บทบาทของร้านยาในงานบริการสาธารณสุข: ความเหมือนและความต่างระหว่างประเทศอังกฤษและไทย

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บทคัดย่อ

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ในช่วงหลายทศวรรษที่ผ่านมาเภสัชกรชุมชนในหลายประเทศได้ขยายบทบาทการให้บริการสาธารณสุขในร้านยาเพิ่มขึ้นเพื่อเป็นส่วนหนึ่งในการแก้ไขปัญหาสาธารณสุขของแต่ละประเทศบทความนี้เป็นการทบทวนวรรณกรรมเพื่อเปรียบเทียบร้านยาระหว่างสองประเทศ ได้แก่ อังกฤษและไทยเนื่องจากทั้งสองประเทศนี้ได้มีการพัฒนารูปแบบงานบริการสาธารณสุขในร้านยาอย่างรวดเร็วในช่วงหลายปีที่ผ่านมา การทบทวนวรรณกรรมพบว่าประชาชนทั่วไปในทั้งสองประเทศเห็นว่าเภสัชกรชุมชนเป็นผู้เชี่ยวชาญด้านยา แต่มีความแตกต่างกันในด้านการกำกับควบคุมด้านกฎหมายเภสัชกรรม ระบบการจ่ายยา และการสนับสนุนจากภาครัฐ ข้อมูลทางวิชาการสนับสนุนว่าการพัฒนารูปแบบการบริการสาธารณสุขในร้านยาในอังกฤษนั้นมีความเป็นรูปธรรมและได้รับการสนับสนุนจากภาครัฐมากกว่าร้านยาในประเทศไทย อย่างไรก็ตามสิ่งที่สำคัญสำหรับทั้งสองประเทศ คือ การตระหนักถึงความต้องการที่แท้จริงของประชาชน และนำข้อมูลนี้มาเป็นส่วนหนึ่งในการออกแบบรูปแบบบริการที่เป็นที่ยอมรับและเข้าถึงได้ง่ายต่อไปในอนาคต

คำสำคัญ : ร้านยา, เภสัชกร, บริการสาธารณสุข, อังกฤษ, ไทย

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Abstract

Public health roles for community pharmacy: Contrasts and similarities between England and Thailand

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The role of community pharmacists in providing services designed to improve public health has expanded in many countries. This article compares community pharmacy in Thailand to England, where public health services have developed rapidly in recent years. From the literature we have reviewed, although still limited, we conclude that the general public in both countries view the community pharmacist mainly as an expert on medicines. The implementation of pharmacy regulation, prescription dispensing system and government support between the two countries are different. Evidence seems stronger from England that community pharmacy has the potential to provide public health services and has been strongly supported by the government, but more work is needed to explore this in Thailand. It is important that the public's perception should be taken into account in both countries, in order to best design acceptable and accessible public health services.

Keyword : community pharmacy, community pharmacist, public health service, England, Thailand

Introduction

The role of community pharmacists in providing services designed to improve public health has expanded considerably in recent years. Services such as screening for diabetes, hypertension and cardiovascular risk, smoking cessation advice and sexual health advice have been offered in many countries. Many public health issues are common throughout the world (Table 1), although additional local issues dictate the services relevant to local populations. Differences in the way in which community pharmacies operate, are funded, regulated and used by the public inevitably result in different approaches to the delivery of public health services and thus potentially to differences in their impact on public health. This article compares community pharmacy in Thailand to England, where public health services have developed rapidly in recent years.

Table 1 Comparison of public health issues in the UK and Thailand

Health-related Measure	Unit	UK[a]	Thailand
Neuropsychiatric disorders	DALYs/100,000 population	3,336	3,222
Malignant neoplasms (cancer)	DALYs/100,000 population	1,977	1,157
Cardiovascular diseases	DALYs/100,000 population	2,196	1,536
Diabetes	DALYs/100,000 population	169	218
Infectious and parasitic diseases	DALYs/100,000 population	178	4,563
Life expectancy at birth females	years	81.8	74.0
Life expectancy at birth males	years	77.6	66.0
Infant mortality rate	deaths/1,000 live births	4.7	13.0
Under 5 mortality rate	deaths per 1,000 population under 5	6	14
Tobacco consumption	% adults who smoke daily (M)	22.0	23.0
	% adults who smoke daily (F)	21.0	2.7
Obesity	% adults with BMI >30 (M)	24.0	3.9
	% adults with BMI >30 (F)	25.0	23.1
Alcohol consumption in those aged 15+	litres/year	10.8	8.47b
Teenage pregnancy	births/1,000 girls aged 15 - 19	26	46

