ENHANCING COMMUNITY RESILIENCE THROUGH THE EARLY CHILDHOOD EDUCATION AND CARE WORKFORCE

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INTRODUCTION

In 2011 the clinicians at the Zero-to-Four Child and Youth Mental Health Service identified an increasing number of children entering the service after experiencing severe weather events. The United Nations International Strategy for Disaster Reduction declared children to be the group most affected by disasters (B. Pfefferbaum, Pfefferbaum, & Van Horn, 2018). During that same year, there were 332 major weather events around the world. In this period alone, 244.7 million people were impacted by a natural disaster at a cost of USD\$366.1 billion (Guha-Sapir, Vos, Below, & Ponserre, 2012). For five nations, this was their most expensive year for natural disaster. Australia experienced significant flooding and a cyclone, Brazil had a flash flood followed by a mudslide, New Zealand had two significant earthquakes within 6 months, Japan had a major earthquake and tsunami, the US experienced at least 17 separate weather events, South Africa had significant flooding, severe hailstorms were recorded in China, while Philippines experienced 33 separate weather events, and Europe experienced 18 separate events (Guha-Sapir et al., 2012).

EXTENDED ABSTRACT

According to Lieberman and Knorr (2007) over their lifetime infants and young children are frequently exposed to traumatic events, including natural disasters. Infants and young are particularly vulnerable because they are yet to develop a wide range of coping skills (Hamiel, Wolmer, Pardo-Aviv & Laor, 2017; Karr, 2009; Lieberman & Knorr, 2007). Trauma becomes evident when the physical or psychological demands overwhelm the child and their ability to cope. However, there are several factors that influence a child's response to a traumatic event. These include the child, the event itself and the direct implications to the environment around the child, the availability of support systems, and the meaning the child associates to the event (Lieberman & Knorr, 2007; Murray, 2006). Lieberman and Knorr state that given the myriad of research available, it is no longer plausible to consider that a child has the internal capacity to tolerate adverse experiences. Particularly given that infants are able to distinguish emotional states in others, and use the information to guide their responses to people and situations. Wolmer et al. (2017) highlight that developmental theories, clinical and empirical evidence demonstrate that children are at greater developmental risk to traumatic events than adults. As such, past assumptions suggesting children will not understand what is happening, and will not be as severely impacted as an adult, given their cognitive maturity are not appropriate. External events will often increase the age appropriate developmental fears in children, and given that some of these include fear of losing a caregiver (Lieberman & Knorr, 2007) or having misunderstandings about their own role in the causation of events (Kar, 2009; Lieberman & Knorr, 2007; Wolmer et al., 2017), severe weather events can be particularly distressing. According to Kar (2009), up to 43% of children who experience a natural disaster can experience PTSD symptoms, in addition to acute stress reactions, adjustment disorders, anxiety, depression and other psychiatric disorders. Following a natural disaster, pre-school children are susceptible to separation anxiety, developing specific fears which can be associated with situations, animals or monsters, or may become pre-occupied with words or symbols that may or may not be associated with an event. The effects of PTSD can overlap to other childhood disorders such as conduct disorder (CD), oppositional defiant disorder (ODD), and attention deficit hyperactivity disorder (ADHD) (Kar, 2009). This indicates enduring consequences for children who experience natural disasters. Furthermore, trauma can impact development in other ways, including chronic long term impacts on cognitive, social, and emotional functioning (Lieberman & Knorr, 2007). Biological and physiological changes have been found in children exposed to traumatic experiences, and given the rapid development of the brain throughout early childhood this has been demonstrated to influence the development of empathy and social reciprocity in children (Hamiel, Wolmer, Pardo-Aviv, & Laor, 2017).

Not all children experience negative outcomes following a natural disaster, in fact some children tend to adapt quite well, particularly those who are provided with support and time (Mooney, Tarrant, Paton, Johal, & Johnston, 2017). It is evident that all infants, children and families need to be supported, but that the support style can vary based on needs (Murray, 2006). Of utmost importance is for those with the most direct access to the children to have the knowledge and skills required to support at the right level and when the signs and symptoms are more severe (Murray, 2006; Wolmer et al., 2017). Research clearly identifies that parents and caregivers including teachers are best placed to identify symptoms of persistent PTSD, but they often underestimate the duration and severity of the symptoms or miss them completely (Kar, 2009; Wolmer et al., 2017). Others emphasize the need for professionals who may have the first contact with the child to become trained in age appropriate assessment techniques and be acutely aware of the ways that children indicate all is not as it should be (Murray, 2006; Wolmer et al., 2017). Building a support network of calm and caring adults has been shown to have beneficial outcomes for children who have experienced natural disasters (Murray, 2006). Younger children are more reliant on adult support, even more so in times of distress. Children look to adults to identify how to react to a situation or event (Mooney et al., 2017). Continually research highlights the influence of relationships with adults having a position influence on the outcomes for children and young children who have experienced a natural disaster (Kar, 2009; Lieberman & Knorr, 2007; Midtbust, Dyregrov, & Djup, 2018; Mooney et al., 2017; Murray, 2006; Wolmer et al., 2017). Specifically, Mooney, Tarrant et al. (2017) cite that in their study, children highlighted that when teachers are calm, the children feel calm.

