Assisting Carers to Respond to the Mental Health Needs of Children

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Across the developed world, efforts are being made to identify and develop effective interventions that will reduce the prevalence and severity of mental health problems among children and young people in out-of-home care. Foster and kinship carers have been identified as critically important in this process. In order to develop an understanding of what interventions and/or supports assist carers in responding effectively to the mental health needs of the children and young people in their care, a scoping review was undertaken. Using the scoping study method, 1064 publications were identified, and 82 publications were selected for further analysis. The review shows that promising interventions that aim to improve the mental health of children and young people living in out-of-home care have been developed and trialled both in Australia and internationally. However, the review also highlights the lack of research specifically focused on the role of the carer.

■ **Keywords:** mental health, foster care, kinship care, child protection, out-of-home care, looked after children

Many countries have struggled to establish appropriate policy settings for out-of-home care. Some, including Australia and Canada, have seen a persistent increase in the number of children entering out-of-home care, whereas the average amount of time spent in care in the United States of America (USA) has increased significantly. The percentage of child protection investigations that resulted in substantiations of abuse has increased in countries including Australia, while thresholds for entry to care were raised (Australian Institute of Health and Welfare, 2016).

The complexity of the needs demonstrated by children living in out-of-home care is apparent. This group is known to be at a greater risk than their mainstream peers of having poor mental health and wellbeing and developing mental health problems, including a range of emotional and behavioural disturbances including attention problems, poor self-regulation, and aggressive or delinquent behaviour (Sawyer, Carbone, Searle, & Robinson, 2007).

Heightened understanding of the carer–child relationship is essential for policy makers and practitioners to work more effectively to enhance the capacity of carers to contribute to improved mental health outcomes for children living in out-of-home care. The recognition of carers as important in improving mental health outcomes

for children in care has led to the implementation of forms of home-based care that have an articulated therapeutic framework in countries including Australia, the USA, and the UK (Biehal, Ellison, & Sinclair, 2011; Frederico et al., 2012; Troutman, 2011).

The aim of this scoping review is to map and summarise the relevant literature that explores the research question: *What is the nature and extent of the relationship between carers and the mental health of vulnerable children in foster and kinship care?* Exploring this question is complex. The role of carers is extensive and multi-faceted, making it difficult to isolate the impact of any one aspect of their role on the mental health of the children in their care. This paper begins with an outline of the scoping review method before reporting on the key themes arising from the research literature in the focus area of the study.

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Methods

The review was undertaken using the scoping study methodology as proposed by Arksey and O'Malley (2005), and refined by Levac, Colquhoun, and O'Brien (2010). This method is commonly used to examine the extent, range, and nature of research activity in a specific field and to summarise research findings. We identified a need for such a summary on this topic, choosing the scoping study methodology in order to establish an understanding of the scope of the available empirical evidence and to identify potential areas for future research.

The first stage of the scoping study framework is the identification of the research question. Levac et al. (2010) recommend a broad research question is combined with a clearly articulated scope of inquiry. This can be done by identifying the concept, target population, and outcomes of interest.

Methods for Identifying Studies

Arksey and O'Malley (2005) identified tensions between breadth and comprehensiveness of a scoping review on the one hand, and the feasibility of reading a large volume of literature on the other. Levac et al. (2010) suggest that, in order to address this tension, the review team should have the context expertise required to make informed decisions. Given our extensive combined experience in practice and research in the fields of out-of-home care and psychiatry, we consider that our team has the requisite knowledge of interventions within foster and kinship care and approaches to improving mental health to make these decisions. We also obtained technical advice on searching the literature from the University of Melbourne library staff.

The period selected for review extended from January 2000 to December 2014, inclusive, incorporating the international and Australian English language literature. This ensured that the amount of literature to be examined remained at a manageable level. Both peer-reviewed and grey literature studies were included.

Using EndNote software, several online databases were searched for the relevant literature including the Library of Congress, Web of Science, and PubMed – US National Library of Medicine. A broad-based Google search was also conducted. Databases were chosen on the basis of size, breadth, and focus on health and cross-disciplinary research.

Search terms used included:

foster child* AND mental health;
foster car* AND mental health;
kinship car* AND mental health;
kin car* AND mental health;
relative car* AND mental health;
child protection AND mental health;
looked after child* AND mental health.

