

Movement and Nutrition in Health and Disease

The sources of parenting stress in Chinese families of children with attention-deficit/hyperactivity disorder: An overview and future directions

| Review

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Abstract: The present article reviews the sources of parenting stress in families of children with attention-deficit/hyperactivity disorder (ADHD). The sources are child characteristics, parent characteristics, and environment characteristics, e.g., child ADHD symptoms, parents' mental health status, parental cognitions, social support, work pressure or family income. Specific factors in families of children with ADHD, such as parental ADHD symptoms, are discussed. Furthermore, studies on these factors in Western and Chinese contexts are reviewed. Future directions for research on Chinese families of children with ADHD are presented.

Keywords: Parenting stress; attention-deficit/hyperactivity disorder; child; parent; environment; Chinese families.

1. Introduction

Attention-deficit/hyperactivity disorder (ADHD) is a widely recognized childhood disorder. Parents raising children with ADHD experience significantly higher levels of parenting stress than parents of typically developing children [1]. The highly stressed status exacerbates the physical and psychological vulnerabilities of the parents [2]; it may also relate to dysfunctional parenting [3,4], less involvement in parent-child interaction [5], less effective parenting [6], and even child maltreatment [7]. As these parents are the main caretakers for children with ADHD, the sources of their stress should be identified in order to alleviate their stress levels.

2. Socio-demographics and parenting stress

The prevalence of ADHD has been reported to be highest in preschool (10.5%) and elementary school (11.4%); it declines to 8.0% in adolescence and 5.0% (self-reported) in adulthood [8]. It seems that if the severity of children's

ADHD symptoms decreases with age, parenting stress would decrease as a result. However, the available findings are inconsistent. Some studies have suggested that children's age is negatively related to parenting stress [9,10], while other studies have not found such a relationship [11–13].

The problems of boys with ADHD are more visible than those of girls, and the boy-girl ratio of diagnosis is 3:1 [8]. A meta-analysis suggested that parenting stress levels tend to be less pronounced in parents of girls than in parents of boys [14]. However, the results vary in different studies. While one study indicated that parenting stress levels are similar between mothers of boys with ADHD and mothers of girls with ADHD [15], another study found more stress in parents of girls with ADHD than in those of boys with ADHD [16]. The inconsistent results obtained by the above mentioned studies regarding the effect of children's age and gender on parenting stress suggest an area for further exploration.

Fathers and mothers have different viewpoints on their perceptions of the severity of child ADHD symptoms in Western [17] and Chinese cultures [18]. Mothers are more emotionally sensitive and more likely to appraise the problem as serious and needing social support; fathers are more likely to see the problems as not important and controllable [19]. Different from mother's pathological view, fathers appraise children's ADHD symptoms as less problematic [17]. In families of children with ADHD, mothers have been found to experience much higher parenting stress than fathers in studies from Hong Kong [18] and mainland China [20], but the stress levels were similar between fathers and mothers of children with ADHD in the United States [14]. The difference might be due to the greater emphasis on gender equality in American culture and the more obvious disparity in the gender division of labor in the Chinese context.

In Chinese studies of parents of children with ADHD, no connection between years of education and parenting stress was found [18, 20]. This means that, for parents of children with ADHD, higher education levels do not help parents appraise themselves as more resourceful and the situation as less threatening, possibly because raising children with ADHD is challenging but not a subject taught at school.

Different from the results of a Western study, which found that mothers with more children are more stressed [21], Chinese parents with only one child and those with two or more children were similar in their stress levels. The difference is probably due to the "one-child policy", in place from 1982-2013. Chinese parents are very stressed about their only child's ADHD diagnosis or academic failure because they do not have a second chance to remedy their perceived faults in parenting.

3. Child characteristics and parenting stress

Child characteristics mainly refer to the child's mood, demands, acceptability, adaptability, and hyperactivity/ distraction [22]. Parents of children labeled as "difficult" or "fussy" are more likely to feel stressed [21]. Children with ADHD often have poor emotion regulation and reduced empathy, and show greater anger/aggression [23]; they are often labeled as "troublemakers". The most notable characteristics of children with ADHD are inattentiveness or hyperactivity/impulsiveness. Thus, ADHD symptoms are identified as sources of parenting stress [24].

4. Parent characteristics and parenting stress

Parent characteristics often focus on psychological wellbeing and parents' cognition (e.g., attributions for child behavior and parenting self-efficacy) [24]. Parents of children with ADHD often deem children's hyperactive/aggressive behaviors as malicious or intentional, or deem children's compliance as unstable or uncontrollable [24]. However, little research has investigated the influence of attributions on stress in parents of children with ADHD. Parenting efficacy refers to parents feeling competent in their role as a parent and capable of handling child problems. Mothers' beliefs about their competence in child-rearing are presumed to influence their emotional reactions to child behaviors [24]. In Chinese families of children with ADHD, parental sense of competence was found negatively associated with parenting stress [18].

