

# A report from the Japanese Society of Drug Informatics Forum: The role of pharmacists providing self-care

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## Abstract

**Background:** Self-care is vital to sustain national healthy living. Community pharmacists in Japan are expected to have an extended role in this area. However, education and training for pharmacists to support self-care in Japan lacks a consistent approach. Presenting experiences from Great Britain (GB), where the role of pharmacists in self-care has been strategically extended and has gradually reformed pharmacy education to meet these needs, at a forum collaboratively held by two academic societies in Japan, relevant issues were addressed attempting to provide possible guidance for further development in effective self-care support by pharmacists in Japan.

**Aims and Methods:** Aimed to provide summary of the information presented at the forum and consider issues to be addressed for improving the provision of self-care services by pharmacists in Japan. The current report was built on interviews with pharmacists across sectors and reviews of relevant information.

**Results:** Self-care activities cover diverse health management to various extents of healthcare professional support in a self-care continuum. Pharmacists in GB have an important role to sustain self-care in their community with varied medicines available at pharmacy. In order to prepare pharmacists to meet the societal needs, educational reforms have been undertaken at pre- and post-registration stages, using integrated approaches to competency-based education for continuing professional development.

**Discussion:** Examples from GB addressed wider opportunities to meet the expectation in this area: pharmaceutical services at all levels of the self-care continuum while meeting locally specific health needs. For maximising the effective use of pharmacy only medicines, better collaboration with other health care professionals appears to be crucial. The consistent and seamless education using the developmental frameworks for professional development in GB is likely to assist further development of Japanese pharmacists through country specific adaptation.

**Conclusion:** Sharing examples from GB provides guidance and opportunities to consider further development of relevant issues in Japan. Comprehensive workforce and service planning in collaboration with leadership bodies is required to prepare pharmacists to best provide self-care support.

**Keywords:** *Pharmacy Education, Role of Pharmacists, Self-Care*

## Background

The role of pharmacists in self-care described by the World Health Organisation (WHO, 1998) is to help people to make informed self-care choices, as a communicator, a quality drug supplier, a trainer and supervisor, a collaborator and a health promoter. Community pharmacists and pharmacies have great potential in taking initiative not only for medicines distribution for medical treatment but also public health in their communities. However, currently only the minority of pharmacies in Japan voluntarily undertake new roles of public health services such as healthy living, smoking cessation, encouraging health check-ups (MHLW, 2014a) and 13.4% pharmacies do not provide “pharmacist only non-prescription medicines” (MHLW, 2014c).

Structured and consistent educational programmes for workforce development in this area are also scarce in Japan, though education remains a foundation of the profession. Currently initial pharmacy education in Japan lacks the area of self-care and self-medication in the curriculum, and the concept was finally included in the updated core-curriculum for pharmacy from April in 2015. Teaching and learning methods and organisation of the subjects in this area are still under consideration. For registered pharmacists, some organisations have organised seminars as continuing pharmacy education to train pharmacists regarding the use of over-the-counter (OTC) medicines and health-related business. However, this is done in an *ad hoc* manner and they could be enhanced when structured consistently and seamlessly.

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Community pharmacists in the United Kingdom of Great Britain and Northern Ireland (UK) have traditionally played a role as a gate keeper of health care (Elliott-Binns, 1986). The role of pharmacists in the community has been extended strategically over decades (Nuffield Foundation, 1986; Secretaries of State for Social Services, 1987). Facing demographic societal changes, similar to most developed countries (WHO, 2011), as a way of maintaining the health of the population, the UK has undertaken the promotion of public health and self-care in community pharmacy environments, which has provided important new roles for community pharmacies (House of Lords, 2013; NHS England, 2013). In order for pharmacists to serve a role for self-care in the local community, pharmacy education and workforce development in the UK has been gradually reforming to meet these societal needs using developmental frameworks for competency-based education and training (DH, 2008).

### Aims and Methods

The contents of this report were presented at a forum held jointly by the Japanese Society of Drug Informatics and the Pharmaceutical Communication Society of Japan, supported by the OTC Self-Medication Promotion Foundation. The forum was held on 26<sup>th</sup> January 2014 in Tokyo, aiming to provide information about the concept of self-care, the role of pharmacists in self-care and education in Great Britain (GB) for pharmacists to fulfil that role, with an attempt to provide possible guidance for Japan to improve its self-care services and pharmacy education related to the area.

