**Aim**

This study aimed to assess whether the method of teaching endodontology influenced the quality of root fillings made by undergraduate students.

**Undergraduate Clinical Endodontic Programme at ACTA**

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<th>Former</th>
<th>Revised</th>
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<td>Preclinical training</td>
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<td>Endodontic treatment on patients</td>
<td>Simulated clinical training</td>
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<td>Formative assessment</td>
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<td>Summative assessment (former)</td>
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**Methods & Results**

An intermediate cohort (N=91) comprised partly students attending the former programme (involving patients in preparation for, and during the, summative assessment) and partly students attending the revised programme (without the involvement of patients until the student passed the summative assessment).

After succeeding in the summative assessment, the quality of the first root filling made by the student in a patient under supervision of either a general dental practitioner or an endodontist was evaluated.

**Good quality (the following has to account for all root canals of the tooth):**

- No ledges, perforations, transportations or separated instruments.
- On the periapical radiograph:
  - Root filling follows the natural form of the root canal and is completely within the confines of the root (no extrusion).
  - Root filling ends no shorter than 0-2 mm from the apex.
  - Root filling appears well condensed.

**On Patients**

- **Less complex treatments**
  - 59% good quality (22/37) \( P=0.045^* \)
- **Complex treatments**
  - 46% good quality (12/26) \( P=0.825 \)

**Simulated**

- **General Dental Practitioners**
  - 62% good quality (47/76)
- **Endodontists**
  - 88% good quality (14/16)
  - **Complex treatments**
    - 50% good quality (6/12)

**Conclusion**

Within the limitations of this study, the following conclusions can be drawn as follows:

1. The quality of root fillings made by students who attended the revised programme—without the involvement of human subjects until students passed the summative assessment—was similar to those made by students who attended the former programme, which involved patients in this part of the training and in the assessment.
2. Undergraduate students might benefit more from supervision by endodontists than from supervision by general dental practitioners; higher quality root fillings might be obtained under supervision of endodontists than under supervision of general dental practitioners.