

# Opportunities for innovation in nutrition education for health professionals

Caryl Nowson 

Going forward from this unprecedented worldwide coronavirus disease of 2019 (COVID-19) health crisis, which has devastated the lives of many and shattered economies around the world, we should hopefully emerge with a renewed recognition of importance of a robust public health systems to support the health and well-being of populations. This pandemic has the potential to be a stimulus for governments, health agencies and educational organisations to develop sustainable strategies and frameworks to address the social inequalities relating to health, which has resulted in increasing rates of chronic disease. The greatest impact of the COVID-19 pandemic has been borne by those already managing chronic health conditions.<sup>1</sup> These lifestyle diseases such as hypertension, type 2 diabetes and cardiovascular disease contribute to an increase in mortality from COVID-19, which in turn are all exacerbated by obesity, also a major risk factor for the development of adverse health outcomes related to COVID-19.<sup>2,3</sup> The population-wide improvement of cardiovascular outcomes seen over recent years in developed countries is now at risk of being overwhelmed by an increase in risk factors arising from poor lifestyle practices, including sedentary behaviour and harmful dietary practices contributing to increased rates of obesity, high blood pressure and an adverse blood lipid profiles.

Health professionals have an important role to play in assisting individuals and populations to improve their lifestyle practices, together with advocating to government to implement environmental changes that enable populations to eat well and be physically

active. Health professional education (excluding dietetic/nutritionist training) has failed to produce graduates with the competencies required to assist populations and patients to implement positive lifestyle and dietary modifications, within the context of their community and home environments. There has been a tendency for health professional groups to act in isolation and it is only relatively recently that they have come together to tackle some of the deficiencies in nutrition education, within health professional training courses.

Health professionals have a direct effect on health outcomes: as well as providing patient care they are knowledge brokers who can link people to technology and relevant information. If health professionals develop competencies in supporting individuals to adopt healthy nutrition and lifestyle practices through basic and postgraduate training, graduates would have opportunity to make a significant positive impact on individual and population health.<sup>4</sup>

There is an urgent need to co-ordinate the production and delivery of quality evidence-based educational materials and resources, which can be disseminated across all health professional groups to ensure the development of nutrition competencies in health professionals in basic training, together with continuing professional educational activities. Evidence of inadequacy of nutrition education in medical training has been extensively documented over decades and this deficit continues today.<sup>5</sup> However, globally there has been little evidence of sustained initiatives that have effectively addressed the inadequacy of nutrition training within non-nutrition-based health professions. More recently, there has been a shift to a greater multidisciplinary team approach to medical care and this provides an ideal opportunity to develop nutritional

and lifestyle educational material suitable for the wide range of health professionals involved in patient care.

Although a recent UK survey undertaken by a multidisciplinary team reported that doctors preferred in-person rather than online teaching, while students preferred workshops and lectures,<sup>6</sup> the ongoing COVID-19 pandemic may have altered this view. A greater number of professional groups are now interacting online and the pandemic has led to the development of innovations in online delivery of medical education. In one Australian medical school, this move to online learning led to review of the curriculum, streamlining of the clinical training components and have reported a high level of student satisfaction and engagement with online learning activities.<sup>7</sup> The benefits of utilising telehealth for health delivery to patients are now being recognised by patients, health professionals and governments.<sup>8</sup> This greater acceptance for communicating via video using the online environment provides another opportunity to engage health professionals and patients in practical interactive learning activities at home. In the USA, a nutrition and cooking educational course combined an onsite course with interactive, online learning delivery within a continuing medical education course.<sup>9</sup> Another group from Australia, which assessed the acceptability of a nutrition education programme that included an online group for midwives, general practice nurses and student nurses,<sup>10</sup> found a high level of acceptability and identified the video cases as the most valuable aspect, highlighting the importance of developing engaging interactive modules for online courses.

If the achievement of nutrition competencies were mandated for all health professional courses there would be an obligation to incorporate nutrition knowledge and skills into health professional training courses. However, currently most salaried academics who teach into professional health education courses lack adequate training in nutrition. Unfortunately, inadequate nutrition training for health professional educators can result in educators promoting their own personal non-evidence-based

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nutritional practices and biases to students, this can lead to health professionals adopting and endorsing questionable dietary practices. It is also common for training institutions to recruit ad hoc sessional staff to provide isolated lectures; however, they generally have insufficient knowledge of the curriculum and therefore the nutrition content delivered lacks integration with the teaching of other aspects of patient care.

To fill this gap, there is an urgent requirement for the development of appropriate nutrition educational resources together with agreement on the nutrition competencies required by the range of health professions. This would result in a common evidence-based core where much of the content would be appropriate across the range of health professional disciplines and could be shared and delivered either online or face-to-face by trained nutrition educators, where available. The development of set of interactive nutritional education resources that could be utilised by a much larger pool of health professionals means that the financial and staffing costs of maintaining and updating such a resource could be reduced.

In addition to formally integrating nutrition into health professional training, the negative impact of the 'hidden curriculum' particularly in medical training that places greatest emphasis on treatment (with drugs or surgery), rather than preventative and lifestyle management of chronic disease, has been shown to undermine efforts to integrate nutrition in the medical curriculum.<sup>11</sup> Patients may be more likely to improve their eating habits if their healthcare professionals have a nutritious diet,<sup>12</sup> and integrating personal nutritional and behavioural goals for students within the curriculum has enormous potential for students to increase both their nutrition knowledge but also develop behavioural strategies that will ultimately benefit themselves and their patients.

As a result of a greater interest in nutrition and food, medical students are now advocating to be taught more nutrition and lifestyle strategies within their training courses.<sup>13</sup> This has been

recognised by UK medical and health professional students who have established an organisation 'Nutritank', which has had a worldwide impact in raising awareness of the importance of diet and lifestyle factors to health providing further impetus for updating the curriculum.

It is fundamental that any educational initiatives to improve the nutrition knowledge and skills of health professionals are well-designed and that any programmes are able to be stringently evaluated. This will facilitate publication of outcomes and ensure that innovations in practice, both successful and unsuccessful, are widely disseminated in the peer-reviewed literature for the benefit of all. This journal currently is seeking submissions to the Nutrition Education Collection that address knowledge and training needs of the wide range of health professionals. Submissions outlining some strategic research and implementation initiatives, which have attempted to address the nutritional content deficiencies in a systematic manner in professional training, would be particularly helpful.

There are many challenges to effectively embed the achievement of nutrition competencies in health professional education, but with a greater capacity to interact virtually, internationally within and across professions, we now have an opportunity to collaborate globally to integrate evidence-based nutrition in health professional education. Currently, we have a much greater range of communication and educational delivery options and existing global networks, which are promoting good nutrition and healthy lifestyle practices across the spectrum of medical care. Furthermore, the benefits of a multidisciplinary team are now clearly recognised. All these factors provide a platform to effectively increase the nutrition competencies of health professionals, which have the potential to be sustainable and therefore likely to be effective in reducing the global burden of chronic disease.

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