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Research article

Physical maltreatment of children with autism in Henan province in China: A cross-sectional study

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ABSTRACT

The aim of this study was to investigate the frequency of child physical maltreatment (CPM) in children with autism aged 2–5 years in Henan province (China), and to explore the risk factors for severe CPM in these children. This cross-sectional study was performed at the Psychology Clinic of the Third Affiliated Hospital of Zhengzhou University between September 2012 and September 2013 with 180 parents of children with autism. Children and parents had no history of any cognitive therapy. The childhood autism rating scale (CARS) was used to evaluate the severity of autism in children. Data on parental CPM during the past 3 months were collected from parental self-reporting. Logistic regression was used to investigate the risk factors of severe CPM. CPM was self-reported by 88% of the parents of children with autism. One hundred and fifty four of these cases were in the minor CPM group (86%) and 64 in the severe CPM group (36%). Most cases of severe CPM were unlikely to have caused injury. Univariate analyses showed that child's age ($p = .018$), age started to speak ($p = .043$) and CARS score ($p = .048$) were associated with severe CPM. Child's age ($p = .011$) and CARS score ($p = .041$) were independently associated with severe CPM. The risk of severe CPM increased with age and CARS score. Our findings showed that CPM is widespread in families of children with autism in Central China and more knowledge should be provided to parents of children with autism, particularly in cases of severe autism (those with high CARS scores).

Introduction

Child physical maltreatment (CPM) is present in all countries and regions within different races, economies, cultures, and religions. However, different cultural backgrounds perceive CPM differently (Finkelhor, Turner, Ormrod, & Hamby, 2010). The psychological damage induced by CPM lasts for a very long time, sometimes even for life (Rosen, Milich, & Harris, 2010). Long-term, serious and unpredictable external forces in early childhood can affect the physiological processes of brain development, leading to negative effects on children's cognition, emotions, behavior and socialization (Eigsti & Cicchetti,

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2004). Children's language delay development in vocabulary and sentence construction may also be related to CPM (Cicchetti, Rogosch, Maughan, Toth, & Bruce, 2003).

The definition of CPM severity differs between countries, cultures and legal systems. CPM severity ranges from minor acts such as spanking or slapping, to the severe behaviors of beating up, burning or scalding. Minor CPM, also known as corporal punishment, is often considered to be part of disciplining children. Severe CPM is often referred as physical abuse, but is often used in a disciplinary context. Irrespective of psychological effects, the main difference between the two degrees is that severe CPM may cause physical injuries or death (Molnar, Buka, Brennan, Holton, & Earls, 2003).

Many studies claim that children with disabilities are more likely to suffer from CPM because of their physical and intellectual disability (Ebeling & Nurkkala, 2002; Hershkowitz, Lamb, & Horowitz, 2007). Sullivan and Knutson (2000) observed that 31% of children in the special education system had a record of being maltreated, compared with 9% of children in the general education system. Children with intellectual and developmental disabilities are at an increased risk of CPM (Spencer et al., 2005; Westcott & Jones, 1999; Ammerman, Hersen, van Hasselt, Lubetsky, & Sieck, 1994). Children with cognitive and verbal deficits may not be able to communicate about the maltreatment or may not be believed when they report maltreatment (Tharinger, Horton, & Millea, 1990).

Childhood autism is characterized by social impairments, communication impairments, restricted repetitive and stereotyped patterns of behavior, interests and activities, and generally begins before the age of 3. The damage caused by autism to social skills and social adaption is more serious than the damage to intelligence (Gadow, 2013). The effects of autism on children's physical and mental development can be serious, causing a great burden to children, parents and society. The characteristics of children with autism, e.g. social isolation and poor communication skills, might either increase their risk of being abused or be a clinical indication of abuse (Howlin & Clements, 1995). In a small sample of children with autism (less than 1% of the overall population) it was suggested that they may experience significantly less abuse than children with other disabilities but the number of family stressors such as family isolation, parental illness, sibling illness, disability of another family member, and incarceration of a family member is also associated with the risk of CPM (Sullivan & Knutson, 2000). Larger numbers of children are needed to truly compare rates among different groups. The prevalence of CPM of children with autism in the US was estimated to be around 18.5%, which is higher than those estimated for the general population (Mandell, Walrath, Manteuffel, Sgro, & Pinto-Martin, 2005).

Given recent increased interest in autism and the growing number of children who receive this diagnosis (Ouellette-Kuntz et al., 2014), it becomes important to understand the psychosocial experiences of these children. Reliable estimates of the incidence of CPM allow the development of effective population-level public health programs to prevent children with autism from becoming victims of violence, and to improve their health and quality of life. The aim of the present study was to investigate the frequency of CPM in children with autism aged 2–5 years, the point at which most children with autism receive their first diagnosis in Henan province (Central China), and to explore the risk factors of severe CPM in these children.

Methods

Study population and procedures

This was a cross-sectional study performed at the Psychology clinic of the Third Affiliated Hospital of Zhengzhou University and the Children's Psychological and Behavioral Center between September 2012 and September 2013. The children and families were referred to the clinic because of concerns over the development or behavior of the children. Those that were included in the study received the diagnosis of autism, but no treatment or rehabilitation. The families gave signed informed consent for their participation in the study. This study was approved by the medical ethics committee of the Third Affiliated Hospital of Zhengzhou University. Survey procedures were designed to protect families' privacy by allowing for voluntary participation and anonymity once the participation was completed.

Only one parent from each family was enrolled. The parent who brought the child to hospital was included. If two parents attended hospital, the parent who cared for the child at home was included. Inclusion criteria were: (1) child with autism was diagnosed and evaluated by the same experienced doctors including one psychiatrist and one psychologist using the criteria of Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition (DSM-IV), and the Childhood Autism Rating Scale (CARS) (Schopler, Reichler, & DeVellis, 1980); and (2) parent and child had never undergone any psychological therapy. Exclusion criteria were: (1) child diagnosed with fragile X syndrome, Rett syndrome, chromosomal abnormalities or any encephalopathy; (2) child age <2 years or >5 years; (3) child living with a legal guardian other than his/her parents.

Respondents were divided into the no CPM group, minor CPM group (only minor CPM) or severe CPM group (any affirmative answer for any of the four items of severe CPM).

Participants

Two-hundred participants were eligible and 183 were enrolled. Three did not complete all questionnaires and were excluded. All included participants had completed datasets.