement with the NIMH. Department of Education Grant S184U30002 and NIMH Grants K05MH00797 and K05MH01027 also supported the study. The study was designed by the Conduct Problems Prevention Research Group, which currently includes, in alphabetical order, Karen L. Bierman, Pennsylvania State University; John D. Coie, Duke University; Kenneth A. Dodge, Duke University; Mark T. Greenberg, Pennsylvania State University; John E. Lochman, University of Alabama; Robert J. McMahon, University of Washington; Ellen E. Pinderhughes, Vanderbilt University; and E. Michael Foster, Pennsylvania State University.

Functional Family Therapy

Description:

1. **Primary purpose:** Functional Family Therapy is a family-based, multi-systemic prevention/intervention treatment model for at-risk youth and adolescents with complex, multidimensional mental health and/or substance abuse issues. The model is based on established clinical theory, evidenced-based treatments, and clinical experience. Using culturally competent practices, FFT is a short-term treatment intervention involving approximately 8-12 sessions for mild cases and up to 30 hours over a three-month period for severe cases. FFT seeks to identify and maximize family strengths and protective factors while mediating risk factors.

The structure of FFT is systematic using a three-stage intervention schema called the “Phase Task Analysis” to provide services which includes the early phase of engagement and motivation, a middle phase of behavior change, and a third phase of treatment generalization. The three-phase process allows the clinician to focus on the specific treatment context but ensures flexibility to accommodate families’ changing needs. Assessment occurs throughout the process and is relevant to the specific treatment phase. Assessments should follow a set of establish precepts:

- Assessment should focus on how the family relational systems are associated with the presenting problem or behavior.
- Using formal assessment instruments and informal observation assessment should identify risk and protective factors to determine the multi-dimensional context of problem behaviors and family contextual issues subsequently to engage in treatment planning.
- Observance of the assessment protocol will enable positive treatment outcomes.

Individual therapists in the homes of the clients provide services.

2. **Target population:** Youth and adolescents ages 11-18 diagnosed with emotional and behavioral problems including conduct disorders, substance abuse, and aggressive behavior. Additionally, FFT will also engage younger siblings of the referred youth.

Evaluating this practice:

1. **Outcome measures:** Randomized and non-randomized trials indicate that FFT is an effective treatment method as it decreases recidivism and/or the onset of delinquency by 25 to 60% compared to other programs such as residential treatment or juvenile probation services.
2. **Qualitative evaluation:**

Evidence supporting practice:

1. **Peer-reviewed research:** There are over 50 certified FFT sites in 15 states. Certified sites disseminate research and practice information.
2. **Other supporting documents:** All training protocols are available through the FFT Practice Research Network (FFT-PRN).

Practice implementation:

1. **Staffing requirements:** An FFT team is comprised of three to eight master-level and/or highly qualified bachelor-level therapists. Therapists come from a variety of professional backgrounds including public health nursing, clinical psychology, social work, marriage and family therapy, criminology, recreation therapy, and psychiatry.
2. **Training requirements:** Training requirements for FFT are intensive. During the first year, the FFT work group (3-8 staff) receives a three-day, on-site clinical training; an externship for the clinical group leader, three follow-up visits a year of two days each; and four hours a month of phone consultation per month.
3. **Cost of program:** According to the Washington State Institute for Public Policy, the cost of providing FFT to youths averaged approximately \$2,161 per program participant compared to \$14,149 in potential criminal justice expenditures; a cost savings of \$11,988. Moreover, the Institute estimated that up to \$59,067 in crime victim costs could be offset per program participant. Therefore, the cost-benefit ratio of \$28.81 per dollar spent for FFT.

First year start-up and implementation costs average approximately \$20,000 not including travel for one work group to become certified as a FFT provider. Thereafter, only a small yearly fee is necessary to maintain certification.

4. **Use of natural funding:** The guiding principles, goals, and techniques of FFT ensures its flexibility to respond to a variety of funding mechanisms including managed care.

Other considerations:

The FFT Practice Research Network (FFT-PRN) owns the Functional Family Therapy model. Dissemination sites must be certified and trained through the FFT-PRN to operate a FFT agency. Certification entails clinical on-site training, on-site follow-up and supervision, ongoing phone supervision and consultation, clinical externship through the University of Nevada, and FFT-CCS (clinical services system for client assessment, tracking, and monitoring system) training and use.

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Relevant websites:

Functional Family Therapy Homepage: <http://www.fftinc.com/>

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Multisystemic Therapy (MST)

A Best Practice

Description

1. **Primary purpose:** Multisystemic therapy (MST) is a family- and community-based treatment model that addresses the mental health needs of children and adolescents. Developed in the 1970s, MST initially targeted juvenile offenders with antisocial behaviors and mental health issues. Its purpose was to reduce long-term rearrest and out-of-home placement for chronic juvenile offenders. Based on Broffebrenner's theory of social ecology, MST assumes that the emotional and behavioral problems in children and adolescents are multidimensional and multi-determined, thus these problems are best understood within the context of the child's social environment. The model predicates that a child's behavior is influenced by their interaction with their primary social systems including family, peer groups, school, neighborhood, and community. Six core elements serve as the basis of the MST intervention. These include a commitment to comprehensive services, ecological validity, use of evidence-based intervention, the empowerment of caregivers, and finally, the assurance of quality in service provision throughout the intervention process. Additionally, MST has nine treatment principles that are fundamental to the success of the intervention:
 - I. The primary purpose of the assessment is to understand the "fit" between the identified problems and their broader systemic context.
 - II. Therapeutic contacts should emphasize the positive and should use systemic strengths as levers for change.
 - III. Interventions should be designed to promote responsible behavior and decrease irresponsible behavior among family members.
 - IV. Interventions should be present-focused and action-oriented, targeting specific and well-defined problems.
 - V. Interventions should target sequences of behavior within and between multiple systems that maintain the identified problem.
 - VI. Interventions should be developmentally appropriate and fit the developmental needs of the youth.
 - VII. Interventions should be designed to require daily or weekly effort by family members.
 - VII. Intervention efficacy is evaluated continuously from multiple perspectives with providers assuming accountability for overcoming barriers to successful outcomes.
 - IX. Interventions should be designed to promote treatment generalization and long-term maintenance of therapeutic change by empowering caregivers to address family members' needs across multiple system contexts.

