

## The Preparedness of Pharmacist in Community Setting to Cope with Globalization Impact

### Kesiapan Apoteker di Apotek Menghadapi Dampak Globalisasi

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#### Abstract

A descriptive study to identify the preparedness of pharmacist in community pharmacies to cope with globalization impact was conducted in 2009. This cross-sectional study was done in DKI Jakarta, Bali and Maluku. Informants were purposively determined involving pharmacists from schools of pharmacy, Indonesian Pharmacist Association (IAI), community pharmacies, Provincial and District Health Offices, as well as community pharmacy owners. Primary data were collected through in-depth interviews and observation using check-list in community pharmacy. Data were analyzed descriptively and qualitatively using triangulation method. Results of the study show that according to Health Offices and the Indonesian Pharmacist Association, pharmacists were not adequately prepared and pharmacists in stand alone community pharmacy are less prepared than those in a network or franchise pharmacy. Licensed pharmacists of network community pharmacy in the metropolis are going to prepare themselves to face the new patient-oriented paradigm and to meet the standard of pharmacy service, whereas stand-alone community pharmacy still prioritized fast service and lower drug price.

**Keywords:** Community pharmacy; Globalization; Pharmacist; pharmacy service

#### Abstrak

Telah dilakukan suatu penelitian deskriptif pada tahun 2009 yang bertujuan untuk mengidentifikasi kesiapan apoteker di apotek dalam menghadapi dampak globalisasi. Studi potong lintang dilakukan di DKI Jakarta, Bali dan Maluku. Responden ditetapkan secara purposif meliputi apoteker dari perguruan tinggi farmasi, pengurus Ikatan Apoteker Indonesia (IAI), dan apotek. Dinas Kesehatan Provinsi dan Kabupaten/Kota serta pemilik apotek. Data primer dikumpulkan dengan wawancara mendalam dan observasi menggunakan daftar tilik di apotek. Data dianalisis secara kualitatif deskriptif menggunakan metode triangulasi. Hasil penelitian menunjukkan bahwa menurut Dinas Kesehatan dan ikatan apoteker Indonesia (IAI) apoteker belum cukup siap dan apoteker di apotek non-jaringan lebih tidak siap dibandingkan dengan di apotek jaringan/franchise. Apoteker di apotek jaringan di kota metropolitan sedang mempersiapkan diri menghadapi paradigma orientasi pada pasien dan pemenuhan standar pelayanan farmasi, sedangkan apoteker di apotek non jaringan yang berdiri sendiri masih menekankan pada pelayanan yang cepat dan harga obat yang lebih rendah.

**Kata kunci:** Apotek, Globalisasi, Apoteker, Pelayanan farmasi

## **INTRODUCTION**

The development in medical and pharmaceutical technologies and the changing of life style have brought changes in the community expectations of pharmacy services. Along with it, the development in information technology enhances the shifting of the old drug-oriented to the new patient-oriented paradigm. In developed countries pharmacy services put more emphasis on the welfare of patients in all settings, and now has been recognized as an important profession in the multi-disciplinary provision of health care. In contrast, pharmacists in some developing countries are still underutilized and not deemed important by either the community or other health personnel due to their limited interaction with the public.<sup>1</sup>

Pharmacist is a health care provider graduated from a school of pharmacy who has a licence to deliver services and prerequisite qualifications. Although the Indonesian Ministry of Health had issued the Standards of Pharmacy Services in Community Pharmacy since 2004,<sup>2</sup> many community pharmacies did not deliver services meeting the standards for reasons like the lack of pharmacist's competence and the awareness of those involved. The study findings in 2005 revealed that 47 community pharmacies from 4 cities were still product oriented.<sup>3</sup>

Globalization can be defined as an intensification of cross-national cultural, economic, political, social and technological interactions. The links between globalization and health are complex and its consequences can be direct or indirect through the economy and other factors.<sup>4</sup> The globalization of trade is particularly relevant for health services that have become a commodity that can be traded such as health services provision across borders, access to overseas health care or certain facilities, an industry that attracts foreign investments and the international

movement of health personnel across borders.<sup>5</sup> According to Segouin, the movement of professionals tends to be detrimental to poorer countries and though still marginal, the so called 'medical tourism' is becoming more important.<sup>6</sup>

In spite of good things that come from better access to information, an inherent danger comes with the vast flood of information available, namely the reliability and accuracy of health information from various web sites. Furthermore, pharmacists have to keep abreast of developments in pharmacy practice and the pharmaceutical sciences, professional standards requirements and advances in knowledge and technology through continuing professional development.

