Role of Community Pharmacists in Medication Management: Current and Future Prospects in Asia

Mohamed Azmi Ahmad HASSALI

Professor of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia azmihassali@gmail.com

Citation: HASSALI, M. A. A. Role of Community Pharmacists in Medication Management: Current and Future Prospects in Asia JAS4QoL 2017, 3(3) 1:1-18.

Online: http://as4qol.org/?p=2019#art1

Received Date: 2017/09/25 Accepted Date: 2017/09/26 Published: 2017/09/30

ANNOUNCEMENT

- The 2017 International Conference on Quality of Life was held in Penang Malaysia on August 20th-21st.
- Proceedings as well as photos and other information from past conferences can be found on our website.

MORE INFORMATION AT HTTP://AS4QOL.ORG/ICQOL/2017/

ALSO OF INTEREST IN THIS ISSUE:

Effects of Chin-Don Therapy on Variations in Blood Levels of Adrenalin, Noradrenalin, and Dopamine: Relationships with Emotion and Behavior of the Elderly

Kanji HATTA

AVAILABLE AT HTTP://AS4QOL.ORG
Role of Community Pharmacists in Medication Management: Current and Future Prospects in Asia

Mohamed Azmi Ahmad HASSALI

Professor of Social and Administrative Pharmacy, School of Pharmaceutical Sciences, Universiti Sains Malaysia, 11800 Penang, Malaysia
(azmihassali@gmail.com)

Abstract

The role of pharmacist had changed during the last three decades from that of a mere specialist involved directly in patient care services. This represents a paradigm shift, where it has brought new sets of beliefs and assumptions on way services should be delivered to pharmacy clients. The pharmaceutical world is evolving continuously and has become more dynamic, so is the role of the community pharmacist. Pharmaceutical care has evolved to embrace different counseling services delivered by pharmacists. These services range from brief counseling following medication purchase to lengthy extensive counseling services and other value added services. Several countries are offering various extended or improved services as a result of the changing roles and challenges faced by the pharmacists. The extended pharmacy-services offered through community pharmacies by pharmacists require additional or special skills, knowledge and/or facilities, and are provided to people with special needs. The traditional community pharmacy practices are prevalent and common in all the Asian countries with few exceptions. The dominance of physician culture has kept pharmacists off dispensing rights, where most of the physicians prescribe and dispense the medicines. This issue of dispensing separation (DS) is of prime importance in the region not only for the pharmacists’ rights but also for the promotion of rational and quality use of medicines. Other key barriers in the region identified are the drug and pricing policies, shortage of pharmacy workforce, up-gradation of pharmacy curricula and skill development of the pharmacists. It is concluded that in order to have proactive role of pharmacists in community pharmacy and primary healthcare, there is need to address shortage of pharmacists, their skill development and dispensing separation implementation. Sound policy making should be encouraged to protect the rights and roles of pharmacist and develop professionally committed workforce. Moreover, the policy making should be evidence-based rather close door negotiations and must involve the pharmacy stakeholders.

Keywords: Community pharmacist, roles, challenges, opportunity, Asia
1. Introduction

Community pharmacists are the most accessible health professionals to the public and in many parts of the world, pharmacists are increasingly being recognized as a source of professional health-related advice (Hassali et al., 2009a). Pharmacists supply medicines in accordance with a prescription when legally permitted, sell them without a prescription and they maintain links with other health professionals in primary health care (World Health Organization, 1994). Recently, pharmacists have become increasingly involved in patient care and have expanded their traditional role of preparing and dispensing medications to influencing the prescribing process and delivery of pharmaceutical care. As a result of this there has been a shift within community pharmacy practice; increasingly, patients are turning to pharmacists for a more holistic approach (Hepler and Strand, 1990, Schumock et al., 2003). In institutional setting such as hospitals, medical practitioners are more familiar with the roles of pharmacists as a part of healthcare team. However, in the private sector, the association between the general medical practitioners and pharmacists is less formalized especially in developing countries. (Hassali et al., 2009c).

