

Efficacy of the Train-the-Trainer Health Education Initiative on Hepatitis B Understanding in a Midwestern Lao Community

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Background

- While Asian Americans comprise only around 5% of the population in the United States, they take up **more than half** of the 1.2-2 million chronically infected in the nation.
- There are 254,000 Laotian individuals living in the United States in 2019 which is a 28% increase from 2000.
- Among the foreign-born Laotian population living in the United States, **13.6%** have chronic hepatitis B.

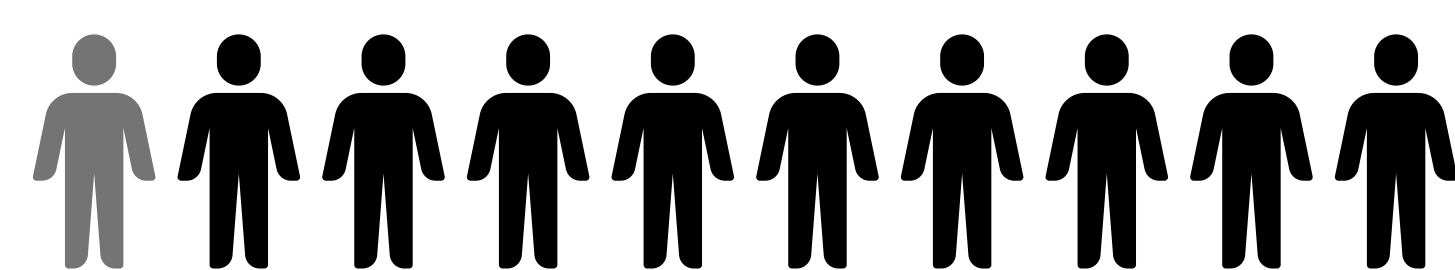


Figure 1. Over 1 of 10 foreign-born Laotians have chronic hepatitis B.

Purpose

To disseminate preventive and screening education regarding Hepatitis B using the Train-the-Trainer framework to a Columbus, OH Lao community in order to increase their understanding of this disease.

Methods

27 participants were recruited. Initial understanding of Hepatitis B was evaluated through a **pre-assessment consisting of 10 questions** on the epidemiology, symptoms, transmission, consequences, and treatment of Hepatitis B. Participants then partook in an interactive presentation on Hepatitis B. Participants then completed a **post-assessment consisting of the same 10 questions** from the pre-assessment. Participants were assessed in their confidence of their understanding of Hepatitis B both before and after the presentation on a **scale of 1 to 5**, with 5 being the most confident.

Results

Of the **27 participants**, **18 completed** both the pre- and post-assessment and were included in this study. Of the 9 participants who were removed from this study, 6 completed only the pre-assessment and 3 completed only the post-assessment. Prior HepB knowledge, testing, and vaccination status (Figure 2), as well as knowledge assessment scores and distribution (Figure 3) and confidence levels and distribution are reported here (Figure 4).