A study to identify the preparedness of pharmacist in community pharmacies to cope with globalization impact and the existing as well as the expected pharmacists' qualification in the implementation of the standards of pharmacy services in community pharmacy has been conducted.

## **METHODS**

This qualitative descriptive study was done cross-sectionally in DKI Jakarta (Central Jakarta), Bali (Denpasar City and Jembrana District) and Maluku (Kota Ambon and Masohi City) in 2009. Informants were determined purposively involving four pharmacists from 4 schools of pharmacy, three pharmacists from 3 regional pharmacist association (IAI), eight pharmacists and six owners from 8 community pharmacies (4 network pharmacies and 4 stand-alone pharmacies), seven pharmacists from 2 Provincial and 5 District Health Offices. Primary data collections through in-depth interviews and observation using check-list in community pharmacy have been used. Data were analyzed descriptively and qualitatively using triangulation method.

## **RESULTS AND DISCUSSION**

### **The preparedness of pharmacist in community pharmacies to cope with globalization impact according to school of pharmacy**

The International Pharmaceutical Federation (FIP) introduced Good Pharmacy Practice (GPP) in 1996 and now Indonesia has just adopted GPP with some adjustment suitable for Indonesia. Until now, the standards of pharmacy services developed by the Ministry of Health have become the references.<sup>2,7</sup>

#### **School of Pharmacy 1**

The present curriculum emphasizes on pharmaceutical production and only up to 40% on pharmacy service. To face globalization era, training in pharmacology, new product knowledge and active English speaking must be followed by pharmacists besides familiarity with the community culture to communicate well.

In globalization era pharmaceutical science and technology so fastly develop that pharmacists should maintain their competencies and expertise through continuing professional development activities.

#### **School of Pharmacy 2**

Pharmacists should start serving the community by providing pharmaceutical care. Pharmacists should do something visible to public, creative and familiar with medical terms so as to be recognized and to compete. To anticipate globalization, pharmacists ought to collaborate with their colleagues to help themselves to have a community pharmacy on their own.

Pharmacists have to provide assistance, information and advice to members of the public about medicines available. This requires them to upgrade their competencies through continuing professional development.

#### **School of Pharmacy 3**

Their education equips pharmacists to practice according to the standards of

pharmacy services, but sometimes there are limitations due to lack of facilities. Communication skill and English language should be mastered to face globalization. The schools of pharmacy should cooperate with foreign schools of pharmacy, e.g. from Netherlands and Malaysia.

#### **School of Pharmacy 4**

The competencies obtained by pharmacists from their education refer to the curriculum guidelines issued by the Association of Indonesian School of Pharmacy (APTFI). Fresh graduated and unexperienced pharmacists may not be prepared appropriately because of the broadness in their learning. Reading international scientific journals and active participation in a discussion forum to exercise English are needed. Pharmacists in a community setting have to be more active than those in hospital setting due to lack of facilitation, concerning drug pharmacology and new product knowledge.

Pharmacology, clinical pharmacy, drug analysis and product knowledge in addition to medical terms have to be mastered. Nowadays, in pharmaceutical education greater emphasis is being given to communication skills, aspects of the social and behavioral sciences and pharmaco-economics.

