Impact of Independent Pharmacist Prescribing on the Future of Pharmacy

Jimmy Shangala Mwawaka
Pharmaceutical Society of Kenya, jimmy.shangala@gmail.com

Follow this and additional works at: http://pubs.lib.umn.edu/innovations

Recommended Citation
Impact of Independent Pharmacist Prescribing on the Future of Pharmacy

Jimmy Shangala Mwawaka
Pharmaceutical Society of Kenya

Conflict of Interest: We declare no conflicts of interest or financial interests that the authors or members of their immediate families have in any product or service discussed in the manuscript, including grants (pending or received), employment, gifts, stock holdings or options, honoraria, consultancies, expert testimony, patents and royalties.

Abstract
Pharmaceutical care as a philosophy is neither universal nor sustainable. Pharmacist prescribing will be the most unifying and transformative innovation in pharmacy practice, globally. Scope expansion supported by prescribing rights for pharmacists will impact pharmacy and other professions: community pharmacy will evolve into an independent profession; and pharmacy and medicine will merge. Important decisions in pharmacy education and practice policy must be made in view of these future changes.

Background
It is established that pharmacy is a healthcare profession. "The mission of pharmaceutical practice is to provide medication, healthcare products, professional services and to help people and society to make best use of medicines" (FIP, 2009).

Pharmacy has dramatically evolved, over the last 3 decades, from a predominantly product-focus to a patient-oriented profession. The advent of pharmaceutical care in 1990 marked the beginning of this revolution.

"Pharmaceutical care is the responsible provision of drug therapy for the purpose of achieving definite outcomes that improve a patient’s quality of life". (Hepler and Strand, 1990)

The definition of pharmaceutical care has itself undergone numerous revisions to align it with all aspects of pharmacy practice; efforts have been made to contextualize pharmaceutical care within the broader context of healthcare.

"Pharmaceutical care is a patient-centered, outcomes-oriented pharmacy practice that requires the pharmacist to work in concert with the patient and the patient’s other healthcare providers to promote health, prevent disease, and to assess, monitor, initiate, and modify medication use to assure that drug therapy regimens are safe and effective”. (The Pharmaceutical Society of New Zealand)

Around the globe, however, the implementation of pharmaceutical care in community pharmacy has been less than satisfactory.

"Pharmacists should move from behind the counter and start serving the public by providing care instead of pills only. There is no future in the mere act of dispensing. That activity can and will be taken over by the internet, machines, and/or hardly trained technicians. The fact that pharmacists have an academic training and act as health care professionals puts a burden upon them to better serve the community than they currently do.” (Pharmaceutical care, European developments in concepts, implementation, and research: a review 2005)

Many pharmaceutical care initiatives and models have been proposed and piloted. One such development is pharmacist prescribing which has been developed in different formats in the UK, USA and Canada.

"Independent prescribers, or non-medical prescribers (NMPs), are in a position to give patients timely access to medicines and are ideally placed to optimize and individualize treatment. The NMP takes responsibility for the clinical assessment of the patient, including establishing a diagnosis and prescribing the necessary medicines”. (How to become an independent prescriber, Pharmaceutical Journal, 2014.)

Limited pharmacy prescribing in community pharmacy is a common practice which has been with us, albeit informally, for many years. Legally-mandated pharmacist prescribing in community pharmacy, the more recent version of pharmacy prescribing, is characterized by unprecedented professional autonomy and scope. Given the universal simplicity of community pharmacy and the numbers of practitioners in this sector; any innovation in community pharmacy, in any part of the world, has the potential to revolutionize the
profession, the world over. This innovation will change pharmacy forever.

