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CONTINUING PROFESSIONAL DEVELOPMENT (CPD) FOR PHARMACISTS IN LOW- AND MIDDLE-INCOME COUNTRIES

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**A thesis submitted to The University of Huddersfield
in partial fulfilment of the requirements for the degree of MSc
Pharmaceutical Sciences (Research)**

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Abstract

The role of pharmacists in healthcare is undergoing change throughout the world. In recent years there had been a tremendous development in the field of pharmacy practice and to improve patient care. The Continuing Professional Development (CPD) has motivated the pharmacists in the developed countries to adopt lifelong learning. This is vital to improve competence and provide optimized patient care. The objectives of this study were to explore the understanding of pharmacy stakeholders in Pakistan, Ghana and Trinidad and Tobago regarding the concept of Continuing Professional Development (CPD). The practice and perceptions of pharmacy stakeholders in Ghana, Pakistan and Trinidad and Tobago were explored. This included barriers, and policy recommendations. The study was conducted through qualitative in-depth interviews of 12 stakeholders, including academics, pharmacy practitioners and regulatory professionals in 3 countries.

The interviews were then audiotaped, transcribed verbatim and coded. A thematic analysis of the transcribed data led to the extraction of the main themes. The findings showed a process of establishment of Continuing Professional Development (CPD) for pharmacists in Ghana whereas in Pakistan and Trinidad and Tobago there was no Continuing Professional Development (CPD) model for pharmacists. Our study informed the understanding of Continuing Professional Development (CPD) among pharmacy stakeholders in these countries and its positive impact on the pharmacy practice. The informants revealed the barriers and identified the possible facilitators to develop a Continuing Professional Development (CPD) model. The informants also highlighted the attributes and the key components to establish a CPD model in these countries. The study also indicated a joint effort to be made by the policy makers, pharmacy regulators and pharmacy practitioners in alliance with the international organizations such as International Pharmaceutical Federation (FIP) and Commonwealth Pharmacists Association (CPA). This is to design a realistic, relevant and mandatory programme of Continuing Professional Development (CPD) model in these countries.

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My appreciation also goes out to my husband for his outstanding support in helping me reach my goal. This dissertation could not be completed without his cooperation. I would also take this opportunity to pay my thanks to all the respondents from Pakistan, Ghana and Trinidad and Tobago, without their help I could not have conducted my research.

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List of Abbreviations

ACPE-Accreditation Council for Pharmacy Education

CPD- Continuing Professional Development

CE- Continuing Education

FIP- International Pharmaceutical Federation

HICs'-High-income countries

Pharm D-Doctor of Pharmacy

IOM-Institute of Medicine

LMICs'-Low- and Middle-income countries

PBTT-Pharmacy Board of Trinidad and Tobago

PCG-Pharmacy Council of Ghana

PCP-Pharmacy Council of Pakistan

PSI-Pharmaceutical Society of Ireland

PSTT-Pharmaceutical Society of Trinidad and Tobago

RPS-Royal Pharmaceutical Society

WHO-World Health Organization

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1 INTRODUCTION

The World Health Organization (WHO) has defined pharmacy practice as “to contribute to health improvement and to help patients with health problems to make the best use of their medicines” (WHO, 2011). Pharmacy practice is responsible for the development and expansion of the pharmacists’ professional roles according to the health sector demands as well as public health (Whalley, 2008).

To achieve good pharmacy practice, every system needs well-established guidelines and standards which also need to be practiced and continuously developed (WHO/FIP, 2011). In current era pharmacists need to broaden their scope of practice and for this pharmacists’ professional learning needs are to be identified (Schindel et al., 2019).

1.1 Continuing Professional Development (CPD)

According to International Pharmaceutical Federation (FIP) Continuing Professional Development (CPD) is “the responsibility of individual pharmacists for systemic maintenance, development, and broadening of knowledge, skills, and attitudes, to ensure continuing competence as a professional, throughout their careers” (WHO/FIP, 2011).

A Continuing Professional Development (CPD) model can be defined as “a self-directed, ongoing, systematic and outcomes-focused approach to lifelong learning that is applied into practice” (Zarembski & Rouse, 2019).

There still exists a huge gap between the education and training of pharmacists (Babar et al., 2013). This is a globally identified problem and one of the best interventions yet designed is to expose pharmacists to a lifelong learning experience which would ultimately lead towards an advancement in pharmacy practice (Zarembski & Rouse, 2019). For this pharmacists who are practicing are required to be completely willing towards maintaining their skills and updating their knowledge. This is to change and improve their practice standards (Schindel et al., 2019). The pharmacy workforce also needs to be consistently trained and educated to provide high-quality pharmaceutical care to the patients (Anderson et al., 2009).

However, it is argued that the professional education programmes and training for the pharmacists are not enough, the learning must be life long and the evolution of the roles shall be consistent (Zarembski & Rouse, 2019). No matter at what stage of their careers pharmacists are they should be required to obtain and update their skillset and knowledge (Driesen et al., 2017). To maintain professional capabilities, pharmacists need to go through the experience of Continuing Education (CE) as it's purpose is to keep the pharmacists updated about the new skills and ways of delivering pharmaceutical care (Tran et al., 2014). There are a variety of methods for the delivery of Continuing Education (CE) and the most commonly used are to use printed materials, seminars, discussions during the professional meetings, live internet discussions or webinars as well as other internet-based ways of learning (Maio et al., 2003).

