Beyond education and

training: Is a new paradigm required to better support general practitioners to feel competent in nutrition care?



Lauren Ball, Jennifer Crowley, Breanna Lepre

SUPPORTING HEALTHY EATING in general practice is one of society's economic 'best buys' for improving population health.1 People regularly engage with general practice in Australia, with an average of five visits per person per year and extensive engagement with priority populations.² Practice guidelines for general practitioners (GPs) identify nutrition as a fundamental component of high-quality routine care.3 In Australia, the National Preventive Health Strategy and the National Obesity Strategy call for a 'big shift' in general practice to focus on healthy eating to build the world's best healthcare system. Clearly, GPs in Australia, New Zealand and other developed countries are expected to provide nutrition care.

A fundamental problem is that while GPs recognise that nutrition is important, they also acknowledge that it is a superficially approached area of healthcare in general practice, and many doctors do not feel competent in addressing nutrition-related concerns.⁴ A recent international review of GPs' knowledge, skills and attitudes towards nutrition care showed that GPs are unlikely to be maximising the potential for nutrition care in clinical practice.⁴ GPs face barriers to providing nutrition care, including lack of knowledge and skills and inadequate time to provide counselling.^{4,5} Therefore, it is unsurprising that nutrition is a highly requested area of professional development by students, new graduates and established GPs.^{6,7} Gastroenterology fellows⁸ and internal medical interns⁹ also report not feeling competent in nutrition care. Thus, there is wide recognition that nutritional training is insufficient in medical education.

For over 50 years, global bodies have been urging medical institutions to commit to making nutrition education compulsory in medical training. Yet, no genuine improvement has occurred in any country worldwide.10,11 Student selection, pedagogical approaches and increasingly crowded curricula are at a critical precipice, with a common theme that a more considered, humanistic approach to doctor development is urgently needed to guide graduates into general practice.12 Recognition of the interrelationship between these factors would provide the opportunity for innovation in general practice workforce development, particularly in emerging areas, such as nutrition.

In addition to cited barriers, underexamined factors might influence GPs' provision of nutrition care. Studies have identified that medical students, GPs and other health professionals draw upon their life history, personal experience and personality attributes when providing nutrition care,^{13,14} meaning formal nutrition education can only ever be partially responsible for clinical practice. Health professionals perceive their personal dietary experiences as strongly influencing their self-efficacy in providing nutrition care. Health professionals learn through observation and role modelling, which shape their attitudes and beliefs about nutrition care. Further, social interactions influence self-efficacy through social persuasion and social pressure, which both facilitate and hinder the adoption of personal dietary behaviour.¹⁴

Personality traits have been shown to influence doctors' career pathways, specialty choices, risk-taking behaviours and work locations. For example, GPs who exhibit high levels of persistence and self-directedness are more resilient in the workplace.¹⁵ However, the personality attributes and life experience that might affect a GP's ability and willingness to provide nutrition care remain largely unknown and must be considered in meaningful efforts to improve the nutrition capacity of the GP workforce.

If the hypothesis that nutrition education can only ever be partially responsible for clinical practice could be proven, it would address an important gap in knowledge for the development of effective solutions to improve nutrition care internationally. An example of a GP who draws upon life history and personality attributes when providing nutrition care is provided in Box 1.

If life history and personality are relevant to GPs' provision of nutrition care, strategies for the development of effective solutions to improve nutrition care might include:

- introducing activities at entry point to differentiate prospective medical students who are likely to promote healthy lifestyles as a routine component of care
- initiating a shift in medical education by providing learning opportunities that draw upon life experiences
- directly supporting GPs and interdisciplinary teams with their own diet to increase their ability and willingness to provide nutrition care
- introducing processes to match patients and GPs based on personality, so that those who would benefit from long-term lifestyle care are connected with GPs who are naturally inclined to provide this support.

More broadly, financial incentives to support GPs to promote lifestyle change are needed, including increased investments into primary prevention. Furthermore, continuing medical education might bridge the current gap and empower GPs to provide nutrition counselling and advice.⁴ The same effect of life history and personality could be true for other procedural aspects of general practice, warranting further investigation as we strive to improve workforce support and development.

Authors

Lauren Ball PhD, Chair of Community Health and Wellbeing at Springfield, Queensland, The University of Queensland, Brisbane, Qld

Jennifer Crowley PhD, Honorary Senior Research Scholar, Department of Nutrition and Dietetics, Faculty of Medical and Health Sciences, The University of Auckland, New Zealand

Breanna Lepre PhD, Centre for Community Health and Wellbeing at Springfield, Queensland, The University of Queensland, Brisbane, Qld

Competing interests: LB is a member of the *Australian Journal of General Practice* Editorial Advisory Committee but had no role in the review process for this manuscript. JC and BL have no competing interests to declare.

Funding: None.

