

**O224**

**Oral Session**

**Emerging infectious diseases**

**ACCEPTANCE OF VACCINATIONS IN PANDEMIC OUTBREAKS: A DISCRETE CHOICE EXPERIMENT IN THE NETHERLANDS**

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**Objectives:** Preventive measures are essential to limit the spread of new viruses. Their uptake are key to the success of these measures. However, often, the vaccination uptake in pandemic outbreaks is low. We aimed to elicit how disease and vaccination characteristics determine preferences of the general public for uptake of vaccinations against new viruses.

**Methods:** In an internet-based discrete choice experiment (DCE) a representative sample of the Dutch population was asked for their preferences for aspects of vaccination programs in hypothetical communicable disease outbreaks. We used scenarios based on two disease characteristics (susceptibility to, and severity of the disease) and five vaccine specific characteristics (effectiveness, safety, out-of-pocket costs, advice regarding vaccination and media attention). The DCE design was based on a literature review, expert interviews and focus group discussions. A panel latent class logit model was used to estimate the trade-offs individuals were willing to make.

**Results:** The participation rate was 63% (677/1083). All aspects proved to influence respondents' preferences for vaccination. Preference heterogeneity was substantial, with females and respondents who stated they were never in favour of vaccination making different trade-offs than males and respondents who stated that they were (possibly) willing to get vaccinated. As expected, respondents preferred and were willing to pay more for more effective vaccines, especially if the outbreak was more serious (ranged €6 to €39). Changes in effectiveness, price of the vaccine and in who advises the vaccine substantially influenced the predicted uptake. For example, a vaccine that had an effectiveness of 30%, instead of 70%, led to a decrease in uptake ranging from 5.7% in case of a mild disease to 18.9% decrease in uptake in a severe disease).

**Conclusions:** We conclude that the uptake of pandemic vaccinations is especially dependent on price, effectiveness of the vaccine, and by whom and which channels vaccines are advised. When communicating public health messages regarding vaccination, one should also take into account preference heterogeneity.