‘DrugSpeak’: Increasing pharmacy students’ drug pronunciation proficiency

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1 What problems were addressed?

The accurate pronunciation of drug names has been an ongoing problem for students within our Bachelor of Pharmacy programme. Insufficient pronunciation skills lead to poorer graduate outcomes and reduced performances at job interviews, which jeopardise the employment prospects of graduating students. Furthermore, student cohorts contain diverse language backgrounds, which for many students, exacerbates the difficulty of pronouncing drug names. Graduating students are required to work in multidisciplinary health care environments in which verbal communication with clients and amongst health professionals is of paramount importance. Furthermore, research has revealed that pronunciation errors lead to mistakes in filling and writing prescriptions, the consequences of which may be life-threatening.¹ Thus, we initiated a project to design and implement a learning tool or programme, called ‘DrugSpeak, to provide students with a scaffolded learning approach to improve their drug pronunciation skills. To ensure theoretical integrity, we enlisted the expertise of speech pathology colleagues in co-creating the learning module.

2 What was tried?

Students were provided with three 10-minute videos covering learning material on the basic concepts of word pronunciation, stress placement and the unpacking of words into syllables, which were supplemented with a face to face, 30-minute, group-based applied workshop. Building on this, students then attended a live 3-hour DrugSpeak workshop in which they received face to face training in phonetics and participated in active learning tasks in which they practised the pronunciation of 50 drug names. Post-workshop, these 50 drug names were made available online to provide further practice opportunities. Both prior to and after these live and online DrugSpeak learning activities, student volunteers made speech recordings of their pronunciations of 100 drug names (representing a purposeful mixture of different phonetics) and completed surveys on their demographic and language backgrounds and the impact of the DrugSpeak workshop and resources.

3 What lessons were learned?

Students expressed a high level of engagement with the DrugSpeak learning activities. Participation in audiorecordings and survey completion rates exceeded 90%, as did attendance levels at the training workshops. Feedback from students both in person and in surveys showed that students valued the learning material and enjoyed the active learning tasks. This sent us a strong message that drug pronunciation skills are an important and fertile area of research, necessitating further development and investigation. Especially striking was the weight of importance that students placed on their own confidence levels, particularly our international students, who felt increased pressure associated with their verbal pronunciation of drug names both at university and following graduation. This injected the project with a further sense of purpose, revealing it to be a valuable addition to our curriculum. Indeed, we envisage embedding the DrugSpeak learning activities within course work across all 4 years of our degree programme so that students from all language backgrounds acquire high levels of proficiency in the pronunciation of drug names by graduation. Ultimately, we aim to produce graduates who are ready to embrace health care professional practice with the skills and confidence in their drug name pronunciation proficiency that will assist them in excelling within their chosen field of employment.

Reference

Lambert BL, Dickey LW, Fisher WM, et al. Listen carefully: the risk of error in spoken medication orders. *Soc Sci Med.* 2010; 7(10): 1599- 1608.