

# Acceptability and Perceptions towards an International Infectious Disease Videoconference among medical students and physicians-in-training in Miami.

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## Background

- Tele-education has emerged as an excellent alternative for traditional face-to-face education. It has allowed to connect first-world countries to developing countries for learning about low prevalent pathologies, such as tropical diseases, parasite infections, etc. [1,2]

## Methodology

### ➤ Videoconference program:

The Division of Infectious Diseases at University of Miami and Clinica Good Hope in Peru started an international videoconferencing program in 2018 with the participation of teaching sites from 5 different countries (USA, Peru, Chile, Spain, and UK).

The format consisted of 1-hour duration sessions, in which 2 clinical cases were presented by 2 different institutions. The diagnosis of the cases was unknown by all the participants. After each presentation, an attending physician was invited to discuss the differential diagnosis and treatment of the clinical cases. Then, the presenter revealed the diagnosis and provided a brief review of the topic. Lastly, a few additional minutes were assigned for questions and comments.

We used several videoconference platforms: Skype™, Facebook™ and Zoom™.

- **Objectives:** To determine the acceptability and attitudes towards the University of Miami International Videoconference Program among students, residents and fellows rotating in Infectious Diseases

- **Study Population:** Medical students and physicians-in-training who attended the University of Miami videoconference program.

- **Study Instrument:** Multiple choice survey that used a 5-point Likert scale (1—strongly disagree, 5—strongly agree) to evaluate the participants' acceptance and perceptions towards this program.

## Results

- 54 participants completed the questionnaire. 50% were residents or fellows, 18.5% were medical students, and 27.7% were visiting trainees.
- The overall acceptance was favorable, 64.9 % of participants reported that videoconferencing was as effective or more effective than face-to-face conferences, 96.3% wanted to continue participating in this program, and 87.04% would recommend it as an educational tool.
- Regarding the collaboration with international sites, 87% of participants felt they learned about diseases not commonly encountered in their countries, 85.2% considered that this program allowed to learn about different treatment approaches, and 68.5% believed that it allowed learning about novel diagnostic tests.
- In terms of the content, 85.2% considered that the cases were interesting and 83.3 % believed that they were presented in an organized fashion.
- Regarding the software performance, 75.9 % believed that images were above average or outstanding, but only 48.1% thought the same about the audio.
- In terms of participation, 57.4% believed that interaction between the local audience and physicians from different sites was easily accomplished.

**Table 1.** Sites participating in the International Videoconference Program

Participating sites	City, Country
University of Miami, Miller School of Medicine	Miami, USA
Clinica Good Hope, Universidad Peruana Union	Lima, Peru
Hospital 12 de Octubre	Madrid, Spain
Aventura Hospital and Medical Center	Aventura, USA
Instituto Nacional de Enfermedades Neoplasicas	Lima, Peru
Hospital Padre Hurtado, Clinica Alemana-Universidad del Desarrollo	Santiago, Chile
The Newcastle upon Tyne Hospitals NHS Foundation Trust, Royal Victoria Infirmary	Newcastle, UK

## Results

**Figure 1:** Countries participating in the Infectious Disease Videoconference (A). Physicians from different sites discussing the clinical cases (B)



## Conclusions

- This videoconferencing program was widely accepted among trainees. The collaboration with international sites was perceived as one of the program assets.
- We believe that implementation of programs like this would be highly beneficial in Infectious Disease education.

## References

1. Boatin A, Ngonzi J, Bradford L, Wylie B, Goodman A. Teaching by Teleconference: A Model for Distance Medical Education across Two Continents. *Open J Obstet Gynecol.* 2015; 5 (13), 754-61.
2. Gonzales-Zamora JA, Alave J, De Lima-Corvino DF, Fernandez A. Videoconferences of Infectious Diseases: An educational tool that transcends borders. A useful tool also for the current COVID-19 pandemic. *Infez Med.* 2020 Ahead of print Jun 1;28(2):135-138.