Global pharmacy education is purposeful to meet workforce needs of local and regional communities, improve health and opportunities similar to what FIP's Global Pharmacy Education Task-force is attempting to do. Success can be achieved by addressing the following 5 key strategies: share expertise and resources to benefit the parties involved; respect historic factors and ethical dilemmas which may have influenced pharmacy education and practice; consider local manpower needs; establish accreditation standards individual or regional countries; and empower students by providing them with the knowledge, skills and attitudes.<sup>8</sup>

There is emerging challenge to move from curricula that focus on knowledge and skill to curricula that will develop pharmacists as people who will 'think, act, and do things in a way that shows they are truly patient-centered pharmacists'. Globally pharmacy educators continue to face challenges in meeting stake holders requirement which are made more difficult in developing countries by a lack of resources, expertise, infrastructure, and the pressure of globalization. Many health systems in developing countries do not recognize pharmacists as part of the integrated health care team, and the perceived status of pharmacists still well below that of their medical peers. Globalization brings internationalization of education universities widen their border beyond conventional or regional boundaries. Internationally, there is the occasional call for standardized competencies, curricula and courses for pharmacists. However considering the variation of pharmacy practice and education capacity, this may not be a feasible nor a desirable endpoint.<sup>9</sup>

In Australia, community pharmacy has a high level of regulation and there-for epharmacy assistants need to be highly skilled with a broad knowledge. To be an accredited pharmacy, all pharmacy staff who sell 'Pharmacy' and 'Pharmacist only' medicines must complete nationally recognised accredited training.<sup>10</sup>

### **The preparedness of pharmacist in community pharmacies to cope with globalization impact according to pharmacist in a community pharmacy**

At this moment there are two known types of community pharmacy, namely franchise type with networking in one or more cities and stand-alone community pharmacy.

#### **Pharmacist in network pharmacy 1**

Globalization will raise tighter and tighter competition due to the emerging of foreign franchise or network pharmacies. Competent pharmacists would be demand-

ed and a substandard school of pharmacy will collapse. Continuing professional development in clinical pharmacy will be required besides provision of two or more pharmacists for a full day pharmacy. The pharmacist thought that their services have been well done, because a pharmacist was present any time.

The main barrier found lied on the pharmacists themselves, that was the lack of their willingness to upgrade and develop their professional skill and knowledge.

#### **Pharmacist in network pharmacy 2**

The impact of globalization on a network pharmacy will be of no significance. Besides participation in external training, internal development of human resources was made to face globalization impact on community pharmacy. Pharmacy service delivered up to this time has referred to a standard operating procedure in line with the GPP. Medium and high level community were targets of this pharmacy. Besides the licensed pharmacist, a co-pharmacist was present.

#### **Pharmacist in network pharmacy 3**

Pharmacist has to own a community pharmacy himself in order to survive and to develop it on his creativity. As long as the pharmacy belongs to others, the development depends mainly on the owners and the pharmacist works reluctantly. The impact of globalization so far does not matter much to pharmacists and the standard of pharmacy service just like GPP are not familiar to them. Efforts to develop the pharmacy are business cooperation with other companies, delivering medicines to patients and increasing interaction with patients. Doubt in providing information to patients, the high cost needed to upgrade skill and lack of complete available drug stock are barriers to development.

#### **Pharmacist in network pharmacy 4**

Globalization will bring small community pharmacies to collapse, par-

ticularly those owned by non pharmacist, and network pharmacies will survive. Demanded fast services make not all that required by the standard of services can be delivered and information may be provided passively. Hindrances found are lack of pharmacy technician and references as well as continuing education program. Consumers from higher economic level were potential target here.

#### Pharmacist in stand-alone pharmacy 1

According to pharmacist who was also the owner, the impact of globalization up to this time is insignificant. Pharmacy service was delivered according to the standard and the pharmacy itself had been accredited. Because the pharmacist was always present, information and counseling could be delivered all the time. Upgrading the skill and knowledge of employee is needed.

#### Pharmacist in stand-alone pharmacy 2

The pharmacist who was a relative of the owner said that globalization would not be much prominent and to anticipate the impact a pharmacist has to control management of the pharmacy. Barriers to develop the pharmacy were human resources, capital and facilities. Marketing strategy was the opportunity to grow and face the globalization era.

#### Pharmacist in stand-alone pharmacy 3

Globalization impact on community pharmacy has not been recognized yet and the standard of pharmacy service was not appropriately socialized. Recording consumers' data was an effort to develop the pharmacy and existing hindrances were dispensing physicians and local government health insurance policy that support it. Nevertheless, stand-by pharmacist was the strength of the pharmacy.