**Table I: Programme of the Forum of the Japanese Society of Drug Informatics (JASDI) and the Pharmaceutical Communication Society of Japan (P-Co) on 26<sup>th</sup> January 2014 in Tokyo: OTC sale by pharmacists and pre- and post-registration education for appropriate self-medication**

	Chair: Naoki Kamimura, Tokyo University of Science
13:00-13:15	Opening (Mayumi Mochizuki, JASDI President, Keio University)
13:15-13:45	Session 1: Overview of OTC regulation in UK (Kaori Nomura, Jikei University School of Medicine)
13:45-15:15	Session 2: Pre- and Post-registration pharmacy education in the UK for supporting appropriate self-medication (Naoko Arakawa, University College London School of Pharmacy)
15:15-15:30	Break
15:30-16:45	Questions and answers Panel: Naoko Arakawa, University College London School of Pharmacy Daisuke Kobayashi, Meijo University Kaori Nomura, Jikei University School of Medicine Toshio Tsukahara, Tsukahara Pharmacy Shigeo Yamamura, Josai International University
16:45-17:00	Closing (Keiko Goto, P-Co President, Tokyo University of Science)

Source: [http://www.jasdi.jp/muqft6001-114/?action=multidatabase\\_action\\_main\\_filedownload&download\\_flag=1&upload\\_id=764&metadata\\_id=54](http://www.jasdi.jp/muqft6001-114/?action=multidatabase_action_main_filedownload&download_flag=1&upload_id=764&metadata_id=54)

The forum (Table I) had over 100 attendees from pharmacies and academics. It was built on interviews with pharmacists purposively selected for their expertise in specific areas and reviews on the published reports, articles, books, and official websites of relevant organisations, such as the WHO, the General Pharmaceutical Council (GPhC), and the Royal Pharmaceutical Society (RPS). Literature was reviewed through electric database, *i.e.*, PUBMED, EMBASE, and PsycINFO, using the term ‘self-care’, ‘pharmacy’, and ‘UK’ as well as through recommendations from experts in interviews. Interviewed experts were selected from pharmacy academics, a professional leadership body, and community pharmacists. The searched information was limited to GB, including England, Scotland, and Wales, because the GPhC and RPS have current statutory authority in GB (Northern Ireland is not included).

The current report aimed to provide a summary of the information presented at the forum and consider issues to be addressed for improving the provision of self-care services by pharmacists in Japan.

### Result

#### *The role of pharmacists in self-care*

Self-care, including self-medication, is one of the necessary components for contemporary health care and public health missions (Taylor, 2011). It is defined as “what people do for themselves to establish and maintain health, prevent and deal with illness” and relate to various aspects such as socioeconomic, lifestyle and demographics (WHO, 1998). Self-care activities cover diverse phases without clear demarcation from individual health management for hygiene, healthy eating and common minor symptoms, with some professional support, to severe or significant health conditions requiring expert self-care management. Such characteristics in continuity and inseparability between self-management and medical professional support expresses in “self-care continuum”, and the UK government acknowledges that health care services should support people at their various stages (Self Care Forum, 2014b). The National Health Service in England undertook a campaign to encourage people to get support from their local pharmacists, for example, in self-care support (Self Care Forum, 2014a).

Currently pharmacists in England provide a wide range of services in their communities. Community pharmacies have contracts to deliver services with local commissioning services based on national negotiations via the Pharmaceutical Services Negotiating Committee (PSNC). These services are divided into three categories: essential services which registered community pharmacies have to provide (e.g. self-care, public health), advanced services which focus more on personalising care (e.g. Medicine Use Reviews), and locally commissioned services which differ in each community for meeting their societal needs (e.g. minor ailment service) (PSNC, 2014).

The extended role of pharmacists is partly supported by the variety of medicines available at pharmacies, such as for smoking cessation and emergency contraception. Medicinal products are essentially Pharmacy Medicines (P) under the current UK regulations, and then certain criteria specified medicinal products as Prescription Only Medicines (POM) prescribed by independent prescribers or General Sale List (GSL) which are available in general retail outlets such as supermarkets (MHRA, 2014). Pharmacies can distribute any medicinal products, while the regulations allow wholesalers including web stores to distribute GSL only. Since this classification system was introduced in 1983 to provide people with safe and effective self-care without using health budget, the reclassified medicines from POM to P or GSL had been limited for acute and short-term conditions; however, with the reclassification in 2004 of certain medicines for long-term conditions the role of community pharmacists in self-care extended to the management of long-term conditions (Ahmed & Rutter, 2011).

