Community Pharmacy Practice in Bhutan: Past, Present and Future

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Abstract
The World Health Organization defines health as a state of complete physical, mental and social well being and not merely the absence of disease. Health is a broad concept involving a team of multidisciplinary health professionals in delivering healthcare services. Pharmacy practice has the potential to provide services to the individual patients and improve the overall quality of life of the patient and the society. Traditionally, pharmacy profession was often regarded as a transitional discipline between the health and chemical sciences and as a profession charged with ensuring the safe use of medication. The International Pharmaceutical Federation recommends for implementation of Good Pharmacy Practice in community pharmacies. Community Pharmacy is a place where medicines are stored, dispensed, supplied or sold. It acts as a first point of healthcare for majority of population living in the developing countries. Community Pharmacy in Bhutan includes retail and wholesale pharmacies. Retail pharmacies are involved in the sale of medicines and wholesale pharmacies for import and distribution of medicines. There are over 90 licensed retail and wholesale pharmacies in Bhutan and they are required to comply with the medicines rules and regulations. Community Pharmacy Practice in Bhutan has to evolve with the rapidly occurring changes in the healthcare deliveries and growing patient expectations. Understanding the current practice of community pharmacies in Bhutan would be useful for studying the gaps and existing opportunities for improving the health of the population. This article describes the regulatory requirements and existing practices of community pharmacies in Bhutan.

Keywords: community pharmacies, CP, retail pharmacies, wholesale pharmacies, Bhutan.

Introduction
The World Health Organization (WHO) defines health as a state of complete physical, mental and social well being and not merely the absence of disease[1]. Within the context of this definition, healthcare providers play a major role in striving for the health of the population. It is also the fundamental right of every human being to enjoy the highest attainable standard of health[2]. Health is a broad concept that involves a team of multidisciplinary healthcare professionals in delivering optimum healthcare to the patient[3]. Pharmacy practice falls in a healthcare category which has the potential to provide services to the individual patients and improve the overall quality of life of the patient and the society. Traditionally, pharmacy profession was often regarded as a transitional discipline between the health and
chemical sciences and as a profession charged with ensuring the safe use of medication\cite{4}. The International Pharmaceutical Federation recommends for implementation of Good Pharmacy Practice (GPP) in community pharmacies (CP)\cite{5}. These recommendations focused on four aspects of services which are; access to pharmaceutical personnel, the training needs of pharmacy personnel, the promotion of highest standards of premises, dispensing, labeling, counseling, pharmaceutical care and record keeping and the establishment of legislation for national drugs policies.

The importance of pharmacy profession is given due consideration across the world but the recognition that the pharmacy professionals are give varies from country to country. The WHO recommends a ratio of 1 pharmacist for every 2000 population\cite{6}. The pharmaceutical services in the developing countries face numbers of challenges in terms of shortage of qualified pharmacists, separate dispensing practices not implemented, lack of standard practice guidelines, inefficient regulatory frameworks, etc\cite{7}. The shortage of pharmacists is even worse in African countries\cite{8} whereas the pharmacists training is more focused towards industrial sector in India\cite{9}. CP is a place where medicines are stored and dispensed, supplied or sold. The public perception of CP and the pharmacist is very weak. CP are usually viewed as medical stores and defines them as drug traders not better than the general store owners\cite{10}. CP act as a first point of healthcare for majority of population living in the developing countries\cite{11}. However, a study done by Goel et al., reported that CP are often seen as a source of inexpensive medical care\cite{9}.

CP in Bhutan includes retail and wholesale pharmacies. Retail pharmacies are involved in the sale of medicines whereas wholesale pharmacies imports and distributes medicines within the country. More than 90 CP are spread all across the different Districts of a country (Table 1). Increasing numbers of CP in Bhutan over the years indicates the growing demand of people availing healthcare services from CP. Understanding the current practice of CP would be useful for studying the gaps and existing opportunities for improving the health of the public. This article describes the regulatory requirements and existing CP practices in Bhutan.

**Brief History of Pharmacy Profession**

Historically, the first professional pharmacy started in Arabic population\cite{12} and the first ever drug store in the world was established in Baghdad in 754 AD. During that time the Arabs used almost two thousand substances to treat various health conditions and few of these substances are still used today. Later, the preliminary form of pharmacy extended to Egypt, Ancient China and Europe\cite{13}. According to a study by Khan, Franklin legally stopped the physicians of his hospital (Pennsylvania, America) from preparing drugs and gave the job to the pharmacist\cite{14}. Helper and Strand in 1990, defined Pharmaceutical Care as “the responsible provision of drug therapy to achieve definite positive outcomes that improves the quality of life of the patient” leading to shift in pharmacy practice towards patient oriented services\cite{15}. In the UK, the supplementary prescribing by pharmacists approved in 2001 led to an extension of rights for pharmacists and made them an Independent Prescriber in 2006\cite{16}.

