Two stories in one: No link found between secondhand smoke and lung cancer; and no one seems to care

By ACSH Staff — December 11, 2013

Although numerous studies seeking to find strong (or any) evidence of a link between SHS (secondhand smoke, or passive smoking) and lung cancer have failed to find such, the popular wisdom (shared by most scientists) is that SHS is indeed a cause of lung cancer. One reason for this widespread mythology is the failure of news media both general and scientific to take note of these studies.

Another example of this "conscious avoidance" has occurred recently. In June, at the annual meeting of the American Society of Clinical Oncology (ASCO, possibly the most prestigious meeting of cancer researchers), a Stanford medical student (Ange Wang) presented her (and colleagues) evaluation of lung cancer and smoking histories contained in the vast Women’s Health Initiative (WHI) database. Their conclusion [1]: among the 76,000+ profiles with all the requisite information, among women who had never smoked, exposure to passive smoking overall, and to most categories of passive smoking, did not statistically significantly increase cancer risk. The news report of this presentation only now has appeared on the website of the Journal of the National Cancer Institute (JNCI) and as of today, no media have paid attention to either the original report or the current news item.

ACSH advisor, epidemiologist Dr. Geoffrey Kabat of the Albert Einstein College of Medicine in the Bronx, NY, who has been a pioneer in this area for over a decade, had this comment:

"This does not really come as a surprise to those who are familiar with the epidemiologic evidence regarding exposure to passive smoking and risk of lung cancer. In fact, the association is weak and inconsistent. The largest U.S. prospective studies, the American Cancer Society’s (ACS) Cancer Prevention Studies (CPS I and II) show either no association or an inconsistent association, respectively. Widely cited meta-analyses show a 25% increased risk of lung cancer among never smokers exposed to passive smoking (mainly through marriage to a smoking spouse). However, other meta-analyses indicate that the excess risk may be lower, more on the order of 10%. In any case, this figure needs to be compared to the 2,000-6,000% increase in risk of lung cancer among smokers. The news item makes the important point that we should not
overstate the weak and uncertain association with passive smoking, and should be looking for other, larger risk factors for lung cancer occurring in never smokers.

The only thing that’s surprising is that this new result, based on an as-yet-unpublished analysis of the Women’s Health Initiative observational study, was featured in a news item in the prestigious Journal of the National Cancer Institute under the title No Clear Link Between Passive Smoking and Lung Cancer. In other words, the only thing that’s surprising is that this news comes as a surprise to many people."

ACSH’s Dr. Gilbert Ross added this perspective: While not disagreeing with the findings, given the prior studies in concord with it, we should note that this is a meeting presentation, not yet published in a peer-reviewed journal. Further, the number of never-smoking women diagnosed with lung cancer is quite small, 152 to be precise, making general comments based solely upon these data fraught. As another expert commented to JNCI: Passive smoking has many downstream health effects asthma, upper respiratory infections, other pulmonary diseases … but only borderline increased risk of lung cancer, said Dr. Jyoti Patel of Northwestern U. School of Medicine. The strongest reason to avoid [SHS] is to change societal behavior: to not live in a society where smoking is the norm. We echo her call for continued, strong anti-smoking measures.