Provenance and peer review: Not commissioned, externally peer reviewed. **Correspondence to:**

lauren.ball@uq.edu.au

References

- World Health Organization (WHO). Tackling NCDs: 'Best buys' and other recommended interventions for the prevention and control of noncommunicable diseases. Geneva: WHO, 2017. Available at https:// iris.who.int/bitstream/handle/10665/259232/ WHO-NMH-NVI-17.9-eng.pdf?sequence=1 [Accessed 19 December 2023].
- Australian Government Department of Health. Future focused primary health care: Australia's Primary Health Care 10 Year Plan 2022-2032. Canberra: Commonwealth of Australia (Department of Health), 2022. Available at www.health.gov.au/sites/default/files/ documents/2022/03/australia-s-primary-healthcare-10-year-plan-2022-2032-future-focusedprimary-health-care-australia-s-primary-healthcare-10-year-plan-2022-2032.pdf [Accessed 19 December 2023].
- Royal Australian College of General Practitioners (RACGP). Smoking, nutrition, alcohol, physical activity (SNAP): A population health guide to behavioural risk factors in general practice. 2nd edn. Melbourne: RACGP, 2015. Available at www.racgp.org.au/getattachment/

Box 1. Case study

Dr Lesley Short is a general practitioner (GP) in a busy urban clinic. As a child, Lesley spent her summer holidays at the beach with her extended whanau (family). Guided by the adults and as part of daily activities, all the children shared in the gathering and preparing of food for the table. The experiences helped to shape her personal understanding and appreciation of the relationship between food, health and wellbeing. As a GP, this experience contributes to her lifelong desire to prevent lifestyle disease. As a result, nutrition is part of the 'mental model' Lesley draws upon when guiding the direction of general practice consultations.

For over 25 years, Lesley's personality attributes of resilience and self-directedness have contributed to her personal resilience and proactive approaches needed for the challenging demands of general practice, such as the recent pandemic. Lesley's personality is high in harm avoidance, persistence and self-directedness, meaning she is drawn to helping others over the long term and continues to raise the topic of nutrition opportunistically with patients, as well as following up in between consultations for patients undergoing specific dietary treatments for conditions. Lesley always strives for positive relationships with patients and introduces nutrition care into consultations for patients with lifestyle conditions using a spiral approach that is evidence based and culturally appropriate. She follows up with referrals for interdisciplinary nutrition care within the practice or to practice-approved providers.

bb78b780-1c37-498a-8ba3-b24a1a4288d9/ Smoking-nutrition-alcohol-physical-activity-SNAP. aspx. [Accessed 19 December 2023].

- Vrkatic A, Grujicic M, Jovicic-Bata J, et al. Nutritional knowledge, confidence, attitudes towards nutritional care among GPs. Healthcare (Basel) 2022;10(11):2222. doi: 10.3390/ healthcare10112222.
- Crowley J, Ball L, McGill AT, et al. General practitioners' views on providing nutrition care to patients with chronic disease: A focus group study. J Prim Health Care 2016;8(4):357–64. doi: 10.1071/ HC15048.
- Crowley J, O'Connell S, Kavka A, Ball L, Nowson CA. Australian general practitioners' views regarding providing nutrition care: Results of a national survey. Public Health 2016;140:7–13. doi: 10.1016/j.puhe.2016.08.013.
- Bredhauer J, Cone S, Brown L, et al. Hungry for more: Australian medical students' competence, attitudes and preferences towards nutrition education. BMC Med Educ 2022;22(1):692. doi: 10.1186/s12909-022-03748-2.
- Raman M, Violato C, Coderre S. How much do gastroenterology fellows know about nutrition? J Clin Gastroenterol 2009;43(6):559–64. doi: 10.1097/ MCG.0b013e318172d647.
- Vetter ML, Herring SJ, Sood M, Shah NR, Kalet AL. What do resident physicians know about nutrition? An evaluation of attitudes, self-perceived proficiency and knowledge. Amer Coll Nutr 27(2):287-98. doi: 10.1080/07315724.2008.10719702.
- Crowley J, Ball L, Hiddink GJ. Nutrition in medical education: A systematic review. Lancet Planet Health 2019;3(9):e379–89. doi:10.1016/S2542-5196(19)30171-8.
- Lepre B, Mansfield KJ, Ray S, Beck E. Reference to nutrition in medical accreditation and curriculum guidance: A comparative analysis. BMJ Nutr Prev Health 2021;4(1):307–18. doi: 10.1136/bmjnph-2021-000234.
- Han ER, Yeo S, Kim MJ, Lee YH, Park KH, Roh H. Medical education trends for future physicians in the era of advanced technology and artificial intelligence: An integrative review. BMC Med Educ 2019;19(1):460. doi: 10.1186/s12909-019-1891-5.
- Hobby J, Parkinson J, Ball L. Exploring health professionals' perceptions of how their own diet influences their self-efficacy in providing nutrition care. Psychol Health 2024;39(2)252– 67. doi: 10.1080/08870446.2022.2069246.
- Lepre B, Crowley J, Mpe D, et al. Australian and New Zealand medical students' attitudes and confidence towards providing nutrition care in practice. Nutrients 2020;12(3):598. doi:10.3390/ nu12030598.
- Eley D, Young L, Przybeck TR. Exploring the temperament and character traits of rural and urban doctors. J Rural Health 2009;25(1):43–49. doi:10.1111/ j.1748-0361.2009.00197.x.

correspondence ajgp@racgp.org.au