

Abstract

Cost consequence analysis of simulation-based education and video-reflexivity in pre-registration physiotherapy

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Background Limited health economic costs analysis has been published in relation to the use of simulation-based education (SBE) in healthcare. Whilst two research studies have previously reported the cost of delivering simulation scenarios within a physiotherapy research study, both omitted full economic costs (FEC) associated with SBE design and delivery.^{1,2} To date, the cost analysis of combining SBE and video-reflexive ethnography (VRE) in pre-registration physiotherapy is unreported.

Methodology Cost consequence analysis has been undertaken in relation to phase 2 of a pragmatic mixed methods study of the use of SBE in cardio-respiratory physiotherapy in the UK. Phase 2 featured the use of SBE and VRE to explore performance, behaviours and personal experiences of final year pre-registration physiotherapy students.³ The transparent approach to costing (TRAC) was used to calculate FEC of 12 scenarios and respective video-reflexive interviews (debriefs).

Results The value attributed by participants included an opportunity to promote skills development, increase self-awareness, placement preparation and the potential to influence patient safety.³ Whereas, the cost analysis of providing this intervention was £3706 per 24 learners, equating to £154.42 per learner. Alternatively, streaming the scenario to an entire cohort reduces costs per learner to £31.10 (saving £123.32 per learner). The cost consequence analysis related to SBE design and delivery, equity of provision, capital investment costs and associated faculty training costs.

Conclusion and recommendations Further experimental studies will be required to demonstrate the value of combining different mediums, modalities and methods of SBE with VRE before comprehensive health economic evaluations relating to impact on learning outcomes and academic performance, transfer to practice and healthcare can be established. Future research will help to ascertain the value and the associated costs to inform decisions of the efficacy, viability and sustainability of SBE in physiotherapy.

References

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