



The Relationship between Stress – Coping – Resilience in Children with Diabetes

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Abstract: The article underlines the close connection between the stress associated with the chronic disease, the cognitive or behavioral strategies used to reduce the unpleasant emotions generated by the disease and resilience as an attitude and ability to overcome the disabling chronic disease condition in children with type I diabetes, considering the fact that the aim is to determine the child's well-being and normally without majorly affecting his functioning. Resilience involves the association of experiences and thoughts with the difficult situation and involves the action of all internal resources to restore balance and the state of adaptation in a positive way, so that the child with diabetes can face strong emotions, but also have a normal development. The environment with they interact is particularly important for the children as it favors a series of adequate or inadequate coping strategies. As children grow, their cognitive strategies for emotional regulation improve and help determine their coping style in stressful situations. In order to be able to observe the effects of stress in children with diabetes, we must analyze their own way of adapting to the disease from the perspective of their psychosocial functioning. Diabetes and stress seem to be interconnected, so that stress can be both the cause and the direct consequence of diabetes-related problems. Emotional stress can affect hormone levels, disrupting insulin physiology. Thus, the triad of perceived stress - coping - resilience leads us to a state of well-being and to an increase in the quality of life.

Keywords: psychological stress; positive coping; flexible resilience; quality of life; children with diabetes

Introduction

Psychological stress or stressors can take many forms, ranging from chronic stressors related to chronic illness to time-limited stressors of high severity, such as

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community and family violence or natural disasters. Stress generally has adverse effects on people, contributing to the development of physical health problems such as chronic medical conditions and/or problems of a psychological nature. The nature and severity of the stressor influences the degree of physical and psychological problems. Illness-related stressors are ambiguous in the initial period of the illness, when the child and his parents have not yet properly conceptualized the illness in terms of severity, duration, intensity of pain and its consequences. The links between the illness and the child's adaptation to it will be mediated by the coping strategies.

The CDC (US Center for Disease Control and Prevention) defines chronic diseases as "health conditions that last a year or more and require ongoing medical care, limit daily activities, or even both". However, despite different definitions and incidence rates, experts agree that the prevalence of chronic conditions in children and adolescents continues to increase compared to the last 30 years. As a consequence of the diagnosis, management and treatment of chronic diseases, children, adolescents and their caregivers face significant sources of stress that can compromise treatment adherence itself. Stress is not only a result of chronic disease, but also acts to aggravate physical and mental illness. Chronic stress is characterized by prolonged activation of the stress response system in response to persistent adversity, particularly in those threatening situations such as chronic illness, physical or emotional abuse, neglect, exposure to violence, or family difficulties. The existence of chronic diseases results in increased stress, but chronic stress simultaneously leads to poorer health outcomes.

Stressors that "directly harm a child or affect him through the environment in which he lives" have been called "adverse childhood experiences" (Bellis, 2016; Felitti et al., 1998). Children's typical ways of responding to stress influence their ability to manage painful events. Coping skills mediate the child's response to pain associated with illness or medical procedures, as in diabetes. A number of factors may influence children's use of coping skills and adaptation in response to distress, including cognitive developmental level, experiences with painful events, and children's belief in their ability to tolerate pain, parental support, and the extent to which the pain is acute or chronic and perceived as being controllable or not by the child. Chronic suffering in children and adolescents is associated with major disruption of developmental experiences crucial to personal adjustment, quality of life, academic, vocational, and social success. Caring for these patients involves understanding the cognitive, affective, social, and family dynamics factors

associated with the chronic illness. Any child is vulnerable to emotional or physiological stress. Where adversity is continuous and extreme and not moderated by factors external to the child, resilience will be very rare (Cicchetti & Rogosch 1997; Runyan et al. 1998). This perspective has particular relevance to the study of stress and coping in children.

