Participation in Boxing by Children, Adolescents, and Young Adults

ABSTRACT. Because boxing may result in serious brain and eye injuries, the American Academy of Pediatrics opposes this sport. This policy statement summarizes the reasons.

The American Academy of Pediatrics opposes the sport of boxing for children, adolescents, and young adults. Amateur boxing is a collision sport in which winning is based on the number and force of punches successfully landed on an opponent’s head and/or body. This deliberately exposes boxing participants to potentially devastating neurologic and ocular injuries. Despite these potential dangers, thousands of boys and girls continue to participate in amateur boxing.

Supporters of amateur boxing suggest that it teaches self-defense, discipline, strength, and agility while building self-confidence, character, and courage. For some youth, boxing may provide a supervised, structured, goal-oriented alternative to the streets. Impoverished youth may see professional boxing as a means of financial gain—without regard to attendant medical risks.

The overall risk of injury in amateur boxing is actually lower than in some other collision sports such as football, rugby, and ice hockey. However, as opponents of boxing have emphasized, boxing is the only sport where direct blows to the head are rewarded and the ultimate victory may be to render the opponent senseless. Participants in boxing are at risk for dementia pugilistica, a chronic encephalopathy caused by the cumulative effects of multiple subconcussive blows to the head. Numerous studies of professional boxers document this hazard and its potentially devastating consequences on long-term health. Because amateur fights last only three rounds, compared to as many as 15 rounds in professional boxing, it is reasonable to expect that amateur boxers receive fewer blows to the head and thus, suffer fewer brain injuries. However, recent studies have shown that amateur boxers still are at risk for acquiring cognitive abnormalities and/or focal neurologic deficits. Although other studies have not confirmed these findings, the “safety” of amateur boxing remains unproven.

Prophylactic measures with helmets, unlimited lengths of hand bandage, and heavier gloves have not decreased the frequency of matches that are stopped for neurologic reasons. Ocular injuries are a risk, even for amateur boxers, and may account for more hospitalizations than neurologic injuries. Despite abundant evidence of the medical risks of boxing and clear opposition from medical associations in the United States, boxing is likely to remain as a sporting option for interested youth. Pediatricians can help young people make more informed choices about participation in boxing and hopefully direct their patients toward safer activities.

RECOMMENDATIONS

The American Academy of Pediatrics recommends that pediatricians:

1. Vigorously oppose boxing as a sport for any child, adolescent, or young adult;
2. Educate “at risk” patients about the medical risks of boxing and provide information that supports the Academy’s opposition to the sport; and
3. Encourage young athletes to participate in sports in which intentional head injury is not the primary objective.

REFERENCES

4. Drew RH, Templer DJ, Schuyler BA, Newell TG, Cannon WG. Neuro-


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Committee on Sports Medicine and Fitness

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