Introduction and Aims

High-fidelity simulation has recently been implemented in France in the Anaesthesia training curriculum. However, due to an increasing imbalance between the growing number of students and the human resources available, all residents cannot play a role during scenarios. The study objective was to assess the impact of learner’s role (active participant -observer or observer only) on learning outcomes immediately after high-fidelity simulation and the 3-month retention of knowledge.

Results

107 anaesthesia residents were included and 104 questionnaires analysed. Satisfaction regarding the training session was high in both groups but higher in the AP-O group (9 (8-9) vs 8 (8-9) /10, p = 0.019). A significant increase in medical knowledge scores was recorded in both groups immediately after simulation with a higher score in the AP-O group (median score: before: 6 (5-8) vs 7 (5-8) /16, p=0.382, and after: 10 (8-11) vs 9 (7-10) / 16, in AP-O and O groups respectively, p=0.001, Fig 1). High scores for non-technical skills and learning transfer were observed after the session, without any difference between the two groups (p > 0.05). Retention of knowledge was difficult to interpret because of limited participation (48%).

Discussion

This study suggests an immediate improvement of learning outcomes for both roles after immersive simulation but some learning outcomes may be better for residents engaged as players in scenarios.

Keywords : Simulation – Anaesthesia training– observer role- learning