7. Farfel and Chisolm Respond to Matte et al.

We agree with Matte, Binder, and Falk that the benefits of lead paint abatement will increase with more widespread application of newer practices. The purpose of our report was to highlight the need for a new approach1 by demonstrating the deficiencies of practices used for decades, such as the removal of paint by burning, scraping, and sanding without rigorous clean-up as summarized in Appendix A. Such practices, including the removal of paint from certain surfaces to only 4 or 5 feet above the floor, have been in use in Baltimore and other cities and locations for several decades.²⁻⁴ The deficiencies revealed in this study led us to explore new practices in ongoing work.

The Baltimore City Health Department's Lead Poisoning Prevention Program referred households sequentially from among newly identified cases that met enrollment criteria for both houses and children. Of the 96 households referred, 87 were enrolled. Ten of these were dropped because abatements either were not completed or were carried out by owner occupants. Six families moved before or during the abatement. This left a final sample of 71 households, which represents approximately 15% of the total abatements in Baltimore during the same time period. Six-months postabatement PbB data were limited largely because a substantial proportion of children with no history of chelation therapy preabatement required long-term chelation therapy postabatement. The analysis was limited to children without a history of chelation therapy to study the effect of abatement per se on blood lead. Further details on all of the above points can be found else-

Although Matte et al. accurately cite that children in an earlier study in Baltimore who resided exclusively in low-lead housing after chelation therapy did show mean blood lead concentration of 1.36 μ mol/L 1 year later, it is also true that a matched sample of those who were discharged to old housing abated in the traditional manner showed mean PbB of 1.78 μ mol/L 1 year later. \square

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References

- Chisolm JJ Jr. Removal of lead paint from old housing: the need for a new approach. Am J Public Health. 1986;76:236-237.
- Chadzynski L. Methods for abating lead hazards in housing. In: Chisolm JJ Jr, O'Hara DM, eds. Lead Absorption in Children: Management, Clinical and Environmental Aspects. Baltimore-Munich: Urban and Schwarzenberg, 1982;127–133.
- Sobolesky WJ. Some problems associated with the environmental phases of a childhood lead poisoning prevention program. In: Chisolm JJ Jr, O'Hara DM, eds. Lead Absorption in Children: Management, Clinical and Environmental Aspects. Baltimore-Munich: Urban and Schwarzenberg, 1982;135– 141.
- Feldman RG. Urban lead mining: lead intoxication among deleaders. N Engl J Med. 1978;298:1143–1145.
- Farfel MR. Evaluation of Health and Environmental Effects of Two Methods for Residential Lead Paint Removal. Baltimore, MD: Johns Hopkins University School of Hygiene and Public Health; 1987. Thesis.

Acceptance of the Female Condom by Latin- and African-American Women

The AIDS crisis, the increase in other sexually transmitted diseases (STDs), and the continuing problem of unwanted pregnancies, necessitate new methods of barrier protection.1 In 1988, Wisconsin Pharmacal began testing the safety and efficacy of a new female condom (Reality™), a disposable, prelubricated, polyurethane device that is both a contraceptive and a barrier against STDs. The product requires no professional fitting and is inserted by the woman. Preliminary data from clinical and laboratory studies indicate that the female condom may be an effective barrier against STDs.2 A widespread use of the female condom, however, will depend on women's and men's initial attitudes, including culturally determined barriers to acceptance.3-8.

In an effort to understand initial attitudinal barriers to acceptance of the female condom, we surveyed 20 African-American and 37 Latin American women on methadone, a group at increased risk of contracting or transmitting the human immunodeficiency virus (HIV). Eight respondents were married; 16 were separated, divorced, or widowed; and 33 had never been married. Eighty-seven percent identified themselves as heterosexual and 57% claimed an ongoing sexual relation-

ship. Seventy percent (n = 40) indicated that at least one close friend had died from AIDS.

Of the total sample, 57.9% (n = 33) were strongly in favor of the female condom, and 17.5% (n = 10) were somewhat favorable; similar proportions indicated they would be very willing or somewhat willing to try the female condom. Fiftyeight percent strongly favored and 12.3% somewhat favored using a female condom over a male condom. Reasons cited were as follows: the use of the condom would enable women to have control over their own protection; it would be safer than a male condom; and the use of the female condom would be less embarrassing than asking a man to use a condom. Seventyfive percent said they would recommend the female condom to other women. The most common objections to using the female condom were its large size, possible messiness and inconvenience, and the belief that insertion would be uncomfortable and difficult.

Nearly two thirds of respondents (63%, n = 34) indicated that their sexual partners would be very favorable or somewhat favorable to the female condom; 73% (n = 42) were willing to discuss the use of the female condom with their sexual partners; and 65% (n = 42) strongly agreed that it is easier for women to use a female condom than to convince their sexual partners to use a male condom. African-American women, more than Latinas, were favorable towards the Reality™ condom ($\chi^2 = 4.044$, df = 1, P < .04) and believed that their sexual partners would permit them to use the female condom ($\chi^2 = 3.96$, df = 1, P < .04). Single women favored the female condom more than did married women (χ^2 i = 3.69, df = 1, P < .05).

The finding that 63% of the respondents believed that their partners would be favorably disposed toward the use of the female condom is noteworthy, given women's reports that men dislike condoms.9,10 These data suggest that this new device may hold promise as a tool in slowing the spread of HIV and other STDs. As the female condom nears approval for use by the public, the scientific focus will shift from technological and biological to the social and behavioral aspects. Studies are needed in order to better understand existing attitudinal impediments, determine how users overcome their initial resistance, and develop and test strategies for increasing initial acceptance and regular use among diverse populations.

