

# VP based examination in paediatric nursing

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## Introduction

Virtual Patient (VP) cases include patient introduction, patient interviews, physical exams, lab tests, diagnosis, therapy and/or clinical decision-making, as well as a detailed feedback section. Since the system keeps track of individual students' performance it has been suggested for assessment of clinical reasoning.

## Aim

In this study, we examine the use of VP cases for assessing paediatric nursing students' clinical competence and students' opinions of VP cases for their learning.

## Methods

It was an intervention study that included two exams. For the first exam, the paediatric nursing students wrote a paper describing actual clinical patient scenarios from their internship at a children's ward. Twelve cases were selected by the course director (an experienced paediatric nurse), developed and implemented in the VP system for an examination in the end of the education. For the second exam, the course director constructed cases for the neonatology class. All cases were reviewed by a paediatrician. Before the exam, the students had the ability to test other cases in the VP system. Both exams were home-based and the paediatric nurse students individually had three hours to solve four cases. The students' opinions were followed with a questionnaire.

## Results

Our results show high levels of acceptance of using VP cases as an examination method. The students found the cases realistic and engaging. They also thought it was a good way to practice their clinical skills. Most students supplied correct diagnoses and made adequate clinical decisions. However there was a wide range of capacity to argue for the clinical reasoning process for clinical decision-making.

## Conclusions

VP cases were accepted by students as an assessment method for clinical competence in nursing. It was possible to develop cases for nursing. The course director appreciated the possibility to follow the whole reasoning process of the individual students. VP was possible to use for assessment, but needs some refinement before being implemented on a regular basis.

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