Several researchers have identified that as children's coping resources increase, they are better able to cope with their own experience of the natural disaster (Kar, 2009; Lieberman & Knorr, 2007; Mooney et al., 2017). Other studies have demonstrated that children who perceive their parents to be more distressed will demonstrate lower coping strategies following a natural disaster (Midtbust et al., 2018). Further, children are often exposed to natural disasters in a variety of ways, such as directly through the event,

hearing it on the radio, in adult discussions, or through television broadcast. Evidence supports that discussing the event is beneficial to children. When discussions have not occurred with an adult, young children are found to develop inaccurate perceptions about an event, resulting in an increased level of anxiety. Interaction between caregivers and young children is encouraged, when appropriately supported by their caregivers' children tend to demonstrate an increase in problem focused coping strategies. If the caregivers are unable to provide this support, engagement with another adult may assist children to obtain the information required to develop an understanding of the event and correct any misunderstandings they have developed (Midtbust et al., 2018). Adults can assist young children to understand that their response is appropriate. When children are well supported their thoughts and feelings are validated and demonstrate increases in self-competency (Cryder, Kilmer, Tedeschi, & Calhoun, 2006). Kar (2009) highlights that children may not report their feelings or reactions unless they are specifically asked about the event itself.

Engagement with caregivers, and the opportunity to vocalise their experience is beneficial with older children, however infants and very young children are yet to develop the language skills for these strategies to be entirely effective. Children are able to express themselves verbally and non-verbally through various play approaches including drawing, stories, and others (Kar, 2009). While there have been several interventions developed for responding to natural disaster in older children, the response to the emotional wellbeing of the infant or young child and their family can be overlooked. To date there have been no resources developed to address families with children under school age, and the signs and symptoms displayed are largely unknown to the general population. Families themselves can become overwhelmed with their own emotional experience, and while they are focusing on rebuilding their lives, they may not identify when their child or infant is not recovering well. Ronan and Johnston (2003) cite research that suggests that an increase in caregiver difficulties intensifies the likelihood that the young child will also struggle. They then postulate that it may be beneficial to provide an intervention to caregivers. Pfefferbaum et al. (2014) suggests universal disaster programs should be run across multiple community sites including schools, childcare centres, and primary health sites especially given these sites are often the first to be restored. They further cite studies with successful outcomes for children who have experienced disasters, run in schools, by school staff.

Acknowledging the distinctive opportunity for early childhood educators to make a difference for families who experience natural disaster events, the Queensland Centre for Perinatal and Infant Mental Health (QCPIMH), developed resources so that educators can start early, working towards building resilient communities. Recognizing that infants and young children are more likely learn and process through play, storytelling, and creative strategies, a curriculum for early education and care settings has been developed. Kar (2009) cites many strategies for working with families post disaster, these include assisting children to make sense of their experience and follow the child's lead. The Natural Disaster Recovery Resources childcare curriculum provides a scaffold for early childhood education and care staff to introduce areas for exploration with infants and young children, while allowing them to add their own narrative, experience, or play based response to the event. Kar (2009), Ronan and Johnston (2003), and others recommend involving parents and families in the process. A series of resources have been developed to acknowledge common experiences of a natural disaster for the caregiver, and highlight some strategies to assist their infant and child. As part of the caregiver resources, a brief story is included to start the conversation and encourage the interaction between caregiver and child. The resources also include a series of children's books; fact sheets and information for parents and educators. Furthermore, an interactive online game based on the book characters has been developed for use independently or with the other resources. These resources draw attention to signs and symptoms an infant or young person may display when they need further support. They aim to build resiliency in the face of natural disaster, first by preparing children about what might happen in the event of a natural disaster, including how the community may be impacted, before highlighting ways for caregivers, and the community to respond.

This presentation will showcase the development of the Natural Disaster Recovery Resources, including the Recovering Together After Natural Disaster: Resource Guide for Early Childhood Education and Care Services. The aim of the package is to develop resilience and skill-set of early childhood educators to support infants and young children to process the emotional impacts of experiencing natural hazards and disaster, and to enhance the readiness of infants, young children, and their families by increasing their resilience prior to a traumatic or severe weather event. Finally, we will overview the planned evaluation of the Recovering Together After Natural Disaster Resource Guide and training package. This evaluation will incorporate

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process, resource and outcome evaluations, and undertake a mixed methods triangulation research approach to develop an understanding of the impact of these resources and training on capacity building in the early childhood education and care workforce.

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