The concept of pharmaceutical care basically refers to what an individual pharmacist does when he or she evaluates a patient’s drug-related needs, determines whether the patient has one or more actual or potential drug-related problems, and then works with the patient and other professionals to design, implement, and monitor treatment plan that will resolve the drug related problem (Mohamed, 2013). Many studies have been done worldwide to illustrate pharmacy practice, the role of the pharmacist in the health care system and the pharmacy education (Chisholm-Burns et al., 2010, Fuentes, 2012, Kibicho and Owczarzak, 2012).

The health policy of any country revolves around availability, quality, safety and efficacy of medicines, timely access to affordable medicines, quality use of medicines (QUM), and responsible and viable medicines industry (Liaw and Peterson, 2009). The promotion of QUM requires a multidisciplinary approach including contributions from government, the pharmaceutical industry, health professionals, consumers, and academia. However, there are significant tensions and unintended effects associated with the multidisciplinary approach, especially with the relationship between prescribers and dispensers of medicines (Alabid et al., 2013).

The healthcare environment is facing a number challenges because of the increasing prevalence of chronic diseases, ageing societies, feminization of the health workforce, increased specialization, escalating costs of healthcare, and rising patient expectations (Kumar, 2011). The fragmentation of care (Stange, 2009) along with poor communication and inconsistencies in health practice within a complex environment and knowledge base also makes it difficult for the patients to understand and manage their illness and care (Dreischulte et al., 2012).

The shortage of global pharmacy workers is an emerging challenge for the pharmacy profession. The WHO estimates that there is a global healthcare workforce shortage of 7.2 million, which is estimated to grow to 12.9 million by the year 2035 (Bates et al., 2016). The countries and regions with lower economic indicators tend to have fewer pharmacists and pharmacy technicians implicating for inequalities regarding access to medicines and medicinal expertise (Gal and Bates, 2012).

The partnership between the patient and clinician is considered as an important part of successful care not only for common illnesses but also for chronic illness (Légaré et al., 2010). This involves actively involving the patients with chronic illnesses in full control of the management of their own illness (Braveman and Egerter, 2008).

Hence community pharmacists are the most accessible and sometimes the sole providers of health care advice or services (Hassali et al., 2009d). Nevertheless, little has been done regarding the implementation of clinical pharmacy practice and the role of pharmacists in medicine management in community pharmacies. This involves several dimensions such as restructuring of the pharmacy to include private areas for counseling, appointment of pharmacy technicians and remuneration of pharmacists. These necessary shifts of focus and authority in the delivery of medical care towards the pharmacists are difficult to implement under the current physician-dominated state of the health care profession. Some postgraduate research projects provided evidence that patient care at community setting can make a difference. This can be achieved by empowering the community pharmacists with full professional autonomy.
2. Expanded roles for pharmacists

The expanded roles of pharmacists have evolved over a period of time, particularly with regard to primary care (Olaniyan et al., 2015). These include prevention and aspects of chronic disease management with medication reviews in individual patient’s homes or residential aged care facilities and the development of formularies and reviewing repeat prescriptions. This model gives rise to new models of interprofessional care in the hospital and community (Azmi et al., 2012).

Over a period of time, extended pharmacy services (EPS) rendered community pharmacists have developed. These include those services which are not associated with traditional services offered by the pharmacists such as dispensing and providing individual consultations on prescription and over-the-counter (OTC) medications, but include new series of services as, medications therapy management (MTM), home medication review (HMR) which involves comprehensive medication reviews to look for medication-related problems. Additionally, EPS also includes all aspects of chronic disease management (CDM) which may include screening, patient education and knowledge, disease monitoring and communication with the primary healthcare team (Berbatis et al., 2007, Cruthirds et al., 2013).

The extended role of pharmacists can improve prescribing practices, reduce healthcare utilization and medication costs and contribute to clinical improvements in many chronic conditions such as cardiovascular diseases, diabetes, osteoporosis and psychiatric illness (Liaw and Peterson, 2009). Keeping the extended roles of community pharmacists in view, the scenario of community pharmacy practice has been discussed in the proceeding sections of this draft.

