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**TITLE:** Health literacy, a crucial determinant of vaccination decision-making among pregnant women

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Dear Editor,

We read with interest the Review by Buchy et al (2020) summarising the evidence on micro (patients, healthcare workers), meso (vaccine manufacturers) and macro (wider society) determinants of influenza vaccination in pregnant women worldwide.

We agree with the authors that improvements in vaccination coverage could be gained with better training for healthcare workers about communicating the benefits of vaccination and the risks associated with influenza infection, as well as education about such benefits to pregnant women. However, education per se may be insufficient unless it is underpinned by health literacy principles. Health literacy has been defined, essentially, as the capacity that citizens have to access and make use of health information to make decisions about their health and care (Nutbeam, 2008).

Decisions to vaccinate are complex, requiring an understanding of the immune system and the pathogenesis of each microorganism, a variety of immunisation schedules, adverse events which occur at different rates and influenced by several health professionals involved in the decision-making process at different time points (Vila-Candel et al, 2016).

Our study exploring the influence of health literacy on influenza vaccination among pregnant women in Spain reflected how women with high health literacy were more likely to reject influenza vaccination than those with lower health literacy (Castro-Sánchez et al, 2018). Among the reasons for these women to reject the vaccine were feelings about its need, in isolation and compared with other immunisations, and claims of having received insufficient information. To mitigate such a gap, women with high health literacy would access a greater variety of information sources, including those promoting outlier or fringe opinions (Danchin et al, 2018; Vila Candel et al, 2016b).

The implications of this study are clear – a wide understanding by healthcare professionals of how pregnant women make decisions about vaccinations is required, including the crucial topics of women's interest and concern, which information sources they prefer to meet their needs, how they combine and integrate the evidence obtained onto explanatory frameworks, and when these frameworks are shaped by emotions and influenced by social and personal networks.

Interventions solely interested in providing evidence-focused vaccination messages to mitigate assumed information gaps, and without acting upon the determinants shared by vaccination and health literacy such as education level, self-efficacy and empowerment, are unlikely to sustainably dent existing suboptimal vaccination rates among pregnant women, disallowing them from the clinical, public health and social gains afforded by vaccination.

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