Source: Global Health Observatory (World Health Organisation, 2008)

[a] Data presented is from the UK, which includes England, Scotland, Wales and Northern Ireland

[b] Data obtained from Global status report on alcohol 2004 (World Health Organisation, 2004)

Community pharmacy practice in England

There are 10,691 community pharmacies in England, of which 61% are owned by large multiple chains (>30 outlets), such as Boots (Table 2). All pharmacies and pharmacists must be registered with the General Pharmaceutical Council (GPhC) and by law all pharmacies must have a pharmacist present at all times. In some rural areas, primary care doctors also dispense as well as prescribe medicines, but most doctors only write prescriptions for patients to obtain their supplies from a pharmacy. Pharmacists can elect to join the Royal Pharmaceutical Society which provides professional support. Currently 66% of pharmacists in England are members.

Table 2 Comparison of community pharmacy in England and Thailand

Factor	England [c]	Thailand [d]
Number of community pharmacies	10,691	17,398
Number of community pharmacies per 100,000 population	20.64	26.60
Number of registered pharmacists	37,229	24,410
Proportion independents	39%	97%
Drug regulation	Prescription only medicines (POM) Pharmacy-only medicines (P) General sales list (GSL)	Home remedies Ready-packed pharmaceuticals Dangerous medicines Specially controlled medicines
Pharmacy regulation	GPhC* registration compulsory	Bureau of Drug Control FDA regulation compulsory
Pharmacist regulation	GPhC* registration compulsory	PhC** regulation compulsory
Funding	80% NHS services: prescription dispensing plus commissioned public health services 20% medicines and other sales	Almost 100% medicines and other sales

Source: [c] General Pharmaceutical Council [d] Food and Drug Administration of Thailand (2011c)
*GPhC – General Pharmaceutical Council, ** PhC – Pharmaceutical Council of Thailand

Medicines are classed into three types: prescription only medicines (POM), pharmacy-only medicines (P) and general sales list (GSL). The latter are available from other retail outlets as well as pharmacies. Most of the community pharmacist's income (approximately 80%) derives from services provided to the National Health Service (NHS). All residents in England are entitled to free healthcare provided by the NHS and individual pharmacy businesses hold contracts with the NHS for providing services. The national English pharmacy NHS contract has three levels of service: essential, advanced and enhanced (Table 3). Dispensing of NHS prescriptions written by general practitioners (GPs) is an essential service and is the main function of community pharmacies, with 813.3 million prescriptions being dispensed in 2009/10.

Patients obtain most of their medicines, whether for acute conditions or long term use from community pharmacies. The large majority of the public do not pay for prescribed medicines, but some (adult working population) do incur a co-payment charge. Pharmacists purchase the medicines and supply them to the patient, then re-claim the cost of the medicine, plus dispensing charges from the NHS. Medicines classed as POM cannot be sold or supplied without a prescription – this includes all drugs for chronic diseases, antibiotics and many painkillers. While private prescriptions can be written for these drugs, the vast majority of the English public utilize the NHS service.

Medicines sales in pharmacies are therefore mainly either GSL or P medicines, the latter requiring supervision by a pharmacist. In other words P medicines cannot be sold without a pharmacist present in the pharmacy.

