Bridging the Nutrition Knowledge Gap in Medical Education: Translating Evidence into Action for Clinical and Population Health

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Background: Despite the critical role of nutrition in preventing and managing noncommunicable diseases (NCDs), medical students and doctors continue to demonstrate limited nutrition knowledge and confidence in providing dietary advice. This gap undermines preventive care, population health outcomes, and the achievement of global nutrition and sustainability targets.

Objective: Drawing on a recently published Journal of Human Nutrition and Dietetics scoping review (Khiri & Howells, 2025), this presentation shares key findings and evidence-informed recommendations to strengthen nutrition education and integration across medical curricula and clinical practice. The aim is to support systemic change in how future healthcare professionals are equipped to deliver effective nutrition care.

Methods: Following PRISMA-ScR guidelines, 28 peer-reviewed studies (2014–2024) were reviewed across PubMed, Web of Science, Embase, and ERIC databases. Braun and Clarke's six-step thematic analysis identified key barriers and proposed solutions.

Findings: Four interrelated barriers were identified: (1) insufficient curricular time, (2) low confidence and perceived relevance, (3) stigma and personal health habits, and (4) limited integration in clinical practice. Four evidence-based solutions emerged: (i) **Curricular innovations**, including altering the current medical curriculum; introducing nutrition into mandatory assessments; prerequisites for medical school admission, (ii) **Standardisation and Guidelines** including implementing national competency standards for future doctors, (iii) **Clinical Practice Integration** including allocating more time and resources for nutrition education and practice within clinical settings, further research intro nutrition education in medical education and clinical settings, and (iv) **Professional Development and Collaboration** including providing more postgraduate education pathways in nutrition, developing a multidisciplinary approach in medical education involving dietitians, educators, and policymakers.

Conclusion: Closing the nutrition education gap is not only an academic imperative but a moral one. When nutrition is embedded as a core clinical skill, medical education becomes a lever for health equity, empowering practitioners to influence lifelong dietary behaviours, enhance patient care, and strengthen community wellbeing. In doing so, we advance the shared goal of improving both human and planetary health.

Keywords: nutrition education, medical curricula, clinical nutrition, population health, competency frameworks, noncommunicable diseases

Reference: Khiri, N., and Howells, K., (2025) Nutritional Education in Medical Curricula and Clinical Practice: A Scoping Review on the Knowledge Deficit Amongst Medical Students and Doctors. *Journal of Human Nutrition and Dietetics*. https://doi.org/10.1111/jhn.70031