3. Global perspective of community pharmacy practice

The role of pharmacist has evolved over a period of time from that of a compounder and supplier of pharmaceutical products towards that of a provider of services and information and ultimately that of a provider of patient care (Schommer et al., 2008). The pharmacist’s task is to ensure the quality use of drugs that the patient receives appropriate drug therapy for the indication drug is prescribed for, effective, safe, convenient and even ensures the availability of the product (World Health Organisation, 1984). Pharmacists in fact take direct responsibility for patients’ medicine-related needs and contribute toward the positive outcome of the drug therapy. In this way pharmacists contribute to enhancing the quality of life of patients by assuring quality use of medicines. The pharmaceutical care rendered by pharmacists becomes an obligation for them. In order to fulfill this obligation pharmacists need to be able to perform many different functions (Penm et al., 2015). Many studies had showed the positive impact of patient-centered roles of community pharmacists in term of health outcome, quality of life, cost-effectiveness of the patient-orientated services, as well as improve patients’ medicines use (Bunting and Cranor, 2006, Chumney and Robinson, 2006, Hawksworth et al., 1999, Verma et al., 2012).

4. Community pharmacy practices in developing countries in Asia

Prescribing and dispensing drugs are important aspects of access to primary health care. In most developed countries, the main role of family physicians is to prescribe drugs without direct dispensing. Doctors are not allowed to sell drugs directly to their patients in several Organizations for Economic Cooperation and Development (OECD) countries such as Italy, Germany and Scandinavian countries. (Filippini et al., 2014). While most OECD countries fully ban physician dispensing, there are some notable exceptions: the USA, the UK, Japan, and Switzerland (partly) allow medical doctors to dispense drugs.

The current trends in community pharmacy practices in the developing countries are discussed herein in detail. The community pharmacy practices are discussed according to the regions which the developing countries are part of. The community pharmacy practices, expanded roles of community pharmacists, pharmacy services and the barriers toward practice change are discussed in the following sections according to the region, i.e. the United Arab Emirates, Middle East, South East Asia and South Asia.

5. Community pharmacy practices in the UAE

There are approximately 2500 pharmacies in UAE and the number of pharmacies is increasing (Hasan et al., 2012). The worldwide shift from product-to patient-focused approach is increasing the ac-
cumulated pressure on UAE pharmacists to provide a better level of service accompanied with higher degree of inter-personal skills and intellectual ability (Rayes et al., 2015b).

In the UAE, Federal Law permits that only UAE citizens can own a pharmacy and the majority of community pharmacies are private and owned by non-pharmacist businesspersons; however, the pharmacy is required to be under the supervision of qualified registered pharmacist only (Rayes et al., 2015b). Overall professional services are seldom provided to customers, pharmacist’s job is to perform managerial tasks (Dameh, 2009b). Occasionally pharmacists advise patients about the side effects of medicines and give instruction on the use of the medicines. Patient medication reviews are rarely carried out in community pharmacies (Dameh, 2009a). Prescription-only-medicines (PoM) can be obtained without a legal prescription (Akshar et al., 2014, Rayes et al., 2015a).

Some of the community pharmacies in Dubai, however, provide services, but limited only to information about nutritional supplements, diet plans, skin care, herbal remedies, and body weight reduction (Rayes et al., 2015a). Nevertheless, the newer generation of qualified licensed pharmacists are ready to accept change and offer extended services (Rayes et al., 2015a, Rasool et al., 2010). The pharmacist should keep themselves abreast of advances in community pharmacy practices (Al-Tabakha et al., 2013). In Kuwait, pharmacists are found to be well prepared in terms of providing counseling services (Awad and Abahussain, 2010). Babiker et al., found community pharmacists in Qatar sufficiently aware of the concept of medication use review (MUR) and its scope however; there are still some deficiencies that warrant further education of community pharmacists (Babiker et al., 2014). The patient’s trust of pharmacists has been reported to be greater in Qatar, where patients are more familiar with the roles of pharmacists as people there tend to self-medicate themselves with OTC therapy (Wilbur et al., 2010).

The identifiable barriers toward community pharmacy practice change in UAE are; non-pharmacist business-oriented owners of pharmacies, and inadequate salaries and lack of incentives to pharmacists (Rayes et al., 2014b). Other barriers include; time constraints, shortage of pharmacists, and absence of training programs for pharmacists (Awad and Waheedi, 2012). Lack of awareness in public about the pharmacists’ services is another significant barrier (Rayes et al., 2014b). Determinants like media, health authorities, pharmacist’s knowledge level, attire, nationality, age and pharmacy location can be helpful in influencing the perception of public toward pharmacist (Rayes et al., 2014a).