The Present

**Pharmaceutical care, is it a sustainable mission?**
Contemporary pharmacy practice seems to suggest that pharmaceutical care as an ideology may not be sustainable: providing pharmaceutical care, consistently and effectively, is a choice (only a small proportion of pharmacists seems committed to); there is lack of demonstrable willingness on the part of consumers and payers to pay for it; there are too many levels and models of practice; and too many pharmacists still make fulfilling careers out of pharmaceutical trade and traditional non-cognitive technical services. Further, the dependence of pharmaceutical care on pharmacist collaboration with physicians and other professionals limits the autonomy of pharmacy as a profession. That would suggest that pharmaceutical care as a mission does not support the emancipation of pharmacy; it is, therefore, inadequate. As pharmaceutical care is, arguably, a transitional phase in the evolution of the profession, the pursuit for a greater role and mission for pharmacists in drug use matters will continue for many years to come. Prescribing by pharmacists is one innovation that is likely to garner universal support amongst pharmacists around the globe. It however presents its own challenges to the mission of pharmacy. Although prescribing by pharmacists has historically happened across the pharmacy counter, the formalization (consolidation) of this rather routine activity has some novelty. Pharmacist prescribing has emerged in three different contexts: desire to empower highly trained pharmacists to promptly, implement their care plans; deliberate expansion of the scope of various professionals including pharmacists; and task shifting (sharing) arrangements to meet shortfalls in qualified staff or to improve cost-efficiency in service delivery. Pharmacist prescribing in these varied contexts cannot be accounted for by one ideology; pharmaceutical care does not support pharmacist prescribing in all contexts.

**Response of the medical profession to the expanded scope of pharmacy.**
It is inescapable that all professions in the health sector will continue to grow at the expense of medicine; pharmacy is no exception. Pharmacy continues to borrow from medicine. Nothing is more symbolic of this trend than the phenomenal growth of non-medical prescribing. The resultant loss of territory may prompt the medical profession to respond, to this onslaught, by advocating for higher academic qualifications for pharmacists and the allied health professions.

In the case of pharmacy, pharmacists might decide to raise the entry-qualification to a post-graduate degree. Physicians might go further and push proposals to transfer the regulation of pharmacy to medical boards or even to make pharmacy and pharmaceutical care a specialism within medicine; it is possible that could be the rebirth of clinical pharmacologists or an expansion of the scope of pharmaceutical medicine. This is not far-fetched; Clinical Pharmacist Practitioners, working under a physician-administered protocol are required to register their collaborative contract simultaneously with both pharmacy and medical boards. Another possible and significant reaction would be for physicians and other health professionals to encroach on pharmacy; on the areas of traditional pharmacy that pharmacists, in their quest for greater ‘patient-centeredness’ are now abandoning.

**Context: Consultation, collaboration, referral and delegation.**
Pharmacists provide consultations (or ‘consults’) to both patients and health care providers. Consultations with physicians may be initiated by either the pharmacist or the physician. The common result of a pharmacist-physician consult is information or advice which is given by the pharmacist to the physician. The physician uses the information to make patient care decisions or to resolve a specific problem in the care of the patient.

In medical practice, “referral” means the *transfer* of responsibility for the care of a patient. Referral can be upward or downward; it is more frequently upward. To date, pharmacists have been pushing for collaboration between pharmacy and medicine: contemporary collaboration is a compromise between consultation and referral wherein the physician allows the pharmacist to make a contribution to the care of a patient; it does not allow for transfer of responsibility for care, let alone outcomes of that care. In terms of contemporary pharmaceutical care, referral to pharmacists would demand that the physician be bound to implement any intervention initiated or proposed by the pharmacist. For physicians to feel comfortable to ‘refer’ patients to pharmacists, the latter would have to have a substantial part of the knowledge that the former uses. In other words, they must be clinicians in the medical sense. The alternative to referral is “delegation”. Under delegation, the physician would hold the pharmacist accountable for work done with the patient. Where the delegation is done under protocol, the pharmacist becomes accountable only to the patient.

