Children and Youth Services Review 58 (2015) 179–186

Contents lists available at ScienceDirect

Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth

Family Care Treatment for dispersed populations of children with behavioral challenges: The design, implementation, and initial outcomes of an evidence-informed treatment☆

Kathleen M. Hine [a,*], Kevin J. Moore [b]

[a] University of Kansas Life Span Institute at Parsons, 2601 Gabriel, Parsons, KS 67357, United States
[b] Child and Family Center, Prevention Science Institute, University of Oregon, Eugene, OR 97403, United States

ARTICLE INFO

Article history:
Received 28 April 2011
Received in revised form 30 September 2015
Accepted 1 October 2015
Available online 3 October 2015

Keywords:
Challenging behavior
Parent training
Pro-social child behavior
Multi-dimensional Treatment Foster Care (MTFC)
Rural community

ABSTRACT

Children and adolescents in rural settings have behavioral needs similar to those living in urban areas, but often have less access to services. The nature of a dispersed population makes factors such as transportation and the availability of trained personnel barriers to the needed services. Multidimensional Treatment Foster Care (MTFC) is an especially effective example of an evidence-based, community-integrated service delivery option that advances positive child outcomes. Although aspects of Multidimensional Treatment Foster Care are not functional for many rural settings the principles of MTFC such as, consistently applied contingencies and parent-as-interventionist are applicable. This manuscript describes the principles-based application of MTFC in a rural area and discusses how principles-based treatment can produce outcomes predicted by more systematic replications. These outcomes include enhancing the stability of residential placement for children and youths, increasing pro-social child behavior and use of the least restrictive strategies and settings.

1. Children and youths in rural settings

The purpose of this manuscript is to describe an application of the principles of an evidence-based program for serving children and youths with challenging behavior (Multidimensional Treatment Foster Care) to a rural field setting. The program described herein was the result of a grant provided by the Kansas Department of Social & Rehabilitation Services to identify options for effectively serving Kansas children and youths with challenging behavior. Because Kansas has only 34.9 persons/mile^2, less than half of the 87.4 persons/mile^2 for the United States as a whole (U.S. Census Bureau, 2000) the emphasis of Southeast Kansas Family Care Treatment (FCT) has been the provision of effective behavioral services to children and families living in an area with a dispersed or rural population. The goal of the grant was not specific to disability and was funded equally by Kansas' Divisions of Mental Health, Family and Children's Services, and Developmental Disabilities. The outcomes identified for children in this program included enhancing the stability of residential placement in single-family homes, increasing pro-social child behavior, and use of the least restrictive strategies and settings.

Twenty-one percent, or 1 in 5 American youths live in rural areas (U.S. Census Bureau, 2000). Rural, as defined by the U.S. Department of Agriculture Economic Research Services includes non-metropolitan counties that include some combination of open countryside, towns with fewer than 2500 people, and urban areas with populations ranging from 2500 to 49,999. The 12 counties in this study area are rural but for seven towns ranging in population from 3312 to 20,233 scattered across 7689 mile^2. According to the 2000 US Census the population density for the counties included was 24.56 people/mile^2.

The perception that rural environments are idyllic and ensure well-balanced, healthy children is contradicted by the documented presence of rural child and adolescent mental health disorders at levels similar to those found in urban centers (Costello, Gordon, Keeler, and Angold, 2001; Moore et al., 2005). Although the service needs of children in rural settings vary, they often include potentially long-term support for caregivers (e.g., Biglan, Brennan, Foster, and Holder, 2004; Bischoff, Hollist, Smith, and Flack, 2004; New Freedom Commission on Mental Health, 2004; Robbins, Dollard, Armstrong, Kutash, and Vergon, 2008; Roberts, Battaglia, Smithpeter, and Epstein, 1999). Two substantial challenges to providing many types of support, long term or otherwise in rural areas are limited resources (Blumenthal and Kagan, 2002) and the fact that service availability often hinges on access to transportation (National Institute of Mental Health, 2000; New Freedom Commission on Mental Health, 2004).

Providing supports and services to children who exhibit challenging behavior in the home and in the community is difficult and typically

☆ Southeast Kansas Family Care Treatment is supported by a grant awarded to Jerry Rea from the Kansas Department of Social and Rehabilitation Services.
* Corresponding author.
E-mail addresses: khine@altamontks.com (K.M. Hine), kevinmphd@gmail.com (K.J. Moore).

http://dx.doi.org/10.1016/j.childyouth.2015.10.001
0190-7409/

requires the combined efforts of a team of professional and natural supports. The challenge becomes greater when circumstances of the children's lives include living in a rural setting where the labor force, availability of professionals, and community resources are limited.

From July 1, 2008 through June 30, 2009 there were 865 Southeast Kansas children and youths in out-of-home care. The stability associated with living and growing within a single-family unit has been accepted as beneficial for children, however it is not always a possibility. Wulczyn, Hislop, et al. (2007) analyzed a multi-state database and showed that almost 50% of children disrupt from foster care within 6 months, and from 12 to 18% of foster children experience multiple moves with older youths experiencing the highest percentage of multiple moves. In addition, in the first two years of foster care approximately two-thirds of children disrupt from placement (Wulczyn, Kogan, and Harden, 2003). While it has been difficult to establish the degree to which placement changes and child well-being are empirically related (Taussig, Culhane, Garrido, and Knudtson, 2012) the current study used the reduction or elimination of placement changes as a measure of success, in addition to changes in pro-social behavior, and use of the least restrictive strategies and settings.

