

LET US RETHINK PRESCRIBING EDUCATION TOGETHER

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ABSTRACT

Prescribing education is central to patient safety and effective clinical practice, yet it remains fragmented across health professions, often taught in disciplinary silos without sufficient interprofessional integration. Drawing on qualitative and cross-sectional studies in Australian dental prescribing education, including student interviews and national surveys, this paper highlights significant gaps between theoretical learning and clinical application, particularly in areas such as antimicrobial stewardship. These gaps reflect broader systemic issues, where limited collaboration between prescribers, pharmacists, and other healthcare professionals undermines safe prescribing practices. It is argued that prescribing should be understood as a shared, patient-centred process requiring intentional, interprofessional education. To address these challenges, internationally aligned frameworks, integrated curricula, and collaborative assessment models that reflect real-world complexity need to be designed and implemented collaboratively by educators, policymakers, and industry to ensure relevance, comparability, and adaptability across diverse contexts. Preparing students for teamwork rather than isolated competencies will foster safer, more effective prescribing decisions and improve patient outcomes globally.

KEYWORDS

Interprofessional, Prescribing, Education

FRAGMENTED PRESCRIBING EDUCATION

Prescribing education sits at the intersection of patient safety, professional responsibility, and collaborative practice [1, 2]. Across the health professions, however, this vital area remains fragmented, often taught in disciplinary silos, inconsistently applied, and insufficiently anchored in interprofessional principles. This concept emphasises prescribing as a structured, patient-centred process rather than a technical extension of clinical care [1, 3].

EVIDENCE FROM DENTAL EDUCATION

My work has shown that dental prescribing education highlights these broader problems. These included qualitative interviews exploring students' experiences, and a national cross-sectional survey assessing prescribing knowledge and attitudes [4]. Participants spoke candidly about the disconnect between theoretical learning and clinical application. Students preferred contextual, guided, and relational education over additional didactic content, seeking practical support in knowing what to prescribe and when to seek assistance. They viewed prescribing not as an isolated task but as a collaborative process within a broader professional network. These findings were echoed in a national cross-sectional

study of dental students' medication knowledge [5, 6]. While most participants answered well, few demonstrated complete mastery. Nonetheless, a majority expressed confidence in their prescribing abilities. These gaps point not only to content deficits but to a lack of contextual and interprofessional training that reflects how prescribing occurs in real practice.

CONSEQUENCES FOR PATIENT CARE

One area where these educational gaps have tangible clinical consequences is antimicrobial stewardship. A national study assessing knowledge of antibiotic prophylaxis protocols found widespread variability and misconceptions among dental students [7]. Without structured, recurrent training in antimicrobial use, the risk of perpetuating inappropriate prescribing practices remains high [7-9]. Without integrated, interprofessional training, students may carry incomplete or incorrect prescribing habits into practice, undermining global efforts to curb resistance. Internationally, the World Health Organisation's Global Action Plan on Antimicrobial Resistance highlights the importance of interdisciplinary education and collaboration, explicitly calling for integrated training across health professions to support responsible prescribing and combat antimicrobial resistance [10].

While the case for interprofessional prescribing education is clear, its implementation is not without barriers. Curriculum overcrowding within professional degrees, structural silos between faculties, and variation in accreditation requirements across disciplines all challenge reform efforts [11-13]. Acknowledging these barriers is vital to devising sustainable and context-sensitive strategies. These challenges illustrate that prescribing is a shared responsibility shaped by the broader clinical team. The consequences of fragmented education extend beyond students. It is shaped by interdisciplinary collaboration between prescribers, dispensers, educators, and policymakers [14]. When general medical practitioners [15] and pharmacists [16] report uncertainty about dental prescriptions, these professionals sometimes feel ill-equipped to manage oral health conditions or interpret dental prescriptions.

These findings reveal a fundamental insight: no single profession holds the complete picture of prescribing. Only through intentional, interprofessional collaboration, initiated early in education, can we prepare clinicians for the complexities of real-world practice [17]. This means embedding co-designed learning opportunities, shared case scenarios, and team-based simulations across health curricula. Prescribing education should be jointly owned across disciplines and grounded in educational approaches that reflect the collaborative nature of clinical care [18].

As my colleague and I highlighted in a recent editorial, the spirit of interprofessional research [13], where collaboration drives insight, should inform how we teach. When educators, researchers, and clinicians engage across disciplinary boundaries, they foster mutual respect, deeper insight, and more effective patient care. When implemented meaningfully, interprofessional education creates clinicians who understand their own roles while valuing the contributions of other professionals, ultimately contributing to cohesive, patient-centered teams.

A VISION FOR INTERPROFESSIONAL PRESCRIBING EDUCATION

Now is the time to act. To achieve sustainable reform, interprofessional prescribing education must be embedded through a set of coordinated priorities. Curricula should include mandatory interprofessional modules that bring together students from different health disciplines, particularly in critical areas such as antimicrobial stewardship [19]. Accreditation bodies across medicine, pharmacy, dentistry, and nursing should work toward establishing joint standards that reflect the shared and collaborative nature of safe prescribing [20]. In addition, assessment models must be redesigned to incorporate interdisciplinary, clinically authentic decision-making tasks that are co-developed and jointly evaluated across professions [21]. These changes will help align education with the realities of team-based healthcare and ensure that future clinicians are equipped to prescribe safely, collaboratively, and confidently [22].

International progress offers instructive models. For instance, the United Kingdom has implemented prescribing competencies through the prescribing competency framework, and Canadian institutions have piloted joint medical-pharmacy prescribing education [23]. Incorporating global insights can inform national and institutional strategies.

Ultimately, students deserve more than technical proficiency; they need preparation for collaborative, real-world decision-making. Evidence suggests that interprofessional training improves prescribing safety and confidence, particularly when applied in clinical contexts [24, 25]. Patients deserve safe, integrated prescribing decisions. Clinicians deserve the training to work confidently across boundaries. Prescribing decisions that are informed, deliberate, and situated within collaborative care. Healthcare professionals deserve an education that equips them with knowledge and the confidence to engage, collaborate, and lead.

Let this be the beginning of a broader dialogue. Let us rethink prescribing education together.

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