An important factor in triggering of the resilience is the ability to develop some positive coping styles such as, problem solving and focusing on emotions. Problem-centered coping causes the child to take active control of the situation and seeks to minimize the stressful problem by including strategies for accepting the confrontation with the aggressor, while emotion-centered coping has a support function and reduces emotional stress, but is less adaptive because it fails to address long-term issues. People turn to emotion-focused coping to prevent negative emotions from overwhelming them and hindering them in their problem-solving actions. Both coping styles lead to the accommodation of stress in a positive way. Resilience is developed through the positive use of stress to improve skills (Frydenberg, 1997). Experiences that improve a child's ability to cope with stress are not always pleasant and may involve very hard work (Rutter, 1985). There is considerable evidence that children's latent resilience can be fostered by interventions aimed at promoting learned optimism through cognitive restructuring (Seligman, 1998).

Coping is a reaction to stress. Lazarus and Folkman (1984) define coping as "an ongoing cognitive and behavioral change, an effort to manage specific external and/or internal demands that are appraised as exceeding the person's resources." Thus, distress is an emotional reaction, whereas coping always involves effort to deal with the stress generated by distress. Resilience is assessed inferentially following the examination of risk and adaptation factors. (Luthar and Zelazo, 2003). Resilience can be broadly defined as "the ability of a dynamic system to successfully adapt to disturbances that threaten the function, existence or development of the system". Over time, research has focused on elements that can moderate the impact of aversive factors on children's adjustment and how individual and contextual factors interact to determine positive or pathological outcomes during the developmental process (O'Dougherty, Wright & Masten, 2005). Researchers have developed intervention models and strategies to ensure success in overcoming children's developmental difficulties and reducing their risky and delinquent behaviors (Goldstein & Brooks, 2013).

Dr. Flach (1988) believes that resilience is not a one-way process and that people can recover and function better when risks are reduced and protective factors are in place. Traditional theories of resilience have focused on individuals and individual factors associated with adaptation, such as personality traits or coping strategies (Walsh, 1996). Gradually, resilience research has expanded to include more general social contexts such as family and community, with authors suggesting that resilience can be better understood as a product of the interaction between phenotype and environment (Patterson, 2002). From this perspective, the ability to adapt and cope with adverse factors represents a multi-determined process that occurs over time and develops in response to complex and constantly changing conditions (Walsh, 1996). Individuals will be more or less resilient depending on early personal history which can be considered as a context in which resilience occurs and which can later influence how individuals engage, react and interpret the environment.

Children with a chronic illness not only face the challenges of achieving optimal growth and development in the cognitive, physical and psychosocial domains, they must also learn to manage their illness, must learn to comply with medical treatment and come to terms with their parents' concerns and their own self-image. Adaptation is a very broad term that covers a wide variety of psychological phenomena. Stress researchers view coping as a particular category of adaptation that occurs in normal individuals when faced with unusual or demanding situations. They view coping as an inherent aspect of a person's functioning and argue that no dysfunction occurs as long as the individual copes with a stressful situation in an adaptive manner. Eiser (2001) pointed out that children with a chronic illness are exposed to a greater number of stressors than children without a chronic illness and that illness-related stressors add to the common stressors that other children experience. Cohen & Park suggested that children with a chronic illness cope differently with ordinary stressors than their peers because they have adopted different coping strategies due to their greater experience with stress in general.

To investigate stressor-specific coping responses, researchers have identified different domains of stressors, mainly several types of common stressors encountered in all children and a variety of illness-related stressors. For example, a child with rheumatoid arthritis experiences stressors such as pain and movement restrictions, while a child with diabetes experiences the stress of gaining weight or adhering to a demanding diet. Therefore, the stressful situations in which these children find themselves are different and require specific coping strategies. The

researchers found that distraction and emotional regulation were used more often in relation to pain and that blaming others was a more dominant coping strategy relative to illness-related stressors. Addressing stress in children, especially children with a chronic illness, is still growing. The results available at this time support that children with a chronic illness have access to a wide repertoire of coping strategies.

Resilience is an umbrella term that encompasses a number of overlapping facets, including social, psychological and cultural factors (Hobfoll, 1989; Southwick et al., 2014). There is a close association between coping and resilience, such that a person's resilience affects the coping strategies used, and the ability to deal effectively with stress affects a person's resilience (Booth & Neill, 2017; Lee et al., 2016). There is some research that suggest that some degree of early stress exerts a positive influence on resilience (Booth & Neill, 2017), while others suggest that children who experience highly stressful environments early in their development may be more likely to use coping styles avoidant or aggressive coping (Repetti et al., 2002).

