



Integrating Virtual Edutainment Escape Rooms into Interprofessional Education Workshops

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INTRODUCTION

In today's rapidly evolving, and ever-more digital healthcare landscape, fostering effective collaboration and communication among diverse professional groups has become more critical than ever. However, it is also necessary to keep educational modalities accessible and affordable to all. Building upon the principles of Interprofessional Education (IPE), we developed an innovative approach to promoting interprofessional teamwork, communication, ethical behavior, and a comprehensive understanding of one's own professional scope of practice. By exploring the implementation of a collaborative escape room experience, we unveil an inexpensive IPE method that not only engages participants but also reinforces essential educational points tailored to the unique perspectives and responsibilities of each discipline involved. Questions were precisely tailored to specific disciplines, which required unique knowledge bases in order to answer. This fostered collaboration between differing groups and further highlighted the importance of a multidisciplinary approach to care. This immersive learning environment, created using google slides, a platform both free and accessible to all, encourages active problem-solving, interdisciplinary cooperation, and ultimately strives to improve patient care outcomes through a collective and cohesive approach.

METHODS

A patient case that required interprofessional management was presented to different groups consisting of medical, dental, and nursing students via a virtual escape room. The case was designed sequentially to explore students' perspectives and experiences surrounding individual workflow as well as patient hand-off, shared decision making, and accurately diagnosing the case at hand. The case incorporated assessment questions to address the objectivity of each section, which must be answered correctly with the watchful eye of facilitating faculty in order to move onto the next room in the allotted time. At the end, all participating IPE members met to debrief on the case which further facilitated peer interaction to promote learning and allowed individuals an insight into the differing workflows of each specialty.

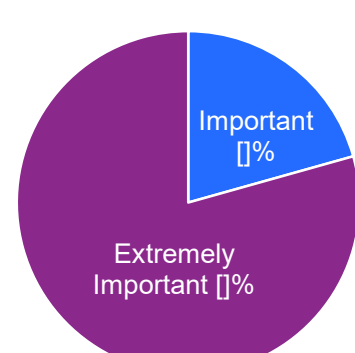
The students were advised to reflect upon their own experience and recognize the full range of their professional responsibilities. They were also able to appreciate how the different roles fostered interprofessional cooperation. The participants were then asked to complete a mandatory post-IPE survey to evaluate feedback of the workshop content.

The faculty completed a post-IPE rubric which evaluated students based on their intra-group communication, collaboration, roles/responsibilities, conflict management/resolution, team-function, and global rating to assess the effectiveness of the group exercises.

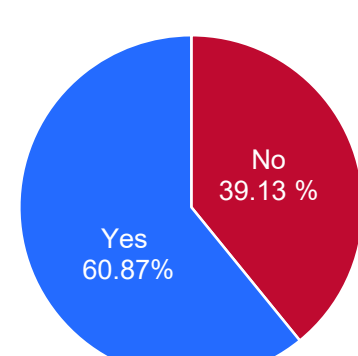
METHODS / DATA

1. Collection of data about using different modalities for IPE sessions and how to make virtual escape rooms which are beneficial, inexpensive, and accessible.
2. Research and familiarization with google slides and basic graphic design skills to develop escape rooms while working with professors to make hints, questions, and cases.
3. Running the escape room sessions with dental, medical, and nursing students together virtually and collecting feedback.
4. Analyzing feedback and comparing the new interactive modalities with non interactive modalities.

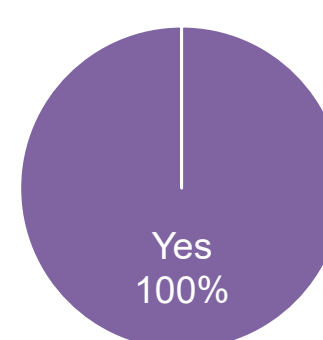
Please rate the importance of promoting and learning effective communication among members of an Inter-Professional team to help you communicate better with patients and other professions.



Have you had Previous Virtual Interprofessional (IP) Education Experience?



