PROFESSIONAL SERVICES OFFERED BY COMMUNITY PHARMACISTS AND CHALLENGES IN MANAGING COMMUNITY PHARMACIES: VIEWS FROM COMMUNITY PHARMACY PRACTITIONERS IN THE STATE OF SARAWAK

by

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This research is a two-year journey full of challenges and uncertainties, a venture into the unknown and unfamiliar in an attempt to discover new knowledge. Despite ultimately claimed as being my work, this chronicle of knowledge is in actual fact a collective effort of many people who willingly sacrificed their time and shared their expertise - people whom I am eternally indebted to.

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CPBG	Community Pharmacy Benchmarking Guideline
CPD	Continuous professional development
EO	Entrepreneurial orientation
GST	Goods and Services Tax
LMIC	Low and middle income countries
MyCC	Malaysian Competition Commission
MCPG	Malaysia Community Pharmacy Guild
MPS	Malaysia Pharmaceutical Society
MREC	Medical Research and Ethics Committee
MTAC	Medication Therapy Adherence Clinic
MYR	Malaysian Ringgit
NHMS	National Health and Morbidity Survey
OTC	Over-the-counter
PPS	Professional pharmacy services
PRP	Provisionally registered pharmacists
RBVF	Resource based view of the firm
ROI	Return of investment
RSP	Recommended selling price
SOP	Standard operating procedures
SPS	Sarawak Pharmaceutical Society
WHO	World Health Organisation

PERKHIDMATAN PROFESIONAL YANG DITAWARKAN OLEH AHLI FARMASI KOMUNITI SERTA CABARAN YANG DIHADAPI DALAM PENGURUSAN FARMASI KOMUNITI: PANDANGAN DARIPADA PENGAMAL FARMASI KOMUNITI DI NEGERI SARAWAK

ABSTRAK

Fokus farmasi komuniti di seluruh dunia telah beralih secara beransuran kepada yang berasaskan perkhidmatan. Namun, pelbagai cabaran pengurusan melambatkan perkembangan ini, terutamanya di negara-negara membangun seperti Malaysia. Dalam literatur, dimensi cabaran yang dihadapi dalam pengurusan farmasi komuniti masuh belum diperjelaskan. Tujuan kajian ini adalah untuk mengenalpasti status terkini perkhidmatan farmasi profesional yang disediakan serta cabaran pengurusan yang dihadapi oleh ahli farmasi komuniti di Sarawak, Malaysia. Methodologi kajian pelbagai kaedah yang terdiri daripada komponen kualitatif (Fasa 1) and kuantitatif (Fasa 2) digunakan. Dalam Fasa 1, temubual separa berstruktur telah dilaksanakan dengan ahli farmasi komuniti yang beramalan di Sarawak. Teknik persampelan secara bertujuan serta bola salji telah digunakan untu memastikan kepelbagaian responden, dengan ketepuan data dicapai selepas 20 sesi temubual. Semua temubual dirakam dan ditranskrip secara kata demi kata, dengan data yang diperoleh dianalisa menggunakan analisa tematik. Sebelas tema utama telah dikenalpasti. Penyediaan perkhidmatan farmasi profesional dipengaruhi oleh motivasi intrinsik serta pertimbangan perniagaan responden. Kekangan dalaman organisasi yang dihadapi termasuk kesuntukan masa, kakitangan dan ruang fizikal, manakala isu-isu budaya, pelanggan yang kurang komited, stok serta isu harga

merupakan halangan luaran organisasi yang dikenalpasti. Permintaan pasaran mempengaruhi perancangan responden untuk memperkembangkan perkhidmatan yang disediakan. Cabaran pengurusan yang dialami merentasi lima domain: persaingan pasaran, isu-isu perundangan, pengetahuan dan ekspektasi pelanggan, kesan makroekonomi serta masalah operasi. Peningkatkan kualiti perkhidmatan pelanggan dan perluansan rangkaian perkhidmatan profesional merupakan strategi tangani yang dicadangkan. Dalam Fasa 2, soal kaji selidik berlandaskan penemuan Fasa 1 serta literatur yang berkaitan telah diposkan kepada semua farmasi komuniti di Sarawak yang layak (n=184). Sebanyak 80 maklum balas telah diterima (kadar respons 43.5%). Tahap persetujuan tinggi dicatatkan mengenai pelbagai cabaran ekonomi, operasi serta pelanggan yang dihadapi. Perubahan strategik untuk menangani cabaran yang dihadapi ditumpukan terhadap harga dan produk, berbanding dengan penyediaan perkhidmatan farmasi. Strategi yang dibeli nilai tertinggi termasuk meningkatkan pemberian diskaun kepada pelanggan dan mencari pembekal yang menawarkan harga lebih murah. Perubahan cadangan perundangan yang boleh meningkatkan pecahan mereka dalam pasaran farmaseutikal disokong kuat oleh responden, terutamanya untuk menangani isu harga serta ketiadaan pemisahan pendispensan. Kesimpulannya, keadaan perundangan semasa dan pemikiran pengguna Malaysia mengekang penyediaan perkhidmatan profesional serta opsyen strategik farmasi komuniti untuk menangani cabaran pengurusan kontemporari yang dihadapi. Pendekatan jangka panjang pelbagai pihak untuk menangani isu-isu ini, serta peningkatan penglibatan ahli farmasi komuniti sendiri dalam agenda ini dikehendaki untuk mempengaruhi perubahan amalan.

