Are final year physiotherapy students able to independently recognise errors encountered in their own simulated practice?

Authors
Name: Suzanne Gough, Judith Sixsmith, Abebaw Yohannes & Pennie Roberts
Position: Senior Lecturer in Physiotherapy
Company: Manchester Metropolitan University
Background

Innovations in teaching and learning within physiotherapy education have included various forms of simulation-based education including the use of simulated or standardized patients, clinical training wards and video vignettes.

Only one video analysis study has provided an insight into how qualified physiotherapists communicate with patients about errors of performance\(^1\).

No published studies have explored error recognition abilities of physiotherapy students with regards to their own simulated experience.
The aim of this study was to explore the error recognition ability of final year physiotherapy students when reviewing their own high-fidelity cardio-respiratory simulated learning experience.
Methodology

- Field Notes & Photographs (Standardization)
- Presentation of Key Themes
- Pre-brief
- Debrief
- Cardiorespiratory Simulated Scenario
- Video Observation
- Think Aloud
- Review Interview
- Video Analysis
- Verbatim Transcription Simulation Videos & Think Aloud Interviews
Results

Although students independently reflected on their actions, the detail provided was mainly superficial during the TAR.
Errors identified by students

Active Failures

Error Producing Factors

Latent Errors
Active Failures

Suction usage, Manual chest physiotherapy techniques, CXR and O2
Error Producing Factors

Individual knowledge and skill deficits
Video Analysis

Despite using the TAR method, students were not always able to identify all errors made during the simulation.
Failure to identify latent errors

Hand written errors in the medical notes

(Planted errors)

a) Documented oxygen prescription and oxygen delivery mismatch

b) Basal crackles noted incorrectly in the medical notes, which did not match the clinical history or x-ray.
Summary

Whilst students were able to *identify some errors* in their simulated practice, they *required further facilitative* probing to explore the *nature and reasons* for their errors.

The use of *TAR* method alone was *not enough to stimulate deep reflection* relating to errors.
References


