LETTERS

ENVIRONMENTAL ASTHMA INTERVENTION

In the January 2002 issue of the Journal, Kinney et al. report the difficulties they encountered in running a pilot intervention project to reduce asthmatic children's exposure to pests and associated allergens in New York City.[1] They are to be commended for taking on such a difficult task. I suggest that a more comprehensive approach is needed and that there are some lessons to be learned from the past.

More than 30 years ago, a coalition of tenants, landlords, trade unions, vocational schools, municipal and state officials, community leaders, and members of the clergy, together with the Mount Sinai Department of Community Medicine, set up the East Harlem Environmental Extension Service. The aim of the service was to reverse the breakdown of tenement home and neighborhood environments and to eliminate the environmental health and safety problems linked to this breakdown. We found that the critical underlying problem was the absence of preventive maintenance.

At the time, I was district health officer of East Harlem. A group of us reported to the McGovern Committee of the US Senate on the health and safety burdens on people living in buildings with poorly functioning boilers, broken plumbing systems, rotting window frames and missing window guards, broken windows, harborages for insects and rodents, pools of stagnant water in cellars and courtyards, inadequate waste management, peeling of leaded paint, unlit and cluttered passageways, and garbage-filled courtyards.

We noted that lead poisoning, home accidents and injuries, the wintertime suffering of the old and young due to the cold, burns and deaths from tenement fires, carbon monoxide poisoning from use of indoor heaters where windows were kept shut, rat and insect bites, and needless mental suffering were some of the hazards and risks for the 130 000 people then living in East Harlem tenement buildings with deteriorating maintenance. We also suspected that bronchial asthma, then the second or third most frequent emergency room diagnosis in Mount Sinai's emergency room, might be triggered by allergic reactions to rodent dander and mites in house dust.[2–4]

Our premise was that a dedicated and competent person trained in tenement maintenance could do more for the health of slum residents than a doctor or nurse. We set up an organization that hired young men trained in building maintenance, subsidized their salaries, and placed them in high-risk buildings. But subsidies were not enough; there was a need for an organizational framework, and the best strategy was to use these subsidies as training stipends. The Extension Service, which served some 30 buildings, eventually fell apart as a result of budget cuts during the Vietnam War and administrative problems. But the idea of a comprehensive approach spread into other neighborhoods.

Some 15 years ago, a group of us reported on the results of a case–control study on the relationship of asthma to passive smoking, dust mites, and other environmental conditions among refugee children in the Gaza Strip, where environmental conditions were particularly severe.[5] On the basis of my work in Harlem 30 years ago and in the Gaza Strip 15 years ago, I question the impact and sustainability of a segmental approach to asthma and other inner-city health problems. To cite just one particular problem, the application of "low-toxicity pesticides" will not itself be without risk and may induce respiratory illness in infants and children,[6] and certainly in children with preexisting respiratory or immunological problems. The use of such pesticides is no substitute for a more ecological approach based on searching for and eliminating pests' breeding sites and food sources—a public health basic. ■

Elihu D. Richter, MD, MPH

Letters to the editor will be reviewed and are published as space permits. By submitting a letter to the editor, the author gives permission for its publication in the Journal. Letters should not duplicate material being published or submitted elsewhere. Letters referring to a recent Journal article should be received within 3 months of the article's appearance. The editors reserve the right to edit and abridge letters and to publish responses.

Text is limited to 400 words and fewer than 10 references. Submit on-line at www.ajph.org, or send a diskette and 3 copies to the editorial office. Both text and references must be typed and double-spaced.

About the Author

Requests for reprints should be sent to Elihu D. Richter, MD, MPH, Unit of Occupational and Environmental Medicine, Hebrew University–Hadassah School of Public Health and Community Medicine, Jerusalem, Israel (e-mail: elir@cc.huji.ac.il; Web site: http://www.md.huji.ac.il/depts/occenvmed).

References

1. Kinney PL, Northridge ME, Chew GL, et al. On the front lines: an environmental asthma intervention in New York City. *Am J Public Health.* 2002;92:24–26.

2. Richter ED, Olivieri M, Galliani R, Rivera V. Statement to the Senate Select Committee on Environmental Health Problems and Human Needs; part 4, Housing and Sanitation. September 14, 1970: 990–1005.

3. Richter ED, Jackson S, Wood C, Peeples S, Volante R. Housing and health: a new approach. *Am J Public Health.* 1973; 63:878–883.

4. Wood C, Volante R, Peeples S, Jackson S, Richter ED. An experiment to reverse health-related problems in slum housing maintenance. *Am J Public Health.* 1974;64:474–476.

5. Mumcuoglu K, Abed Y, Armenios B, et al. Asthma in Gaza refugee camp children and its relationship with house dust mites. *Ann Allergy.* 1994;72:163–167.

6. Richter ED, Kowalski M, Leventhal A, et al. Illness and excretion of organophosphate metabolites four months after household pest extermination. *Arch Environ Health.* 1992;47:135–138.