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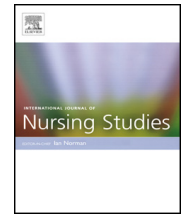
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Guest Editorial

Medication prescription by nurses and the case of the Brazil: What can we learn from international research?

The role of the nurse in the process of medication prescription and ordering diagnostic tests and clinical examinations has intensified worldwide. For the International Council of Nursing (ICN), these actions are innovative elements that contribute to advanced nursing practice (ICN, 2011). The term prescription by nurses encompasses a diversity of practices within which we can highlight three models: the independent or substitute prescriber, the semi-autonomous or complementary prescriber, and the group protocol (Patient Group Directions) (Consejo General de Enfermería, 2006; Kroezen et al., 2011). Among the countries where prescription and the requisition of clinical examinations by nurses is already consolidated, the United Kingdom (UK), Sweden, United States, Canada, Australia, New Zealand, South Africa and Ireland stand out (Van Ruth et al., 2008; Kroezen et al., 2012; Latter et al., 2010). The UK in particular, has both an extensive form of nurse prescribing, embracing all three models above, and a well developed evidence base from research into its acceptability and effectiveness.

But not all countries have progressed so far. In this editorial we consider the implications of this evidence base for countries where the practice is still developing. We focus on our country, Brazil, as an example and use the international evidence and reviews to illuminate the current situation of nurses in Brazil and offer recommendations for progress.

The prescription of medication through group protocols by nurses is a legally permissible practice in Brazil within primary health care, following authorization from the Ministry of Health. Prescribing protocols are designed to be used in strategic areas (child health, women's health, chronic and acute diseases), where nurses are normally practicing. Examples of protocols that are inclusive of prescribing for diseases or injuries include: tuberculosis; leprosy; hypertension and diabetes mellitus; prenatal care; child nutrition; and HIV and other Sexually Transmitted Diseases (STD). Medicines that can be delivered by nurses include antibiotics, analgesics, anti-inflammatory agents and bronchodilators. The evolution of

the use of Patient Group Directions by nurses in Brazil coincides with the growth of the availability of health care services and the public's lack of access to medical professionals in many areas in primary health care, in a context of reduction of expenditure on health care (Oguisso and Freitas, 2007). Whilst improvement in care for patients and better use of nurses' skills has ostensibly driven the expansion of prescribing in countries such as the UK, in Brazil, like other countries such as Canada and Australia, forces external to the nursing profession have motivated the introduction of prescription by nurses. These include reduction of health care expenditure, efficient use of time and resources (Van Ruth et al., 2008; Consejo General de Enfermería, 2006), reduction of doctors' workload, resolution of the problem of lack of doctors and to assist with coverage of patients in remote areas (Kroezen et al., 2011).

The fact that these are externally driven forces may have contributed to the situation that, despite the legislation enabling nurses to prescribe using Patient Group Directions in Brazil, the current context is problematic and in practice the extent to which nurses are prescribing remains very limited. A study on prenatal care performed by nurses in São Paulo found that only 40 of a total of 131 nurses used therapeutic protocols to treat infections of pregnant women and their partners (Narchi, 2010). Other studies show that nurses demonstrate fear and insecurity in prescriptive actions (Ximenes Neto et al., 2007) or that they do not prescribe for fear of complaints (Moura et al., 2007). There may be several possible reasons for this lack of prescribing. Firstly, there is no requirement for nurse training prior to the initiation of prescriptive practice. In contrast, the ICN recommends specialized knowledge, clinical experience and registration as a prescriber, as pre-requisites for prescribing. This acquisition of specialized knowledge through educational preparation varies internationally with respect to the duration and the level of training. In the UK, qualified nurses with at least three years' experience undertake a degree level training programme of 26 days, with 12 days supervision

of prescribing in clinical practice; in the United States and Australia, a Master's degree is required ([Consejo General de Enfermería, 2006](#)). Despite the UK's comparatively short educational preparation programme, research shows that it offers a satisfactory preparation for prescribing practice ([Latter et al., 2011](#)). The Federal Board of Nursing need to consider introducing training for current and future models of nurse prescribing to overcome nurses' apprehension and increase their legitimacy as prescribers.