Table 3 NHS Services provided by community pharmacies in England

	Service level with English NHS pharmacy contract		
Service Component	**Essential**	**Advanced**	**Enhanced (public health service)**
Funding	National	National	Local
Regulation	Compulsory registration with GPhC*	Accreditation of premises and pharmacist	Varied, determined locally
Examples	Prescription dispensing	Medicines use review	Needle and syringe exchange
	Disposal of unwanted medicines		Cardiovascular screening
	Promotion of healthy lifestyles		Smoking cessation advice and support
			Provision of free emergency hormonal contraception
Distribution	All pharmacies	86% of pharmacies	Varied

Source: Choosing health through pharmacy (Department of Health, 2005)
*GPhC – General Pharmaceutical Council

Community pharmacy practice in Thailand

The pharmacy profession in Thailand officially began in 1929 when the Pharmaceutical Association of Siam was founded. In 1936, the Drug Control Act and the Profession Control Act were established to guide pharmacist roles and control licensure. (Pongcharoensuk and Prakongpan, 2007) Thai drugstores are classed into 3 types: (Food and Drug Administration of Thailand, 2011a; Chan and Ching, 2005)

(i) Modern community pharmacies: These are equivalent to English community pharmacies and must have a pharmacist present at all times.

(ii) No-pharmacist drugstores: These are an old-fashioned form of Thai community pharmacy, operated by a business man without registered pharmacists.

(iii) Traditional pharmacies: These are run by qualified traditional medicine professionals providing traditional medicines.

All drugstores are regulated by the Bureau of Drug Control, Food and Drug Administration (FDA) while the pharmacists are controlled morally and professionally by the Pharmacy Council of Thailand (PhC). At present, there are 17,398 drug stores across the country; 13,482, 2,431, and 1,485 for types i, ii and iii respectively. (Food and Drug Administration of Thailand, 2011b) However, the no-pharmacist drugstores will shortly disappear as permission to operate this type of business has been withdrawn.

Medicines are divided into four major groups (Table 2); (i) home remedies - common medicines for minor ailments, no license needed for selling, (ii) ready-packed medicines - can be sold without prescription , (iii) dangerous medicines - can be sold without prescription by pharmacists and (iv) specially controlled medicines, can be sold only with prescription by pharmacists. Modern community pharmacies are able to supply all

types of medicines while no-pharmacist drugstores can only sell medicines type i and ii. In addition, medical doctors are able to prescribe and dispense all groups of medicines within their private clinics or surgeries. Nurses or other health professionals can do so but only for specific drugs. This indicates the business of supplying pharmaceutical products and medicines can involve many health professionals in the private sector, with overlapping roles. The Thai population therefore has a broad range of accessibility to medicines.

The pharmacy is primarily a place where medicines are sold and this is the major source of pharmacy income. Only 3% of modern community pharmacies are chain stores, e.g. Boots, Watson, and are usually located in cities and have pharmacists practising at all times. The rest are run independently (97%) and, unfortunately, their operation without the physical presence of a community pharmacist at all times has been highlighted as a serious concern. The FDA reported in 2006 that in only 33% of community pharmacies were pharmacists found to be practising throughout all opening hours. (Drug System Monitoring and Development Programme, 2010) This indicates that the implementation of pharmacy regulation may be weak.

In 2003, 'accredited community pharmacy' status was introduced by the Thai FDA and PhC, with the aim of applying the Good Pharmacy Practice (GPP) strategy to develop the quality of community pharmacy services. This includes the requirements for community pharmacists to be present at all times, provide prescription dispensing and deliver public health services; e.g. refill prescription for chronic diseases, smoking cessation support, hypertension/diabetes screening. To date, only 406 modern community pharmacies have been accredited (Food and Drug Administration of Thailand, 2011c), which indicates there is a low success rate. However, pharmaceutical bodies continue putting efforts into improving quality and to include community pharmacies in the national health system.

Public health services in England

While many novel public health services have developed as a result of government policy, in many areas national policy lags behind local practice. The Department of Health has a strategy for public health in pharmacy (Department of Health, 2005), which specifically identifies areas where pharmacy should be able to improve population health. The Royal Pharmaceutical Society supports pharmacist members professionally to develop novel services. There is one nationally commissioned essential service at present, the Medicines Use Review (MUR) service. This involves the pharmacist in reviewing an individual patient's medicines, both prescribed and purchased, which focus on improving patient knowledge and understanding of their medicines. A total of 1.7 million MURs were conducted in 2009-10 and pharmacists are paid for each one conducted. Other public health services are commissioned by local NHS organizations, based on population needs and are at advanced level. Some are widespread throughout all areas of England; these are supervised methadone consumption and needle exchange services for drug misusers, smoking cessation support and free emergency hormonal contraception, aimed at reducing teenage pregnancy rates. The Department of Health in England recently proposed that all people between 40 and 74 should have a health check, to assess their risk of developing cardiovascular disease and that community pharmacists should be one of the providers of these checks. This service is also therefore widespread. Other services are less well developed, but are increasingly being commissioned at a local level, such as weight management services, screening for risky alcohol use combined with brief interventions and immunization services. A few of these services are also provided privately by pharmacists, such as weight management, emergency contraception and immunization.