In line with the consultation phase of scoping study methodology outlined by Arksey and O'Malley (2005), the further relevant literature was sourced from colleagues and key stakeholders, government websites, and in the bibliographies of key studies discovered through online databases.

Criteria for Inclusion. Studies had to make substantial reference to the role of foster and/or kinship carers in achieving better mental health outcomes for children. Given the limited literature available on this subject, this did not need to be the main focus of the study, as long as the article made a unique contribution to addressing the research question. Studies published before 2000 were excluded, except where they were commonly referenced in more recent studies, indicating a valuable contribution to the current knowledge base. Only English language studies were included.

The role of foster and kinship carers in improving the mental health of children is complex, and a variety of study methods may be suitable for ascertaining their contribution. The scoping study method is recommended for assessing complex interventions and does not discriminate among studies based on methodological criteria or utilise subjective measures of quality (Arksey & O'Malley, 2005). The lack of a rigorous quality assessment represents the major limitation of this review.

Data Extraction and Analysis

Searches resulted in 1064 potentially relevant articles. Abstracts were reviewed to ascertain relevance to the primary research question. Eighty-two relevant publications were identified for inclusion in the review. Information including country of origin and the main findings for each study was entered into a spreadsheet. Similar information was extracted from the grey literature. Seven key themes were identified within the 82 publications. The themes were selected using stages four through six of the Arksey and O'Malley (2005) framework: charting the data; collating; summarising and reporting the results; and consultation. These are as follows.

i)   Frequency and severity of mental health problems;
ii) Service use;
iii) Access to services;
iv) Carers as gatekeepers or 'agents of change';
v)   Carer training and support;
vi) Interventions involving carers; and
vii) Attachment and placement stability.

Results

The majority of studies were conducted in the USA, United Kingdom (UK), or Australia, with the remaining studies originating mostly from continental Europe. Sample sizes ranged from around 30 to more than 39,000, with most being from 40 to 450. Larger studies often utilised pre-existing city or state-wide data, whereas clinical trials used

mid-range sample sizes, and smaller studies featured questionnaires and qualitative data sourced from interviews with carers, children, or case managers.

Frequency and Severity of Mental Health Problems

Children in foster and kinship care are more likely to experience mental health problems than their mainstream peers (for example Baker, Kurland, Curtis, Alexander, & Papa-Lentini, 2007; Ford, Vostanis, Meltzer, & Goodwin, 2011; Milburn, Lynch, & Jackson, 2008). This is consistent across various age groupings in the USA, the UK, and Australia. Tarren-Sweeney and Vetere (2013) claim that more than half of such children in the developed world have a measurable need for mental health services. Because of the high prevalence of mental health problems, there have been calls for improvements to the early mental health assessment of children in care (Garcia & Courtney, 2011).

Up to 80% of youth in contact with child welfare services in the USA present with behavioural or emotional disorders, developmental delays, and other health and mental health problems (Farmer et al. 2001; Leslie et al. 2005; Taussig, 2002). Milburn et al. (2008) found that in Australia, mental health problems are four times more likely to occur within the care population than in the mainstream. Baker and colleagues (2007) used the Child Behaviour Check List (CBCL) – a widely used method of identifying problem behaviour – to study the US children in care. Those with scale values in the clinical range varied from 8% experiencing somatic problems, to an extremely high 56% of children exhibiting clinical levels of externalizing behaviours.

In Canada and the UK, the Strengths and Difficulties Questionnaire (SDQ), an assessment tool used to predict mental disorder, is administered to the primary carer of children in foster and kinship care. Goodman and Goodman (2012) found that, in the UK, this practice provided accurate estimates of the prevalence of mental health disorders among looked-after children. Seventy percent of young people in care in Northern Ireland scored within the abnormal and borderline ranges of this questionnaire, indicating that they were at high risk of meeting the criteria for a psychiatric diagnosis (Cousins, Taggart, & Milner, 2010).

US studies indicate that the frequency and severity of mental health problems among children in care often stem from a history of child abuse and neglect, fractured attachment relationships, and poor placement stability (Garcia & Courtney, 2011; Shin, 2005). However, a German review of the literature by Oswald, Heil, and Goldbeck (2010) showed that there is limited evidence showing traumatisation is the major reason for multiple developmental and behavioural problems among children in care, as they are often subject to multiple risk factors, including genetic factors, intergenerational trauma, violence, and prenatal exposure to nicotine, alcohol and other drugs.

