Now, we have it. Will we use it? New results from ECOS on the willingness to be vaccinated against COVID-19

Sebastian Neumann-Böhme & Iryna Sabat

Key Findings

• The willingness to get vaccinated against COVID-19 dropped between April (73.9%) and November (60%) 2020 and is at a level that would make herd immunity through vaccination uncertain.
• Policy makers should now try to inform and convince the people who are still unsure about a vaccination (23%) against COVID-19 about the risks and benefits.
• The reason most frequently given for a vaccination was to protect the respondents own and family members health, concerns revolve mainly around side effects and safety.

What Problem Was This Research Addressing?

The focus in much of 2020 was on the development, approval and recently the distribution of a vaccine against the Coronavirus SARS-CoV-2 to protect against the disease COVID-19. Policymakers should prepare for the next challenge: uptake of the vaccine among the public. Having a vaccine does not automatically imply it will be used.

Vaccination programmes can lead to herd immunity without requiring a large proportion of the population to be infected. The latter is mostly seen as an undesirable option, given the potentially high numbers of deaths as a result of infection. Especially so, if the health systems are overwhelmed by a large number of patients with severe COVID-19 symptoms. Herd immunity through vaccination, however, requires a sufficient proportion of the population to be vaccinated.

What This Research Adds

While vaccination is widely recognised as an effective way to reduce or eliminate the burden of infectious diseases by health authorities and the medical community [1], its effectiveness also depends on the individual willingness to be vaccinated. This willingness could be negatively affected by doubts and worries that exist in the population about the safety and appropriateness of vaccines. This is sometimes labelled vaccine hesitancy [2]. If too many individuals hesitate about being vaccinated, herd immunity may not be reached.

What This Research Adds

When we reported the first results from the European COvid Survey (ECOS) in April 2020 [3], 73.9% of the 7.664 participants from Denmark, France, Germany, Italy, Portugal, the Netherlands, and the UK stated that they would be willing to get vaccinated against COVID-19 if a vaccine became available. A further 18.9% of respondents...
stated that they were not sure, and 7.2% stated that they did not want to get vaccinated. During the course of the pandemic, we observed protests against the containment measures in many European countries but also protests against vaccines.

In this article, we report the most recent ECOS data on the willingness to be vaccinated against COVID-19 from November 2020 as well as the reasons respondents provided for their decision. This overview is aimed at policymakers and to provide an update on our earlier publication.

Methods

To investigate the issue of willingness to be vaccinated as well as others, we investigated people attitudes about vaccination against COVID-19 in an online survey among representative samples of the population (in terms of region, gender, age group and education) in seven European countries (N = 7,115 in wave 4). This data collection was part of the larger ECOS project, which collected data in April, June, September and November 2020. In each wave, respondents answered questions on the willingness to be vaccinated, the causes for their decisions, their worries, beliefs and approval of containment measures taken by their national governments, among other topics. The data was collected between the 8th and 16th of November 2020.

Research Findings

Compared to our findings in April, the willingness to vaccinate in November 2020 dropped by 13.9 percentage points to 60% with 23% (18.9% in April) reporting to be unsure about wanting to be vaccinated and 17% (7.2% in April) of respondents refusing a vaccination against COVID-19.

Similar to other reports [4] on the confidence in vaccines, we see a large variation in the willingness to vaccinate across Europe. As indicated in Figure 2, the willingness ranges between 46% in France and 71% in Denmark. While the share of respondents unwilling to be vaccinated increased over the course of 2020, a larger share of respondents are still unsure if they want to be vaccinated or not. This share ranges from 18% in Denmark to 27% in Portugal.

Figure 2: Willingness to vaccinate across 7 European countries

We also asked all respondents who said that they would be unwilling or hesitant about a vaccination for the reasons of their decision. Among the respondents who were unsure about vaccination in November 2020, the reasons most often stated were that respondents wanted to protect themself (18%) and their family members (16%) against the infection.

Figure 1: Willingness to be vaccinated in seven European countries

One might argue that the group that is currently unsure about getting a vaccine may be the most relevant. These are the people who potentially can be persuaded more easily to get vaccinated to achieve
Policy Relevance of Research

- In order to achieve herd immunity through vaccination a sizeable proportion of the population needs to be convinced to get vaccinated against COVID-19.
- We provide evidence from the most recent data of the ECOS project on the willingness to be vaccinated in seven European countries.
- Policy makers could use the information in this report to address the subgroups most hesitant about vaccination.
- Furthermore, we provide evidence on the reasons respondents most frequently gave for or against vaccination, so that an information campaign could highlight the benefits and inform about the concerns.

Our findings highlight that considerable policy effort may be required to come from having a vaccine to adequate vaccination rates, especially in some countries. Targeting those in the population who are currently hesitant seems most promising and cost-effective, but this requires convincing evidence and clear communication on the safety and effectiveness of the vaccine. This may be at odds with the current push for having a vaccine available as soon as possible. A campaign emphasising the social benefits of vaccination could increase the willingness to be vaccinated among those amenable to such pro-social motives. Finally, a sizeable proportion of the population indicates not to be open to vaccination. This group may remain at risk of spreading the virus and contracting the disease, even after herd immunity has been achieved. Concluding, improving our understanding of vaccination hesitancy in the context of COVID-19, as well as finding and using policies to overcome it, maybe as important the recent vaccine discoveries.

References

Acknowledgements
This project has received funding from the European Union’s Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No 721402.