### GPs' views on the extended roles of pharmacists

The role of pharmacists has been expanding gradually while the variety of deregulated medicines available at pharmacies has been broadened. Simultaneously, views towards the extended pharmacists' role with regards reclassified medicines from General Practitioners (GPs) appears to have changed over time (Bayliss & Rutter, 2004).

The relative changes in GPs' views towards deregulated medicines from POM to P can be seen in three different studies using the same questions, conducted by Spencer and Edwards in 1990 (n=744), Erwin and colleagues in 1994 (n=515), and Bayliss and Rutter in 2004 (n=133) (Figure 1). Their views shift to greater approval for pharmacists providing the deregulated medicines in most cases (Spencer & Edwards, 1992; Erwin *et al.*, 1996; Bayliss & Rutter, 2004).

Moreover, Stewart and colleagues (2010) (n=462) identified GPs' concerns about pharmacists providing long-term treatment due to lack of monitoring and follow-up. Closer collaboration between GPs and community pharmacists would enable the provision of more accessible, effective and safer management of long-term conditions in community (Stewart *et al.*, 2010).

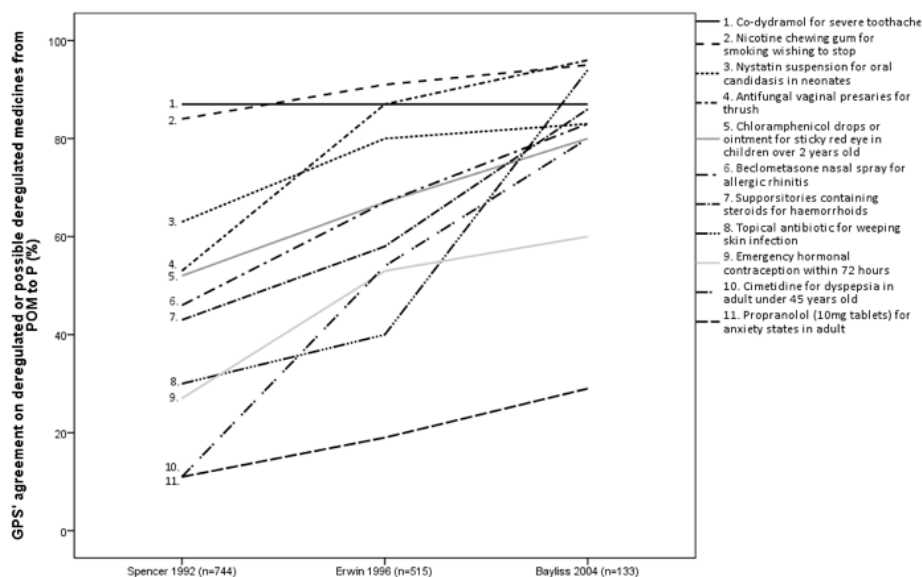
### Pharmacy Education

Education and training is vital for pharmacy professional foundation and further development. Pharmacy education in GB has gradually reformed to prepare graduates and practitioners for providing effective self-care support, which is consistently structured.

### Pre-registration phase (initial education)

The structure of pharmacy education in England is shown in Figure 2. The GPhC is the regulator of pharmacists, pharmacy technicians, pharmacy premises and the standards of pre-registration pharmacy education as the statutory accreditation body of pharmacy schools and standards of practice in GB (GPhC, 2011b). The GPhC standards also emphasise the importance of integrated initial pharmacy education: it recommends using the concept of the spiral curriculum which is a way of organisation of the curriculum, repeatedly revisiting the topics or subjects throughout the course while deepening of the topic by building each serial encounter on the previous one (Harden & Stamper, 1999), indicating vertical integration of programmes stressing the value of links between study years. The standards add the benefit of horizontal integration into the concept of the spiral curriculum, highlighting links between subjects or modules which instil practical application. For example in integrated undergraduate education, first year students learn the simple case related to self-care while linking between pharmaceutical sciences and practice. Then, the

Figure 1: Changes of GPs' views on deregulated or possible deregulated medicines from POM to P



complexity of scenarios is gradually increased towards the final year of the course as students deepen the understanding of the subjects as well as gain the transferability of skills to apply knowledge to practice.