**Health and Healthcare System in Bhutan**

Bhutan is a small landlocked nation situated between India and China with a population of 779,666 in 2017\cite{17}. The gross national income per capita was USD 2640.17 in 2016\cite{17}. Modern healthcare system in Bhutan began in 1961\cite{18} coinciding with the first Five Year Plan, 1961-1966.\cite{19} Healthcare services is provided free in Bhutan by the government as per the Constitution\cite{20}. Bhutan’s health system follows the principle of Universal Health Coverage and is largely government-driven both in financing and provisions\cite{21}.
Comprehensive healthcare services are delivered through a three-tiered healthcare system from Satellite and Out Reach Clinics to Basic Health Units at the primary level and District Hospitals at the secondary level and the Regional Referral Hospitals to National Referral Hospitals at the tertiary level\textsuperscript{[22]}. Private healthcare is not encouraged in Bhutan as the government ensures free basic healthcare services for the people. Bhutan is fully dependent on imported medicines from countries like India, Bangladesh and Thailand as there are no pharmaceutical companies manufacturing medicines in the country. The Drug Regulatory Authority (DRA) as a national medicines regulatory agency ensures the quality, safety and efficacy of medicinal products in the country through premarketing and post marketing control system. Blood and Blood Products are also regulated as medicines in Bhutan although the regulatory procedures are quite different from pharmaceuticals\textsuperscript{[23]}.

Regulation of Community Pharmacies in Bhutan
All premises wherein medicines are manufactured, stored, distributed and sold are licensed by the DRA. CP plays an important role in delivering healthcare services to the people. Bhutan has witnessed a growing numbers of CP in the recent years and the records maintained with the DRA reveals the need for improvement in their compliance to regulatory requirements. The DRA regulates CP in terms of premises, personnel and products. GPP standard and guidance on the implementation of proper pharmacy practices are the basis for implementing the concept of the total quality management\textsuperscript{[24]}.

Community Pharmacy Practice in Bhutan: Past experiences
Before the enactment of the Medicines Act of the Kingdom of Bhutan 2003, only a handful of CP were operating in the country and they used to import and sell medicines without the need to register the medicinal products. Most of these CP were managed by diverse category of retired health professionals including pharmacy technicians, clinical officers, nurses, nursing assistants, health assistants, basic health workers, operation theatre assistant, laboratory assistant, etc. With the enforcement of Medicines Act of the Kingdom of Bhutan 2003, only pharmacy professionals were eligible to open a new pharmacy which probably would have led to shortage of professionals for CP. Competency crash courses were conducted by the DRA in 2011 and 2015 with the aim of imparting training to the existing personnel working in the CP in order to bring them to the same level and to address the shortages of professionals eligible to work in CP at that point of time. Competency course was also done for the veterinary pharmacy in 2013.

Community Pharmacy Practice in Bhutan: Current scenario
Today, all CP in Bhutan have to comply with the regulatory requirements although state of GPP varies from pharmacy to pharmacy and between the retail and wholesale pharmacies. CP cannot operate in Bhutan unless authorized by the DRA. Premises for CP are assessed for its suitability and adequacy before the issuance of technical authorization (license). Premises used for storage and dispensing of medicines is critical as the quality of medicines cannot be ensured if it is not stored or distributed properly\textsuperscript{[25]}. Adequate storage area, proper ventilation, premise separated from residential use, appropriate furniture and apparatus for storing of medicines among others are hugely essential for any CP\textsuperscript{[26]}.
Personnel handling medicinal products in the CP are registered as competent person with the DRA. Only the competent person can work in CP and must comply with the prescribed duties of competent person\textsuperscript{[27]}. Patient counseling is one of their primary mandates and is critical in pursuit of ensuring safe use of medicines by the patients. Only those medicinal products that are registered with the DRA are allowed for sale and distribution. Sale and distribution of unregistered
medicinal products is an offence that warrants regulatory penalties. Reporting of product defects and timely removal of expired and defective medicines is also the responsibility of the CP.

**Community Pharmacy Practice in Bhutan: Future directions**

The standard of CP in Bhutan would definitely improve with the growing numbers of CP as CP have to compete among themselves to thrive in the market which would be determined by the efficiency of services that they deliver to the public. More qualified professionals would take up a job to work in CP in the future thereby ensuring better healthcare services for the public.

**Table 1: Community Pharmacies operational in different Districts of Bhutan**

| District     | Retail Pharmacies (n) | Wholesale Pharmacies (n) |
|--------------|-----------------------|--------------------------|
| Thimphu      | 25                    | 23                       |
| Paro         | 7                     | 0                        |
| Wangdue      | 4                     | 0                        |
| Chukha       | 6                     | 6                        |
| Punakha      | 3                     | 0                        |
| Samtse       | 2                     | 0                        |
| Trashiyangtse| 1                     | 0                        |
| Tashigang    | 1                     | 0                        |
| Dagana       | 1                     | 0                        |
| Tsirang      | 2                     | 1                        |
| Pemagatshel  | 1                     | 0                        |
| Sar pang     | 5                     | 1                        |
| Mongar       | 1                     | 0                        |
| Bum thang    | 2                     | 0                        |
| Samdrup Jongkhar | 1                | 0                        |
| **Total**    | **62**                | **31**                   |

**Conclusion**

There are over 90 licensed retail and wholesale pharmacies in the country. Patients (consumers) expect medicines to be safe, effective and affordable. CP must function in conformance with the existing laws. Proper counseling on the use of medicines is crucial for safety of the patient and to yield maximum benefits and reduced harm from medicines.

Although people have free access to healthcare services, those who can afford, prefers to avail medicines from CP. Therefore, CP services are central to public health concerns and must strive to achieve quality and safe medicines. CP practice in Bhutan is expected to change accordingly with the rapidly occurring changes in the healthcare delivery and growing patient expectations.

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