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References

- Stein ZA. HIV prevention: The need for methods women can use. Am J Public Health. 1990;80:460-463.
- Leeper MA. Reality™ (WPC-333): Preliminary evaluation of a condom for women to wear. AIDS Care. In press.
- 3. Leonard TL, Freund M, Platt JJ. Male clients of female street prostitutes. *Am J Public Health*. 1989;79:903.
- Solomon MA, DeJong W. Preventing AIDS and other STDs through condom promotion: a patient education intervention. Am J Public Health. 1989;79:453-458.
- Mays VM, Cochran SD. Issues in the perception of AIDS risk and risk reduction activities by Black and Hispanic/Latina women. Am Psychol. 1988;43:949–957.
- Wyatt GE, Peters SD, Gutherie D. Kinsey revisited Part II: comparisons of the sexual socialization and sexual behavior of Black women over 33 years. Arch of Sex Behav. 1988;17:289–332.
- Marin G. AIDS prevention among Hispanics: needs, risk barriers, and cultural values. *Pubic Health Rep.* 1989;104:411–415.
- Schilling RF, El-Bassel N, Gilbert L, Schinke SP. Correlates of drug use, sexual behavior, and attitudes toward safer sex among African-American and Hispanic women in methadone maintenance. J Drug Issues. In press.
- Valdisierri RO, Arena VC, Proctor D, Bonati FA. The relationship between women's attitudes about condoms and their use: implications for condom promotion programs. Am.J Public Health. 1989;79:499–501.
- Sakondhavat C. The female condom. Am J Public Health. 1990;80:498.

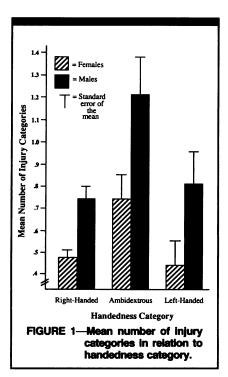
Handedness and Accident Proneness

Coren¹ recently reported that left-handed subjects suffered more accidents requiring medical attention (during the previous 2 years) than did right-handed subjects (OR = 1.89, 95% CI = 1.39, 2.58). He hypothesized that the increased risk in left-handed subjects may come from "implicit and explicit biases of the environment toward maximal convenience of the right-handed majority." In order for this hypothesis to be viable, ambidextrous people, who were combined with left-handers in

Coren's study, should be shown to have fewer accidents than left-handers.

In 1989, Dr. Coren graciously provided me with his raw data. In our reanalysis of his data, we trichotomized subjects' total handedness scores into a left-handed (n = 113), ambidextrous (n = 77) or right-handed (n = 1553) category. A 2 (male vs female) by 3 (handedness category) analysis of variance revealed that the total number of injury categories (range: 0-5; mean = 0.62; SD = 0.91)² varied across the three handedness categories (F = 5.50; df = 2, 1739; P = .004), and that males suffered more injury categories than did females (F = 16.60; df = 1, 1739, P = .0001). There was no interaction between gender and handedness categories (F = 0.70; df = 2, 1739; P = .50). Figure 1 illustrates these results.

Pairwise Tukey HSD tests revealed that ambidextrous subjects suffered accidents in more injury categories than did right-handed or left-handed subjects (P <.05), but that there was no difference between right-handed vs left-handed subjects. Nonparametric statistical analyses paralleled these results. Cochran-Mantel-Haenzel (CMH) tests,³ controlling for the gender effect (CMH = 31.85; df = 1; P < .001), revealed that there was a significant difference among the three handedness groups with respect to the occurrence vs nonoccurrence of an accident in any category (CMH = 17.28; df = 2; P < .001), but that the handedness accident odds ratio was similar across gender ($\chi^2 = 0.80$; df = 1; P = .37).



Pairwise CMH tests, also controlling for gender, revealed that more accidents occurred in ambidextrous than in either right-handed subjects (CMH = 16.39; df = 1; P < .001; OR = 2.52, 95% CI = 1.61, 3.94) or left-handed subjects (CMH = 5.81; df = 1; P = .02; OR = 1.57, 95% CI = 1.09, 2.26), but that left-handed vs right-handed subjects did not differ with respect to accident history (CMH = 1.13; df = 1; P = .29; OR = 1.24, 95% CI = 0.87, 1.79).

These results suggest that ambidextrous people, rather than left-handed people experience more accidents than right-handed people. Although further investigation is needed, the relatively greater incidence of accidents in ambidextrous than in left-handed people weakens Coren's "right-handed world" hypothesis.¹ Biological or psychological hypotheses may ultimately prove more viable, although the literature does not allow one to draw firm conclusions as to ways in which ambidextrous and left-handed people differ. \square

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References

- Coren S. Left-handedness and accidentrelated injury risk. Am J Public Health. 1989;79:1040-1041.
- Games PA. Curvilinear transformations of the dependent variable. *Psychol Bull*. 1983;93:382–387.
- Landis RJ, Heyman ER, Koch GC. Average partial association in three-way contingency tables: a review and discussion of alternative tests. *Int Stat Rev.* 1978;46:237–254
- Breslow NE, Day NE. Statistical Methods in Cancer Research. Vol 1: The Analysis of Case-Control Studies. Lyon, France: International Agency for Research on Cancer; 1980.

Coren Responds

The reanalysis of my data by Daniel and Yeo and their finding that ambihanded individuals are more susceptible to accident related injuries is quite interesting. It suggests that some additional aspects of handedness may be of importance in determining accident susceptibility besides simple sinistrality; however, these results do not cause me to abandon the hypothesis that left-handers are more susceptible to accidents.

Ambi- or mixed-handedness is a characteristic that is more closely associated with left-than with right-handedness. Part of the reason for this is that left-