

The Use of the Metaverse as a Teaching Tool for Uterine Malformations in Medical Education

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Objective

To share our experience using the metaverse as a teaching tool for uterine malformations in medical education.

Methods

Professors and residents from the radiology and gynecology departments of five universities were invited to participate in a real-time virtual training session. This session eliminated geographical barriers and incorporated features such as sequential viewing of 2D imaging slices and shared navigation within a 3D organ model.

As part of this interactive approach, remote sessions were conducted in which the instructor presented clinical cases while participants, connecting from different locations, analyzed ultrasound images using the metaverse platform. Participants were able to manipulate the images interactively, navigate through 3D datasets, and explore a virtual model with a segmented representation of the uterine cavity.

After the training, participants completed a questionnaire assessing the benefits and potential challenges of this educational modality.

Results

A total of 12 professors and 35 residents participated in the study. The use of the metaverse introduced innovative communication and learning strategies into medical education. All participants considered the tool valuable and effective for educational purposes. The interactive and immersive virtual environment enhanced their understanding of anatomical and pathological features by allowing them to be “inside the examination” in a way that traditional methods cannot replicate.

Conclusion

The metaverse is an evolving technology with substantial potential as a digital educational tool. It can significantly enhance collaboration and improve learners’ understanding of uterine malformations and other gynecological conditions.

