

Medical students' learning needs relating to childhood vaccination and hesitancy

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Dear Editor,

Vaccine Hesitancy (VH) was listed as one of the top ten threats to global health by the WHO in 2019¹. Studies have reported declining confidence in vaccines, the doctors who administer vaccines, and companies that develop them². Inadequate training is often cited as the reason why some practicing healthcare professionals do not discuss vaccinations with their patients.³

We performed a qualitative study using focus groups to outline the experience of Irish medical students relating to childhood vaccination and VH within the medical curriculum and to explore any desired changes. 20 final year students undergoing their paediatric rotation in University College Cork participated over 3 focus groups. The learning needs of medical students relating to vaccines and VH relate to factors around five main themes: knowledge, role of clinical placement, desired education, motivation to learn and barriers to engagement with vaccine hesitant families.

The participants in this study have some obvious knowledge gaps, some known to them, others not. All participants report that they don't currently have sufficient knowledge to address vaccination concerns. The suggestion from one participant that oral drops are less "traumatic" than injections promotes a stereotype that children should be protected from "painful" injections, despite the harm prevented globally by vaccine injections. Participants were unanimously in favour of furthering their knowledge of vaccinations and VH and have indicated a desire for simulations and role-playing to address knowledge gaps.

Intrinsic motivations to learn include their positive attitudes towards vaccinations, and feeling inherent responsibility towards the paediatric population, who they want to advocate for. Some participants were frank about how extrinsic motivations to pass exams and OSCEs are their primary concern, wishing to focus on "high yield topics". Participants also highlighted conflicting priorities serve to demotivate them, and that there is currently more focus on learning interprofessional communication rather than "difficult" communication with patients

or families. Despite acknowledging this gap in preparation, participants viewed engagement with VH families as a “waste of time” suggesting a “common ground” would not be reached. Their reflections highlight a challenge to remain empathic, non-emotional and respectful. A systematic review on parental attitudes and beliefs regarding childhood vaccinations pinpointed poor communication and distrust as major barriers to timely vaccine acceptance⁴. Teaching medical students the merits of engaging with vaccine hesitant families is therefore important and worthwhile.

In summary, the results of this study and our interpretation of the findings, combined with current literature, suggest that there are knowledge and communication training gaps relating to vaccines and VH. Addressing the common barriers to engaging with VH families, such as addressing the belief that engagement is futile, is a key learning need. Students themselves describe role play and simulations as areas they would like to see developed to address knowledge and communication skill deficits. The results of this study may assist educators to develop a training programme specific to vaccines. Seeking to improve students’ preparedness for discussions with an increasingly curious population is a worthwhile undertaking and an area for future research.

Declarations of Conflicts of Interest:

None declared.

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References:

1. Ten threats to global health in 2019. 2019.
2. Smith TC. Vaccine Rejection and Hesitancy: A Review and Call to Action. Open Forum Infect Dis. 2017;4(3):ofx146.
3. Pavlovic D, Sahoo P, Larson HJ, Karafillakis E. Factors influencing healthcare professionals' confidence in vaccination in Europe: a literature review. Hum Vaccin Immunother. 2022;18(1):2041360.

4. Lauren E. Latella RJMaMR. Beliefs about Vaccinations: Comparing a Sample from a Medical School to That from the General Population. International Journal of Environmental Research and Public Health. 2018;15, 620.