PROFESSIONAL SERVICES OFFERED BY COMMUNITY PHARMACISTS AND CHALLENGES IN MANAGING COMMUNITY PHARMACIES: VIEWS FROM COMMUNITY PHARMACY PRACTITIONERS IN THE STATE OF SARAWAK

ABSTRACT

The focus of community pharmacies worldwide is gradually shifting towards service-based. Unfortunately, various management challenges delay this progression, especially in developing countries like Malaysia. Dimension of challenges faced in the management of community pharmacies is poorly articulated in the literature. The aims of this study were to explore the current status of professional pharmacy services provision and management challenges faced by community pharmacists in Sarawak, Malaysia. A mixed-methods design comprising qualitative (Phase 1) and quantitative (Phase 2) components was used. In Phase 1, semi-structured interviews were carried out with community pharmacists practising in Sarawak. Purposive and snowball sampling techniques were employed to ensure a diverse group of informants, with data saturation achieved after 20 interview sessions. Interviews were audio-recorded and transcribed verbatim, with the resultant data analysed using thematic analysis. Eleven major themes were identified. Professional pharmacy service provision was influenced by both respondents' intrinsic motivations and business considerations. Intra-organisational constraints faced include lack of time, personnel and physical space, whereas cultural issues, uncommitted customers, stock availability and price issues were the extra-organisational barriers. Market demand influenced respondents' plans for further service expansion. Management challenges experienced traverse five domains: market competition, legislative issues, customers'

knowledge and expectations, macroeconomic impacts and operational problems. Improving customer service quality and expanding the range of professional services were suggested coping strategies. In Phase 2, survey questionnaires constructed using Phase 1 findings and supplemented with relevant literature were posted to all eligible community pharmacies in Sarawak (n=184). A total of 80 responses were received (response rate 43.5%). High levels of response homogeneity were recorded for various economic, operational and customer-related challenges faced. Strategic changes to counter these challenges were focused on pricing and product stocked, rather than service provision. Most rated strategies include increasing discounts for customers and sourcing cheaper suppliers. Legislative change proposals that can increase their share of the pharmaceutical market were strongly supported by respondents, particularly those that address pricing issues and the lack of dispensing separation. In conclusion, current legislative conditions and Malaysian consumer mindset might have constrained professional services provision and strategic choices of community pharmacies to deal with contemporary management challenges faced. A long-term multi-pronged approach to address these issues and increased involvement of community pharmacists themselves in this agenda are required to influence practice change.

CHAPTER 1

INTRODUCTION

1.1 Background

In recent times, the orientation of community pharmacies worldwide has gradually metamorphosed from product-based to service-based (Moullin et al., 2013; Roberts et al., 2005). This move was primarily sparked by the landmark pharmaceutical care concept introduced by Hepler and Strand (1990), who advocated the focus on patient outcomes rather than just the dispensing process. In this new orientation, community pharmacists are implored and incentivised to provide professional services that commensurate with their expertise, moving beyond the traditional mainstay of preparing and dispensing medicines to patients, as well as selling non-drug commodities (J. Smith, Picton & Dayan, 2013; World Health Organisation, 1994).

Several other reasons contributed to make this transformation necessary. The professional expertise of community pharmacists, as well as their high visibility and easy accessibility were seen as ideal to tackle the burgeoning prevalence of chronic illnesses and public health issues (McMillan et al., 2013; Mossialos et al., 2015). Providing services were also a conduit to ensure the continued relevance of the profession, as a lot of functions previously performed by community pharmacists were supplanted by the pharmaceutical industry and automated machineries, especially manufacturing and packing medicines (Bush, Langley & Wilson, 2009; Edmunds & Calnan, 2001). The reducing margins in prescription medications and increased competition amongst community pharmacies also served as a compelling reason to venture towards professional services provision (Doucette et al., 2012;

Feletto et al., 2010a). A pharmacy service is acknowledged as professional if it utilises 'specialised health knowledge' of community pharmacists, 'optimises process of care' and is primed to 'improve health outcomes and the value of healthcare' for patients (Moullin et al., 2013).

There are growing evidences on the positive impacts of community pharmacists-led professional services, further consolidating their involvement in these endeavours. Health benefits that are statistically significant had been established for health screening services (Willis et al., 2014), smoking cessation services (Brown et al., 2016; Saba et al., 2014), weight management (Brown et al., 2016), asthma management (Saini et al., 2011) and government reimbursed medication reviews (Hatah et al., 2014). For services where concrete evidences of effectiveness are still forthcoming, the need of nations to meet increasing challenges of delivering cost-effective health care services is already a compelling justification to provide them (Mossialos, Naci & Courtin, 2013).

Community pharmacists across the world are however, moving towards this service-based future at a different rate (Rangchian et al., 2016). In countries with highly developed community pharmacy practice, including England, the United States of America, Canada and Australia, community pharmacists are already providing services than transcend traditional pharmacy boundaries, including prescribing medicines, administrating injections and interpreting laboratory tests (Mossialos et al., 2015; Mossialos et al., 2013). In other European countries, services such as smoking cessation, management of drug waste and pharmaceutical care programmes

are commonly available (F. Martins, van Mil & da Costa, 2015). In contrast, community pharmacists in low and middle income countries (LMICs) are struggling, as even providing an acceptable level of fundamental pharmacy services is still an enormous challenge (Miller & Goodman, 2016; F. Smith, 2009). In Southeast Asian countries including Malaysia, the process of implementing changes has been slow, with range and quality of services provided changed little over the past 14 years (Hermansyah, Sainsbury & Krass, 2016).

