Is There an Association Between Physical Punishment in Childhood and Physical Health in Adulthood?

Since the landmark study on adverse childhood experiences (ACEs),\(^1\) there has been a growing interest in the relationship between ACEs and physical health. ACEs are associated with smoking, chronic obstructive pulmonary disorder, obesity, diabetes, cardiovascular disease, alcohol use, and liver disease in adults in a dose-dependent fashion. In the original study by Felitti et al.,\(^1\) ACEs were more common than one might expect; although the majority reported 0 or 1 ACE, one-fourth of all respondents reported ≥2 ACEs.

Physical punishment, by contrast, is nearly universal in the United States; ∼90% of preschool-age children were spanked in the last year.\(^2\) Three decades of research on physical punishment has shown with remarkable consistency that spanking children increases the risk of poor mental health, aggression, and delinquent and antisocial behavior; decreases the quality of the parent-child relationship, increases behavioral symptoms, and increases rates of physical-abuse victimization.\(^3\) Despite the recognized association between ACEs and physical health in adulthood, however, there have been no studies to our knowledge that have evaluated the relationship between physical punishment and physical health in adulthood.

In the study by Affi et al.,\(^4\) which appears in this issue of Pediatrics, the authors used the National Epidemiologic Survey on Alcohol and Related Conditions (NESARC) to evaluate the relationship between what they define as “harsh physical punishment” and a set of 8 physical health disorders. This article is a companion paper to a study\(^5\) that used the same data set to evaluate the relationship between harsh physical punishment and mental disorders.

In the current study, the authors report that the adjusted odds ratio of having arthritis, obesity, and cardiovascular disease (borderline significance) were all increased in adults with a history of harsh physical punishment. The rate of having any 1 of 8 physical health conditions increased from 52% in adults without a history of physical punishment to 59% in those with a history of physical punishment (adjusted odds ratio: 1.30, 95% confidence interval: 1.12–1.51).

We applaud the authors for trying to expand the evidence base related to the relationship between physical punishment in childhood and physical health conditions in adulthood. Our enthusiasm, however, is tempered by several important methodologic concerns as well as concerns about the conclusion that the authors have drawn from their data. Several of these concerns, including the cross-sectional nature of the study, the choice of confounders, and the effect of both selection and recall bias, were raised at the time of publication of the companion study.\(^5\)–\(^8\)

Perhaps the most significant concern in the current article is the low rate of endorsed harsh physical punishment and the way in which harsh physical punishment was operationalized. Harsh physical

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ABBREVIATIONS

ACE—adverse childhood experience
NESARC—National Epidemiologic Survey on Alcohol and Related Conditions

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punishment was defined by the response to a single question in the NESARC: “How often did a parent or other adults living in your home push, grab, shove, slap, or hit you?” Harsh physical punishment was defined as having answered “sometimes,” “often,” or “very often” to that question, whereas physical abuse was defined by the authors as responding “sometimes,” “often,” or “very often” to the statement “having been hit so hard it left marks or bruises, or caused an injury.” None of the terms in this question were further defined. Only 3.6% of respondents in the study were categorized as having experienced harsh physical punishment on the basis of the response to this question, whereas 38% met criteria for maltreatment. This low rate of harsh physical punishment and the high rate of physical abuse challenge us to interpret exactly what parent behaviors the authors are reporting. Also problematic is the conclusion drawn by the authors that states that “based on the current findings… it is recommended that physical punishment should not be used on children of any age.” Although we may support the condemnation of spanking, this condemnation should rest much more squarely on the extant literature relating physical punishment to mental health problems and maltreatment. This conclusion clearly oversteps what the authors can say on the basis of their findings. In fact, there was no category of subjects who experienced physical punishment that was not harsh as defined by the authors. Physical punishment which does not reach the level of being considered harsh is likely the most common type of discipline. To show that physical punishment of any type is harmful, there should have been 4 categories (physical abuse, harsh physical punishment, non–harsh physical punishment, and no physical punishment) rather than just 3 categories.

In conclusion, although we congratulate the authors on this important study, which raises key issues about physical punishment and long-term physical health, methodologic and definitional issues temper our enthusiasm. The study, we believe, is most useful for generating new hypotheses. We look forward to seeing a follow-up study with prospectively collected data and clearly defined behaviorally specific terms that capture frequency, intensity, and intent to begin to answer the important question of whether physical punishment, in any form, is associated with long-term physical health.

REFERENCES

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