SCHOOL OF MEDICINE

AIMS-trained Residents Exhibit Specific Communication Skills During Virtual **Encounters with Standardized Vaccine-Hesitant Parents Following an Online** - allonen's **Training Program** Shanna M. Barton^{1,2}; Aaron W. Calhoun^{1,2}; Carrie A. Bohnert²; Sara M. Multerer^{1,2}; Victoria A. Statler^{1,2}; Gary S. Marshall^{1,2}

BACKGROUND

- Vaccine hesitancy is commonly encountered in daily pediatric practice¹
- There are no accepted best practices for communicating with vaccine-hesitant parents
- Vaccine hesitancy communication training is not required by the ACGME and is not formally offered in many residency programs²
- In-person training of residents in the AIMS method³ of communication (Figure 1) resulted in behaviors of interest during live encounters with standardized patients (SPs) portraying vaccine-hesitant parents⁴
- In this study, we...
 - Adapted the training and SP encounters to the virtual environment
 - Modified the SP portrayal to better approximate the well-intentioned parent who is reluctant to vaccinate
 - **Revised the Vaccine Hesitancy Communication** Assessment (VHCA) based on performance in the prior study



PURPOSE

- Determine to what extent online training results in **AIMS-specific behaviors during SP encounters**
- Determine the effect of modified SP case materials on the ability of SPs to differentiate AIMS-trained from control-trained residents
- Generate validity and reliability data for the modified VHCA

- See Figure 2
- Subjects were Pediatrics and Medicine-Pediatrics residents
- Randomized to AIMS or control (standard of care) training
- Virtual encounters with SPs before and after training
- Videotaped encounters assessed by 3 independent raters using the modified VHCA
- SP perception of the residents' communication skills assessed using the Gap-Kalamazoo Assessment Form⁵
- Investigators, subjects, SPs, and video raters blinded to resident training allocation
- Institutional Review Board approved with unsigned consent

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RESULTS

Baseline characteristics of AIMS- and control-trained residents were similar (data not shown) Internal consistency of the VHCA across multiple raters ranged from 0.32-0.59 • VHCA demonstrated moderate global intraclass correlation (0.52 pre-training, 0.51 post-training) • After training, AIMS behaviors were detected in AIMS-trained, but not control-trained, residents (moderate effect size) (Figure 3) Confidence increased in both AIMS- and control-trained residents (Figure 4)

Figure 3

Communication Score





METHODS



Figure 4

• No differences in SP perceptions of the encounters with AIMS- or control-trained residents (Figure 5)

Confidence



SUMMARY

- Similar findings compared to the study that used inperson training and SP encounters
- Online AIMS training resulted in AIMS-specific behaviors
- Performance of the modified VHCA was moderate and similar to the original instrument
- Training resulted in confidence gains in both groups
- SPs unable to differentiate between AIMS and control-trained residents

CONCLUSIONS

- Specific communication skills can be taught, and their use assessed in a virtual environment
- VHCA ceiling effect in terms of validity and reliability
- Low VHCA internal consistency not unexpected given heterogeneity of AIMS elements
- Confidence increases regardless of training
- It remains to be seen if communication training and gains in provider confidence can improve vaccine uptake among patients
- SPs do not recognize AIMS behaviors. This suggests that SPs in the scripted vaccine hesitancy model may not be able to respond organically to providers, or that AIMS is no different than standard of care communication training
- Further work to evaluate the effect of the AIMS construct on real parents may be warranted

REFERENCES

- https://www.who.int/news-room/spotlight/ten-threats-to-global-health-in-2019 www.acgme.org/Portals/0/PFAssets/ProgramRequirements/320_Pediatrics_2020.pdf?ver =2020-06-
- 29-162726-647 Vaccine Confidence Initiative: The AIMS Method for Healthy Communications Training Guide. Sanofi Pasteu
- Barton. J Pediatrics 2021;241:203-211
- Essential Elements: The Communication Checklist, ©Bayer-Fetzer Group on Physician-Patient Communication in Medical Education, May 2001, and from: The Bayer-Fetzer Conference on Physician-Patient Communication in Medical Education. Essential Elements of Communication in Medical Encounters: The Kalamazoo Consensus Statement. Academic Medicine 2001: 76:390-393