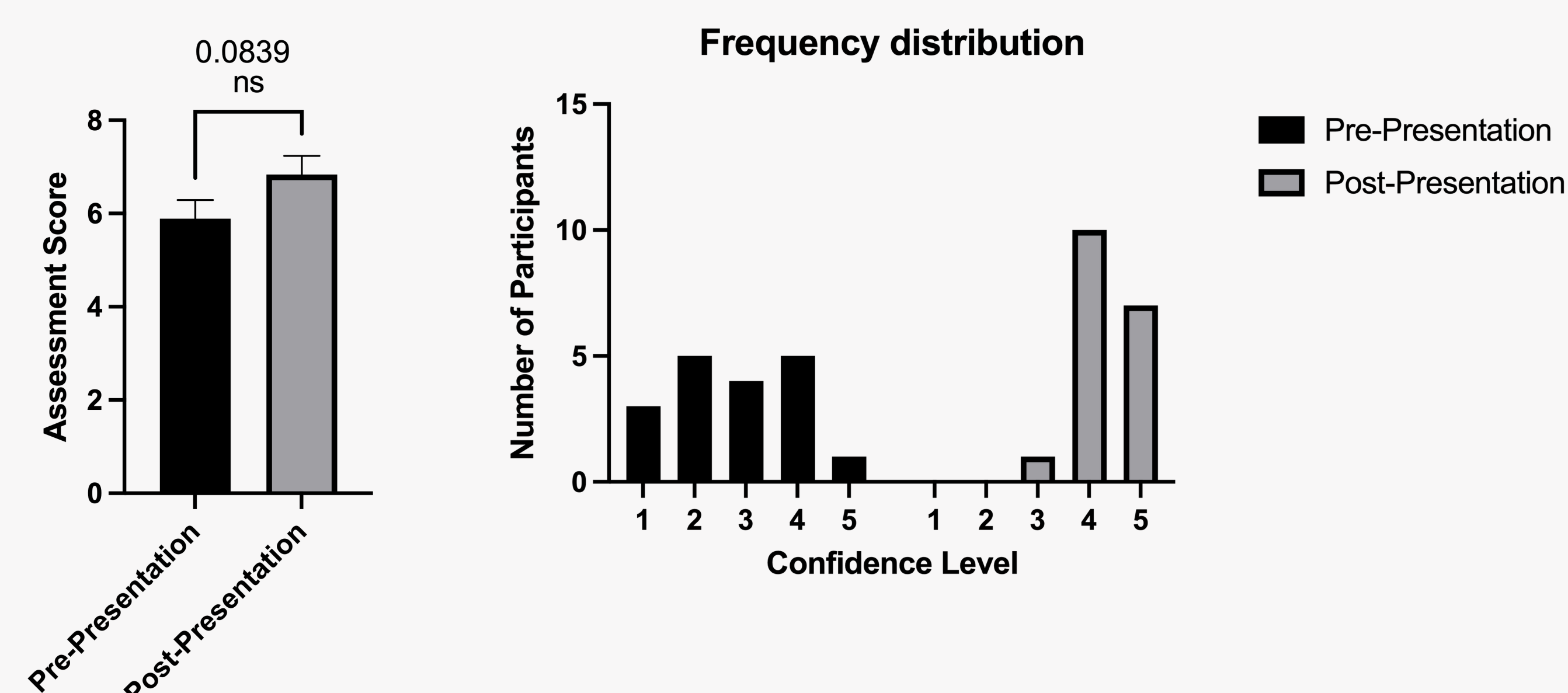


Figure 3. On the left: knowledge assessment scores from pre to post assessment increased from 5.89 to 6.83 ($p = 0.084$). On the right: distribution of confidence scores presented.

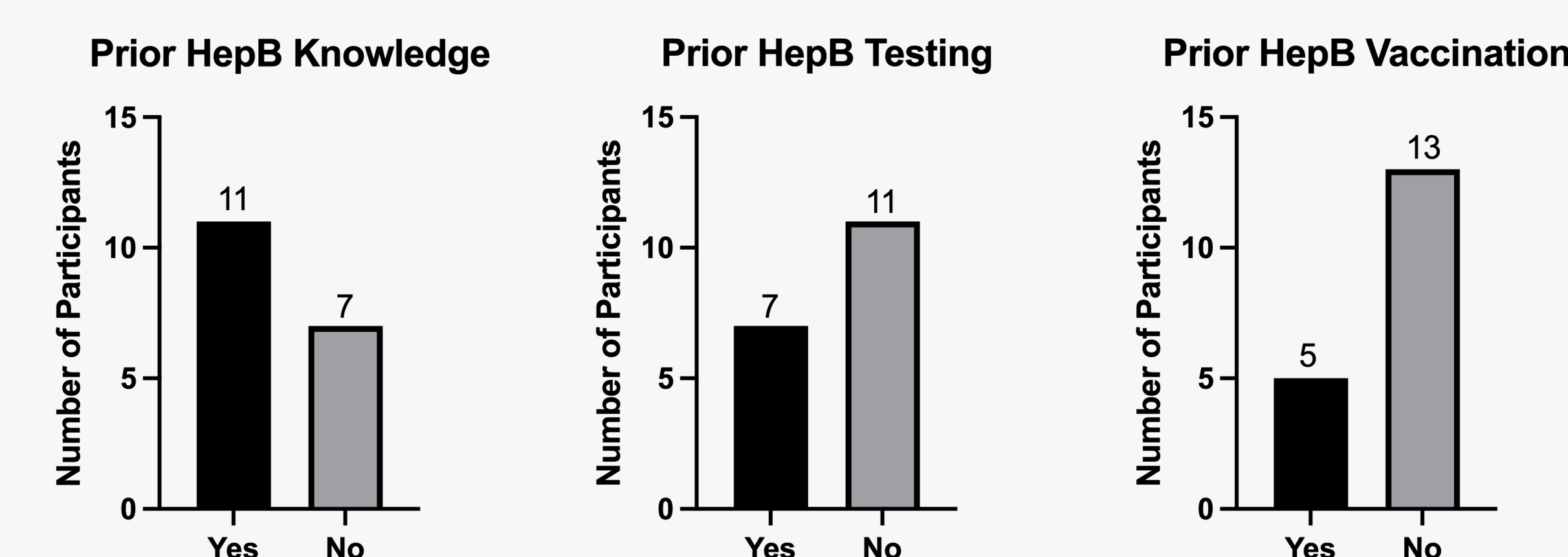


Figure 2. HepB knowledge, HepB testing and HepB vaccination status of participants prior to Train-the-Trainer experience.