Children in kinship care in the UK may have better mental health and social function than do children in foster care (Winokur, Holtan, & Valentine, 2009). For example, Golding (2010) surmised that a lack of stability and parental advocacy for children living in foster or residential care contributes to their poor response to traditional models of mental health services. However, in Australia, it may be the opposite - children in kinship care may fare worse than their peers in foster care (McHugh, 2013). Most children living in foster and kinship care in many countries, including the USA, Italy, and Serbia, have a significantly better quality of life than those living in residential care, including superior mental health outcomes (Damnjanovic et al., 2012; Ferrara et al., 2013; Robst, Armstrong, Dollard, & Rohrer, 2013).

Service Use

Children in foster care in the USA manifest a greater use of mental health services compared with their mainstream peers (Farmer et al., 2001; James, Landsverk, Slymen, & Leslie, 2004), at levels of up to 62% according to at least one study (Dos Reis, Zito, Safer, & Soeken, 2001). In fact, it has been shown that American children in foster care utilise mental health services at a rate five to eight times greater than the population of children who live in poverty (for example Administration for Children and Families, 2005; Bellamy, Gopalan, & Traube, 2010).

In the USA, children who are placed in kinship care, as opposed to foster care, use fewer mental health services (Winokur et al., 2009). Garcia and Courtney (2011) found that 36% of young people in foster care were accessing mental health services, compared to only 26% of young people in kinship care. Strain on carers in the USA also has a direct impact on the service use of children in their care, including the combination of services used and the sequencing of services. Brannan, Heflinger, and Foster (2003) found this strain resulted in increased gaps in the provision of mental health care. Financial resources devoted to programmes that mitigate against carer strain may realise financial savings through the reduced use of expensive residential services and overall costs of care (Brannan et al., 2003).

Access to Services

Despite a high level of service use amongst looked-after children in the UK, Golding (2010) concluded that their complex mental health needs are not well met by traditional mental health services, which often lack flexibility and adaptability. Baker and colleagues (2007) stated that if youth with serious mental health problems continued to be placed in child welfare settings in the USA, then intensive, affordable, community-based treatment services would need to be available to appropriately service the care population.

The main gap in mental health service provision for children in care in the USA concerns interventions to help them with persistent, disabling and difficult to manage mental health problems rather than crisis intervention (Blower, Addo, Hodgson, Lamington, & Towlson, 2004). Similarly, Golding (2010) articulated a need to adapt UK services and therapeutic frameworks in a way that helps young people

and their carers to access and engage with a range of interventions.

The UK, USA, and Australian studies report difficulties for carers in accessing mental health services for the children in their care (Beck, 2006; Schneiderman, Smith, & Palinkas, 2012; Tarren-Sweeney, 2010). Twelve percent of carers in New South Wales were unsuccessful in accessing mental health services for the children in their care (Tarren-Sweeney, 2010). UK carers reported difficulties with waiting times, unwelcoming venues and a lack of home visits (Beck, 2006). Similarly, carers in the USA reported that they had to advocate and be persistent and creative in finding the best possible health care for their foster child (Schneiderman et al., 2012).

Carers as 'Gatekeepers' or 'Agents of Change'

Bellamy et al. (2010) characterised the USA child welfare system as a gateway to mental health services and asserted that foster care represented one of the best paths through that gateway. Furthermore, Schneiderman and Villagrana (2010) stated that carers in the USA system are an important element in ensuring that services for children in their care are utilised appropriately. Indeed, carers have emerged as powerful drivers of access to various forms of health care for foster children in several US studies (for example Timmer, Urquiza, & Zebell, 2006).

The knowledge, skills, and resources possessed by carers play a pivotal role in connecting youth to appropriate mental health services (Farmer et al., 2001). Carers can be an important agent of change when it comes to improving the emotional wellbeing of children, due to their expert understanding of the individual child (Minnis & Del Priore, 2001). Tarren-Sweeney (2010) found that carers without the requisite knowledge, skills or interest could be a barrier to accessing critical Australian mental health services.