#### Pharmacist in stand-alone pharmacy 4

The pharmacist thought that globalization would be of no importance, for their location were far from the metropolis. The standard of pharmacy service was not practiced because the public main concern was cheap drug price and fast service. The large number of consumers that come simultaneously was a handicap to provide information besides the availability of an appropriate room, and counseling might only be done in the morning when a few consumers are there. The public usually have not recognized their pharmacist like their doctors and nurses or midwives. Nevertheless, there were two pharmacists available that at least one of them was stand-by at pharmacy open time.

Results of activity observation of pharmacy services in community pharmacy were resumed in Table 1.

Some pharmacists thought that in this era of globalization the competition between hospital and community pharmacy will be keen, particularly with the emergence of foreign franchise community pharmacy. This impact will first be felt in metropolis area. To promote the service quality, the Ministry Of Health in 2004 introduced the standard of pharmacy service in community setting which referred to Good Pharmacy Practice (GPP).<sup>7</sup> In the Decree, pharmacy service was defined as direct professional responsibility of pharmacist to improve the patient's quality of life.

Full time pharmacists in a stand-alone community pharmacy did not always serve better than part time pharmacists, for patients usually came nearly at the same time and demanded fast service and cheap drug price. The patients usually have not recognized their pharmacist like their doctors and nurses or midwives.

**Table 1. Pharmacy services in community pharmacy**

Sample pharmacy	Services										
	A	B	C	D	E	F	G	H	I	J	K
Network 1	-	-	-	v	v	v	v	v	v	v	-
Network 2	-	-	-	v	v	v	v	-	-	v	-
Network 3	-	-	-	v	v	v	v	v	v	v	-
Network 4	v	-	v	v	v	v	v	-	-	v	-
St.alone 1	-	-	v	v	v	v	v	-	-	v	-
St.alone 2	v	-	v	v	v	v	v	v	v	v	-
St.alone 3	-	-	-	v	v	v	v	-	v	v	v
St.alone 4	v	-	v	v	v	v	v	v	v	v	v

Notes: Prescription (A to C), Drug dispensing (D to H), Counseling (I to K)  
 A. Admin.screening D. Dispensing G. Delivery J. Promo - educat  
 B. Pharm. screening E. Labeling H. Information K. Homecare  
 C.Clinical screening F. Packaging I. Drug use monit

Observation reveals that the pharmacy technician, if any, did most of activities in delivering medicines to patients. In depth interviews reveal that the handicap mainly rest on pharmacists themselves.

In Pakistan, the profession seriously lacks government interest and legal reform is needed to achieve acceptance of the pharmacy profession as an integral part of a health care system. This lack of recognition is also due to the limited interaction of pharmacists with the public. The main problem is the shortage of pharmacists and their services are more focused towards management.<sup>1</sup>

Health cannot be assumed to be the same as other basic goods. Linked to health care are many complex ethical, cultural, and human resource issues. Further, it is the duty of health professionals to promote health as a global human right.<sup>6</sup> The preparedness of pharmacist in community pharmacies to cope with globalization impact according to the employer/owner.

**Pharmacy owner/Area Manager 1**

Pharmacy service was practiced according the SOP in line with GPP. The impact of globalization on a network pharmacy will be of no importance. Regular internal training had been conducted and external outside training depended on the financial condition of the pharmacy. The

opportunity of a network pharmacy serving a community with higher economic level will still be great. Each pharmacist had a co-pharmacist to assist them.

**Pharmacy owner/Area Manager 2**

The standard of pharmacy service was translated in the SOP developed by the head office. The pharmacist and their staff were encouraged to provide information and education to the patients. At present, pharmacies are in competition with each other and this forced a pharmacy to serve the best. Drug availability as well as information provision was essential. Computerized control of drug stock will be of value besides corporate social responsibility. Upgrading staff capacity through training, seminars and sharing was done regularly.

**Pharmacy owner/Area Manager 3**

The pharmacy owner/manager was not too familiar with the standard of pharmacy service or GPP, but to develop their pharmacy no problem was found and they had many staff working in four shifts a day for six days in a week.

