7. Bayliss EA, Ellis JL, Shoup J, Zeng C, McQuillan DB, Steiner JF. Effect of continuity of care on hospital utilization for seniors with multiple medical conditions in an integrated health care system. *Ann Fam Med.* 2015;13(2):123-129.

8. Wang HHX, Wang JJ, Lawson KD, et al. Relationships of multimorbidity and income with hospital admissions in 3 health care systems. *Ann Fam Med.* 2015;13(2):164-167.

9. Echouffo-Tcheugui JB, Simmons RK, Prevost AT, et al. Long-term effect of population screening for diabetes on cardiovascular morbidity, self-rated health, and health behavior. *Ann Fam Med.* 2015;13(2):149-157.

10. Spee LAA, Lisman-van Leeuwen Y, Benninga MA, Bierma-Zeinstra SMA, Kollen BJ, Berger MY. Predictors of chronic abdominal pain affecting the well-being of children in primary care. *Ann Fam Med.* 2015;13(2):158-163.

11. de Oliveira Vidal EI, dos Santos Silva V, dos Santos MF, Jacinto AF, Villas Boas PJF, Fukushima FB. Why medical schools are tolerant of unethical behavior. *Ann Fam Med.* 2015;13(2):176-180.

12. Hughes LS. You can't hide the bridges. *Ann Fam Med.* 2015;13(2): 181-183.

13. Goldstein AO. Is exposure to secondhand smoke child abuse? Yes. *Ann Fam Med.* 2015;13(2):103-104.

14. Lindhorst T. Is exposure to secondhand smoke child abuse? No. *Ann Fam Med.* 2015;13(2):105-106.

POINT / COUNTERPOINT

Is Exposure to Secondhand Smoke Child Abuse? Yes.

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Scientific research over the last decade has increasingly demonstrated that exposure to secondhand smoke is not simply a nuisance; it is deadly.[1] Secondhand smoke exposure causes multiple diseases in children, including asthma and pneumonia, and results in thousands of avoidable hospitalizations.[2] Secondhand smoke exposure is a major cause of sudden infant death syndrome and may cause lung cancer and heart attacks with repeated exposure.[2] No safe level of exposure exists.[1,2]

Purposefully and recurrently exposing children to secondhand smoke—a known human carcinogen—despite repeated warnings, is child abuse. Federal law defines child abuse as "any recent act or failure to act on the part of a parent or caretaker which results in death, serious physical or emotional harm, sexual abuse or exploitation; or *an act or failure to act which presents an imminent risk of serious harm*."[3] In the case presented below, our patient's parents failed to act in a way to remove their child from recurring, life-threatening harm by secondhand smoke, thereby constituting child abuse.

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Case

At least 10 times over 3 years, we counseled the family to quit smoking around the 5-year-old patient and her 7-year-old sister, as the kids repeatedly came to the clinic for ear infections, coughing, bronchitis, and asthma. Two months after a recent visit, the younger child developed pneumonia. We successfully treated her with antibiotics and inhalers, and gave strong admonitions to the parents to avoid smoking anywhere near the children, offering the parents detailed counseling support. The parents, however, refused to engage with us about quitting smoking, pharmacotherapy for cessation, or about not letting their children be exposed to cigarette smoke.

In the clinic, the residents and I discussed the case in detail, asking ourselves what more we could do. We reviewed the Public Health Service guidelines on tobacco use treatment that document optimal ways to help people quit smoking, then reviewed our attempts at counseling and referral and the quality improvement efforts in our office systems to support improved outcomes.[4] In short, we did everything that evidence-based guidelines tell us to do.

We still did not do enough. Not long after, the younger child showed up in the emergency room with a recurrence of pneumonia and severe asthma. By the

time we heard about it, she was already on a ventilator in the pediatric intensive care unit, where she stayed for several days before ultimately improving. Out of the 10 adults gathered in the waiting room—parents, extended family members, and several friends—6 were heavy smokers.

In retrospect, it is easier to see where and why we failed: our patient was suffering from child abuse, and we had failed to intervene beyond offering medication, counseling, and referral. The parents refused to take adequate safeguards to prevent their children's recurrent exposure to cigarette smoke. We needed to take the additional step of placing a call to Social Services to report suspected child abuse. We needed to consider a petition for the court to remove the children from the parent's home until securing a guarantee of no involuntary exposure to recurrent secondhand smoke exposure.