**Figure 2: General structure of pharmacy education in England**



### *Post-registration phase*

A pharmacist in GB needs to renew their registration with the GPhC annually based on a continuing professional development (CPD) model. GB is at the forefront of using the concept of CPD in a qualitative manner using a diary of reflective practice. Currently, a minimum of nine CPD entries per year are required to remain qualified as a pharmacist (GPhC, 2011a), which is considered as the minimum standard to be a pharmacist. Pharmacists are encouraged to maintain their professional development above this minimum level to contribute to excellence in quality health care. This system is under review by the GPhC and is likely to change towards a “revalidation” model, using a more formal portfolio system, which explained later (Wang, 2013).

In 2010, the Royal Pharmaceutical Society of Great Britain devolved the role of professional regulator to the current regulator GPhC and took up the role of professional leadership body, the Royal Pharmaceutical Society (RPS). The RPS plays an important role for professional development and subsequently developed a consistent standards model, establishing developmental frameworks workforce development.

Foundation practice is where pharmacists should develop their professional competencies following initial registration or a career break, for example. The Foundation Pharmacy Framework (FPF) (RPS, 2014b) is a professional development framework for foundation-stage pharmacists and those who return to practice after a career break, for example, maternity leave. The FPF was launched by the RPS in January 2014 building on a review of the General Level Framework (GLF) developed by the Competency Development and Evaluation Group (CoDEG, 2010) with evidence to cover all competencies to conduct pharmaceutical services across all healthcare sectors. Key to the FPF is the aspiration to develop, whether or not formal education provision is available, regardless of sector or geography. It is regarded as an equitable process of support and development for all, and not solely a training programme for hospital practitioners (which was the original 2004 development model).

Education and training within the foundation programme using the royal college FPF are currently in the

implementation phase. To develop and sustain necessary competencies for self-care support, self-identification of required skills and knowledge for effective self-care support is vital without relying totally on existing educational programmes in self-directed lifelong learning. The RPS will be accrediting centres/employers and providers who invest in the support, training and development of their staff and pharmacists engaged in foundation practice, and beyond into advanced development for the RPS Faculty stages.

In 2013, the RPS launched a new professional development and recognition programme at the advanced level: the RPS Faculty (RPS, 2014a). The core of support for the RPS Faculty is the Advanced Pharmacy Framework (APF) (RPS, 2013) which builds on evidence and development fostered by CoDEG since around 2007 (CoDEG, 2009). The APF is a set of competencies at advanced level covering career experiences across a range of scope of practice and which provides an evaluation framework for formal professional recognition (sometimes referred to as ‘credentialing’) and subsequent membership of the RPS Faculty.

The APF focuses more on generic clinical leadership skills rather than specific aspects. The majority of advanced-level pharmacy workforce is in a place to lead and guide other workforce. Furthermore, having greater views of ‘advanced’ level including experienced generalists in broad scope as well as specialist pharmacists in narrow scope, focusing on the advancement, the RPS Faculty is a support scheme for the community pharmacy sector. The RPS Faculty provides all essential support required to assist professional development of members: the APF identifies the required skills and guidance for career pathways in all sectors of pharmacy, education and training under the RPS Faculty standards, and portfolio review and peer assessment/review using the Multiple Source Feedback tools, while motivating community pharmacists to maintain their development by the professional recognition with the Faculty.

Regulation and monitoring CPD for pharmacists in GB is set to change based on changes to other health professionals’ CPD and dissatisfaction with the outcomes of the current CPD system. The GPhC has announced intentions to shift towards a new “revalidation” system for pharmacists, known as continuing fitness to practice (CFtP). The GPhC CFtP has key components including the use of external CPD portfolios, peer assessment and Multiple Source Feedback while considering their practice area, which is conceptually similar to the RPS Faculty professional recognition model already in place; there is obvious synergy between these two systems of regulated CPD and professional career development. The GPhC has stated these procedures are going to be conducted by accredited partner organisations and employers (Wang, 2013), and is in close discussions with the RPS around the Faculty model being the “Gold Standard” for CFtP.