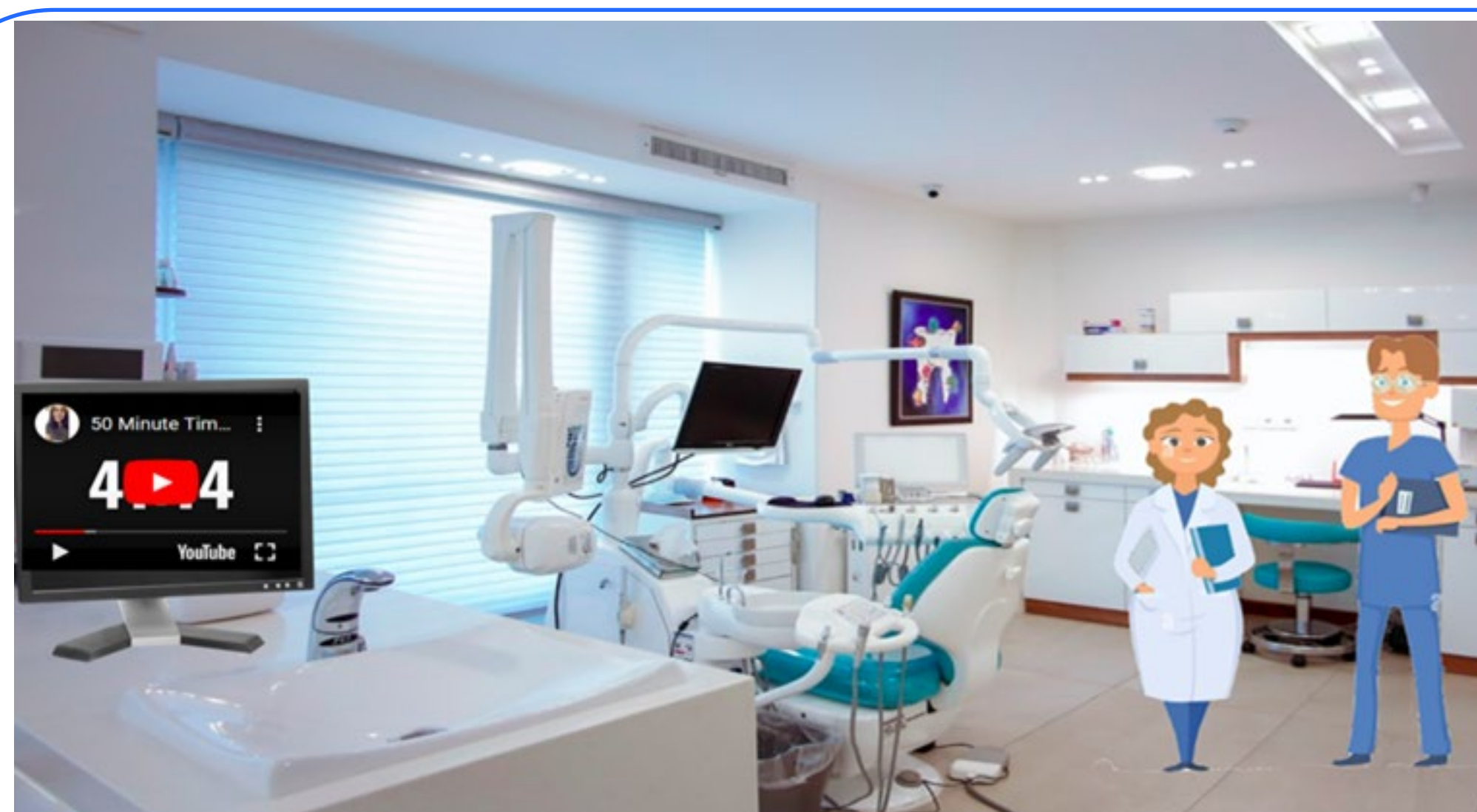
Which of the following statements on Ludwig Angina are true?



RESULTS

Results were obtained in a post-activity survey. All students who participated in the IPE Escape Room answered the following question correct: "Which of the following statements on Ludwig Angina are true?" This indicated the students' abilities to properly understand the information provided to them. Majority of students (60.87%) indicated having a prior IPE education experience, while 39.13% of students did not. When asked about the importance of promoting and learning effective communication among members of an interprofessional team, 79.35% students believed it was "extremely important" and 20.65% believed it was "important." When asked about whether participants had a prior degree in healthcare discipline, 78.26% answered "no" and 21.74% answered "yes." Following up with this question, participants were asked which degrees they have obtained including Bachelor's, Master's, DO/MD/both, DDS/DMD, NP/RN.DNP/MSN/BSN. Majority of participants had obtained a Bachelor's degree (53.66%), followed by a Master's degree (34.15%).

