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Letter to the Editor

## Reply to "Health literacy, a crucial determinant of vaccination decision-making among pregnant women" by Castro-Sánchez et al



In their correspondence entitled "Health literacy, a crucial determinant of vaccination decision-making among pregnant women", Castro-Sánchez et al. rightly highlight the complexity of the considerations leading to the decision to vaccinate. In our recent review entitled "Vaccinating pregnant women against influenza needs to be a priority for all countries: An expert commentary" (Buchy et al., 2020), we dedicated a chapter to the description of the main obstacles to influenza vaccination in pregnancy and the lessons learned from countries that have succeeded in increasing vaccination coverage in pregnant women. We identified from the literature the major obstacles to antenatal immunisation. The most frequent reasons reported included safety concerns for the foetus, objections to drugs in pregnancy, poor understanding of the severity and burden of influenza disease and low awareness of the benefits of vaccination. We cited an Italian study showing a strong association between low educational attainment and perceived vaccine safety concerns (D'Alessandro et al., 2018), but Castro-Sánchez et al. also observed that in Spain women with high health literacy were actually even more likely to reject influenza vaccination than those with lower health literacy (Castro-Sánchez et al., 2018). We therefore fully agree with Castro-Sánchez et al. that health literacy is one of the main determinants of decisionmaking about vaccination.

As well as health literacy, external factors such as healthcare professionals (HCPs), peers, social norms and the media appear to strongly influence the decision of women to accept or refuse vaccination (Buchy et al., 2020). A survey conducted by the Royal Society for Public Health in the UK (2018) revealed, for instance, that on social media, negative messages about vaccines were more likely to attract attention and to spread rapidly than positive messages. However, it was reassuring – and we would like to reemphasize its importance – that scientific experts, doctors, midwives and nurses were seen as the most trusted sources of advice on vaccine uptake. The survey demonstrated the need for sufficient training of HCPs to allow them to respond to questions regarding vaccinations (Royal Society for Public Health, 2018), but also showed that women have the capacity to make use of these recommendations.

Considering the complexity of the problem and the multiplicity of factors leading to the decision for pregnant women to be vaccinated, it is not surprising that some of the most successful strategies to increase antenatal vaccine coverage have resulted from a multichannel approach, as described for instance in the UK by Baxter (2013).

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## **Conflict of interest**

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#### **Author contributions**

All authors reviewed the literature, provided substantial input, and reviewed the publication. All authors approved the final publication and are accountable for all aspects of the work.

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