There is currently evidence of the benefits of community pharmacy-based smoking cessation support,

screening for diabetes, hypertension and cardiovascular risk as well as service for drug misusers. (Anderson *et al.,* 2008) Other services still lack evidence and are still developing, despite being commissioned in some areas.

Public health services in Thailand

In contrast to England, Thai community pharmacies have not yet been connected to the national health system. They are independently run privately, thus are more commercial. Since, the 'pharmaceutical care' concept has become widely accepted within the Thai pharmacy profession, many attempts (either from pharmacy schools or other pharmacy institutions) have been made to expand pharmacy public health roles. Published papers, although still limited in number, have identified three potential services being provided including sexual health services, smoking cessation support and cardiovascular risk screening.

Services for reproductive health and sexually transmitted diseases (STD) are commonly available. Oral and emergency contraceptive pills are classified as over-the-counter (OTC) drugs in Thailand – therefore can be supplied from pharmacies. Thai community pharmacists are also able to supply antibiotics legally without prescription if needed. Community pharmacy was thus rated by female sex-workers and males with STDs as the place of choice to obtain STD treatment. (Benjarattanaporn *et al.,* 1997; Kilmarx *et al.,* 1997) Because of the traditional culture in Thailand, sexual activities are perceived as being highly sensitive, therefore the privacy of healthcare provision, plus the supportive law and regulations has made community pharmacy ideal venues for seeking such services. However, there is a need for a standardised practice guideline in order to ensure the quality of service provision, as well as to control rational antibiotic use.

Smoking cessation service is also provided from pharmacies with successful outcomes. The Thai Pharmacy Network for Tobacco Control has promoted this intervention to be delivered through community pharmacies as well as offering training courses for pharmacists who wish to provide it. (Nimpitakpong *et al.,* 2010) A study has shown that is a cost-effective service and gains life years for smokers – consequently it has been suggested this should be implemented nationally. (Thavorn and Chaiyakunapruk, 2008)

Cardiovascular and associated risk screening can be delivered, either at a community pharmacy or in other community-based locations. Pharmacy-based cardio vascular screening is widely delivered particularly through accredited pharmacies, (Sookaneknun *et al.,* 2004; Pongwecharak and Treeranurat, 2010) but is likely to be less via non-accredited ones. Community-based screening was initially developed by intensive collaborative work between three parties; local community pharmacies (with student placements), a primary care unit (providing health promotion services is a major mission for the government sector) and a pharmacy school. As a result, community pharmacies were able to become involved in a national health promotion programme identifying high-risk hypertensive/diabetic patients. (Sookaneknun *et al.,* 2010) Further work is needed to strengthen and continue networking between these three organisations.

Services for drug misusers have not yet been initiated, but one study has suggested community pharmacy services should be considered due to a seriously high need for needles/syringe exchange among drug addicts. (Kerr *et al.,* 2010) Services similar to the MUR service are more likely to be provided in hospital rather than in community pharmacy, possibly because of the failure to completely engage community pharmacy into a prescription dispensing system.

The roles of community pharmacists in both England and Thailand have shifted from medicines dispensers/sellers towards health providers in the recent decades – but it is likely England has stepped further than Thailand. The differences in the implementation of pharmacy regulation, prescription dispensing system

and government support between the two countries are clear. Novel pharmacy services have been significantly supported and commissioned by the English government and local healthcare organisations, so that services are widespread. In contrast in Thailand, pharmacy educational institutions or other independent pharmacy associations (e.g. PhC, FDA, etc) have initiated such services, basically cooperating with a small number of accredited community pharmacies where the presence of a pharmacist is guaranteed, thus services are far from universal across the country.