1.2 Problem statement

Community pharmacists worldwide demonstrate favourable attitudes towards providing professional pharmacy services (Laliberte et al., 2012; Luetsch, 2016). Unfortunately, multiple problems were faced in efforts to switch community pharmacists' focus towards provision of professional pharmacy services, even in countries with highly developed practice. In England, despite the realignment of remuneration to favour professional services provision, community pharmacists still spend dominant and similar amount of time as a decade earlier on routine dispensing work (Davies, Barber & Taylor, 2014). In Australia, community pharmacists were also slow in moving beyond their current dispensing based model into one that is services focused (Mak et al., 2011). Identified barriers include lack of time, manpower and confidence levels to provide these services (Berbatis et al., 2007; Eades, Ferguson & O'Carroll, 2011). The need to wear three 'hats' as a retailer, dispenser and health consultant also fragmented the concentration of community pharmacists (Rapport, Doel & Jerzembek, 2009). Often these services were offered on top of the dispensing they are required to do, culminating in increasing workload for pharmacists (Hassell et al., 2011). For community pharmacists in LMICs, efforts

were further stymied by underdeveloped health systems and legislations that did not facilitate proper development of pharmacy practice (Hermansyah et al., 2016; Miller & Goodman, 2016; F. Smith, 2009), as well as a lack of recognition by general practitioners and patients regarding their ability to provide professional services (Azhar et al., 2009; Hasan et al., 2011).

In the Malaysian context, the current nationwide status of professional pharmacy services provision was previously characterised by Hassali, Ooi et al. (2014). Community pharmacists were surveyed regarding their involvement in providing counselling sessions on specific health topics, disease state management, health screening and monitoring tests as well as patients' medication check. Twenty-nine out of the 35 services listed were provided by more than half of the respondents. The findings were consistent with an earlier study, where nearly half of the community pharmacies in Malaysia was found to provide smoking cessation services and three quarter of them offered health screening tests (S. S. Chua et al., 2008). Several local studies on the barriers faced in professional pharmacy service provision exist, with lack of time similarly being the dominant barrier noted (Hassali, Ooi et al. 2014; Hassali, Subish et al., 2009; Taha & Ooi, 2014; Bershir & Hamzah, 2014). Other major barriers include lack of knowledge and skills as well as patient demand (Taha & Ooi, 2014; Mathialagan et al., 2015). Unfortunately, all of these are quantitative studies, hence details on the root causes of these barriers, as well as the ability to detect novel barriers are limited.

Provision of professional pharmacy services cannot be studied in isolation, as it is inextricably linked to the business dimension of community pharmacies (Duckett, 2015; Ancuceanu & Bogdan, 2016). The challenges faced in managing the pharmacy business and other administrative tasks are likely to influence the provision of professional pharmacy services in various, sometimes surprising ways. Unfortunately, research on the current operating environment of community pharmaices, which impacts their business performance is scarce in the literature. In Malaysia, the foundation for examining the challenges faced in the management of community pharmacies had been laid by Hassali, Saleem et al. (2014). Another study at a different location conducted using a different methodology is essential to triangulate the findings and further expands the scope of inquiry.

1.3 Rationale of study

The focus on improving provision of professional pharmacy services was traditionally on the implementation barriers and facilitators (Berbatis et al., 2007; Gastelurrutia et al., 2009; Roberts et al., 2006). We opined that this scope is inadequate as it is too narrow, investigating only a subset of the challenges faced, rather than tackling the issue holistically. Hence it does not provide a sufficient platform to investigate the underlying causes. For instance the lack of time to provide these services can be due to a myriad of reasons, including lack of qualified personnel to be hired (Brata et al., 2016), or lack of funds to hire them (Rayes, Hassali & Abduelkarem, 2015).

Besides, the business challenges faced by community pharmacies will determine the availability of resources to operate professional services. Studies on the impact of managing business challenges on the provision of profession pharmacy services were limited in the current literature. Nevertheless, available studies implied that provision of professional pharmacy services was highly responsive to current market conditions and contemporary challenges faced. Brooks et al. (2007) and L. Martins and Queiros (2015) both noted that community pharmacies in competitive localities were more inclined to offer medication therapy management services and professional services respectively. A conceptual study which comprehensively investigated business challenges faced by community pharmacists had recently been published, acknowledging the need to focus on a wider perspective (Rangchian et al., 2016).

The direction of the response is also highly dependent on the business level strategy employed by the pharmacy owner or manager. When faced with shrinking margins for prescription medicines, pharmacists in Australia responded positively by either increasing their product range, diversifying the services provided or forming collaborative networks with their peers in the same area (Feletto et al., 2010b). In Macao, community pharmacists increased service quality and pharmaceutical services provision in response to rising competition (Chong et al., 2013). In contrast, pharmacists in Iceland responded negatively by reducing the number of staff at the front counter, adversely affecting the quality of service (Almarsdȩttir & Morgall, 1999). Therefore investigating the coping strategies of community pharmacists is also essential to provide a complete picture.

As community pharmacies face mounting economic and legislative challenges, from deregulation of the ownership of community pharmacies and control over medicines in favour of free markets, shrinking profit margins for pharmaceuticals and more fresh entrants into an already saturated field, the necessity to focus on business survival is likely to further impact the provision of professional pharmacy services. However, the extent and direction of these impacts had not been well articulated in the literature. Indeed, how these overarching issues impact and manifest in the practice of community pharmacists, especially regarding the provision of professional pharmacy services is the research gap this study sought to fill.

