Chiropractic Update

Update 45

EFFECT OF ANTIBACTERIAL HOME CLEANING PRODUCTS ON INFECTIOUS DISEASE SYMPTOMS

The home environment has been implicated as one important source of spread of infectious diseases, and hygienic interventions have resulted in reduced incidence, particularly in less-developed countries. In the United States, several studies have demonstrated the effectiveness of hygienic interventions in reducing transmission of infections in child-care centres and schools. However, despite the fact that 75% of liquid and 29% of bar soaps available in the U.S. consumer market contain antibacterial ingredients; their benefits in terms of reducing the incidence of infectious diseases in households have not been demonstrated. In addition, concerns have been raised about the potential for long-term use of such products to increase resistance to antiseptics or cross-resistance with antibiotics

The objective of a recently reported randomised double-blind clinical trial[1], that involved 238 primarily Hispanic households in New York, was to evaluate the effect of antibacterial cleaning and handwashing products for consumers on the occurrence of infectious disease symptoms in households.

Households were randomly assigned to use either antibacterial or nonantibacterial products for general cleaning, laundry, and handwashing. All products were commercially available, but the packaging was blinded and the products were provided free to participants.

To qualify for inclusion in the study, a household unit had to include 3 or more persons with at least one preschool-age child and had to have access to a telephone. In addition, household members had to speak English or Spanish. Hygiene practices and infectious disease symptoms were monitored by weekly telephone calls, monthly home visits, and quarterly interviews for 48 weeks.

The authors found that the symptoms that the participants experienced during the course of the trial were primarily respiratory such that during 26.2% of household-months one or more members of the household had a runny nose, during 23.3% of household-months one or more members of the household had a cough, and during 10.2% of household-months one or more members of the household had a sore throat.

Fever was present during 11% of household-months, vomiting was present in 2.2% diarrhoea was present in 2.5% and boils or conjunctivitis were present in 0.77%.

Differences between intervention and control groups were not significant for any symptoms or for numbers of symptoms. The authors conclude, “The tested antibacterial products did not reduce the risk for symptoms of viral infectious diseases in households that included essentially healthy persons.”

Reference:

1.) Larson EL, Lin SX, Gomez-Pichardo C, Della-Latta P. Effect of antibacterial home cleaning and handwashing products on infectious disease symptoms: a randomized, double-blind trial. Ann Intern Med. 2004;140:321-9.