Vaccine hesitancy and Health Literacy: we need to change our paradigm

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Introduction:
The vaccination coverage decline and the re-emergence of vaccine preventable diseases draw attention to the problem of vaccine hesitancy (VH). Many studies demonstrated that the
current vaccine education is not very effective. We analysed the problem of VH in relation to Health Literacy (HL) and the perception of vaccine preventable diseases-related risks in a sample of parents.

Methods:
We conducted a survey among parents between February and November 2018. We collected data on demographic, main sources of information, vaccination attitude (using the Vaccine Confidence Index (VCI) adapted from Larson HI 2016), HL levels (using an adapted version of IMETER and knowledge of signs and symptoms of diphtheria, tetanus and measles.

Results:
The study included 772 parents, 620 women (mean age 39 years), 48.2% had diploma. The main source of information was the doctor (85.5%) followed by the web (24.2%). The average VCI was 3.78 (range: 0.1-10) with lower values among parents informed through social networks (2.05-2.78). Analysing the IMETER test, 90% had a good or acceptable level of HL. No significant correlation between VCI and HL was found. For parents who identified at least 3 specific elements of selected diseases, the average VCI was significantly higher (Measles 4.32, Tetanus 4.64, Diphtheria 5.84).

Conclusions:
The HL level did not correlate with the VCI. A low VCI was associated with poor knowledge of selected diseases; this confirms the importance of a correct risk perception. This study in accordance with the literature suggests to amplify the model used to analyse the VH taking into account cognitive biases (i.e. ambiguity aversion and omission bias) as important factor affecting the parents’ decision making. We aim to expand our work building a survey to categorise parents according their main cognitive bias. This may be useful to understand the better communication strategies to effectively have an impact on each parents’ behaviour.

Key messages:
• This study in accordance with the literature suggests to amplify the model used to analyse the VH taking into account cognitive biases.
• The Health Literacy is not enough to explain the problem of the Vaccine Hesitancy.