Parental health is widely considered as a source of stress for parents [22]. Physical or psychiatric disorders (e.g., depression) are a burden for families of children with special needs [25], such as ADHD. For depressed individuals, their symptoms may also be accompanied by debilitating circumstances, such as isolation from social networks, discord with spouse, loss of ability to care for children in a warm/sensitive manner, which may escalate parents' stress [25]. Most of the studies exploring psychopathology and parenting stress have been conducted in mothers [26]. Little is known about the relationship between fathers' mental health and paternal stress levels. In the Chinese context, the relationship between depression and parenting stress has also been studied in families of children with autism spectrum disorder [27]. However, parents of children with ADHD are more likely to suffer from depression than those of normal families [28]. Future studies should focus on whether parents' mental health status has an impact on parental stress levels in Chinese parents of children with ADHD.

Parental ADHD symptoms have been found to be a potent factor in predicting levels of parenting stress [29]. ADHD is a familial disorder; about two-thirds of children with ADHD have a parent with ADHD symptoms [30]. Parents with more ADHD symptoms often experience more home chaos which, in turn, leads to ineffective parenting, such as being unresponsive to children's needs or being less involved in child care [31]. However, the impact of parental ADHD on parenting stress should be further studied in fathers of children with ADHD, since only few fathers were included in past studies [29].

5. Environmental characteristics and parenting stress

Although the nature of parenting stress is similar in various cultures, culture affects our beliefs, values, and the environment we live in. In mainland China in 2016, the workforce aged 15-65 years numbered 1.03 billion, of which 776 million were employed. When excluding 80.9 million students, the working rate was 81.8%. Work is a crucial factor for parenting behaviors; and in recent decades, working hours, workload, and work complexity have increased. In 2017 in the urban areas of mainland China, average weekly working hours were 47 for men and 45.2 for women [32], higher than those of OECD countries, which averaged 38.4 hours [33]. Role conflict theory suggests that when parents' psychological resources cannot fulfill the requirements of their role as both an employee and a parent, work-family conflicts appear [34]. This struggle with shifting roles, as employee and parent, may cause emotional exhaustion. Traditional Chinese culture emphasizes the concept of "family"; individualism is not advocated, and individuals should integrate freedom and personality into their patriarchal clans [35]. However, this collectivism requires that work takes priority over family. Although, in modern mainland China, the power of collectivism is not as strong as in the past, it still exists and influences individuals' beliefs and behaviors. Past studies merely examined the positive relationship between work stress and mental health [36], while parenting stress was not particularly explored. In Hong Kong, full-time or part-time employment status has been found to be related to higher stress levels in parents of children with ADHD [18]. Further studies should focus on the impact of work-family conflicts on parenting stress in parents of children with ADHD.

Social support refers to resources that an individual perceives to be available or that actually could be provided to him/her from formal or informal relationships [37]. According to stress and coping theory, a belief in the availability of social support can help stressful events be appraised as less threatening [38]. In families of children with ADHD, perceived satisfaction with support is inversely related to parenting stress in Western societies, such as the United States [29]. When facing child-care challenges, parents of children with ADHD may seek various types of support or resources from primary networks (e.g., families or friends) or professional networks (e.g., health care professionals, education professionals, or social services) to cope with stressful events. Chinese are taught to be self-sufficient and they are expected to seek help only from within the family [39]. Parents may feel ashamed to seek help outside the family

[40]. Parents' perceptions of primary and professional social networks were different in a study from Hong Kong [41]. However, guidelines and training for teachers, as well as special adjustments for children with special education needs, have been well established in Hong Kong [42], while social services for children with ADHD are in their infancy in mainland China. In most cities in mainland China, neither medical nor school social work systems have been established. Teachers have limited knowledge on ADHD; for example, only 45.4% of teachers believe that ADHD is a mental disorder [43] and 48.7% of teachers have attitudes of disgust or discrimination towards children with ADHD [44], which may impede their helping behaviors. Future studies should examine the role of different sources and types of social support in predicting parenting stress in families of children with ADHD in mainland China.

Material resources (e.g., money or goods) may also influence parents' appraisal of what can be done in stressful situations [45]. Most studies have focused on the impact of poverty or economic disadvantage on mental health [46]. Theories on the relationship between family income and parenting stress fall in two categories: first, poverty has a close relationship with parenting stress [47]; second, family income has an indirect imp act (rather than a direct impact) on parenting stress [48]. However, these studies were mainly conducted in families living in poverty and thus cannot be extended to the situations of normal families.

6. Conclusion

The present analysis of sources of parenting stress in families of children with ADHD indicates that potent factors influencing parenting stress come from inner parent characteristics (parental psychological symptoms or parental ADHD symptoms) and from the context of daily life (social support, family income, or work pressure). Clinical practitioners should adopt an ecological perspective [49] in designing programs for families of children with ADHD. Apart from child behavioral training, family-based and community-based services should be provided. Intersectional collaborations between education system, health care system and social welfare system may help parents alleviate their depressive/anxious symptoms, ADHD symptoms, sense of conflict between work and family, and sense of social isolation, which in turn, can greatly help reduce parents' stress levels.

Conflict of interest

The author declares no conflict of interest.

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