**Pharmacy owner/Area Manager 4**

The standard of pharmacy service or GPP have not been recognized yet before. Highly competitive situation due to no limitation in the distance between a

pharmacy to another might bring cooperation with each other in completing their drug stock. Customers and the availability of generic drug and medicines for chronic diseases may be an opportunity to develop the pharmacy, whereas obstacles came from the physician who often affect drug stock and pharmacy's capital through the changing of prescription and short distance among pharmacies.

#### Pharmacy owner/Area Manager 5

The pharmacy did not know the standard of pharmacy service or GPP. There was now unfair competition where some pharmacies tendered for certain products such that they can be sold at a lower price than the market price. Imported products will become an obstruction and intransparency in distribution level will affect competition in price.

#### Pharmacy owner/Area Manager 6

The present condition is still good, for the number of pharmacies are comparable to the number of people. The number of pharmacists and their assistants are adequate to compete with foreigners. The impact of globalization will not be so great. Foreigners will first come into Indonesia through pharmaceutical industry in metropolis and if they succeed, they will enter the drug distribution sector and then establish on-line network pharmacies.

Hence, patients' access to drugs and information are the instruments to be prepared by a community pharmacy to anticipate global competition. At this time most pharmacists can hardly serve patients well. Network community pharmacies felt being prepared to anticipate globalization era and free trade, because they were supported by professional management and periodically there were internal training for pharmacists. Professional pharmacist was stand-by every day.

On the other hand, stand-alone community pharmacies were usually

conventional and some of them that were located in big cities thought that globalization would have no impact. Professional pharmacy service did not become first priority for the owner and therefore the existence of dispensing physician or those prescribing drugs in various changing trade names was their main concern.

The globalization of trade is especially relevant for health services that now have become a trading commodity. First, health services can be provided across borders and second, patients can travel abroad to receive health care. Third, health services themselves have become an industry that attract foreign investment and fourth, the international movement of health personnel across borders has become a significant component of the trade in health services.<sup>11</sup>

#### **The preparedness of pharmacist in community pharmacies to cope with globalization impact according to stake holder Pharmacy section.**

#### Health Resources of Provincial Health Office 1

The control of community pharmacy is now taken by the District Health Office and the Provincial Health Office acts as regulator and has issued the standard of pharmacy service in community setting since 2005. To anticipate globalization in health policy, the standard of pharmacy services should be revised periodically and socialization of new regulation will be conducted. Progress are made concerning pharmaceutical data analysis and the implementation of on-line drug reporting. Upgrading in information technology, updating information and the implementation of ISO system as well as journal readings to upgrade foreign language skill have to be carried out.

#### Food and Pharmacy Control, Provincial Health Office 2

The standard of pharmacy service was not fully implemented yet and the pharmacy has just merely supplied medi-

cines. The provision of drug information was just tried to be done and only a few pharmacists did. Until now there are many schools of pharmacy and the number of pharmacist needed can be met. To ensure competences, pharmacist's licence has to be renewed every five years and continuing professional development is required. Educational programmes for entry to the profession should appropriately address both current and foreseeable future changes in pharmacy practice. The impact of globalization will be more influential in big cities. Pharmacists should be self-confident and improve their communication skill.

#### District Health Office 1

The implementation of the standard of pharmacy service was not like the expected yet and it needs socialization to those involved, but this will be limited by fund availability.

#### District Health Office 2

Optimal control and monitoring of pharmacy service in community pharmacy has not been achieved yet due to lack of human resources in the office.

#### District Health Office 3

The standard of pharmacy service had been implemented and cost effective service was considered, no polypharmacy had been found. The local government health assurance program licensed physician to store limited medicines bought from a community pharmacy. To ensure quality of services, the ISO 2008 is a precondition.

#### District Health Office 4

The implementation of the standard of pharmacy service was not like the expected yet, especially concerning the presence of pharmacist during open time and limited time as well as appropriate room to communicate with patients. To ensure quality and competence, either formal education or training was conducted. Pharmacists should be capable of prac-

ticing professionally and leading their staff, communicating and making right decision if needed.

#### District Health Office 5

The implementation of the standard of pharmacy service in community setting was not like the expected due to shortages in human resources.