## Discussion

Japan is facing an aging society, which has led to a dramatic rise in the use of national health services and costs (NIPSS, 2013). Public health policies, healthy living and preventative actions are considered to help avoid the unnecessary use of limited resources and improve societal quality of life (Taylor, 2011). The expectations towards self-care are growing for supporting the healthy living of population, though its theoretical basis has not fully established in Japan (Matsushige, 2012).

In Japan, community pharmacies are classed as medical institutions for providing health care. Japanese government has announced the plan utilising community pharmacies as hubs to promote health information in order to support local self-care activities, utilising professional skills of pharmacists. The transformed pharmacies are provisionally labelled as 'health navigating stations'. The health navigating stations are expected to offer health consultations and OTC selling along with collaboration with other health care institutions based on community collaborative care system (MHLW, 2014b). Further, the current Japanese government strategically aims to create new health markets in pharmacy, as online sales of non-prescription medicines become more broadly available and other services including blood glucose testing are offered at pharmacies (Prime Minister of Japan and His Cabinet, 2013). Hence pharmacy education, workforce development and career training programmes for such new roles need to prepare graduates and registered practitioners to meet these societal and clinical expectations to provide the quality, effective and innovative self-care service development in community environments. Although the initial education programme has extended from four to six years in order to strengthen clinical pharmacy subjects, it has lacked education and training in this field in a consistent and structured manner: attention needs to be paid to future trends in the new model of pharmacy core curriculum which will be launched in April 2015.

Reviews of relevant information and interviews of experts revealed the current pharmacist's role for improving healthy living of population supported by a wide range of OTC medicines available and growing expectations of the pharmacists' contribution, as well as the current situation of pharmacy education in the UK. These findings likely provide general guidance for Japan to further develop national health.

The concept of the self-care continuum provides more opportunities for pharmacists to contribute to self-care support in the community. Currently pharmacists in Japan tend to focus only on self-medication using OTC medicines without looking at the whole picture of the self-care continuum: the Japan Medical Association and its research institution addressed the lack of self-care support activities among pharmacists and governments (Maeda, 2014). Examples from GB in self-care address wider opportunities for pharmacists to meet the proposal from the Japanese government considering community pharmacies as a hub for providing health-related services

and information in community (Prime Minister of Japan and His Cabinet, 2013). Based on essential services for supporting self-care and enhancing public health in their communities, pharmaceutical care including at all levels in self-care continuum as well as locally specific health needs need to be provided. Further, with the use of pharmacist-only non-prescription medicines, better collaboration with other healthcare professionals can be sought for better care, though a long time would be required to employ the collaborative care because of the need to raise the awareness of the benefit of pharmacists in this area, as the UK example shows.

Pharmacists in Japan need to develop competencies regarding self-care to play such a role though there is still a lack of structured education and training. Well-structured pre-service education is essential to develop a foundation for a profession to provide self-care support. In order to instil pharmacists in Japan with a habit of CPD to continuously deliver quality pharmaceutical care services, the RPS Faculty, using a developmental framework (which show clear career pathways with professional recognition), forms an opportunity to deliberate upon development of pharmacy education and training in Japan. Cohesiveness and collaboration among all relevant organisations and stakeholders is likely to be key to a successful educational and workforce development.

The major limitation of this project is the generalisation because of the nature of project: the restricted number of interviews due to time limitation. However, with the aim of sharing experiences and examples in the UK, the facts provided in this report allow pharmacists and pharmacy academics in Japan to consider further development of their role in self-care and education. Future research will be vital to advance pharmacy education in Japan to serve the expected role of pharmacists for supporting safe and effective self-care of the population.

## Conclusion

Self-care is receiving much attention from both Japan and the UK to sustain healthy living of their populations. Currently community pharmacists in Japan are expected to have an extended role in self-care: pharmacy education, workforce development and training needs to prepare pharmacists to serve the expected role based on societal health needs. Sharing the concept of self-care, extended role of pharmacists, and pharmacy education and training related to the area in the UK provides possible guidance and opportunities to consider further development of relevant issues in Japan. Comprehensive workforce and service planning will be required, through societal needs assessment, to prepare pharmacists for serving an important role to support self-care in Japan.

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