



To the Minister of Health, Welfare and Sport

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Subject : Influenza vaccination in the elderly  
Your reference : -  
Our reference : U 1171/JAK/ns  
Enclosure(s) : -  
Date : October 4, 2007

Dear Minister,

Recently, concern arose following the publication of a scientific article in the journal *The Lancet Infectious Diseases*.<sup>1</sup> The article's authors summarised published research into the effects of influenza vaccination. They believe that the beneficial effect of influenza vaccination in the elderly largely results from the fact that it is primarily healthy people who opt for vaccination, and not the most vulnerable individuals. Another contributory factor would be that the studies in question use general end points, such as death from any and all causes. In their conclusion, the authors cast doubt on the benefit of influenza vaccination in the elderly. In view of the fact that, earlier this year, the Health Council of the Netherlands recommended that you allow the annual vaccination of elderly people to be continued (and even to be extended to include individuals aged 60 and above)<sup>2</sup> and given the imminence of the annual vaccination campaign, I feel that it is incumbent on me to respond to these reports.

In 2003, the Health Care Insurance Board (CVZ) expressed the view that the annual round of influenza vaccination in the Netherlands – which was organised by the National Influenza Prevention Programme (NPG) – had been a success.<sup>3</sup> In recent years, studies conducted by various research groups in the Netherlands have demonstrated the value of influenza vaccination. One of these studies showed that repeated annual vaccinations produced a 28 percent reduction in mortality among vaccinated elderly individuals.<sup>4</sup> Another study revealed that the vaccination of high-risk groups, including the elderly, leads to a strong reduction in hospital admissions and mortality (in the elderly, these figures were 48 percent and 50 percent respectively).<sup>5</sup> There was also no evidence, in the Netherlands, for relatively limited participation in the programme by elderly people at increased risk.<sup>4</sup>



Subject : Influenza vaccination in the elderly  
Our reference : U 1171/JAK/ns  
Page : 2  
Date : October 4, 2007

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The article in *The Lancet Infectious Diseases* cites an earlier Dutch study into the effects of influenza vaccination.<sup>6,7</sup> This was a randomised, placebo-controlled, double-blind study, which did indeed include a group of elderly people at increased risk, and in which specific end points were used, such as serologically confirmed influenza or morbidity resulting from influenza. This study showed that the vaccination of elderly individuals reduced the occurrence of influenza by half.

The fact that vaccination, in the latter Dutch study, cut the occurrence of flu by half, but did not eliminate it completely, shows that the vaccine is not perfect. Accordingly, a more effective vaccine would be most welcome. However, vaccination has been and continues to be of great importance, also in extremely elderly individuals where, given the increasing prevalence of risk factors, even a less than ideal vaccine can combat a great deal of additional morbidity and mortality from influenza. Vaccination is the only measure we can take, and – in relative terms – the programme in the Netherlands is highly successful. It would be a great shame if an unjustified loss of confidence in that programme were to result in a fall in the level of vaccination among the elderly. Indeed, the authors of *The Lancet Infectious Diseases* article also favour continued vaccination of the elderly against influenza.<sup>1</sup>

An article in today's *New England Journal of Medicine* describes a study into the effect of influenza vaccination among elderly individuals in the United States.<sup>8</sup> This study also shows that vaccination leads to a decrease in influenza-related hospital admissions and mortality. Furthermore, even on close analysis, there was no evidence of preferential vaccination of healthy elderly people in particular.

In summary, the recent publication in *The Lancet Infectious Diseases* in no way diminishes the great importance of vaccinating elderly people against influenza, whether or not risk factors are involved.

Yours sincerely,

(signed)  
Professor J.A. Knottnerus,  
President



Subject : Influenza vaccination in the elderly  
Our reference : U 1171/JAK/ns  
Page : 3  
Date : October 4, 2007

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**Literature**

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