6. Middle Eastern countries

In Middle Eastern countries like, Saudi Arabia, Palestine, Iraq and Jordan, traditional dispensing practices are prevalent and there is unrestricted public access to medications from community pharmacies and under-appreciation of professional services of pharmacists (Bawazir, 2006, Maher et al., 2014, Aburuz et al., 2012, Ibrahim et al., 2013). Identifiable barriers include; lack of technical and appropriate knowledge on medication errors and adverse drug reactions and reporting, multilingualism, high work load and insufficient salaries (Aljadhey et al., 2014). Community pharmacists should play a pro-active role in becoming an effective and indispensable part of health care and have to be well equipped with appropriate knowledge and competencies (Al-Arifi, 2012).

7. Community pharmacy practices South East Asia

Malaysia: the professional role of community pharmacies in Malaysia to deliver pharmaceutical care is limited due to absence of dispensing rights to the pharmacists working in community pharmacies (Shafie et al., 2012b). In fact, to date there is no dispensing separation in Malaysian community pharmacy system and this is presented be as one of the major barriers in the transformation of services from a product-based selling of drugs to a patient-oriented approach (Hassali et al., 2009a). The Malaysian Poison Act 1952 (Section 7) and Poison Regulation 1952 (Regulation 3), gives rights to general practitioners to dispense medications directly to the patients. This has resulted in the role of pharmacists evolving in community pharmacies into to one of information provider on health supplements and foods, homecare, personal hygiene and beauty products as well as the complementary alternative medicines (Hassali et al., 2009b).

The community pharmacies in Malaysia function more like personal drug stores, as they are seldom involved in provision of primary care (Saleem and Hassali, 2016). Therefore, community pharmacies
have limited opportunity to optimize their clinical knowledge. Recent work by Hassali et al. has identified the current barriers toward transformation of community pharmacy practice in Malaysia. Dispensing separation is believed to be a critical policy change that will help to reduce medical costs, improve population health and increase the quality of health in Malaysia (Shafie et al., 2012a). There is an urgent need for the development and implementation of new policies to facilitate the practice change. It is suggested to improve the community pharmacy practice in general and facilitate the implementation of extended pharmacy services with major emphasis on the dispensing separation (Hassali et al., 2009e).

**China:** In China, in addition to the traditional roles of dispensing prescriptions and selling medicines, community pharmacists must adopt responsibility in primary care by delivering pharmaceutical care services (Fang et al., 2013). A large majority of pharmacies in China provide prescription drugs and over-the-counter products (OTC), as well as prescription dispensing and patient counseling. However, the lack of reimbursement mechanism reduces the willingness of pharmacists to offer EPS. Dispensing separation is considered as dilemma for practice change in China (Xiao-yun, 2011). The shortage of qualified pharmacists has been reported in China and other identifiable barriers include the failure to meet increasing patient needs lack of training of pharmacists has led to low priority for delivery of expanded role of pharmacists in routine pharmacy practice (Fang et al., 2011).

**Thailand:** Community pharmacies in Thailand provide first line care for the patients with minor ailments and common illnesses. The authorities in Thailand are working with the intent of upgrading community pharmacies to providing the first line of healthcare services where the responsible area and target population will be well defined (Payanantana et al., 1998). In 2005, Thai Food and Drug Administration (TFDA) established Quality Drug Store project for improvement and development of community pharmacy as a service with good standards (Lochid-amnuay et al., 2009). The Thai Pharmacy Council accredits community pharmacy as Quality Drug Store that must comply with those criteria meeting the Good Pharmacy Practices (GPP) guidelines. This compliance with the criteria and standards has led to better performance by the community pharmacists in Thailand (Arkaravichien et al., 2016). Thai Pharmacy Council enforces the concept of quality services rendered by the community pharmacists (Lochid-amnuay et al., 2009). A model concept of Perceived Community Pharmacy Service Quality (PCPSQ) is being practiced in Thailand, intended for measuring services quality and focuses on the patients’ perception and satisfaction (Panyawuthikrai et al., 2006).

