Upstanding and Interrupting Biases: Understanding the Impact of Different Curriculum Delivery Models and Student Identity on Learner Outcomes

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BACKGROUND

Experiences of racism, discrimination, and microaggressions (RDM) have been correlated with higher rates of positive depression screening and lower satisfaction with medical training. Power differentials faced by medical students can make acts of RDM challenging to address. Previously, we demonstrated that our curriculum increased student awareness of RDM, knowledge of communication strategies to mitigate RDM, and confidence to address RDM. In this study, we examine the curriculum’s efficacy among two models of curriculum delivery (in-person vs virtual). Additionally, we investigate if learners who identify as under-represented in medicine (URM) have a different impact when participating in upstander training, a factor that has not been previously characterized.

QUESTIONS

1. Is there a difference in learner outcomes between in-person vs virtual curriculum delivery?
2. Is there a difference in learning outcomes among learners who self-identify as under-represented in medicine (URM) compared to learners who do not (nURM)?

MATERIALS & METHODS

We examined learner outcomes in two sessions: virtually in January 2022 and in-person in September 2022.

- Small group sessions were co-facilitated by faculty and senior medical students; all facilitators attended a pre-session training.
- Learner knowledge and confidence was assessed using anonymous pre- and post-session surveys, as measured on Likert scales.
- Responses between groups were compared using t-tests.

RESULTS

Figure 1. Virtual and In-Person Learners Reported Increased Knowledge and Confidence in Addressing RDMs

- I am aware of different strategies to deal with RDMs aimed at other members of the medical team.
- I am aware of different strategies to deal with RDMs aimed at patients.
- I am aware of strategies to deal with RDMs aimed at myself.
- I feel confident in applying communication strategies to deal with RDMs in the clinical learning environment.
- I am comfortable addressing RDMs aimed at others.
- I am comfortable addressing RDMs aimed at patients.
- I am aware of different strategies to deal with RDMs aimed at others.
- I am aware of different strategies to deal with RDMs aimed at patients.
- I am comfortable addressing RDMs I have committed.

Figure 2. URM and Non-URM Learners Reported Similar Increased Knowledge and Confidence in Addressing RDMs

- I am aware of different strategies to deal with RDMs aimed at other members of the medical team.
- I am aware of different strategies to deal with RDMs aimed at patients.
- I am aware of strategies to deal with RDMs aimed at myself.
- I feel confident in applying communication strategies to deal with RDMs in the clinical learning environment.
- I am comfortable addressing RDMs aimed at others.
- I am comfortable addressing RDMs aimed at patients.
- I am aware of different strategies to deal with RDMs aimed at others.
- I am aware of different strategies to deal with RDMs aimed at patients.
- I am comfortable addressing RDMs I have committed.

DISCUSSION

- Across every measure, students demonstrated a statistically significant increase in knowledge content and confidence on how to address instances of RDMs in the clinical environment.
- Learning outcomes did not differ between in-person and virtual delivery methods nor with learner background.
- URM and nURM learners reported a similar increase in knowledge and confidence with addressing RDMs.

LIMITATIONS

- As responses were collected voluntarily, the post-session completion rate was low limiting the proportion of paired analyses. This may have affected the power to detect differences in curricular impact and educational outcomes.
- Self-assessed confidence and knowledge may not correlate with competence.

DISCLOSURES

- The program evaluation was submitted to the University of Colorado Institutional Review Board and deemed exempt from formal review.
- The authors do not have any conflict of interest to disclose.
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REFERENCES


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