The research was focused on a single state rather than sampling all states in Malaysia to facilitate data collection. Nevertheless, limiting data collection to a single state is unlikely to greatly impact the generalisation of findings to other states in Malaysia. This assertion was made as all community pharmacies in the country are exposed to the same legislations and macroeconomic conditions. Besides, based on the findings of previous literature, differences in challenges faced were also more likely to be demarcated between urban and rural settings (L. Martins & Queiros, 2015), as well as pharmacy ownership structure (Bush et al., 2009; Dobson & Perepelkin, 2011), rather than the state lines. Sarawak was selected as the site of this study as it offered the required heterogeneity in terms of the demographic profile of community pharmacists and characteristics of community pharmacies to provide a balanced mix of perspectives. Sarawak is the largest state in Malaysia in terms of geographical size, with a highly scattered and rural population (Ariff & Lieng, 2002), consisting of

27 different ethnic groups with unique cultures and languages (Hussain & Ibrahim, 2011). The additional challenges caused by this rurality and diversity will also be able to be clarified by this research. Having enough community pharmacists venturing into the rural areas of Sarawak was highlighted as one of the barriers hindering the implementation of dispensing separation in the country (Cruez, 2015; Teo, 2014).

1.4 Study objectives

The main objective of this study is to determine the professional pharmacy services offered and the challenges faced by community pharmacy practitioners in Sarawak, Malaysia. The specific objectives are to:

i. Explore the types of professional pharmacy services offered by community pharmacies in Sarawak (Chapter 4 & 5).
ii. Explore the challenges faced by community pharmacists in Sarawak in managing their pharmacies (Chapter 4 & 5).
iii. Determine the direction and extent of the impact of these challenges on the provision of professional pharmacy services (Chapter 4).
iv. Determine the strategies used by community pharmacists to cope with the challenges (Chapter 4 & 5).
v. Determine possible legislative changes to overcome the challenges faced (Chapter 4 & 5).

1.5 Overview of thesis

The write-up of this thesis was divided into six chapters:

Chapter 1: Introduction was on the overview and background of the study, including the research objectives to provide the context as well as setting the scene for further explorations.

Chapter 2: Literature Review explores the past literature on this research topic, in particular challenges faced in management of community pharmacies and provision of professional pharmacy services, which serves as the foundation for this research.

Chapter 3: Research Methodology discusses the research methods, statistical and analytical techniques employed for this research, as well as elucidating the rationale for each choice.

Chapter 4: A qualitative exploration of professional services and challenges in managing community pharmacies among community pharmacy practitioners in Sarawak, Malaysia analyses and discusses the findings of the first phase of the research, a qualitative study which was carried out using semi-structured interviews.

Chapter 5: A quantitative evaluation of professional services and challenges in managing community pharmacies among community pharmacy practitioners in Sarawak, Malaysia analyses and discusses the findings of the second phase of the

research, a quantitative study which was carried out using postal questionnaire survey.

Chapter 6: Discussion, Recommendations and Conclusion summarises the findings synthesised from both qualitative and quantitative sections of the research. Implications and limitations of the research, as well as recommendations for actions and further studies are also explored.

CHAPTER 2

LITERATURE REVIEW

2.1 Chapter overview

In this chapter, five main aspects of the research will be scrutinised. First, the rationale for the provision of professional pharmacy services will be articulated, followed by a short section discussing the definition of profession pharmacy services. The next section will be on the barriers and facilitators of professional services provision, with a special focus on the Asian context. As the current status of community pharmacy practice is similar in most Asian countries, this focus will facilitate comparison. In the penultimate section, challenges faced in the management of community pharmacies will be scrutinised, including sub-sections on the professional-business conundrum of community pharmacy practice as well as coping strategies to overcome these challenges. The last section will be an overview of the healthcare system and community pharmacy practice in Malaysia, to provide a contextual background for the research. The chapter structure is outlined in Figure 2.1.