**Taiwan:** In Taiwan the pharmacists working in community pharmacies have been reported to have greater job satisfaction than the contemporary hospital and clinical pharmacists (Yen-Ju Lin et al., 2007). In 2002, the Bureau of Pharmaceutical Affairs, Department of Health Taiwan, began a national effort entitled as Community Education Program on Medication Use, which involved the expertise of pharmacists in educating public on safe use of medicines (Wen et al., 2007). This program facilitated by pharmacists improved the medication knowledge of the public and it was later re-iterated that community pharmacists should play a proactive role on large-scale (Huang et al., 2006). In Taiwan, public has some level of trust for pharmacists, aware of the services that pharmacists render (Chen et al., 2012).

**Hong Kong:** The role of pharmacist in Hong Kong is not different from rest of the developing world. Traditionally the role of pharmacist is not well understood by the public (You et al., 2011). Most see pharmacists as “pill counters” and nothing more. This situation has taken a positive turn in the past decade when in 2002, a group of pharmacists started promoting an improved image of the profession to public via media including (print and electronic)(Wong et al., 2011). Nowadays the public is more aware of the roles, responsibilities, and capabilities of pharmacists and this has, in turn created an increase in the demand for community pharmacists in Hong Kong. There are also plans to implement services in community pharmacies such as medicine use review in the future (You et al., 2011).

**Singapore:** The majority of the community pharmacists in Singapore play the traditional role of dispensing (George et al., 2010). In Singapore, although the community pharmacist provides advice-giving services to consumers who seek self-medication for the management of minor ailments, consumers lack the awareness that pharmacists can help them with safe and effective use of medicines (Wong et al., 2011). More efforts in public education and current state of poor documentation of advisory function of CPs is warranted to improve the services (Chui and Li, 2005).
Korea: In Korea, until recently both physicians and pharmacists were allowed to prescribe and dispense drugs for patient care that resulted in the quality and efficiency of the healthcare system (Kim et al., 2004, Kwon, 2003). In July 2000, the Korean government launched a radical drug policy reform. The South Korean government expected to reduce the cost of medications and improve service levels, medical appropriateness of care and drug effectiveness (Kim and Ruger, 2008). However, despite the reforms, unintended consequences have distorted the supply of medical services and spending. This consequently resulted in increased use of uninsured services, and the prescribing of high-d drugs and a growing market share for multinational companies (Lee, 2003).

Japan: With recent advances in the separation of dispensing and prescribing drugs, the social role of community pharmacists has expanded in Japan (Hayashi, 2003). Pharmacists working in community sector provide the quality information required for the optimum management of patients and environment is suitable for pharmacy externships (Iguchi et al., 1998). In Japan, community pharmacies are not only contributing to the community by dispensing medicines, but also providing information on prescription and nonprescription drugs, and through other activities (Akaho et al., 2003). More specifically, the following activities are provided by community pharmacists: (1) labeling the drugs dispensed with a pharmacy label that mentions the patient’s name, dosage, indication, and warnings; (2) documenting past medical and social histories of patients to avoid adverse drug events; and (3) dispensing a patient information leaflet with the drugs (Yamamura et al., 2006). Generic substitution services have been started in Japan, pharmacists can provide information about the branded and generic drugs (KAMEI et al., 2001). In general, the primary work of pharmacists is still dispensing medicines. Therefore, pharmacists are not required to provide screening, which ideally they should do (Inoue et al., 2016). It is hoped that work done by Japanese pharmacists would transition from primarily dispensing drugs to patient care, advice, and counseling to enrich overall health promotion (Inoue et al., 2015).

8. Other South East Asian countries

In other South East Asian countries such as Vietnam, Philippines, Cambodia, Indonesia, more than 80 percent of people go directly to community pharmacies when they become ill. However, the pharmacists are in short number and they face the same problems and barriers as discussed earlier for developing countries (Loquias and Robles, 2012).

9. Community pharmacy practices in South Asia

In South Asian countries like Iran, India, Pakistan, Afghanistan, Nepal, Bangladesh, Bhutan and Sri Lanka, pharmacists are involved only in traditional dispensing of medicines (Smith, 2009). Pharmacists are still underutilized and both the public and health care professionals do not consider their role as health care professionals (Azhar et al., 2013). This lack of recognition can be attributed to limited interaction of pharmacists with public, being least aware and healthcare professionals (Azhar et al., 2009).