Public awareness and use of pharmacy public health services

England

Clearly, community pharmacists in England are currently delivering a range of public health services with support from the government sector. Little is known of how the general public, the potential users of these services, perceive them – thus service development has neglected their views. Only two studies were found focusing on the general public's use of, and perception towards, pharmacy public health services. A population-based survey in North-Staffordshire, found that a community pharmacy is mainly used as a source of prescribed medicines and OTC purchase. Only 11.9% of respondents had obtained advice from pharmacists; for medicines, specific illnesses and general health. (Boardman *et al.,* 2005) A survey of the general public in Liverpool indicated that the public rate issues as being of greatest importance to be smoking, cancer, overweight, sexual health and reproductive control, but viewed pharmacists as only having a role in smoking cessation, again being viewed to help with matters relating to medicines, rather than delivering public health services. (Krska and Morecroft, 2010)

Another two reports looked at the views of pharmacy users and patients. A systematic review concluded pharmacists were perceived as drug experts, not health experts, but that satisfaction levels for novel health services were high among service users. (Anderson *et al.,* 2004) A survey conducted by the Patients Association indicated that delivering public health services (e.g. health screening) through community pharmacy can be acceptable. However, a lack of privacy was highlighted as a barrier to pharmacy use, (The Patient Association, 2008) as has been found in other reports. (Anderson *et al.,* 2004; Krska and Morecroft, 2010; Eades *et al.,* 2011) The difference of views is clearly seen; the general public is more likely to acknowledge basic roles of the community pharmacist rather than public health involvement. This might be because of the long history of the pharmacy profession is embedded into the public's knowledge, influencing their perceptions.

A study recently undertaken by Saramunee and co-workers (Saramunee *et al.,* 2011) found positive views of the general public towards pharmacy public health services, however, suggested further multi-dimensional work is required to diminish barriers to their uptake. Crucial obstacles to service use were identified; general public's perception towards pharmacists' competencies and privacy and confidentiality in pharmacies, as well as the need for appropriate advertising of services to educate the general public about pharmacy's public health roles.

Thailand

Published work regarding Thais' perception towards pharmacy public health roles is even more limited. One survey investigated the public's opinion towards services provided by community pharmacies designed to facilitate student placements managed by the Faculty of Pharmacy, Mahasarakham University. Respondents identified their preferences for community pharmacies to provide comprehensive advice about medicines and health, patient-centred care, short waiting

times, and health/drug information service. (Keawkes *et al.,* 2010) Another survey in North-eastern Thailand reported that the elderly (age 60 years and over) visited community pharmacies a few times a month just to obtain modern medicines for minor ailments (Bryant and Prohmmo, 2001), indicating over use of medicines. This could assume that the Thai general public may view the community pharmacist as an expert in medicine and health advice. They also expect high quality services from pharmacies. So far, while efforts have been made to build up public health services delivered through community pharmacy, work is now required to establish whether these are acceptable to the Thai public and likely to be used.

Conclusion

From the literature we have reviewed, although still limited, we conclude that the general public in both countries view the community pharmacist mainly as an expert on medicines. (Box 1) Evidence seems stronger from England that community pharmacy has the potential to provide public health services, but more work is needed to explore this in Thailand. It is important that the public's perception should be taken into account in both countries, in order to best design acceptable and accessible public health services which will benefit future service users.

Box 1 Key messages

How we are alike;

- Community pharmacists in both countries have expanded their public health roles.
- The English and Thai general public have a similar view of the community pharmacist as a drug expert.

How we are different;

- Accessibility to medicines is more controlled in England than in Thailand due to differences in pharmacy law and regulations.
- Operation of community pharmacies without the physical presence of a pharmacist at all times is a serious concern in Thailand.
- Dispensing of prescriptions for ambulatory patients must be done in community pharmacies in England while this is usually done in dispensary units within Thai hospitals.
- English community pharmacies are highlighted as part of primary healthcare and actively supported by the National Health Service, whereas this has not yet been implemented universally in Thailand.

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