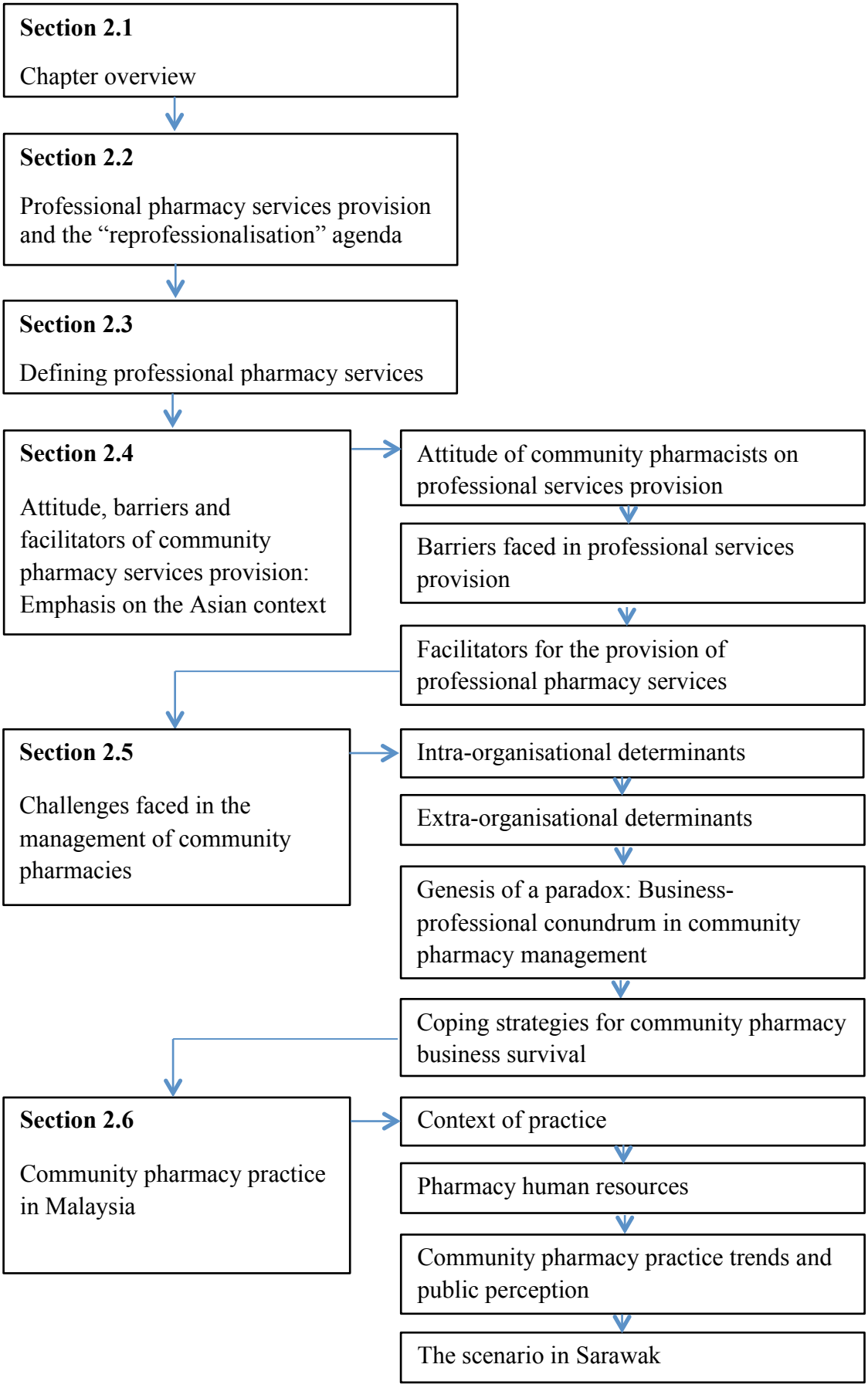

Figure 2.1 Structure of Chapter 2

2.2 Professional pharmacy services provision and the "reprofessionalisation" agenda

Community pharmacists are health care professionals whose roles traditionally centered on the preparation and dispensing of medicines to patients, as well as being a provider of counselling and information relevant to the products being sold (World Health Organisation, 1994). As acknowledged earlier, in recent times their roles have been steadily diversified to incorporate professional services provision (Moullin et al., 2013). The push for professional pharmacy services stems from the "reprofessionalisation" strategy for pharmacists first suggested by Birenbaum (1982). Reprofessionalisation is construed as an "effort to upgrade the status of pharmacy in the healthcare delivery system", a reactive stance to avoid being rendered irrelevant by fast evolving technological and organisational changes (Birenbaum, 1982). It is perceived that recognition of pharmacists as professionals will increase in tandem with the number of services offered beyond dispensing (Agomo, 2012).

However, not all scholars are convinced that offering a plethora of services will enhance the professional standing of community pharmacists. Substantive evidence demonstrating the effectiveness of these services are still lacking, as most published systematic reviews have poor methodological rigours and lacks external validity (Mossialos et al., 2013). Harding and Taylor (1997) even claimed that this approach may actually have a de-professionalising effect, as it marginalises the core competency and responsibility of community pharmacists, i.e. dispensing medicines. Instead, they suggested for the focus to be adjusted back on the medicines itself, and for pharmacists to concentrate on using their knowledge to transform drugs into

meaningful medicines for their patients. True professionalism was also asserted to be more multi-pronged, and should include aspects such as having a conducive practice environment, as well as emphatic and helpful personnel whom are well-trained (Agomo, 2012).

The ambiguity surrounding the term "professionals" and what it takes for practitioners in a profession to be irrefutably regarded as such fuelled these arguments. In one of the earlier definitions, "professionals" is a term reserved for practitioners of an occupation that had met certain traits criteria. Harding and Taylor (1997, p551) explained the process of professionalisation as "*... defined in terms of an occupation's accumulation of specific attributes or traits (trait theory), such as specialised training and education, formal examination of its members, service based on altruism rather than profit alone, or simply as the rendering of services based on specialised skill and knowledge whose contribution in maintaining the social system is highly valued*...". However, a definitive and discriminatory listing of traits was lacking, highlighting the weakness of this approach (Dingwall & Wilson, 1995).

Alternatively, "professionals" are a selected group granted autonomy to carry out their mandate – specific activities in-line with their expertise and skills (Dingwall & Wilson, 1995). This autonomy is established if the profession was able to retain sole authority in their field of expertise and have full control to make decisions, decide quantum of remuneration and influence public policies (Edmunds & Calnan, 2001). A true profession also exerts authoritative control over its "social object" (Bissell & Traulsen, 2005). The claim of pharmacists as professionals lies in their expertise to

transform their social object “inert chemicals” into “drugs” (Dingwall & Wilson, 1995), or from “drugs” into “medicines” (Taylor & Harding, 1997), changing a non-descript entity into something that is useful and tailored to the needs of their customers. Thus the professional part of pharmacist revolves around the information and advice given to the customers rather than on the drug (Taylor & Harding, 1997). These “social object” definitions were made in response towards the assertion by Denzin and Mettlin (1972) that pharmacists are quasi-professionals due to their lack of control over their social object, defined by them as “medicines”. Traditionally, community pharmacists’ skills in compounding and mixing medicines provided exclusive ownership over this “social object”, which was subsequently lost when these tasks were taken over by pharmaceutical manufacturers (Bader et al., 2016; Edmunds & Calnan, 2001).

