'It was all a dream' - Perceived benefits and limitations of a clinical game-based simulation by Year 3 osteopathy students

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BACKGROUND: Simulation-based education is becoming an integral component in healthcare programs. It is defined as any educational activity implying simulation procedures to recreate clinical scenarios. Previous studies have shown that simulation can improve patient safety by enhancing healthcare providers' competencies. However, few studies have investigated students' perceptions of simulation within osteopathic programs. This study aimed to measure and compare Year 3 osteopathy students' perceptions of a game-based simulation versus traditional clinical training.

METHOD: Year 3 osteopathy students from the Institut d'Ostéopathie de Rennes-Bretagne (N=68), were invited to participate in a Likert-based survey and semi-structured interviews at the end of a 12-week clinical training. Three clinical training modalities were implemented and evaluated: a demonstration clinic (DC), a video-streamed demonstration clinic (VDC), and an innovative game-based simulation taking inspiration into hip-hop culture, the 'clinical battle' (CB).

RESULTS: Sixty-seven Year 3 osteopathy students completed the surveys, and eight students were interviewed. CB was significantly felt ($p<0.05$) as the most engaging, most useful to gain feedback, and least stressful of the three training proposed. The CB was also perceived as similar to a DC to formulate a diagnosis and for reflective practice ($p>0.05$). The semi-structured interviews offered deep structured explanatory narratives depicted from thematic analyses. Five themes emerged: engagement, clinical reasoning improvement, stress, ideas for improving clinical training, and reflective practice and self-assessment.

CONCLUSION: The simulation-based training implemented in this study is positively perceived by students for their clinical education. Future research could focus on the effectiveness of game-based simulation versus traditional training on clinical competencies acquisition.