Children and Youth Services Review 35 (2013) 642–656

Contents lists available at SciVerse ScienceDirect

Children and Youth Services Review

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

Effectiveness and implementation of evidence-based practices in residential care settings☆

Sigrid James *, Qais Alemi, Veronica Zepeda

Loma Linda University, Department of Social Work and Social Ecology, United States

ARTICLE INFO

Article history:
Received 7 September 2012
Received in revised form 6 January 2013
Accepted 7 January 2013
Available online 24 January 2013

Keywords:
Evidence-based practice
Residential care
Group homes
Residential treatment
Systematic review
Effectiveness

ABSTRACT

Purpose: Prompted by calls to implement evidence-based practices (EBPs) into residential care settings (RCS), this review addresses three questions: (1) Which EBPs have been tested with children and youth within the context of RCS? (2) What is the evidence for their effectiveness within such settings? (3) What implementation issues arise when transporting EBPs into RCS?
Methods: Evidence-based psychosocial interventions and respective outcome studies, published from 1990 to 2012, were identified through a multi-phase search process, involving the review of four major clearinghouse websites and relevant electronic databases. To be included, effectiveness had to have been previously established through a comparison group design regardless of the setting, and interventions tested subsequently with youth in RCS. All outcome studies were evaluated for quality and bias using a structured appraisal tool.
Results: Ten interventions matching a priori criteria were identified: *Adolescent Community Reinforcement Approach*, *Aggression Replacement Training*, *Dialectical Behavioral Therapy*, *Ecologically-Based Family Therapy*, *Eye Movement and Desensitization Therapy*, *Functional Family Therapy*, *Multimodal Substance Abuse Prevention*, *Residential Student Assistance Program*, *Solution-Focused Brief Therapy*, and *Trauma Intervention Program for Adjudicated and At-Risk Youth*. Interventions were tested in 13 studies, which were conducted in different types of RCS, using a variety of study methods. Outcomes were generally positive, establishing the relative effectiveness of the interventions with youth in RCS across a range of psychosocial outcomes. However, concerns about methodological bias and confounding factors remain. Most studies addressed implementation issues, reporting on treatment adaptations, training and supervision, treatment fidelity and implementation barriers.
Conclusion: The review unearthed a small but important body of knowledge that demonstrates that EBPs can be implemented in RCS with encouraging results.

1. Introduction

Evidence-based practices or treatments (EBPs)[1] and residential care are usually not mentioned in the same sentence. In fact, EBPs are a direct response or alternative to what are considered to be costly and ineffective treatment modalities such as residential care. Yet residential care settings (RCS) are wrestling with the increasing demand for EBPs by child-serving systems, prompting some experts to argue that the focus needs to shift to transporting such treatments into RCS (American Association of Children's Residential Centers (AACRC), 2009; McCurdy & McIntyre, 2004). The American Association of Children's Residential Centers stated in 2009 that "residential agencies across the country are making efforts to implement EBP…adding client-specific models into their programming; introducing milieu-wide interactive approaches; and working with community partners to send youth to evidence-based treatments offered in community settings" (p. 249). As the success of such an endeavor could define RCS' continued role in the continuum of services for children and youth with special needs, the question arises what is known about the implementation of EBPs in RCS. Three questions guided the current review: (1) Which EBPs have been tested with children and youth within the context of RCS? (2) What is the evidence for their effectiveness within such settings? (3) What implementation issues arise when transporting EBPs into RCS?

1.1. Defining residential care

Residential care has a long history in the provision of services to children who have been maltreated or have significant emotional and

☆ Source: The preparation of this article was supported in part by grant NIMH K01 MH077732-01A1 (PI: Sigrid James) and by the Implementation Research Institute (IRI), at the George Warren Brown School of Social Work, Washington University in St. Louis; through an award from the National Institute of Mental Health (R25 MH080916-01A2) and the Department of Veterans Affairs, Health Services Research & Development Service, Quality Enhancement Research Initiative (QUERI).

* Corresponding author at: Loma Linda University, Department of Social Work and Social Ecology, Loma Linda, CA 92350, United States. Tel.: +1 909 379 7591; fax: +1 909 379 7594.
E-mail address: ssjames@llu.edu (S. James).

[1] The term evidence-based practice(s) has been used to describe both a practice paradigm as well as distinct treatments, which are empirically supported. In this paper, we are using the term in the latter fashion.

0190-7409/$ – see front matter © 2013 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.childyouth.2013.01.007

behavioral problems. It has been described as a higher level placement, a multi-component intervention, and as a setting that contains and sustains "unique cultures" (AACRC, 2009, p.249). It is an umbrella term, capturing various forms of residentially-based living arrangements, from small group homes to large institutions, across three service systems—child welfare, mental health, and juvenile justice. RCS provide therapeutically planned behavioral health interventions to unrelated youth with a wide range of problems in a 24-hour structured and multidisciplinary care environment (Abt Associates, 2008). Programs vary considerably in size, structure, organization, treatment approach and population served. It is difficult to develop a sensible typology of different RCS and the conceptual imprecision about RCS has hindered knowledge advancement in this field (Butler & McPherson, 2007).

For purposes of this review, RCS was defined as short- or long-term group homes or residential treatment centers. Inpatient psychiatric care settings, which provide acute care in hospital settings, were excluded; so were secure juvenile detention or correctional facilities, which differ in significant ways from traditional RCS aimed primarily at providing psychosocial interventions for children and youth with emotional and behavioral problems.