There is no distinction between the pharmacist and technician working in community pharmacies, a common trend seen in South Asian countries (Bhagavathula et al., 2014). India being the biggest country in the region, community pharmacy practice is in developing stage and has many barriers which need to be overcome. Important barriers to the provision of patient / pharmaceutical care include lack of proper education, weak law enforcement and lack of recognition of the pharmacy as a profession by other healthcare professionals and the public (Basak et al., 2009). However, trust of the public for community pharmacists has also been reported in India to a little extent in advisory role of pharmacists for their drug related and lifestyle issues (Singh and Khale, 2015). A wide range of corrective actions can be helpful in promoting the level of customer satisfaction (Mehralian et al., 2014).

The situation is not different in other countries as Nepal, Afghanistan, Bangladesh, Bhutan and Sri Lanka where traditional practices prevail with more focus on drug selling rather patient-centered practices (Goel et al., 1996). Majority of community pharmacies do not comply with the regulatory provisions. Presence of authorized personnel in some pharmacies has only partially controlled non-compliance (Poudel et al., 2016). The current practice of Iranian community pharmacists needs improvement with regard to their roles in community practice: promoting rational drug use (Hanafi et al., 2015).
10. **Major challenges in the region**

Major challenges to community pharmacy practice and recognition of the role of community pharmacists have been identified as common in the region. These challenges are also considered to be barriers toward practice change and need to be overcome. The barriers toward community pharmacy practice change are given as follows:

1. Insufficient pharmacy workforce.
2. Lack of dispensing rights to pharmacists.
3. Poor enforcement of laws governing the drug control aspects of a country.
4. Lack of recognition of pharmacists as healthcare professional and underutilization of pharmacists by health professionals and the public.
5. Pharmacy curriculum.
6. Lack of presence of national essential medicine list in some countries or lack of compliance toward following the essential medicine list.
7. Non-uniform prices or the uncontrolled prices of drugs and pharmaceuticals.
8. Accessibility and affordability of quality medicines to the public.

11. **The importance of having dispensing separation in Asian countries**

Prescribing and dispensing of drugs are one of the main aspects of access to primary health care. In most developed countries, the main role of family physicians is to prescribe drugs without direct dispensing. Doctors are not allowed to sell drugs directly to their patients in several Organizations for Economic Co-operation and Development (OECD) countries such as Italy, Germany and Scandinavian countries. (Filippini et al., 2014). While most OECD countries fully ban physician dispensing, there are some notable exceptions: the USA, the UK, Japan, and Switzerland (partly) allow medical doctors to dispense drugs.

Historically there has been some tension between dispensing doctor practices and community pharmacies (Gilbert, 1998) regarding where each should be located and the quality of service that each provides. If physicians are allowed to sell drugs to patients, they may prescribe more drugs or, depending on drug pricing, substitute toward more expensive prescriptions to generate additional income. In other words, dispensing can create financial incentives for physicians to induce demand and thus raise healthcare expenditures (Kaiser and Schmid, 2016).

In many Asian countries, physicians both prescribe and dispense drugs, earning profits that vary with the types and amount of drugs dispensed. This is largely the case in China, Hong Kong, Japan, Malaysia, South Korea, Taiwan and Thailand. Combining prescribing and dispensing creates incentives for physicians to increase drug prescriptions and is hypothesized to be a major cause of high drug expenditure and widespread prescription of antibiotics in Asia. For example, drug expenditure as a share of total health expenditure is approximately 30% for Japan, South Korea and Taiwan, and as high as 52% for China, compared with an average of 10–14% among OECD countries where, in most cases, prescribing and dispensing are separate activities (Chou et al., 2003). In recent years, in an effort to control drug expenditure growth and improve appropriate drug prescription, separating the drug prescribing and dispensing functions of physicians has gained popularity in policy debate among Asian countries. Underdevelopment of pharmacy in Asia can be explained by remembering the history of the respective health care systems. In the West, the main expected outcome from visiting a physician has always been the diagnosis and explanation. While in Asian countries, due to the domination of herbal medicinal traditions, the expected outcome from visiting a physician is the preparation and dispensing of medication. This drug-related revenue has frequently been the only source of income for physicians, since charging the patient for diagnosis and advice was considered to be inappropriate (Salmasi et al., 2016).
12. The Malaysian experience