2. Evidence of effective services

Of the evidence-based, community-integrated options for service, Multidimensional Treatment Foster Care (MTFC) (Chamberlain, 1994; Chamberlain and Reid, 1998; Chamberlain, Leve, and DeGarmo, 2007; Moore and Chamberlain, 1994; Moore, Sprengelmeyer, and Chamberlain, 2001) is a particularly effective large-scale demonstration of behavioral treatment. Multidimensional Treatment Foster Care is a form of parent training with the goal being to "teach parents how to effectively supervise, discipline, and encourage their child" (Chamberlain, 2003). The program has been applied successfully in a programmatic series of randomized control effectiveness trials to a variety of populations, for example, girls and boys referred from juvenile justice, children and adolescents leaving a state hospital, and children in state-supported foster care (Chamberlain and Moore, 1998; Chamberlain and Reid, 1991, 1998; Kerr, Leve, and Chamberlain, 2009; Leve, Fisher, and Chamberlain, 2009).

The Multidimensional Treatment Foster Care program uses a team approach that provides personnel with clearly defined roles (Chamberlain, 2003). In addition to the trained foster parents each team includes a program supervisor, youth therapist, family therapist, behavior support specialist, and a foster parent trainer.

While the roles of each team member are important to the success of Multidimensional Treatment Foster Care it is the foster parents who provide the moment-by-moment treatment. Through the use of trained and monitored foster parents Multidimensional Treatment Foster Care establishes the supports necessary to provide a positive community-based living experience for the youths. Foster parents use a daily point-and-level system through which they establish a consistent, coordinated means of administering consequences for positive and negative youth behavior (Smith, 2004). In addition to the weekly meetings with the program supervisor and the daily calls from the foster parent trainer, foster parents are supported further with unlimited on-call access to program staff, on-site crisis intervention support, and respite (Moore and Chamberlain, 1994).

In comparison with other types of care, youths in MTFC are significantly less likely to disrupt from foster placements (Smith, Stormshak, Chamberlain, and Whaley, 2001) and permanent placements (Fisher, Hyoun, and Pears, 2009), demonstrate decreased rates of anti-social behavior (Fisher, Gunnar, Chamberlain, and Reid, 2000), receive lower rates of criminal referral (Eddy, Whaley, and Chamberlain, 2004) and reduced incidence of pregnancy (Kerr et al., 2009). At 1-year follow-up MTFC youths had spent 60% fewer days in lock-up than control youths in group-care (Chamberlain and Mihalic, 1998). And MTFC is positively correlated with better school attendance, improved homework completion, and less time spent in restrictive settings (Chamberlain and Mihalic, 1998; Leve and Chamberlain, 2007).

3. Principles-based replication

Based on the scientific support for MTFC processes and results reported by Chamberlain and her colleagues (e.g., Chamberlain et al., 2008; Eddy and Chamberlain, 2000) the Southeast Kansas Family Care Treatment program was developed as a principles-based (see Barlow, Allen, and Choate, 2004; Bishop-Fitzpatrick, Jung, Nam, Trunzo, and Rauktis, 2015) replication of MTFC. Recently principle-based approaches have been advocated as an alternative to the direct replication of evidenced-based treatments for reasons such as efficiency of training, costs, clinical fit to non-university-based clinical settings (Chorpita, 2007; Chorpita, Daleiden, and Weisz, 2005) and because no advantage was obtained for name brand programs in studies where specific programs utilizing the same treatment methods were compared (Barlow et al., 2004; Lipsey, Wilson, and Cothern, 2000).

The principles of MTFC include the use of behavioral techniques such as overt established contingencies with high positive to negative ratios, development of behavior change plans, youth mentorship, consultation and support to caretakers regarding the implementation of these principles, and supervision of staff regarding adherence to these principles (Henggeler and Schoenwald, 2011). Importantly, MTFC principles also include extensive caregiver training, and the inclusion of caregivers (biological, adoptive, relative, foster, etc.) in the planning and treatment for their child (Chamberlain, 2003). The principles of MTFC and how Family Care Treatment has applied them are summarized in Table 1.

Table 1
MTFC principles and the means by which they were applied by Family Care Treatment.

MTFC principles	Family Care Treatment application
Use of behavioral techniques with high positive to negative ratios	Youth behaviors and caregiver skills are behaviorally defined; descriptive analysis of behavior is completed in the home, school and community; interventions are based on data indicating the function of behavior; target behaviors are the pro-social alternatives to the negative behaviors occurring at referral.
Development of behavior change plans	Behavioral recommendations are written based on observation and hands-on intervention by the therapist.
Youth mentorship	A skills trainer is made available for at least 1 h two to three times per week in the community. Skills trainers are trained by the therapist to implement the recommended strategies.
Consultation and support to caretakers regarding implementation	Caregivers are called each day to establish a routine involving the discussion of positive youth behavior and data collection. Graphs of these data are shared with caregivers at weekly meetings.
Staff supervision regarding treatment integrity	During in-home training the caregiver records data on the therapist as the therapist implements the recommended strategies with the youths; an additional therapist or the program coordinator conducts reliability observations with the therapist.
Extensive caregiver support and training	Modeling, practice and feedback are used during weekly in-home meetings to teach caregivers to implement the recommended strategies in the natural setting. Training is conducted until the caregiver demonstrates mastery of all skills; telephone access to the therapist available 24 h/day.
Inclusion of caregivers in the planning and treatment for their child	During the initial meeting the family identifies the issues and priorities; data collection and program development are built on the issues identified by the family; graphs of the data are updated and shared with the caregiver weekly.