Carer Training and Support

Carer support services are necessary for community-based service delivery to succeed (Stroul & Friedman, 1986). When foster carers have the resources and support they require to care for children, positive child welfare outcomes result (for example Christenson, 2006; Herczog, Van Pagee, & Pasztor, 2001; Lutz & Agosti, 2005).

In a nine-country case study, Herczog et al. (2001) concluded that the development of extraordinary parenting skills in foster carers is necessary to meet the special needs of children. There are a broad range of benefits for children in care stemming from the provision of additional training for foster and kinship carers (for example Herczog et al., 2001; Lutz & Agosti, 2005; McHugh, 2013). Other studies have identified the need for carers to be trained in the identification of mental health problems, whereas Stanley, Riordan, & Alaszewski (2005) stated that child and adolescent mental health service professionals in the UK should strengthen their consultative roles with carers (McAuley & Young, 2006; White, 2006).

Leathers (2006) found that more resources should also be allocated to training US foster carers in managing disruptive behaviour and assisting with the integration of young people into the family. However, a systematic review conducted in the UK found that training focused on problem behaviours had a mixed effect, potentially dependent on the length and intensity of training among other factors (Everson-Hock et al., 2012).

Interventions Involving Carers

Golding (2010) found that a commitment from UK service providers and carers to work collaboratively was essential to the success of interventions. Equally, enabling American carers to be truly equal members of the team around the child has been shown to be important (Leathers, 2006). There has been significant progress in identifying interventions that improve the ability of foster carers to respond to the attachment and mental health needs of children, as the efficacy of key programmes including Multi-Dimensional Treatment Foster Care (MTFC), Attachment and Biobehavioural Catch-up (ABC), and Parent-Child Interaction Therapy (PCIT) has become apparent through programme evaluation and research (Troutman, 2011).

Several researchers have advocated the referral of children in foster care to programmes that utilise trauma-focused behavioural interventions, such as MTFC, also known as Intensive Fostering in the UK (for example Biehal, Ellison, & Sinclair, 2011; Fisher & Kim, 2007). MTFC provides carers with training and support to establish nurturing and trusting relationships with children, to manage difficult behaviour, and to promote positive behaviour. MTFC has been found to reduce disruptive behaviours, increase placement stability, and improve hypothalamic axis (HPA) functioning in American children, associated with a reduction in mood disorders (Fisher, Stoolmiller, Gunnar, & Burraston, 2007). Intensive Fostering placements in England may also significantly decrease antisocial behaviour and delinquency (Biehal, Dixon, Parry, & Sinclair 2011). However, Green et al. (2014) found that MTFC contributed to only non-significant improvements in Child Global Assessment Scale outcomes for UK children.

ABC is a USA intervention designed to help foster carers provide nurturing responsive care through the provision of a predictable interpersonal environment. Carers receive intensive training to recognise and respond appropriately to the cues of children who have experienced trauma. ABC may normalise HPA axis functioning in young children in foster care, impacting on unhealthy levels of stress and anxiety (Dozier, Peloso, Lewis, Laurenceau, & Levine, 2008).

Timmer et al. (2006) advocate programmes that support both foster carers and the needs of children, such as carer training and support used in combination with traditional services such as psychotherapy. They comment that some services are designed to address the child's problems but not the carer's ability to manage them. Such combined interventions, for example PCIT, have been shown to be effective in

the USA, with children exhibiting decreases in disruptive behaviour and symptoms of anxiety and depression (Timmer et al., 2006).

Early Intervention Foster Care, an American programmes designed to support carers through intensive preservice training and ongoing expert consultation, has been shown to contribute to placement stability for children, as has the comparable Circle Program in Australia (Fisher, Gunnar, Chamberlain, & Reid, 2000; Frederico et al., 2012).

Attachment and Placement Stability

The quality of care children receive in foster care is a major factor in the type of relationship they develop with their carer, and therefore their psychological adjustment (Troutman, 2011). For this reason, some researchers including psychologist Daniel Hughes advocate dyadic interventions based on attachment theory, with carers co-regulating emotional affect (2004). Factors associated with the quality of the child's attachment with their carer include the carer's attachment style, their responsiveness to the child's attachment needs, their commitment to the child, and their delight in the child (Dozier et al., 2002).