One of the few countries in the region, where physician dispensing practices are still allowed, has been pondering a separation of roles for many decades, but fierce vocal opposition from a few parties unfortunately has misled and confused the Malaysian public and has inhibited further progress toward separation (Shafie et al., 2012b). In Malaysia, both prescribing and dispensing rights still lie with private general practitioners (GPs) in private clinics. Concerns have arisen with this model, due to potential conflicts of interest, as GPs profit from the prescribing and sale of prescription medicines. This may well lead to unnecessary as well as over-prescribing. The idea of dispensing separation is not new and has been discussed for many years with strong objections from various organizations, including the medical associations. More recently, there has been increasing discussions on this topic and many arguments still remain around reduced convenience and increased costs to consumers and an insufficient pharmacist workforce (Mak and Hassali, 2015). Malaysia remains one of the few countries in the South East Asia region without such a health policy owing to the colonial era legislation, particularly the Poisons Act 1952 (and its subsequent amendment in 1989) which granted the rights of dispensing to both doctors and pharmacists (Tiong et al., 2016). A significant milestone was achieved with the signing of a Memorandum of Understanding in 1986 between the Malaysian Medical Association (MMA) and the Malaysian Pharmaceutical Society (MPS), which recognized the dispensing role of pharmacists. Despite this, doctors in private practice continue to dispense medications in the absence of legislation which prohibits them from doing so (Tiong et al., 2016). By separating the prescribing and dispensing of medicines, it is believed that the process will reduce the overuse and misuse of medicines, improve the quality of the consumption of prescription drugs, and enhance the patients’ right to know about medications (Saleem and Hassali, 2016). One way to reduce resistance from prescribers is an upsurge of consultation fees. Furthermore, dispensing services fees can be offered for the pharmacists to assume their new role in the health care system. Nonetheless, Malaysian policymakers have to weigh the benefits of the separation policy against the need to increase consultation and dispensing fees to assist in policy implementation (Saleem and Hassali, 2016).

13. Dispensing separation: need of the hour

The separation between prescribing and dispensing medicines will indeed be an enormous task to achieve as it involves various stakeholders and it is not only confined to community pharmacists and GPs. Traditionally doctors have held on the practice of prescribing as well as dispensing and GPs in particular have served as one-stop center for patients’ needs. It seemed to have worked well for many years; however, there are certain merits and demerits to the separation of roles. Specifically:

1. Convenience: It is very convenient to go to one center where one not only receives treatment but also obtain medications. A separation of the services will entail going to two places, first to see the doctor and then to collect medications from the pharmacist. While it might appear that going to two place will inconvenience the patient, in fact this might not necessarily be so. Let us consider the example of a general hospital. One can receive the treatment in one room and still cross over to another block to collect the medications. By the same token, a pharmacy located close to a clinic will serve just as well.

2. Cost: Another common misconception is the fear that medication would be more expensive if obtained from pharmacist compared to GPs. This fear is however unfounded as the risk of excessive pricing is actually higher with the present policy whereby the GPs play both prescribing and dispensing role. This means that the GPs would play the role of buyer and seller at the same time at the expense of the patient. There is evidence that this would influence GPs into expanding patient need (supplier induced demand) by prescribing unnecessary intervention that would consequently increase cost to the patients. In addition it is well known that clinics cannot have an exhaustive list of medications. There are instances where prescriptions have to be written by doctors for patients to purchase from pharmacists which would have a competitively priced medications available.

3. Generic medicines: The use of generic medicines will mean tremendous savings for patients as well as the country and this can be achieved without compromising quality. The generic substitution policy is best carried out by the community pharmacists as medicines are the cornerstone
of any medical treatment and pharmacists are trained to dispense medicines. Drug therapy and medicine-related illness cannot be managed and monitored effectively without pharmaceutical care.

4. **Safety:** By engaging two practitioners, there will be a good check and balance system to prevent any medication errors which sometimes could be fatal to patients. This is an important area that is recognized internationally and dispensing separation has become a norm in many developed countries. Any change in the dispensing separation policy should take the issues into consideration.

