

## **Title**

# **Simulation-Based Evaluation among Moroccan nursing student: comparing formative assessment Vs Summative assessment**

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## Abstract

**Background:** Simulation-Based evaluation has become an increasingly used tool in health professional education(1); two types of evaluation can be used formative and summative assessment(2). All forms of assessment have their strengths and weaknesses; however, formative evaluation is commonly the most widely used tool in simulation(3). This study aim to compare these two types of assessment in nursing simulation.

**Methodology:** This study targeted 24 Master degree students, Students were divided into two groups, Data collection was conducted for the first group during formative assessment (procedural simulation), and for the second group during summative assessment (OSCE station), we used the same thematic scenario for the 2 groups and scored out of 20. Three parameters were evaluated: knowledge and skills using evaluation grids, stress level during the scenario using the visual analogue scale (VAS) with a Numerical rating scales (NRSs) going from 0 to 10. And finally, the level of satisfaction was evaluated using "the questionnaire on satisfaction and self-confidence of students in learning" established by the national league of nursing.

**Result:** The mean age of the participants was  $23 \pm 1.7$  years. 75% of the students were female. Students who were assessed by formative assessment (procedural simulation) **average score 13,58 ( $\pm 3,679$ )** performed better than students evaluated using summative assessment (OSCE station) **average score 8,41( $\pm 4,033$ )**. Stress was experienced by all participants, however, stress level was higher in the group evaluated by the summative assessment (VAS:8/10) Compared with summative assessment (VAS:4/10). Regarding satisfaction, 96% of the students evaluated through formative assessment were satisfied compared with 25 % of students evaluated through summative assessment.

**Conclusion:** Formative assessment tends to be preferred among students. Various complaints arise in term of summative evaluation, yet the two evaluation strategies can be mixed to have improved results. Also, further research is needed concerning providing feedback during the summative assessment.

**References:**

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