★ Winner – APPD 2017 Trainee Research Award ★

A VIRTUAL REALITY CURRICULUM FOR PEDIATRIC RESIDENTS DECREASES RATES OF INFLUENZA VACCINE REFUSAL (RESEARCH ABSTRACT)

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Objective: Communication skills can be difficult to teach and assess in busy medical settings. These skills are particularly important for effective counseling such as in cases of influenza vaccine hesitancy, a common occurrence in primary care practice. Though physicians can affect caregivers' attitudes toward vaccination, physicians report uneasiness discussing vaccine hesitancy. We hypothesized that physician-patient communication training using virtual reality (VR) can decrease rates of vaccination refusal. **Methods**: An immersive VR curriculum was created to teach pediatric residents best-practice communication skills when discussing influenza vaccine hesitancy. This pilot curriculum consisted of three VR simulations during which residents counseled graphical character representatives (avatars) who expressed vaccine hesitancy. Instruction was delivered via the Oculus Rift headset. Participants were randomized to the intervention (n=24) or the control group (n=21). Only residents in the intervention group underwent the VR curriculum. Impact of the curriculum was assessed through (1) a pre/post self-assessment survey evaluating resident confidence in addressing influenza vaccine hesitancy and (2) difference in influenza vaccine refusal rates between the intervention and control groups in the three months following the VR curriculum. **Results**: Participants included postgraduate level (PL) 2 and PL3 pediatric residents. All eligible residents (n=45) participated and the survey response rate was 100%. Residents in the intervention group reported increased confidence in addressing vaccine hesitancy compared to controls (p=0.02). In patients aged 6-59 months, residents in the intervention group had a decreased rate of influenza vaccination refusal in the post-curriculum period when compared to the control group (27.8% v. 37.1%; p=0.03). (Figure 1) **Conclusion**: This pilot study suggests that VR might be an effective modality to teach communication skills to medical trainees.