Being “professionals” was also construed to mean community pharmacists exercising their “ethical imperative” to prioritize the welfare of their customers over their own (Ancuceanu & Bogdan, 2016). As professionals, information and knowledge assymetry between pharmacists and customers on medicines, which confers power to the pharmacists, must be judiciously used to promote social wellbeing rather than being exploited for profits (Taylor & Harding, 1997). Thus activities carried out by community pharmacists including advice giving, counseling and other services are considered to be in the professional realm if the intention to provide them have elements of altruism and not driven by pure profit motives. The prioritation of patients as the centre of pharmacists′ professional activities was in tandem with the stance of Hepler and Strand (1990), whose Pharmaceutical Care concept initiated this patient-centric concept. Unfortunately, community pharmacists need monetary influx

for their businesses to stay afloat, with their dealings with customers likely influenced by commercial interest - an antithesis of the altruistic, service orientation of profession (Bissell & Traulsen, 2005). However Caldwell (2005) asserted that the core of the professionalism concept is *"the relationship between responsible expert providers and their clients"*, whereby professionals strike a deal with their clients, utilising their learned expertise to provide for clients' needs and earn money in return for the services rendered. The professional services they offer are subjected to market demands, hence are inetricably linked to the commercial realm (Caldwell, 2005).

Irrespective of these theoretical arguments, the fact is that provision of professional pharmacy services is slowly gaining traction to become a fixture of community pharmacy practice around the globe. This is in part due to the keenness of policy makers in developed countries to capitalise on the community-centric location of community pharmacies and expertise of pharmacists to launch public health initiatives (Badcott, 2011; Mossialos et al., 2013). There are generally two broad objectives underpinning community pharmacists' role expansion, namely facilitating the safe, effective and appropriate use of medications as well as the prevention and management of chronic diseases (Mossialos et al., 2013). As the range of services continue to expand and governmental remuneration for these services initiated in these countries, academia from developing countries started to follow the trend and commenced research in this area. This was done despite several basic issues have yet to be ironed out, including the lack of pharmacists, separation of dispensing, adherence to ethical practice standards and related legislation.

2.3 Defining professional pharmacy services

As community pharmacies move beyond the dispensing of medicines and start offering other value-added services to patients, new terms were coined to define and describe these services. The initial term used was "Pharmaceutical Care Services", with the services focusing on the effectiveness and safety of drug therapies to ensure better health outcomes for patients (Hepler & Strand, 1990; Moullin et al., 2013). Services associated with pharmaceutical care can be as diverse as translation of labels and medication information via interpreters, disease screening and vaccination to disease and medication therapy management (Cheng et al., 2013). Subsequent terms include enhanced pharmacy services, cognitive pharmacy services and extended pharmacy services, each having their own definition and scope which overlap the others. Definitions of these terms are provided in Table 2.1.

Table 2.1
Definition of professional services related to community pharmacies

Classification Name	Definition
Pharmaceutical care services	The use of specialised knowledge by pharmacists for the patient or healthcare professionals for the purpose of promoting effective and safe therapy (Cipolle, Strand, & Morley, 1998).
Cognitive pharmacy services	Professional services provided by the pharmacist, who use their skills and knowledge to take an active role in contributing to patient health, through effective interaction with both patients and other health professionals (Roberts et al., 2006).
Enhanced pharmacy services	Services offered in community pharmacies requiring additional or special skills, knowledge and/or facilities and are provided to sub-groups with special needs (Berbatis et al., 2007).

Extended pharmacy services	Services which are not associated with pharmacists' traditional roles, such as dispensing and providing consultations on prescriptions and over-the-counter medications, but include new services such as home medicines review, medication therapy management and chronic disease management (Hassali, Ooi, et al., 2014)

In order to unify all these terms pertaining professionally related programmes and services offered by community pharmacists and community pharmacies, as well as fully encompass the range of services offered, Moullin et al. (2013) proposed the umbrella term professional pharmacy services (PPS), which was defined as *"... an action or a set of actions undertaken in or organised by a pharmacy, delivered by a pharmacist or other health practitioner, who applies their specialised health knowledge personally or via an intermediary, with a patient/client, population or other health professional, to optimise the process of care, with the aim to improve health outcomes and the value of healthcare..."* (Moullin et al., 2013, p. 990). Compared to previous terms, PPS include services provided at external sites as well as those provided by other health professionals employed by community pharmacies, which better reflects the full extent of community pharmacies' involvement in professional services provision (Moullin et al., 2013).

The model of professional pharmacy service provision proposed by Moullin et al. (2013) is attached below for clarification.

