Interprofessional education in our universities will ultimately bring better health outcomes to our patients

I was excited to read the article 'Interprofessional education for physiotherapy, medical and dietetics students: a pilot programme'[1] about the feasibility of incorporating interprofessional education into the Otago University curriculum.

Reflecting back on my university days as a physiotherapy student at Otago (nearly a decade ago), there wasn't much focus on interprofessional education. And while feeling quite prepared for entering the registered world of physiotherapy, I do recall a steep learning curve of finding out what other health disciplines did, how the professions fitted into the overall treatment of patients, and then finally on how to communicate with them to provide and extrapolate information that was appropriate to perform our individual tasks with efficiency and effectiveness.

As a student clinical supervisor, I have noticed that many students are generally naive about interprofessional interactions, are often unsure of who to refer to for different scenarios, what information can be received from them, or even simply how to interact with them. During placement, students will often get the opportunity to spend time with other professions. Generally, these opportunities are spent observing and not participating towards a common goal. This pilot study gives the focus towards goal setting which is very important in achieving good outcomes.

The evolving health system encourages us to operate more frequently in multidisciplinary teams; having this extra knowledge and skill set as new graduates surely will increase the global quality of health care being delivered as whole.

With our ageing population and the ever-growing prevalence of chronic diseases, there has been wide demonstration of research into the positive effects of the multidisciplinary team approach in managing chronic diseases, especially those such as diabetes.[2,3] Incorporation of interprofessional education with chronic disease management seems a logical way of bringing this into the curriculum.

It is also pleasing to see that this research adds to other studies in which students perceived that they had learned about each others' scope of practice and built confidence in their communication skills.[4]

I do hope that Otago University follows on from this pilot and brings this concept into their curriculum, and that other universities continue to look for ways to build interprofessional education into their respective programmes. It can only be more positive for preparing students for the working world, and in helping improve the team care approach towards delivery of high quality health care for our population.

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Response to medicines adherence: evidence for any intervention is disappointing

Based on the 'disappointing' findings from the studies reported in this *Journal of Primary Health Care* 'Viewpoint',[1] it is clear that the fundamental question to be asked is: 'Where do we go from here?'

Adherence is the extent to which a person's medication-taking and lifestyle practices coincide with medical or health advice.[2] The importance of being adherent to therapy is borne out by the rising costs of health care. Research has shown that non-adherence rates for chronic illness regimens are approximately 50%.[3] Additionally, the increased prevalence of chronic diseases and the suboptimal levels of adherence to therapy, especially in diseases such as diabetes and hypertension, make the most modern treatments dependent on patients managing themselves. In some cases, clinical outcomes are affected significantly. It has been estimated by the World Health Organization that, by 2020, chronic disease will be responsible for three-quarters of all deaths.[4]

The lack of a gold standard of measurement and other confounders complicate research into adherence to medicines. Also, some disease states may show a stronger relationship between adherence and clinical outcomes. In HIV infection, for example, an adherence level of 95% is recommended to achieve sustained

Letters may respond to published papers, briefly report original research or case reports, or raise matters of interest relevant to primary health care. The best letters are succinct and stimulating. Letters of no more than 400 words may be emailed to: **editor@rnzcgp.org.nz**. All letters are subject to editing and may be shortened.

viral suppression.[5] To address the issue of correlation between adherence and clinical outcomes, it might be worthwhile to examine the effectiveness of the regimen itself. Reverse causality should also be considered, since some patients discontinue treatments prematurely because of good clinical outcomes.

We should not 'throw our hands up' in despair. What is needed is a patient-centred, multidisciplinary approach to address the problem. Recognising that different individuals may respond differently to any therapy, a logical approach to adherence is to examine the issue from all possible perspectives.

In agreement with Bryant, more qualitative research along with improved communication skills and health literacy may help. Non-adherence is both a quality and cost issue for health care. All should be done to aid it. Improved adherence has been shown to reduce the total usage and cost of health care, although earlier studies do not provide strong evidence of a causal link.[6]

A simplistic approach to tackling non-adherence has been 'disappointing'. Therefore, interventions should be framed around a more deliberate and systematic approach and should include an evaluation of the way health care is structured, operated and paid for. Health care providers need to be prepared through adequate training and to be rewarded for quality over quantity.

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Author's Response

The letter from Tricia De Shong has many pertinent points worthy of wider debate because, as she points out, long-term conditions are very costly and will increase pressure on our health care resources. The approach to improved medicines adherence needs to be multi-faceted and patient-driven—not just adherence to medicines therapy, but also to healthy lifestyle choices.

There has been a tendency to invest in expensive interventions to improve adherence, such as 'medicines use reviews'.[1,2] However, these investments may not be evidence-based but more along the lines that 'it sounds like a good idea'. Strategies that may have shown an impact, no matter how small, in a randomised controlled study are often implemented in a more ad hoc manner, without the structure and theoretical framework used in the study.

De Shong rightly indicates that we need to look at the effectiveness of the regimen itself. This certainly adds to the debate. Taking statins and the number-needed-to-treat to prevent one death as approximately 20 people for 3.7 years for secondary prevention,[3] then far more people need to receive an intervention to improve adherence to then have an impact on outcome. This makes expensive low-benefit interventions dubious in terms of cost-effectiveness.

There needs to be an individual patient-driven approach beyond the routine, standardised information-giving. An increasing focus on self-management and self-directed care is likely to suit the 'baby boomer' generation. This approach involves structured goal-setting and care planning. It is about putting the responsibility back on the person—if you take away their responsibility, you take away the essence of the person. The area of adherence support is more complex than the relatively simple, almost product- or profession-focused interventions previously studied. There is good opportunity to move to broader aspects of adherence, including self-management and social marketing interventions. We also need better measures of outcome.

Lastly, we need to be wary of saying that a person has poor health literacy just because they do not comply with what we want them to do. Autonomy allows people to make what we may perceive as poor decisions—providing they have adequate, unbiased information to do so.

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