Disruptions in attachment relationships with foster carers may result in an increase in mental health problems and psychiatric emergencies (Lawrence, Carlson, & Egeland, 2006). Multiple placements are also likely to increase the risk of mental health and behavioural problems (Hussey & Guo, 2005; Newton, Litrownki, & Landsverk, 2000). McHugh (2013) identified the importance of placement stability in ensuring that the mental health needs of Australian children are assessed and addressed in a timely and consistent manner. Conversely, she found that children in care who present with mental health problems have been found to have less stable placements.

Troutman (2011) asserts that though there are significant psychological risks associated with placing children in foster care, there is also an opportunity to provide evidence-based interventions that have the potential to significantly improve the child's long-term psychological adjustment through improved quality of relationships with primary caregivers.

Discussion

This review sought to explore the nature and extent of the relationship between carers and the mental health of vulnerable children in foster and kinship care and yielded several relevant findings. First, the prevalence of mental health problems is high among children in foster and kinship care. Although gaining access to appropriate services is a common problem, levels of service use are high relative to those in the general population. These findings are consistent across the USA, UK, Canada, and Australia.

Second, the quality of day-to-day care that children in out-of-home care receive from foster and kinship carers and the nature of the caring environment is a major factor influencing their mental health and wellbeing. Interventions that enhance training and support for foster carers in dealing with behaviour related to past experience of trauma and neglect have the potential to improve the mental health of the children in their care. Interventions of this nature in the USA, UK, and Australia have been found to have a positive impact. It is unclear whether this finding also applies to kinship carers.

Third, significant barriers exist for carers in gaining access to services and supports for mental health problems for children in their care in the USA, UK, and Australia. This is recognised as a problem, as carers have been identified as a critical agent of change due to their expert understanding of the needs of the individual child. Interventions that improve the knowledge, skills, and resources of carers may assist in overcoming these barriers.

Finally, placement stability is critically important. Without stability, the disruption of attachment relationships may create further mental health problems, and the capacity for early identification is also reduced. Certain kinds of interventions become impractical without placement stability, and successful interventions in Australia and the USA have treated placement stability as a key outcome.

This is one of the first, and most specific, surveys of literature that focuses on the ability of foster and kinship carers to promote the mental health and wellbeing of children. A systematic review conducted by Everson-Hock and colleagues (2012) focuses on the effects of carer training and support on the physical and emotional wellbeing of looked-after children in the UK. Unlike this review, it does not consider interventions other than training or literature from outside the UK. Our review offers a synthesis of currently available English language literature on the impact of all interventions and supports for carers on the mental health and wellbeing of children, albeit with limitations imposed by the scoping review method, chief of which is the inclusion of studies that are not subjected to quality assessment.

Despite the survey of many studies, we found only a limited number that focus tightly on the research question – *What is the nature and extent of the relationship between carers and the mental health of vulnerable children in foster and kinship care?* This is consistent with previous work. For example, a systematic review conducted by Winokur et al. (2009) included 62 studies focusing on the behavioural development, mental health, and placement stability of children in kinship care. Our review identifies methodological and design weaknesses in most studies. None provides significant findings regarding the role of kinship carers in improving mental health outcomes for children. Other papers and reports focus on related questions, such as how carer 'strain' affects the mental health service use of children in their care (Brannan et al., 2003), or much broader questions, such as how the assessment and training of foster carers influences children's outcomes in general (Herczog et al., 2001).

Several studies examine the effects of treatment or therapeutic foster care on children, although most do not focus

on the role of the carer. However, a randomised trial conducted by Farmer, Burns, Wagner, Murray, and Southerland (2010) claims to be the first of its kind to examine the effects of increased training and secondary consultation for foster carers working within treatment foster-care programmes. It tests the effects of this 'enhanced' treatment foster-care model in improving outcomes for young people, reporting a reduction in mental health symptoms, and emotional and behavioural difficulties.

Access to appropriate levels of resourcing can have a range of implications with regard to a carer's ability to focus on their relationship with a child or young person, so it is important to acknowledge that the conditions under which carers operate can vary significantly from country to country, and even state to state or county to county. Foster carers in the UK may receive an allowance commensurate to a wage, whereas most carers in Australia, New Zealand, and the USA receive only a small reimbursement that covers some of a child's expenses and the rates in Canada are somewhere in the middle.

