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Influenza Vaccine: No Side Effects

Gina Pugliese, RN, MS
Martin S. Favero, PhD

Between 25 and 50 million people each year become ill with influenza, resulting in millions of work-loss days, hundreds of thousands of hospitalizations, and billions of dollars in healthcare costs. Concern about side effects has been one of the barriers to influenza vaccination. Dr. Kristin Nichol and colleagues recently studied the side effects following influenza vaccination among healthy working adults, randomized to receive influenza or placebo injections. Of the 849 subjects enrolled in the study, 425 received a placebo, and 424

received influenza vaccine. When assessed for the 7 days following the study injection, vaccine and placebo recipients reported the same rates of fever, myalgia, fatigue, malaise, or headaches. Overall, 35.2% of placebo and 34.1% of vaccine recipients reported at least one of these systemic symptoms. Vaccine recipients reported a higher rate of arm soreness at the injection site than did placebo recipients. Local reactions were mild in both groups and infrequently resulted in decreased use of the arm. After logistic regression, female gender, age younger than 40 years, and coincidental upper respiratory tract illness were associated

independently with higher rates of systemic symptoms.

In the multivariate model, vaccine again was not associated with systemic symptoms. The authors concluded that influenza vaccination does not cause systemic adverse side effects in healthy adults. Symptoms reported by patients who receive influenza vaccination most likely are the result of coincidental illness or heightened somatic awareness following vaccination.

FROM: Nichol KL, Margolis KL, Lind A, et al. Side effects associated with influenza vaccination in healthy working adults. *Arch Intern Med* 1996;156:1546-1550.