

**Pharmacist Manpower Planning in Hong Kong:
A Personal View**

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1. The stage is set for creative solutions to meet the health care manpower needs in Hong Kong. Financial resources should be set aside for a critical mass of pharmacists, within the next 5 years, who will be tasked with customizing individualized pharmaceutical care as well as evaluating its effectiveness. In other words, future recruitment of pharmacists should focus more on fulfilling a clinical role and less on a dispensing role.
2. The drivers for change are several:
 - a. Aging population with a rising demand for drugs
 - b. Scientific advances that enable the cure of recitrant diseases, notably certain types of cancer and HIV
 - c. Democratization of health-related information due to digital revolution, resulting in an increasingly health and medicine savvy public
 - d. Coming of age of biologics and complex drugs that require intervention by knowledgeable and properly trained pharmacists
 - e. Possibility of launching of the PPP initiative. This is a positive step forward in (a) enhancing the quality of healthcare valued by Hong Kong citizens, (b) clarifying the role of members of the healthcare team in rendering collaborative care, and (c) creating a public health community resource that engages the pharmacist as a caring, well informed companion in the patient's therapeutic journey.
3. Meeting future manpower needs requires radically different solutions than simply increasing the number of doctors and nurses in the current model. Recent pharmacist graduates possess clinical skills, thus offering [a solution to address the current overworked situation of doctors and nurses plus enhancing the quality care of patients to the Bureau and HA](#). By not accurately addressing the pharmacy manpower challenge, patients will be at risk of not gaining the full benefit from the regimen designed by the physician.
4. The advent of automation and artificial intelligence will diminish the dispensing function in favour of an advanced clinical role for pharmacists
 - a. Patients should have ample time to consult with the pharmacist on aspects concerning the drugs prescribed by the physician, such as storage conditions, side effects, and drug-drug, drug herb, and drug food interactions.

- b. The current practice of dispensing of more than 6 months of drugs to chronic disease patients in the HA Hospitals is an unsatisfactory solution to minimizing the workload of an already overburdened medical and pharmacist staff. It will lead to drug wastage and, worse yet, drug misuse.
 - c. The expected reduction in the volume of prescriptions in public hospital in favour of the community pharmacy will free up time for the hospital pharmacists to discharge their clinical duties in Outpatient Pharmacies and Pharmacist managed clinics, to serve as consultants to the nursing staff in administration of medications, and to monitor the progress of drug therapy, emergence of side effects, and signs of drug-drug interactions in patients.
 - d. Pharmacists who have received advanced clinical training can team up with the medical staff in designing therapeutic plans that address diseases in a much more targeted way, with fewer unwanted effects. By identifying patients who are most likely to respond well to a given therapeutic intervention and who therefore will benefit the most, we stand to spare patients who are non-responders from side effects.
 - e. Any manpower model must reshape the prevailing local culture of the sick and disadvantaged in its over reliance on the emergency room regardless of the seriousness of the ailment. The allocation of additional financial resources to hire clinical pharmacists is a cost-effective way to bring about healthier and happier lives in the Hong Kong public.
5. The time is ripe for higher education to transform the training of members of the future healthcare team. Graduates must be prepared to practice collaboratively. The core responsibility of each profession must be well defined and understood by the team. Physicians must feel at ease to delegate.

To be provocative, would it be desirable to harmonize the duration of training of medical, nursing, and pharmacy students to six years and award the graduates a doctoral degree?

6. In summary, the time has come to motivate the healthcare work force to work as an integrated team in discharging its social responsibility of meeting the health needs of Hong Kong citizens. The future manpower needs in Hong Kong must be properly balanced. It is a critical step to bring closure to healthcare reform that began more than a decade ago.