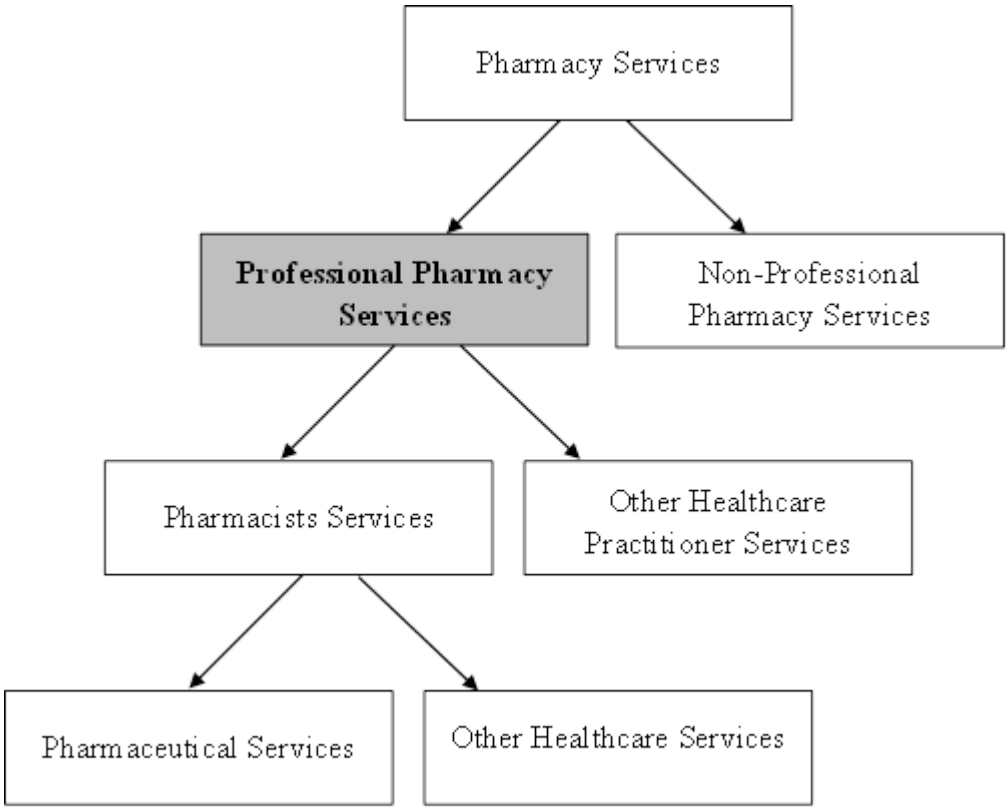

Figure 2.2 Model of pharmacy service provision

2.4 Attitude, barriers and facilitators of professional pharmacy services provision: Emphasis on the Asian context

Contextual circumstances play an integral role in the functions of community pharmacies worldwide. Community pharmacy pratice in each and every country is unique, with the diversity an artefact of differences in culture, economic standing, regulation framework, health financing arrangement and other organisational determinants (Anderson, 2002; Bissell & Traulsen, 2005). Compared to their Western counterparts, community pharmacists in Asian countries including Malaysia are relatively slow in assimilating services provision into their practices, with efforts to introduce them mostly sporadic and localised (Hermansyah et al., 2016; Miller & Goodman, 2016). In fact, even the quality of basic pharmacy services in those

countries remain below par, with insufficient knowledge of pharmacists, emphasis on business considerations and inadequate existing regulations cited as major contributing reasons (Miller & Goodman, 2016). Hence a contextual review of the barriers and facilitators faced in providing professional pharmacy services, with an emphasis on the Asian region, is likely to serve as a more accurate comparison for the situation in Malaysia.

2.4.1 Attitude of community pharmacists on professional services provision

Community pharmacists in most Asian countries acknowledged that counselling patients is their professional duty and demonstrated positive attitudes toward the provision of this service (Adepu & Nagavi, 2009; al-Hassan, 2011; Alaqeel & Abanmy, 2015; Hamoudi et al., 2011; Rajiah et al., 2016). Nonetheless, translation of their positive perceptions into actual practice proved problematic due to various barriers faced (Adepu & Nagavi, 2009; Hamoudi et al., 2011). As a result, less than half of the respondents in a study were satisfied with the counselling services being offered to their patients (Seungwon et al., 2016).

Similarly, community pharmacists largely have positive attitudes towards the provision of enhanced pharmacy services and are willing to be involved. In terms of pharmaceutical care services, they believed that offering these services are beneficial for both the pharmacy profession and patients, and should be the way forward (Aburuz, al-Ghazawi & Snyder, 2012; al-Arifi et al, 2007; El Hajj, al-Saeed & Khaja, 2016; Mehralian et al., 2015). However, caveats were exposed by some studies. Respondents admitted that current practice conditions limit their ability to

provide pharmaceutical care services, in particular Mehralian et al. found that only 30% of community pharmacists thought that it was practical to be practiced in Iran at the current time (Fang et al., 2011; Mehralian et al., 2015; Ung et al., 2016). Some respondents considered further qualifications as being essential for the provision of these services (Aburuz et al., 2012; Mehralian et al., 2015). El Hajj et al. (2016) noted that the positive attitudes demonstrated by community pharmacists paled in comparison with their peers in other practice settings. In terms of health promotion activities, integration into their daily routine was agreed by less than half of the respondents in a study, despite them extolling the virtues of these services (Beshir & Hamzah, 2014). Community pharmacists also have reservations regarding the acceptance of patients towards them providing breast cancer health awareness programmes (El Hajj & Hamid, 2013; Ibrahim & Ibrahim, 2013). The overall positive attitudes demonstrated by Asian community pharmacists are consistent with the attitudes of pharmacists working in countries with developed community pharmacy practice, underscoring the assertion of Luetsch (2016) that pharmacists' attitude should cease being seen as an impediment for the provision of professional pharmacy services.

2.4.2 Barriers faced in professional pharmacy services provision

Based on the review conducted, the problems faced in the provision of professional pharmacy services in Asian countries are relatively similar, suggesting that these problems are systemic in nature. These barriers can be divided into a few major categories:

(a) Lack of time

Lack of time is often cited by community pharmacists as the main reason for them not providing professional pharmacy services. This was noted by Eades et al. (2011) in their review on the involvement of community pharmacists in providing public health services. A study conducted by Laliberté et al. (2012) in Canada noted that 86% of community pharmacy respondents attributed this barrier for their lack of involvement in public health activities. Likewise, 90% of respondents in an Australian survey attributed it as the main reason for them not providing enhanced pharmacy services (Berbatis et al., 2007). In Asian countries, lack of time is also consistently rated as the main reason preventing community pharmacists from delivering basic counselling services (Adepu & Nagavi, 2009; Arul Prakasam, Samuel & Nanthakumar, 2011; Poudel et al., 2009; Rajiah et al., 2016; Seungwon et al., 2016) as well as provision of extended pharmacy services, including pharmaceutical care and health promotion services (Awad & Abahussain, 2010; Beshir & Hamzah, 2014; Beshir & Hanipah, 2012; El Hajj, al Nakeeb & al-Qudah, 2012; Hassali, Subish et al., 2009).