### 14. Dispensing separation: the way forward

Further, in order to successfully implement dispensing separation, following factors need to be closely looked into:

1. **The need for rescheduling the current laws:** Consider the case of Malaysian poison list; currently some of the medicines such as those listed for the treatment of diabetes e.g. Daonil® (Glibenclamide) and Diamicron® (Gliclazide) are categorized as “Group C” poisons which can be sold by pharmacists without a physician’s prescription. With the implementation of dispensing separation, it is imperative that more drugs from “Group C” poisons are moved to “Group B” poisons which can only be sold with a doctor’s prescription. This move will help the doctors monitor their patients’ health regularly as the patients need to go and see them for their prescriptions. In addition the loss of income due to patients being able to buy their medicines from pharmacists without visiting the GPs, a serious concern for GPs would be resolved.

2. **The need for establishing a generic substitution policy:** There should be a very strong regulatory mechanism for the safe use of generic medicines. The regulatory authorities should require bio-equivalence evidence that the generic products are comparable with the branded products for them to be registered for sale.

3. **Establish the need for pharmacist-physician patient referrals:** The concerned authorities within the ministry of health should establish a pharmacist-patient referral system for GPs. Currently doctors only receive referrals from their medical peers. According to recent recommendations from the World Health Organization (WHO) and International Federation of Pharmacy (FIP), establishing such a system will help overcome the problems of some under-diagnosed ailments in the community as some of the findings from initial screening tests that can be performed by pharmacists will be evaluated further by a medical doctor.

4. **Provision of special loans for pharmacists:** The fourth factor that should be considered if dispensing separation is to implemented is providing special loans to pharmacists to start their practice in rural areas. The provision of special loans will be an incentive for pharmacists to start their practice in rural areas and this has been proven effective in many other developed countries such as Australia and New Zealand. We believe there is room for implementation of dispensing separation in the region but it is a question of the right timing and appropriate policies.

5. **Changes in the current curriculum of pharmacy schools:** With the changes in the current curriculum of pharmacy schools across the globe, pharmacist undergraduate training has become more patient oriented rather than product oriented. It is also emphasized that the approach in the pharmacy curriculum should be integrated, having collaboration of the other healthcare professionals.

6. **Collaboration between the physicians and pharmacists:** At most institutions across the world medical specialists are also are intensely involved in teaching clinical aspects of disease management to pharmacy students during their clinical years. Therefore, a mutual insight into each other's professional roles is needed and any personal conflict should be avoided as it will mar the professional images of both professions. A few countries, like Korea and Taiwan, in the region have been successful in separating the dispensing from doctors. It is time for rest of the countries in the region to give dispensing rights to pharmacists.

7. **Price regulation of pharmaceuticals:** One of the biggest barriers towards dispensing separa-
tion in the region is believed to be pricing policy. As a measure of affordability of medicines, many countries have regulated the price of essential medicines. New rules should be made or existing rules amended and the prices of pharmaceuticals must be fixed. Having fixed the prices of medicines there will be a fixed percentage of profits being offered to the pharmacies so that the patients would can receive maximum benefit. This will keep the pharmaceutical companies from offering lucrative incentives to the physicians.

8. Consumer demand and expectations: Changes in disease and demographic patterns, and better standards of living have impacted patient perceptions and expectations of health, leading to increased demand for medical care. Resource constraints complicate access to expensive and sophisticated treatment in many developing countries. By addressing such types of issues, that is by meeting the patients’ expectation health care providers can bring a positive change in the system, provided all healthcare professionals work in their own domains and honor the domains of their peer professionals.

15. Conclusion
In conclusion, in order to develop and maintain a proactive role for pharmacists in community pharmacy and primary healthcare, the shortage of pharmacists should be addressed, their skill development needs to be emphasized and dispensing separation should be implemented following the Taiwan- and Japan-models. Sound policy making should be encouraged to protect the rights and roles of pharmacist and develop a professionally committed workforce. Moreover, policy making should be evidence-based rather than door negotiations and must involve the pharmacy stakeholders.

16. References/Bibliography


BUNTING, B. A. & CRANOR, C. W. 2006. The Asheville project: long-term clinical, humanistic, and eco-
Economic outcomes of a community-based medication therapy management program for asthma. *Journal of the American Pharmacists Association*, 46, 133-147.


HAYASHI, S.-R. 2003. The expected role of community pharmacist in society. Journal of the Pharmaceutical...


SINGH, D. & KHALE, A. 2015. Perception of patients towards the knowledge of community pharmacist