**Transition**

Training pharmacists to work as physician-extenders.
Contemporary pharmacy training aims to produce Training pharmacists to work as physician-extenders. contemporary practitioners who would offer their expertise to physicians who, by law and practice, make therapeutic decisions. There are many opportunities, especially in the developing world, for pharmacists to collaborate with other health profession.
workers, who, in fact, have a more urgent need of the pharmacist’s expertise. These health workers may actually ‘allow’ pharmacists a greater scope for therapeutic decision-making. In the developed world, highly trained pharmacists have been used as physician extenders—namely as patient coaches, adherence counsellors and independent or dependent prescribers. One wonders whether schools of pharmacy should not restructure their curricula to ensure all pharmacists enter the profession as physician-extenders. This means: (1) including in the pharmacy curriculum, substantial components of the training curricula for physicians, nurse practitioners and physician assistants and (2) admitting to schools of pharmacy individuals who are already qualified as physicians or non-physician clinicians. There is, unfortunately, a down-side to this: by positioning ourselves as physician-extenders we lose the important platform of physician collaborator—this would undermine the stature and autonomy of the profession; it would be a major set-back for pharmacy.

The Future

Future models of clinical pharmacy practice
The role of clinical pharmacists will change: pharmaceutical care will move more upstream to joint-prescribing or delegated prescribing. Under joint-prescribing, the traditional prescriber and the pharmacist will jointly attend to clients in the consultation room, jointly making prescribing decisions; in delegated prescribing the traditional clinician will undertake clinical assessment of the patient and hand-over the patient to the pharmacist who will prescribe the drug treatment and plan further care of the patient; just like physiotherapy, laboratory testing and medical imaging, drug prescribing could be outsourced. Joint-prescribing and delegated prescribing would represent a better form of ‘collaboration’; it would represent a rational division of labor. The challenges posed by this ‘arrangement’ include the risk of fragmenting care and ‘patient overload’.

Pharmacist prescribing
The formal legitimation of pharmacist prescribing, by means of statute or policy decree, will have important unintended effects within and outside the pharmacy profession. Both dependent and independent pharmacist prescribing, permits pharmacists to put into immediate effect their care plans and interventions. Prescribing enables pharmacists to promptly deliver more comprehensive care and assume ‘full’ responsibility for the outcomes. It renders the pharmacist visible to the patient and makes his care ‘tangible, thereby elevating the status of the pharmacist from a distant adviser (observer?) to a care provider. It reinforces the patient-pharmacist relationship.

How will pharmacist prescribing impact pharmacy and pharmaceutical care in the developed world?

Autonomy is important for all professions. The right to prescribe is, arguably, the last frontier in the struggle (of pharmacy and other professions) for emancipation from medicine. It is the apex of clinical pharmacy practice. Policy makers, responding to pressure from consumers and payers, will continue to support pharmacist prescribing. In the interest of patient safety, one will expect policy makers to set limits or deconcentrate only certain prescribing needs to pharmacists. If pharmacist prescribing leads to more effective and efficient use of medicines, then pharmacist prescribing in the community will lead to much greater savings.

As pharmacist prescribing takes root around the world, community pharmacy will become the most influential sector of the pharmacy profession; pharmacists will extend their prescribing to include nutraceuticals, foods, cosmetics and alternative remedies. Given their accessibility, community pharmacists will attain unprecedented prominence and will rival general practice medicine.

With advancements in telemedicine, medical imaging and laboratory testing; the importance of a physical examination as we know it today will decline—pharmacy will match medicine in professional, social and economic privileges .The allure of the autonomy and influence of community pharmacists will draw to it the Industrial, Hospital and Clinical pharmacists. With time and given its broader scope and new status, community pharmacy will, likely, break off from the rest of the profession. Meanwhile the role of pharmacists in traditional practice will be taken over by technicians, non-pharmacist pharmaceutical specialists and other health professionals.

Compared to the pharmaceutical care process, pharmacist prescribing is more mechanical and requires little professional motivation and commitment. Independent pharmacist prescribing, largely, obviates the need for collaboration with another professional; it will render pharmaceutical care redundant; pharmacist prescribers will gradually become more ‘medical’ in their approach to the patient. With time the pharmacist prescriber will lose most of his pharmaceutical knowledge and skills in favor of more ‘relevant’ patient care skills.