Although there are 34,418 nurses active in primary health care Family Health Teams in Brazil ([Ministry of Health, 2013](#)), who are potential prescribers, there are no clear rules regarding when and how nurses should use Patient Group Directions to provide medicines for patients. There is evidence that nurses lack knowledge of prescribing legislation for nurses and the types of medications they are permitted to prescribe ([Leal et al., 2004](#)). In addition to this, a large number of protocols have been drawn up by the Ministry of Health in a centralized way with little participation or re-working from local health care teams and there has been a denunciation of the lack of municipal protocols, and a misperception about the existence of restrictions by the Regional Council of Nursing ([Dantas, 2008](#)). All this adds up to a lack of nursing ownership, clarity and local support for integrating nurse prescribing into practice. In contrast, international literature on nurse prescribing repeatedly points to the importance of local peer support, mentoring and supervision of nurses to maintain confidence and continued prescribing after initial qualification ([Latter and Courtenay, 2004](#)). In the UK, a network of local non-medical prescribing leads for coordinating and championing nurse prescribing was instrumental in its early success ([Norman et al., 2007](#)). And as nurse prescribing expanded to embrace the entire British National Formulary and a greater range of nurses, the [Department of Health \(2006\)](#) stipulated a need for local governance and risk management of non-medical prescribing in NHS Trusts, which the majority of Trusts were seen to implement ([Latter et al., 2011](#)).

In Brazil, although the prescription of medication and requisition of clinical examinations by nurses is legally permissible (Law 7.498/1986), the medical profession has shown strong resistance to the prescription of medication and diagnostics by other professionals. The law that regulates the medical profession, was only approved in 2013 (Law 12.482) and caused dissatisfaction amongst doctors, following a veto on the article of the bill which stated that the formulation of diagnosis and therapy was the sole prerogative of doctors. Medical resistance to extending prescriptive authority to nurses is an international phenomenon; the [New Zealand Medical Association's \(2013\)](#) recent response to the Nursing Council of New Zealand's consultation on extending nurses' prescribing rights calls for restriction of nurse prescribing to delegated modes only, with concerns that independent nurse prescribing may lead to inappropriate prescribing and represent a potential risk to patient safety. Initial resistance to the introduction of nurse prescribing in the UK would appear to have been largely overcome now, well over a decade since its first introduction. The nursing profession and its professional bodies nationally were

united in support of its introduction in the UK, to improve patient care and legitimize the skills and knowledge that many nurses were already in possession of in practice. Instrumental in its successful rollout in the face of medical opposition is likely to have been its incremental introduction, together with nationally funded research to provide feedback on its acceptability, safety and efficacy at key points. Positive evaluation of early pilot sites by [Luker et al. \(1997\)](#) paved the way for expansion of community nurse prescribing; findings from a national evaluation of nurse independent prescribing from a limited formulary ([Latter et al., 2007a,b](#)) fed in to Government proposals ([DH, 2005](#)) to extend nurse and pharmacist prescribing to the full drug formulary for the first time. At the same time, national studies of supplementary prescribing ([Bissell et al., 2008](#)) mental health nurse prescribing ([Norman et al., 2010](#)) and independent prescribing in Ireland ([Naughton et al., 2013](#)) all showed largely positive findings, and so helped build support and confidence for nurse prescribing in the UK. Studies demonstrate that the prescription of medication by nurses is safe and competent, has led to better access and quality of care for patients, improvements in the abilities and experience of nurses, increased professional recognition, the legitimization of responsible autonomous practice and enabled better team working between the various healthcare professionals ([Latter et al., 2012](#); [Kroezen et al., 2011](#); [Bhanbhro et al., 2011](#)). [Kroezen et al. \(2011\)](#) state that patient support and grassroots legislative constituency are crucial in battles over prescribing rights and these UK national studies all consistently reported patient support for nurse prescribing. In Brazil there is no research that has evaluated the impact, quality or safety of the prescription of medication by nurses in primary health care, and this is now urgently required in order to collate evidence that may help win support and legitimacy for taking it forward. International experience also suggests that this will need to be accompanied by united support from nurses for its rollout, coupled with national regulation on training and registration and a clear and robust plan for local implementation, including governance and support measures. These experiences and lessons from Brazil are likely to apply in many other countries.

Conflicts of Interest

There is no Conflict of Interest

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