Overall, the literature provides a broad understanding of how the role of the carer may interact with mental health outcomes for children in their care. This review identifies several key themes that are broadly consistent across the countries where relevant research has been conducted.

Conclusion

The importance of placement stability, predictability, and adequate attachment to primary caregivers for children in out-of-home care is well recognised. However, recognition of the role of foster and kinship carers – their skills, experience, and commitment – in creating these conditions and thereby achieving positive outcomes for children has been slower to develop. Further research is needed into the role of carers in supporting the development and maintenance of good mental health in the children in their care. Specific attention should be given to establishing the effectiveness of particular interventions and supports that are designed to increase carers' ability to provide stable placements and nurturing care environments that recognise and respond adequately to the influence of past trauma and disruption on the emotions and behaviour of children. This is especially relevant for kinship care, which can be further complicated by the impact of intergenerational trauma.

References

Administration for Children & Families (ACF) (2005). *CPS sample component wave 1 data analysis report*. Washington DC: Administration for Children & Families.

Arksey, H., & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8, 19–32.

Australian Institute of Health and Welfare (2016). *Child protection Australia 2014–15*. Child Welfare Series, 63, Canberra.

Baker, A. J. L., Kurland, D., Curtis, P., Alexander, G., & Papa-Lentini, C. (2007). Mental health and behavioural problems of youth in the child welfare system: Residential treatment centers compared to therapeutic foster care in the Odyssey Project population. *Journal of Child Welfare*, 86(3), 97–123.

Beck, A. (2006). Addressing the mental health needs of looked after children who move placement frequently. *Journal of Adoption & Fostering*, 30(2), 53–63.

Bellamy, J. L., Gopalan, G., & Traube, D. E. (2010). A national study of the impact of outpatient mental health services for children in long-term foster care. *Journal of Clinical Child Psychology and Psychiatry*, 15(4), 467–479.

Biehal, N., Dixon, J., Parry, E., & Sinclair, I. (2011). *The care placements evaluation (CaPE) of Multidimensional treatment foster care for adolescents (MTFC-A)*. York, United Kingdom: United Kingdom Department of Education.

Biehal, N., Ellison, S., & Sinclair, I. (2011). Intensive fostering: an independent evaluation of MTFC in an English setting. *Children and Youth Services Review*, 33(10), 2043–2049.

Blower, A., Addo, A., Hodgson, J., Lamington, L., & Towlson, K. (2004). Mental health of "looked after" children: A needs assessment. *Journal of Clinical Child Psychology and Psychiatry*, 9(1), 117–129.

Brannan, A. M., Heflinger, C. A., & Foster, E. M. (2003). The role of caregiver strain and other variables in determining children's use of mental health services. *Journal of Emotional and Behavioural Disorders*, 11(2), 7–91.

Christenson, B. L. (2006). *An empirical-based evaluation model of recruitment, preservice training, support, and retention of kinship and non-kinship foster/adoptive families*. Moscow, USA: University of Idaho.

Cousins, W., Taggart, L., & Milner, S. (2010). Looked after or overlooked? An exploratory investigation of the mental health issues of adolescents living in state care in Northern Ireland. *Journal of Psychology, Health & Medicine*, 15(5), 497–506.

Damnjanovic, M., Lakic, A., Stevanovic, D., Jovanovic, A., Jancic, J., Jovanovic, M., & Leposavic, L. (2012). Self-assessment of the quality of life of children and adolescents in the child welfare system of Serbia. *Vojnosanit Pregl*, 69(6), 469–474.

DosReis, S., Zito, J., Safer, D. J., & Soeken, K. L. (2001). Mental health services for youths in foster sare and disabled youths. *American Journal of Public Health*, 91, 1094–1099.

Dozier, M., Higley, E., Albus, K., & Nutter, A. (2002). Intervening with foster infants' caregivers: Targeting three critical needs. *Infant Mental Health Journal*, 23(5), 541–554.

Dozier, M., Peloso, E., Lewis, E., Laurenceau, J., & Levine, S. (2008). Effects of an attachment-based intervention on the cortisol production of infants and toddlers in foster care. *Development and Psychopathology*, 20, 845–859.

Everson-Hock, E. S., Jones, R., Guillame, L., Clapton, J., Goyder, E., Chilcott, J. . . . Swann, C. (2012). *The effectiveness of training and support for carers and other professionals on the physical and emotional health and well-being of looked-after children and young people:*

A systematic review. Sheffield, United Kingdom: The University of Sheffield.