1.2. The case against residential care

Multiple factors have contributed to RCS' falling out of favor with child-serving systems, policy makers and consumers (Dodge, 2006). The system of care movement provided ideological justification for a shift away from residentially-based services and toward community-based care in the least restrictive setting. Studies have raised concerns about the potential for abuse within institutions (Colton, Vanstone, & Walby, 2002), iatrogenic effects such as negative peer processes (Dishion, McCord, & Poulin, 1999), reliance on shift staff with often inadequate training and high turnover rates (Colton & Roberts, 2007), and the failure of RCS to adequately involve the biological family or provide post-discharge services (Barth, 2005). The growing number of community-based alternatives to RCS, such as Multisystemic Therapy (Henggeler, Schoenwald, Borduin, Rowland, & Cunningham, 2009), Multidimensional Treatment Foster Care (Chamberlain & Smith, 2005), and Wraparound Services (Walker & Bruns, 2006) have further raised questions about the enormous cost of RCS in light of its perceived limited benefits (Whittaker et al., 2006). Yet some experts argue that RCS continue to have a place in the continuum of services for youth with emotional and behavioral disorders (Leichtman, 2006; McCurdy & McIntyre, 2004).

1.3. Evidence-based treatments in residential care

Youth in RCS have been described as some of the most disordered children, presenting with the whole range of developmental psychopathology (Abt Associates, 2008). Research indicates that RCS can be effective in improving outcome in multiple domains of functioning for some youth (Bean, White, & Lake, 2005; Bettmann & Jasperson, 2009; Hair, 2005; James, 2011; Lee, Bright, Svoboda, Fakunmoju, & Barth, 2011). However, findings are generally confounded by weak study designs, the effect of mediating or moderating variables, and a lack of specificity about the elements of 'usual care' RCS. A 2011 study summarized findings from a structured review of RCS milieu-wide treatment models (James, 2011). It identified five models: Positive Peer Culture, Teaching Family Model, The Sanctuary Model, the Stop-Gap Model and Re-ED. Although four of the five models were rated as effective or promising, it was noted that the combined body of knowledge on these models remains small and is to a large degree dated. While comprehensive milieu-wide treatment approaches may be most fitting to address the complexity of problems experienced by youth in RCS (Burns, Hoagwood, & Mrazek, 1999), changing an entire system approach may be difficult to accomplish for many RCS. The growing number of evidence-based client- and diagnostic specific interventions for children and adolescents therefore raises the question whether RCS could not improve their services by importing EBPs into their treatment context (AACRC, 2009). This review captures the current state of knowledge in this area.

2. Methods

2.1. Introduction

The current review differs in several significant ways from a standard systematic review. It started with a selection of interventions rather than studies and as such, used a different search approach than is common. Given the preponderance of nonrandomized evaluation designs in the field of residential care, it opted to "cast the net wide" and include pre-experimental alongside randomized studies. For this reason, it was also less focused about the size of effects and presented findings in the form of a narrative synthesis rather than a meta-analysis. Finally, this review went beyond the scope of a traditional systematic review in that it specifically addressed implementation issues. However, this review shares important features with systematic reviews, including the explication of study questions, clear a priori inclusion/exclusion criteria, a systematic selection process, and a standardized appraisal phase.

2.2. A priori inclusion/exclusion criteria

A priori inclusion/exclusion criteria were as follows: (1) The review aimed to identify psychosocial interventions with some level of effectiveness, that is, efficacy or effectiveness had to have been previously established through a comparison group design regardless of the setting in which the study was conducted. Psychosocial interventions were broadly defined as client-level interventions targeting mental health, substance abuse and/or social skills problems and were differentiated from system-wide or milieu-based interventions, e.g., Teaching Family Model, which have been previously reviewed (James, 2011). (2) The EBP had to have been subsequently tested with children and/or adolescents in RCS, which, as already stated earlier, was defined as short- or long-term group homes or residential treatment centers, excluding inpatient psychiatric care settings and secure juvenile detention or correctional facilities. (3) Studies had to have been published in the peer-reviewed literature between the years 1990 and 2012 since EBPs had limited penetration into social work and other human services professions until the 1990s. (4) Single-subject/case studies and grey literature sources were excluded.

2.3. Search strategy

The multi-phase search strategy was shaped by several considerations: Interventions already rated to have some evidence for effectiveness were targeted for inclusion. However, given the lack of a comprehensive list of psychosocial evidence-based treatments for children and adolescents, such interventions cannot be easily identified. In consultation with several child welfare/mental health experts, clearinghouses providing evidence ratings for a long and growing list of interventions were therefore used as the starting point for the search. These included the California Evidence-based Clearinghouse for Child Welfare (CEBC) (www.cebc4cw.org), SAMHSA's National Registry for Evidence-Based Programs & Practices (NREPP) (www.nrepp.gov), the Office of Juvenile Justice & Delinquency Prevention (OJJDP) (www.ojjdp.gov), and the Center for the Study & Prevention of Violence (CSPV) (www.colorado.edu/cspv/blueprints). All four clearinghouses aim to assist practice communities in identifying and/or implementing EBPs and have standardized review and rating procedures. Each organization has a slightly different focus. The CEBC