Resilience is the process and outcome of adaptation to difficult or challenging life experiences, particularly through mental, emotional and behavioral flexibility and adaptation to external and internal demands. A number of factors contribute to how people adapt to adversities, the predominant ones being the way individuals view the world and interact with it, the availability and quality of social resources, and specific coping strategies. Psychological research demonstrates that the resources and skills associated with more positive coping, that is, greater psychological resilience, can be acquired.

Resilience includes both social, psychological and/or cultural aspects, as well as methods used by individuals to cope with events, namely high levels of agreeableness, conscientiousness, dominance and extraversion, low levels of neuroticism and a self-efficacious view of themselves. In general, individuals' resistance to stress is idiosyncratic, based on the interaction of several factors and leading to a multi-determined physical and psychological response. Individual differences in resilience also influence physical and psychological problems following stressful experiences.

Being psychologically flexible is critically related to resilience. The greater the psychological flexibility, the more resilient we will be. In short, psychological flexibility means separating ourselves from our own thoughts and emotions a little more than we usually might, and then choosing to act on long-term values rather

than short-term impulses, thoughts, and feelings. Psychological flexibility includes focusing on the ability to be comfortable with all emotions. We often focus on helping our children and ourselves become comfortable with some emotions and devalue others. This is not a recipe for resilience or psychological well-being. A large body of research shows that the ability to be comfortable with our emotions, including our so-called “negative” emotions, is essential to our ability to move forward effectively and productively in life. It allows us to be flexible and responsive to a variety of situations, no matter what we face. When our children can be at least somewhat comfortable with negative emotions, they can be more flexible and trained in how they respond to situations that generate those emotions. An important part of the ability to be psychologically flexible is the ability to accept things as they are. It is a paradox that when a person is incapable of acceptance, they are likely to respond to challenging situations with inflexibility due to the frustration and negativity of the situation. As a result, their ability to pay attention to the situation is reduced and they see fewer opportunities to make decisions. When we accept situations as they are, even when we don’t like them, then we have a greater ability to be flexible in how we respond and can rely on our deep values to guide our subsequent actions.

Resilience is a mindset. Resilient people see challenges as opportunities. They don’t look for trouble, but they understand that they will eventually be strengthened by it. Children live up to the expectations of the adults around them. They can only take positive steps when they have the confidence to do so. They gain this confidence when they have good reason to believe they are competent. When children want to develop their strength to overcome challenges, they need to know that they can control what happens to them. Those with a wide range of positive coping strategies will be prepared to overcome stressors. Although the child has many natural abilities and strengths, he can always develop greater resilience, but he cannot do this on his own. Every child needs at least one adult in his life, who represents that key relationship that helps him develop vital coping strategies. Research shows that it is not just self-confidence, positive self-esteem, determination or inner strength that makes children overcome difficult obstacles, but rather the presence and trust of at least one significant person in their lives. Resilience is therefore related to protective factors, such as parental management and social support, which moderate the effects of risk and stress.

In conclusion, the relationship between Stress - Coping - Resilience as a construction process involves the journey from the confrontation with the adverse

factor and related stress, passing through the use of coping mechanisms specific to each individual situation and each individual, until the construction of a complex of factors and skills able to help him face and overcome the threat of disadvantage and adversity. The study of developmental resilience has overturned many negative assumptions and deficit-centered models about children growing up under the impact of adversity of chronic diseases. The most surprising conclusion that emerges from studies of these children is the ordinary nature of resilience. An analysis of converging findings suggests that resilience is usual and typically emerges from the normative functions of human coping systems, with the greatest threats to human development being those that compromise these protective systems. The conclusion that resilience is made of ordinary processes rather than extraordinary ones provides a more positive perspective on human development and adaptation, as well as a direction for policies and practices aimed at improving the development of children at risk for problems and psychopathology (APA PsycInfo Database Record, 2016).

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