Farmer, E. M. Z., Burns, B. J., Chapman, M. V., Phillips, S. D., Angold, A., & Costello, E. J. (2001). Use of mental health services by youth in contact with social services. *Social Services Review, 75*(4), 605–624.

Farmer, E. M. Z., Burns, B. J., Wagner, H. R., Murray, M., & Southerland, D. G. (2010). Enhancing "usual practice" treatment foster care: Findings from a randomized trial on improving youths' outcomes. *Journal of Psychiatric Services, 61*(6), 555–561.

Ferrara, P., Romani, L., Bottaro, G., Ianniello, F., Fabrizio, G.C., Chiaretti, A., & Alvaro, F. (2013). The physical and mental health of children in foster care. *Iranian Journal of Public Health, 42*(4), 368–373.

Fisher, P. A., & Kim, H. K. (2007). Intervention effects on foster preschooler's attachment-related behaviors from a randomized trial. *Journal of Prevention Science, 8*, 161–170.

Fisher, P., Gunnar, M., Chamberlain, P., & Reid, J. (2000). Preventive intervention for maltreated preschool children: Impact on children's behaviour, neuroendocrine activity, and foster parent functioning. *Journal of the American Academy of Child and Adolescent Psychiatry, 39*, 1356–1364.

Fisher, P., Stoolmiller, M., Gunnar, M., & Burraston, B. (2007). Effects of a therapeutic intervention for foster preschoolers on diurnal cortisol activity. *Psychoneuroendocrinology, 32*, 892–905.

Ford, T., Vostanis, P., Meltzer, H., & Goodman, R. (2007). Psychiatric disorder among British children looked after by local authorities: Comparison with children living in private households. *British Journal of Psychiatry, 190*, 319–325.

Frederico, M., Long, M., McNamara, P., McPherson, L., Rose, R., & Gilbert, K. (2012). *The circle program: An evaluation of a therapeutic approach to foster care.* Melbourne, Australia: Centre for Excellence in Child and Family Welfare.

Garcia, A., & Courtney, M. (2011). Prevalence and predictors of utilization among racially and ethnically diverse adolescents in foster care diagnosed with mental health and substance abuse disorders. *Journal of Public Child Welfare, 5*(5), 521–545.

Golding, K. S. (2010). Multi-agency and specialist working to meet the mental health needs of children in care and adopted. *Journal of Clinical Child Psychology and Psychiatry, 15*(4), 573–587.

Goodman, A., & Goodman, R. (2012). Strengths and difficulties questionnaire scores and mental health in looked after children. *British Journal of Psychiatry, 200*, 426–427.

Green, J. M., Biehal, N., Roberts, C., Dixon, J., Kay, C., Parry, E., . . . Sinclair, I. (2014). Multidimensional treatment foster care for adolescents in english care: Randomised trial and observational cohort evaluation. *British Journal of Psychiatry, 204*, 214–221.

Herczog, M., Van Pagee, R., & Pasztor, E. M. (2001). Multinational transfer of competency-based foster parent assessment, selection, and training: A nine-country case study. *Child Welfare, 80*(5), 631–643.

Hughes, D. (2004). An attachment-based treatment of maltreated children and young people. *Attachment and Human Development, 6*, 263–278.

Hussey, D. L., & Guo, S. (2005). Characteristics and trajectories of treatment foster care youth. *Child Welfare, 84*(4), 485–506.

James, S., Landsverk, J., Slymen, D. J., & Leslie, L. K. (2004). Predictors of outpatient mental health service use – role of foster care placement change. *Mental Health Services Research, 6*, 127–141.

Lawrence, C., Carlson, E., & Egeland, B. (2006). The impact of foster care on development, *Development and Psychopathology, 18*, 57–76.

Leathers, S. J. (2006). Placement disruption and negative placement outcomes among adolescents in long-term foster care: The role of behaviour problems. *Child Abuse and Neglect, 30*, 307–324.

Leslie, L. K., Gordon, J. N., Meneken, L., Premji, K., Michelmore, K. L., & Ganger, W. (2005). The physical, developmental, and mental health needs of young children in child welfare by initial placement type. *Developmental and Behavioral Pediatrics, 26*(3), 177–185.

