Embedding Brief Behaviour Change Simulation into Acute Dietetics Education: A Pilot Curriculum Innovation

Annelie Shaw[1], Sarah Browne[1], Ruth Charles[1], Clare Corish[1], Nicola Dervan[1]

[1]School of Public Health, Physiotherapy and Sports Science, University College Dublin, Dublin 4, Republic of Ireland

Introduction

Behaviour change (BC) conversations are central to dietetic practice across acute care settings, particularly where consultations are brief and clinically complex. National and international guidance emphasises structured BC approaches within healthcare delivery[1,2].

Despite this emphasis, simulation-based education (SBE) remains underdeveloped within dietetics curricula compared with other health professions[3]. Embedding structured SBE within preregistration dietetics education may support psychologically safe rehearsal of brief BC-focused consultations prior to clinical placement.

Aim: Design and embed brief BC SBE within a Year 2 MSc Dietetics professional practice module in a university setting, addressing a recognised training need in acute care communication.

Methodology

3 brief BC simulations (Table 1) using standardised participants were embedded within a Year 2 MSc Dietetics professional practice module. Simulations focused on acute care diagnoses and were supported by structured pre-learning, PEARLS [5] debriefing and Kirkpatrick-informed evaluation [6] (Figure 1).

1.Pre-Learning [1,4]
- OARS communication skills
- COM-B framework
- Acute care BC skills

2.Simulation
- Standardised participants
- 10-12 minute scenarios
- COPD, T2DM & chronic liver disease

3.Debrief
- PEARLS framework [5]
- Facilitated reflection
- BC feedback

4.Evaluation
- Kirkpatrick Levels 1 & 2 [6]
- Learner feedback
- Iterative refinement

FIGURE 1. Structure and evaluation framework for the brief behaviour change simulation intervention

TABLE 1: Overview of Simulation Scenarios

Scenario Overview	Behaviour Change Focus
COPD exacerbation	Poor oral intake and oral nutrition supplement adherence
Newly diagnosed T2DM with cellulitis	Dietary uncertainty and self-management
Alcohol-related liver disease	Poor appetite, nausea and low motivation

Results

KEY FINDINGS :

- Feasible curriculum integration of brief SBE
- High learner satisfaction and perceived relevance
- 100% reported intention to apply learning to practice
- Debriefing and peer observation positively received
- Strong perceptions of clinical realism

Results

QUANTITATIVE LEARNER FEEDBACK (Figure 2)

Learners reported high levels of perceived:
- relevance to future clinical practice
- reflective learning during debriefing
- respectful and constructive peer/facilitator feedback
- value of peer observation
- appropriate level of challenge

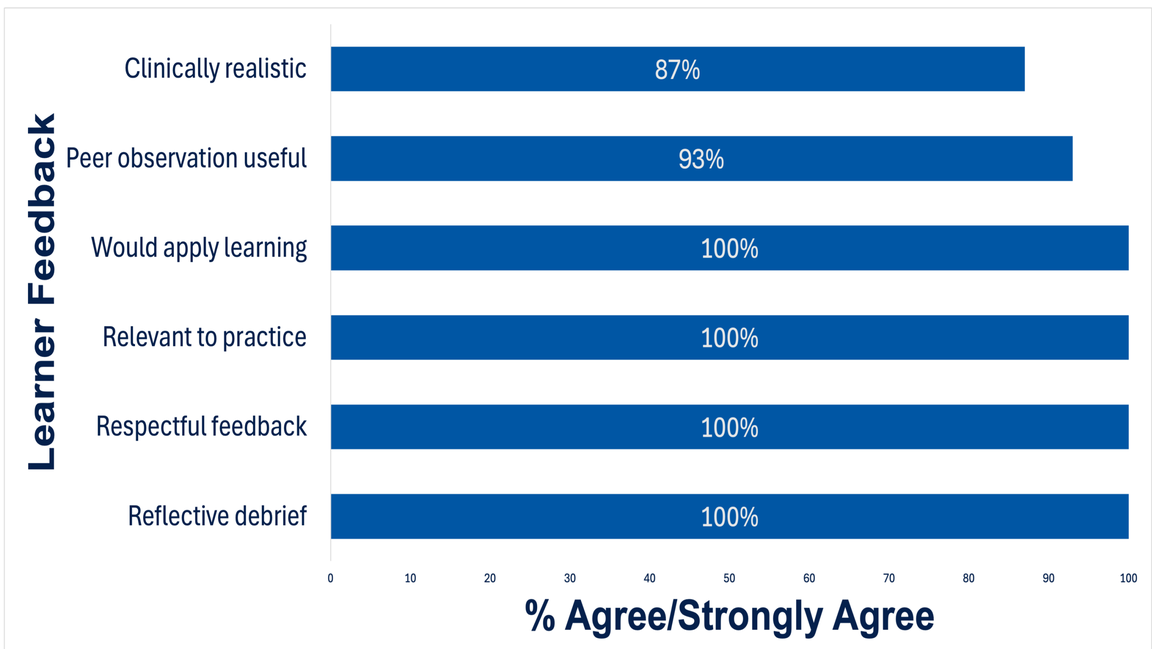

FIGURE 2. Quantitative Learner Feedback of the Simulation Experience (n=15)

DESCRIPTIVE LEARNER FEEDBACK

Psychological Safety

"**Safe space** to reflect with other peers."

"The circle setup provided students with **inclusivity** and made everybody feel **comfortable** expressing how they felt."

Clinical Realism

"The patient showed more **resistance** which made it **feel more realistic**."

"The simulation was designed to mimic a **real-life situation** as much as possible."

Peer Learning

"**Constructive feedback** from the group was a **valuable way of learning**."

"Peer observation **engaged everyone** and brought a **variety of insights."**

Structured Debriefing

"The debrief helped me **focus** on the **consultation** as a **whole**."

"The debrief part of the session was **excellent** and **well structured**."

"The actresses' perspective was **really useful** for **learning**."

Conclusion

Embedding brief BC simulation within a preregistration dietetics professional practice module was feasible within the existing timetable and aligned with contemporary behaviour change frameworks.

Learners reported high perceived relevance to future clinical practice, reflective learning, and psychologically safe rehearsal of acute care communication skills. Iterative refinement informed ongoing development of simulation realism and observer engagement.

This initiative provides a practical model for integrating theory-informed SBE into preregistration dietetics education. Future work should explore formal evaluation of learner performance and transfer to placement practice.

References:
1. Michie S, van Stralen MM, West R. The behaviour change wheel: A new method for characterising and designing behaviour change interventions. Implementation Science. 2011;6(1):42.
2. NICE. Behaviour Change: Individual Approaches. London: National Institute for Health Care Excellence; 2014. Contract No.: PH49.
3. O'Shea M-C, Palermo C, Rogers GD, Williams LT. Simulation-Based Learning Experiences in Dietetics Programs: A Systematic Review. Journal of Nutrition Education and Behavior. 2020;52(4):429-38.
4. Koh-Knox CP. Motivational Interviewing in Health Care: Helping Patients Change Behavior. Am J Pharm Educ. 73: © 2009-American Association of Colleges of Pharmacy.; 2009.
5. Eppich W, Cheng A. Promoting Excellence and Reflective Learning in Simulation (PEARLS): development and rationale for a blended approach to health care simulation debriefing. Simul Healthc. 2015;10(2):106-15.
6. Kirkpatrick D, Kirkpatrick J. Evaluating training programs: The four levels: Berrett-Koehler Publishers; 2006.