#### Indonesian Pharmacist Association (BPP IAI) Prov. 1

Not more than 20% pharmacists in Thailand and Philippine practiced according to GPP and in Indonesia the reference is the standard of pharmacy service in community setting from the MoH. In this globalization era, besides basic pharmaceutical sciences, a pharmacist has to be capable of practicing English and computer as well as developing SOP for each professional activity. Foreign pharmacists who will practice in Indonesia should be able to speak Indonesian.

The impact of globalization can now be recognized by the existing e-community pharmacy from the Philippine serving around the capital. There are opportunities to face globalization, foreign pharmacist may come into Indonesia and Indonesian pharmacist may go out and work abroad. Pharmacists have to follow up the developments in pharmacy practice and pharmaceutical sciences, professional standards requirements and advances in knowledge and technology. In collaboration with school of pharmacy and various health professional organizations the association of pharmacist organized continuing professional education and also published books, scientific journal and so on.

#### Indonesian Pharmacist Association (BPP IAI) Prov. 2

The quality of pharmacy service delivered in community pharmacy was inadequate due to the absence of pharmacist nearly all the time. The association published bulletin and organized scientific

meeting to continuously develop the profession. Certain community pharmacy has an ISO 9000-2 accreditation and the association will establish GPP and the SOP referring to international standard. Upgrading the capability of pharmacist in foreign language and computer is required. Meanwhile, most of the pharmacist in community pharmacy were part timers for they were also officers and therefore they should be willing to be replaced by full time pharmacists.

#### Indonesian Pharmacist Association (BPP IAI) Prov. 3

A pharmacist is usually not a community pharmacy specialist although the scientific basis is adequate and just some advancement is required. They obtained general pharmaceutical knowledge from school and familiar in non-proprietary name for medicines. In practice they have to recognize their trade name too. Although pharmacological principles were familiar to them, they have to improve their communication skill and management. The association played a role in the arrangement of monthly member discussion and certification. In order to survive, pharmacists have to upgrade their competencies especially in public health and epidemiology, besides regulation from the authority.

Efforts made by one Provincial Health Office were among others the establishment of guidelines of pharmacy service in community pharmacy followed by monitoring and direction to pharmacy personnel. The development of pharmacy personnel was yet ineffective and in another province the standard of pharmacy service was unable to be implemented yet, but merely dispensing prescription. The condition showed that they were not prepared to anticipate globalization. Head of provincial pharmacy section said that there were many schools of pharmacy which had not been accredited yet. Therefore, the competencies of their graduates

to cope with globalization impact were questionable.

Pharmacist will have to have physician support to further their prescribing. Managing patients with chronic diseases and others that require substantial monitoring and dosage adjustments is not cost-efficient activity for physicians. They would do better by engaging in collaborative practice with credible pharmacists and spending their own time on new or more complex patients.<sup>12</sup>

The increasing trade in health services may have profound implications for provision of proper health care. In spite of improving the consumer's choice, some developments are believed to have long-term dangers, such as establishing a two-tier health system, movement of health professionals from the public sector to the private sector, inequitable access to health care and the undermining of national health systems. The illegal trading of drugs and the provision of access to controlled drugs via the internet are potential health risks. In addition, globalization process can also result in a 'brain-drain' in the health sector as a result labour migration from developing to developed regions.<sup>4</sup>

## CONCLUSIONS

Pharmacists in stand-alone community pharmacy are less prepared than those in a network or franchise pharmacy. Licensed pharmacists of network community pharmacy in the metropolis are going to prepare themselves to face the new patient-oriented paradigm and to meet the standard of pharmacy service, whereas stand-alone community pharmacy still prioritized fast service and lower drug price.

According to Health Offices and the Indonesian Pharmacist Association, pharmacists were not prepared adequately and even there were signs of inappropriate competencies of graduates from some schools of pharmacy that surely will needvarious training to implement the

standard of pharmacy service. Continuing professional education should cover pharmacology, clinical pharmacy, drug analysis, new drugs and product knowledge, medical terms, social culture, counseling and communication skill and English language.

Considering differences in pharmacy services that should be delivered at various pharmacy service facility, pharmacists competence at each facility should be specific too and a further analysis of pharmacists qualification is needed.

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