The reason behind the lack of time is however, not well studied, with the majority of studies accepting this barrier at face value. In developed countries, the lack of time may be attributed to the high workload of prescription medicines to be dispensed. A work sampling study conducted by Davies et al. (2014) in England noted that 40% of community pharmacists' time are devoted to activities related to prescriptions. In Ireland, this activity consumed around 52% of community pharmacists' work time, with those working in pharmacies with high dispensing workload spending significantly less time on over-the-counter (OTC) counselling and consultations

compared to their counterparts in pharmacies with lesser prescription loads (McCann, Hughes, & Adair, 2010). In Asian countries, it seems that time constraints are more often due to a lack of qualified personnel to adequately deal with all the necessary professional and non-professional work. However, it is fair to note that a lack of time is more of a symptom rather than a true underlying reason hindering professional services provision.

(b) Lack of pharmacists' skills and knowledge

Inadequate knowledge and skills of community pharmacists is another barrier being consistently highlighted, affecting the provision of basic counseling, pharmaceutical care services, health promotion activities and chronic disease management (Adepu & Nagavi, 2009; Mehralian et al., 2014; al-Arifi et al., 2008; Mathialagan et al., 2015) This barrier is also rated significantly higher in Asian studies compared to findings in Australia and New Zealand (Berbatis et al., 2007; Zolezzi et al., 2014). This inadequacy subsequently affected their confidence to provide these services (Mathialagan et al., 2015; Rayes et al., 2015). Reasons for this shortfall range from insufficient training in pharmaceutical care practice to more general deficiencies in clinical and drug knowledge (Aburuz et al., 2012; al-Arifi, 2008; al-Arifi et al., 2007; Sancar et al., 2013). Local pharmacy schools being slow in responding to the changing environment and incorporating more clinical elements into their curriculum was pinpointed as the root cause (Azhar et al., 2013; Mehralian et al., 2015; Puspitasari, Aslani & Krass, 2015).

(c) Human resource insufficiencies

Human resource inadequacies continue to limit the provision of professional

pharmacy services in Asian countries. Numerous Asian countries do not have enough qualified pharmacists. In Indonesia, community pharmacists are often government pharmacists moonlighting after office hours (Brata et al., 2016). In other countries such as India and the United Arab Emirates (UAE), the low pay commanded by community pharmacists resulted in preference to work in other areas (Basak et al., 2009; Rayes et al., 2015).

In developed countries, certified pharmacy technicians play an integral role in the day-to-day management of community pharmacies. Numerous routine work in the pharmacy that does not require the professional judgment of community pharmacists are delegated to them, enabling the pharmacists to focus on patient care activities (Alkhateeb et al., 2011). This cadre of workers is unfortunately insufficient in Asian countries, forcing pharmacists to be heavily involved in work non-related to their professional expertise (Brata et al., 2016; El Hajj et al., 2012; Wibowo, Sunderland & Hughes, 2016).

Due to this shortfall in personnel, some countries lowered the qualification needed to be a community pharmacy operator. In India, the requirement is to obtain a Diploma in Pharmacy, which involved 2 years of study (Basak et al., 2009). In China, diploma holders in a related discipline can obtain a practicing license provided that they pass a licensing examination (Fang et al., 2013). This further reduces the quality of services rendered, as even if they are experienced, their experience was insufficient to compensate for the lack of knowledge obtained in a full-length structured pharmacy undergraduate course (Hussain & Ibrahim, 2011). The likelihood of new services being introduced is also diminished as having adequate resources including

pharmacy personnel is essential for practice change to occur (Doucette et al., 2012).

(d) Legislative issues

Non-conducive legislative environment and unsupportive healthcare systems are also the bane of community pharmacists in Asia. Perceived barriers include a lack of overall vision to foster professional development of community pharmacies and encourage them to take up pharmaceutical care (Ghazal et al., 2014; Mehralian et al., 2014), difficulties in accessing the medical records of patients (Aburuz et al., 2012; al-Arifi et al., 2007; Ghazal et al., 2014; Mehralian et al., 2015), lack of reimbursement (Fang et al., 2011; Mehralian et al., 2014) and workload related to dealing with regulatory issues (Sancar et al., 2013). There is also a lack of professional framework for the delivery of professional pharmacy services. A professional framework is essential as it outlines the expected standards of care and boundaries of practice, serving to protect the patients and pharmacies involved as well as protecting the credibility of the pharmacy profession (Hanes, Wong & Saini, 2015).

(e) Customer/patient factors

Lack of demand and recognition by their customers/patients is another recurrent barrier raised regarding the provision of pharmacy services, especially in developing countries. Patients were perceived as being unable to fully comprehend and accept these services (al-Arifi, 2008; Hasan et al., 2011; Ung et al., 2016). Even in more developed countries, despite the efforts of community pharmacists to expand their service-oriented roles, the concept of pharmacists as health care providers had yet to stick on the consciousness of many patients, with community pharmacies still