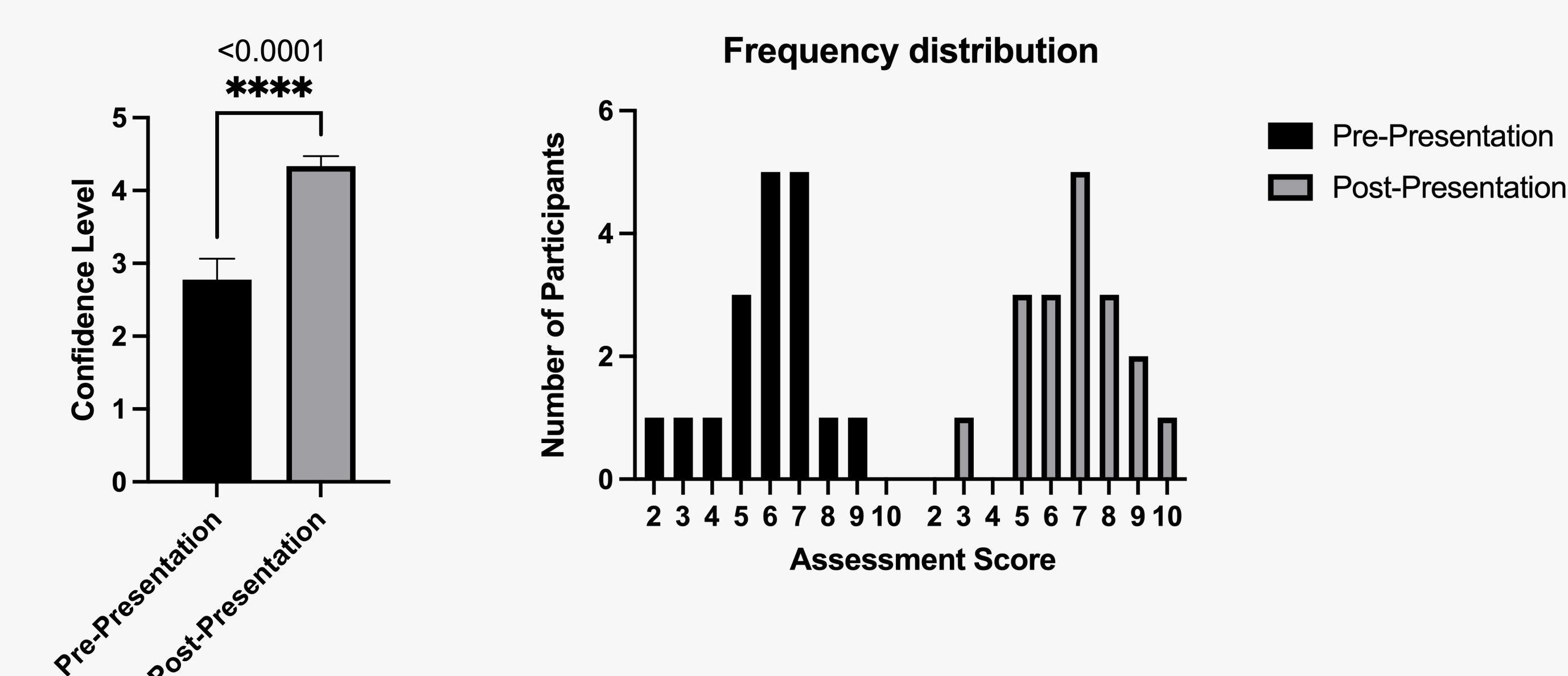


Figure 4. On the left: confidence level from pre to post assessment increased from 2.78 to 4.33 ($p < 0.0001$). On the right: distribution of confidence scores presented.

Conclusions

The significant increase in confidence scores after the program indicates that participants believe they are better equipped to educate other individuals about Hepatitis B. Increasing health literacy is especially effective when health materials are disseminated via members of one's own community. The lack of significant difference in scores could be due to the design of assessment questions and may not accurately reflect an increased understanding of the disease. By spreading awareness of Hepatitis B through the Train-the-Trainer program, we can continue to provide health education and improve early targeted screening to susceptible communities.

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