Impact of pharmacist prescribing on pharmacy practice in the developing world.
In low-economic development countries (LECs) the priority is, currently, for pharmacists to make sufficient amounts of drugs available at the right cost and quality. Clinical pharmacy, in these countries, is virtually non-existent as trained clinical pharmacists work in academia, policy development, health system management and traditional hospital pharmacy. In the developing world, community-based pharmacists, pharmacy technicians and other drug vendors regularly recommend, initiate and administer drug
treatment. Considering the high cost of medical care and the scarcity of qualified prescribers, it is conceivable that legal reforms to permit pharmacist prescribing will be more than welcome in LECs. Further, consumers might push for reforms in the training curricula of all health workers to include courses in medical prescribing. Over time, we are likely to see the community pharmacist transforming into some sort of clinician - a medical pharmacist - akin to the historical apothecary.

What the academy needs to do in view of the future.

It will be a while before the merger of pharmacy and medicine occurs. During the transition period, we have ample opportunity to midwife the change, delay, abort it or simply adjust to it. The academy, working with the leadership of the profession, can play a leading role in managing the transitional developments outlined above. The academy needs to respond to the following urgent issues through, amongst other things, research, theory development, and curriculum reforms and practice modelling:

1. **The philosophy of pharmacy**
   Pharmaceutical care is inadequate in explaining and contextualizing pharmacist prescribing. It is pointless to have a philosophy or mission that is not universal in application. As the state of a nation’s economic advancement influences the development of pharmacy practice, pharmacists will need to craft a more flexible philosophy that is more inclusive.

2. **Working with non-physician clinicians**
   We need to train pharmacists who can work even in places that are underserved by physicians. Pharmacy graduates must be able to work, as equal partners, with such non-physician clinicians(NPCs) as nurse practitioners, physician assistants (or clinical officers and assistants), optometrists, podiatrists, physiotherapists, dieticians and even alternative healers. There are three ways to achieve this: we could include the curricula of the allied professions in the pharmacy curriculum, train pharmacists alongside these other professionals or require prospective pharmacy students to be qualified allied health professionals.

3. **Place and scope of pharmacist prescribing**
   If prescribing will increase access to care and is what consumers are willing to pay for, then pharmacists must become prescribers. However prescribing must not blur the line between pharmacy and other professions. There is need to think of innovative models of practice that would make this goal feasible.

4. **Professional governance**
   If pharmaceutical care is essential to patient outcomes, then pharmacists must, of necessity, be open to the possibility of merging pharmacy with medicine or transferring the control of pharmacy practice to medicine.

5. **Fate of pharmaceutical science**
   Pharmaceutical care will grow at the expense of the traditional practice of pharmacy. Loss of the scientific content of pharmacy curricula is a threat to the identity and future of the profession. Deliberate efforts must be made to preserve the uniqueness and specialized knowledge of pharmacy. If the definition of pharmaceutical care cannot accommodate pharmaceutical roles that are not considered patient-facing, then there may be need to divorce the latter from pharmacy. As this happens, we must put in place measures to preserve and grow these valuable technical skills by creating a parallel profession.

6. **Immediate implications for pharmacy education**
   Clearly certain changes are required to align education to new realities in pharmacy practice during the transition:
   - Pharmacy education may need to be a post-graduate qualification.
   - Training schools may need to recruit students from amongst allied health professionals.
   - The science content of pharmacy education may need to be strengthened and fashioned into a parallel profession that will be distinct from pharmacy.
   - All pharmacy curricula shall be expected to have a strong medical component that will include skills in patient assessment, diagnosis and prescribing.
   - Pharmacists and other clinicians including physicians shall increasingly be trained side by side.

**Conclusion**

Pharmacy is in need of a new ideology that is more adaptable and inclusive. Pharmacist prescribing is the apex of patient-oriented pharmacy practice. Prescribing in community pharmacy, will have universal uptake and immense public support; and will transform the profession in a fundamental way, and spawn new drug-related professions. The academy, working with the leadership of the profession, must prepare to guide these changes, in both the short- term and long-term.