Levac, D., Colquhoun, H., & O'Brien, K. (2010). Scoping studies: Advancing the methodology. *Implementation Science.* Retrieved from http://www.implementationscience.com/content/5/1/69.

Lutz, L., & Agosti, J. (2005). *Recruitment and retention of resources families: Promising practices and lessons learned.* Seattle: Casey Family Programs.

McAuley, C., & Young, C. (2006). The mental health of looked after children: Challenges for CAMHS provision. *Journal of Social Work Practice, 20*(1), 91–103.

McHugh, M. (2013). *An exploratory study of risks to stability in Foster and kinship care in NSW: final report.* NSW: Social Policy Research Centre.

Milburn, N. L., Lynch, M., & Jackson, J. (2008). Early identification of mental health needs for children in care. *Journal of Clinical Child Psychology and Psychiatry, 13*(1), 31–47.

Minnis, H., & Del Priore, C. (2001). Mental health services for looked after children: Implications from two studies. *Journal of Adoption and Fostering, 25*, 27–38.

Newton, R. R., Litrownki, A. J., & Landsverk, J. A. (2000). Children and youth in foster care: Distangling the relationship between problem behaviours and number of placements. *Journal of Child Abuse & Neglect, 24*(10), 1363–1374.

Oswald, S. H., Heil, K., & Goldbeck, L. (2010). History of maltreatment and mental health problems in foster children: A review of the literature. *Journal of Pediatric Psychology, 35*(5), 462–472.

Robst, J., Armstrong, M., Dollard, N., & Rohrer, L. (2013). Arrests among youth after out-of-home mental health treatment comparisons across community and residential treatment settings. *Criminal Behaviour and Mental Health, 23*(3), 162–176.

Sawyer, M. G., Carbone, J. A., Searle, A. K., & Robinson, P. (2007). The mental health and wellbeing of children and adolescents in home-based foster care. *The Medical Journal of Australia, 186*(4), 181–184.

Schneiderman, J. U., Smith, C., & Palinkas, L. A. (2012). The caregiver as gatekeeper for accessing health care for children in foster care: A qualitative study of kinship and unrelated caregivers. *Child Youth Services Review, 34*(10), 2123–2130.

Schneiderman, J. U., & Villagrana, M. (2010). Meeting children's mental and physical health needs in child welfare: The importance of caregivers. *Journal of Social Work in Health Care, 49*(2), USA.

Shin, S. H. (2005). Need for and actual use of mental health service by adolescents in the child welfare system. *Children and Youth Services Review, 27*, 1071–1083.

Stanley, N., Riordan, D., & Alaszewski, H. (2005). The mental health of looked after children: Matching response to need. *Health and Social Care in the Community, 13*(3), 239–248.

Stroul, B., & Friedman, R. (1986). *A system of care for severely emotionally disturbed children and youth.* Washington, DC: CASSP Technical Assistance Center.

Tarren-Sweeney, M. (2010). Concordance of mental health impairment and service utilisation among children in care. *Journal of Clinical Child Psychology and Psychiatry, 15*, 481–495.

Tarren-Sweeney, M., & Vetere, A. (Eds.) (2013). *Mental health services for vulnerable children and young people.* Routledge Advances in Health and Social Policy.

Taussig, H. N. (2002). Risk behaviors in maltreated youth placed in foster care: A longitudinal study of protective and vulnerability factors. *Child Abuse and Neglect, 26*, 1179–1199.

Timmer, S. G., Urquiza, A. J., & Zebell, N. (2006). Challenging foster caregiver-maltreated child relationships: The effectiveness of parent-child interaction therapy. *Children and Youth Services Review, 28*, 1–19.

Troutman, B. (2011). *The effects of foster care placement on young children's mental health: Risks and opportunities.* Iowa, USA: Carver College of Medicine.

White, S. (2006). The mental health needs of looked after children. In K. Dunnett, S. White, J. Butterfield & I. Callowhill (Eds.), *Health of looked after children and young people.* Dorset, UK: Russell House Publishing.

Winokur, M., Holtan, A., & Valentine, D. (2009). Kinship care for the safety, permanency and wellbeing of children removed from the home for maltreatment. *The Cochrane Library, 3*, 1.

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