2. **Target population:** The target population is children and adolescents(ages 11-17) who exhibit serious emotional disturbance, anti-social behavior, mental health and/or substance abuse problems that are at imminent risk for out-of-home placement. The use of MST is indicated for youth with multidimensional issues rather than a single issue problem.

Evaluating this practice:

1. **Outcome measures used to evaluate practice:** MST Services of the MUSC have conducted seven experimental trials and one quasi-experimental trial that were cross-sectional and longitudinal in nature. Outcome effects have been quite strong that demonstrate the efficacy of the MST program. Trials with over 800 families with a variety of populations including urban youth, violent juvenile offenders, substance abusing/dependent juvenile offenders with co morbid mental health disorders, youth with acute psychiatric emergencies, juvenile sexual offenders, and maltreating families were completed. Consistently, the model has resulted in improved family functioning and relationships, decreased adolescent mental health and chemical dependency symptoms, increased adolescent school attendance, decreased rearrest rates with juvenile offender populations by 25-75%, decreased in out-of-home-placement rates by 47-64%. Additionally, study attrition has been quite low with 97% of participants completing treatment.

Approximately a dozen studies are now in the process of implementation at a number of national and international sites. These studies target a range of areas including SED youth, abused and maltreated children and adolescents, youth involved with juvenile drug court, school-based prevention, an MST-based continuum of care, and neighborhood-based intervention.

2. **Qualitative evaluation:** None known. All studies to date have been experimental and quasi-experimental in nature.

Evidence supporting practice:

1. **Peer-reviewed research:** Four studies were recently completed by other community-based providers and universities to determine the efficacy of the model when implemented in a “real-world” location. Again, MST demonstrated significant positive outcomes in juvenile offenders and their families. However, in one study when quality assurance and treatment fidelity measures were not closely monitored the effects, although present, were demonstratively smaller than those studies in which fidelity was strictly observed.
2. **Other supporting documents:** The MST treatment and supervision model is highly “manualized”. All manuals and instruments are only available through MST Services, Medical University of South Carolina.

Practice implementation:

1. **Staffing requirements:** Each MST program typically has two to three teams of three master-level or highly qualified bachelor-level therapists that receive supervision from an

on-site doctoral level clinician. These doctoral-level clinicians spend minimally 75% (approximately 25% per team) of their work allocation engaged in supervision. MST sites may also employ a full- or part-time administrator. Caseloads are intentionally low with an average caseload of four to six families for each clinician. Treatment length is approximately four months per family so each clinician works with approximately 15 families per year.

2. **Training requirements:** To ensure model fidelity and adherence to the nine MST treatment principles, the Medical University of South Carolina solely owns the model and each MST site must obtain the appropriate license to operate a MST program. Accordingly, the Family Services Research Center of MUSC provides on-site, five-day training for all new MST programs. Supervisors receive training in the MST supervisory procedures as well. Additionally, each site receives one-and-a-half day quarterly trainings and ongoing case consultations with MST experts.
3. **Cost of program:** In 2001, The Washington State Institute for Public Policy examined several interventions used with juvenile offender populations. It determined that MST ensured the greatest net savings of all programs by preventing long-term placements in juvenile justice facilities. The cost of providing MST to a targeted juvenile offender and their family averaged approximately \$4,743 compared to \$31,661 in potential criminal justice costs per program participant. Moreover, the Institute estimated that up to \$131,918 in crime victim costs could be offset per program participant. Therefore, the cost-benefit ratio of \$28.33 per dollar spent for MST.

MUSC recently conducted a four-month follow-up study in 2000 comparing the use of MST as a psychiatric crisis stabilization strategy versus psychiatric hospitalization for SED children who were not juvenile offenders. Overall, researchers found that the program was more expensive to operate for those with acute psychiatric problems compared to those children in the juvenile justice system. Additional costs were incurred because of the addition of a licensed psychiatrist to conduct clinical supervision, a reduction in caseload to three families per therapist, and increased 24/7 support to address psychiatric crises. Nevertheless, MST prevented hospitalization for 57% of the participants and decreased the number of days of hospitalization by 72% overall. Average cost per youth in the MST group averaged \$5,954 compared to \$6,174 for the hospitalized group. It is not yet clear if MST will reduce future hospitalization rates with a psychiatric population.

4. **Use of natural funding:** Clearly, the cost of MST will vary depending upon the funding structure of each state. Potential funding sources for MST services include Medicaid reimbursement under family preservation, the reallocation of state funds from out-of-home-placement resources (e.g., foster care, juvenile justice, etc.), and the use of continuum of care.

Other considerations:

The Multisystemic Therapy model, owned by MST Services, Inc., has a licensing agreement with the Medical University of South Carolina for dissemination purposes. To ensure

treatment and quality assurance standards dissemination is allowed only through MST Services, Inc. MST Services has partnered with the NIMH and Office of Juvenile and Delinquency Prevention to promulgate programs in 20 states, Canada, and Norway.

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Relevant websites:

MST Institute: <http://www.mstinstitute.org/>
DOJ/OJJDP: <http://www.ncjrs.org/txtfiles/165151.txt>
WA State Institute for Public Policy: <http://www.wa.gov/wsipp>

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