As a society, we universally believe that children should be protected from all forms of abuse or neglect. When we discover high lead levels in a child's home, we intervene to preserve health. When we discover children at risk of neglect due to parents' alcohol or drug addiction, we refer to Child Protective Services. Suspicions of child abuse that involve significant harm to the child obligate us as clinicians to intervene.[5,6] It should be the same with prolonged and repeated pediatric secondhand smoke exposure.

The legal system has begun to recognize and act on children's continued exposure to secondhand smoke through court-ordered termination of parental rights, changes in custody status, and other actions, particularly when a child suffers from asthma and other chronic secondhand–smoke-induced conditions.[7] While several states have banned smoking in cars when children are present,[8] there is still no national legislation that protects children from involuntary exposure to secondhand smoke in all public places, worksites, and areas where children cannot escape such exposure, such as inside cars and homes. Mandated interventions to protect children from involuntary exposure to secondhand smoke are considered ethical under most circumstances.[9]

Moving forward, medical associations like the American Medical Association, the American Academy of Pediatrics, the American Academy of Family Physicians, and the American College of Physicians should endorse policies classifying purposeful and recurrent exposure of children to secondhand smoke as child abuse. Policy makers and clinicians can continue to aggressively advocate for all policy changes that would eliminate such exposure. A national conference on secondhand smoke and child abuse would appropriately draw leading researchers and organizations into this dialogue and help focus the resulting policy measures.

Our task as medical professionals is clear: given the number of lives at risk, medical and public health communities must accelerate their efforts to protect children from exposure to secondhand smoke. In the same way that we did not always view deaths and injuries caused by drunken drivers, domestic violence, or giving drugs to minors as criminal acts, our perception of secondhand smoke as a form of child abuse reflects a paradigm shift. As our understanding of the harms of secondhand smoke increases, so does our responsibility to advocate for those involuntarily placed in harm's way. Today, parents who willfully and continually expose their children to secondhand smoke are committing child abuse. We must intervene to stop this abuse.

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References

1. How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General. Atlanta (GA): Centers for Disease Control and Prevention; 2010. http://www.ncbi.nlm.nih.gov/books/NBK53017/. Accessed Sep 4, 2014.
2. The Health Consequences of Involuntary Exposure to Tobacco Smoke. A Report of the Surgeon General. Atlanta, GA: Centers for Disease Control and Prevention; 2006. http://whb.ncpublichealth.com/Manuals/counseling/Secondhand-Smoke.pdf. Accessed Nov 19, 2014.
3. US Department of Health & Human Services. Administration of Children and Families. Administration of Children, Youth and Families. Children's Bureau. Office on Child Abuse and Neglect. Federal Child Abuse Prevention and Treatment Act (CAPTA). June 5, 2003. http://www.acf.hhs.gov/sites/default/files/cb/capta2003.pdf.
4. US Department of Health and Human Services Treating Tobacco Use and Dependence: 2008 Update. Clinical Practice Guideline; 2008.
5. Australian Government. Australian Institute of Family Studies. Mandatory reporting of child abuse and neglect. https://www3.aifs.gov.au/cfca/publications/mandatory-reporting-child-abuse-and-neglect. Accessed Nov 20, 2014.
6. Flaherty EG, Sege R. Barriers to physician identification and reporting of child abuse. *Pediatr Ann*. 2005;34(5):349-356.
7. Anderson JD. Parental smoking: a form of child abuse. Marquette Law Rev. 1993;77(22):360. http://scholarship.law.marquette.edu/cgi/viewcontent.cgi?article=1614&context=mulr. Accessed Aug 28, 2014.
8. Kabir Z, Manning PJ, Holohan J, Keogan S, Goodman PG, Clancy L. Second-hand smoke exposure in cars and respiratory health effects in children. *Eur Respir J*. 2009;34(3):629-633.
9. Jarvie JA, Malone RE. Children's secondhand smoke exposure in private homes and cars: an ethical analysis. *Am J Public Health*. 2008;98(12):2140-2145.