THE ESCAPE ROOM



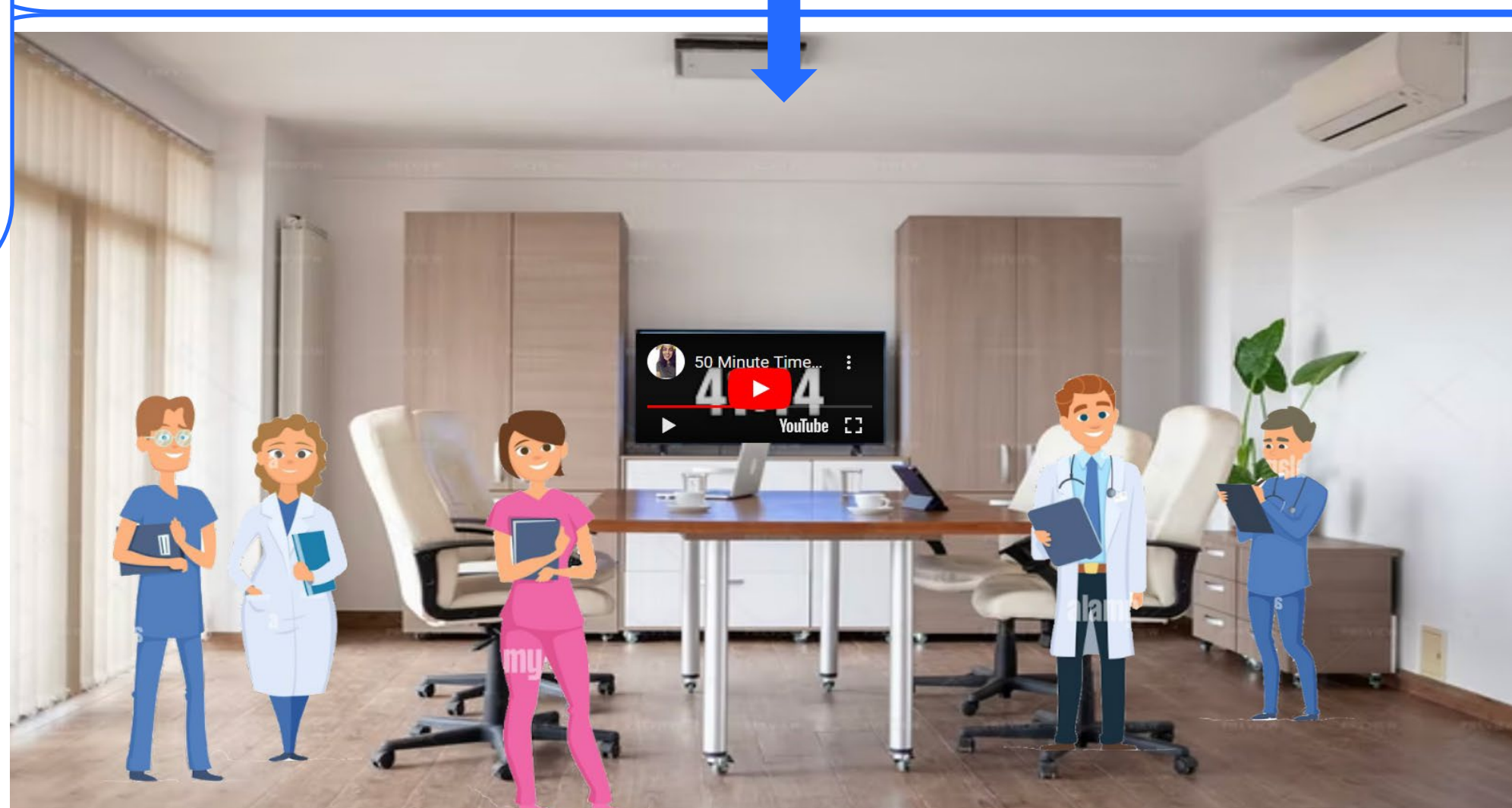
The vowels to solve the Puzzle are: "E, E, I, E, EA"



Puzzle Solution: PREVENTIVE HEALTH



Additional letters of the first word to solve the Puzzle are: "PR, V, NT, V"



Additional letters of the second word to solve the Puzzle are: "H, LTH."

DISCUSSION

- The final production of the virtual escape room demonstrated the possibility to improve teamwork, communication and respect among different healthcare disciplines.
- Piloting this approach required an exchange of ideas among students and faculty from multiple university systems and readily available online technological resources, enabling implementation at a program of any size.
- Similarly designed escape rooms may be a practical approach for interprofessional education with a goal of increasing student engagement and enjoyment.
- Interprofessional education is a unique opportunity for students of diverse healthcare specialties to collaborate during the planning process and is the next step in modernizing professional education.

CONCLUSION

Convenient education in the post-pandemic world is needed to effectively train and keep the attention the next generation of healthcare providers. The concept of a virtual escape room provide an ideal learning environment in which low-cost high-impact education can be attained. The initial design required a significant time investment but can be duplicated and revised for following years. Edutainment emphasizes a sense of team-building and competition through the entertainment component of the program. It also allows teams to gain a deeper understanding of what it takes to function in a more realistic clinical setting. The escape room does not introduce the level of anxiety induced by interaction with a non-simulated patient. It provides an opportunity to learn the importance of teamwork and communication in a fun and safe environment. We look forward to implementing more virtual interfaces into our clinical years and hope to increase the level of interaction and cooperation between differing professional groups

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ACKNOWLEDGEMENT

We extend our sincere gratitude for the invaluable support received from Touro College of Dental Medicine, Touro College of Osteopathic Medicine, and New York School of Career and Applied Studies. Their unwavering commitment to academic excellence has greatly enriched our research endeavors.

We are deeply thankful for the guidance and encouragement provided by Dr. Katrin Tamari, Dr. Matsuko Takeshige, Dr. David Colbourne, Dr. Justin Steinberg, Dr. Patricia Burke, Ms. Yi Gong, and Nicole Israeli, D.D.S. Candidate. Their expertise and insights have played a pivotal role in shaping the direction and scope of our research.

This project would not have been possible without the collaboration and assistance of these individuals and institutions, and we are honored to acknowledge their significant contributions to our work.