In the USA, pharmacy regulation boards require minimum number of hours of Continuing Education (CE) to be completed by the pharmacists for their license renewals (Tran et al., 2014). In recent years the healthcare system has undergone tremendous development and transformation and these changes have indicated a dire need in the advancement of professional development models (Wheeler & Chisholm-Burns, 2018).

The concept of Continuing Professional Development (CPD) offers broader learning opportunities than Continuing Education (CE). However, it does not eliminate the need of Continuing Education (CE) as CE tends to be an integral element of the Continuing Professional Development (CPD) model (Tran et al., 2014). The Continuing Professional Development (CPD) enables individuals to assess their knowledge gaps and to design their learning techniques (IOM, 2010).

The purpose of Continuing Education (CE) is to update one's self with the advanced methods of delivering pharmaceutical care, while Continuing Professional development (CPD) involves addressing personal learning needs (Tran et al., 2014). The command-based teaching, learning and assessment methods are the exclusive features of CPD and these are aimed at promoting patient safety and professional skills development (Sachdeva, 2016).

The Continuing Professional Development (CPD) is vital and the incorporation of Continuing Professional Development (CPD) into the existing structure of Continuing Education (CE) of

pharmacy would enormously facilitate the growth of the profession (Wheeler & Chisholm-Burns, 2018).

Also an effective Continuing Professional Development (CPD) system ensures that pharmacy practitioners provide patient-centered care and the opportunity to work in inter-professional teams. This also gives the ability to apply evidence-based practice and boost quality and use health information technology (IOM, 2010).

Continuing Professional Development (CPD) covers self-driven activities to ensure lifelong learning for the pharmacists. This needs to be organized and should start with the creation of career objectives (Wheeler & Chisholm-Burns, 2018). Pharmacy schools should ensure that their graduates possess the necessary skillset required during their life time to continue learning. This should also be an integral part of the Pharm-D (Doctor of Pharmacy) programmes (ACPE, 2016). The aim is to produce “CPD ready” pharmacists and graduates having in-depth knowledge about CPD and its different segments (Janke & Tofade, 2015).

According to a survey, the top 3 reasons for the motivation for lifelong learning are personal ambitions to learn, maintenance of licensure and pleasure attained from the change of routine (Hanson et al., 2007). Also, seen from the literature, pharmacists showed a greater interest if their participation in Continuing Education (CE) offers some rewards (Driesen et al., 2005). The barriers usually faced by the practitioners towards this method of learning are job pressure, scheduling of learning activities and family engagements (Hanson et al., 2007).

The attitude and information of pharmacists towards Continuing Professional Development (CPD) is continuously being explored and various surveys have been conducted. A study conducted in 2003 in Texas showed that the majority of the pharmacists from this area can describe a CPD programme. However, half of the participants were not aware of this concept and the other half who knew about Continuing Professional Development (CPD), they were not aware of its benefits (Bellanger & Shank, 2010).

Another survey in the UK revealed pharmacists' opinion about the recording stage of the CPD process, however it was not considered much of a contribution by the pharmacists in their practices (FIP, 2014).

Also, a literature review published in 2011 regarding the professional beliefs and participation of pharmacy practitioners in Great Britain towards the Continuing Professional Development (CPD) between 2000 and 2010 identified the barriers in incorporating Continuing Professional Development (CPD). These barriers were time constraints, inadequate resources, understanding of CPD, lack of motivation towards the CPD, financial issues and attitude towards the Continuing Professional Development (CPD). However, all professionals agreed with the motive behind engaging with the CPD yet not many were willing to accept the concept (Donyai et al., 2011).

1.2 The importance of a Continuing Professional Development (CPD) model in pharmacy practice

Continuing Professional Development (CPD) enables a pharmacist to assess their learning gaps to devise a plan, execute their planned strategy and then evaluate the success of their implemented intervention (Driesen et al., 2006). The Continuing Professional Development (CPD) is needed in the low and middle-income countries as it is a realistic approach towards the advancement of improving the skill set of the pharmacists. Moreover, it could have a positive impact on patient care across the board if such a (CPD) model for pharmacists is developed and implemented (Zarembski & Rouse, 2019). The Continuing Professional Development (CPD) involves the responsibility of each individual practitioner to refine their capabilities throughout their careers. They can do this by continuously updating their skillset to promote pharmaceutical care (Driesen et al., 2005).

1.3 The Status of Continuing Professional Development (CPD) in High Income Countries

Many pharmacy educational and regulatory organizations have conducted activities for the development of Continuing Professional Development (CPD). The pharmaceutical society of Ireland carried out a study of CPD models in 2010 (PSI, 2010) while the International Pharmaceutical Federation (FIP) in 2014 recorded a wide variation in the development of implementing a framework for Continuing Professional Development (CPD) globally (FIP, 2014).

Table 1 presents an overview of the case studies depicting trends of Continuing Professional Development (CPD) in high income while the Table 2 shows status of pharmacy education and development in LMICs’.

Country	Total number of registered pharmacists	Accreditation Body	CPD
Australia	27,339	Australian Pharmacy Council (APC, 2013).	CPD mandatory since 2010. 40 points must be undertaken by pharmacists each year.
Canada	36,174	Canadian Council on Continuing Education in Pharmacy (CCCEP, 2013).	CPD systems has been completely adapted by some provinces while some provinces have adopted portions of CPD however it is mandatory for all the pharmacists in Canada to undertake CPD or CE activities (Karim and Nott, 2011).
United States of America	275,000	Accreditation Council for Pharmacy education (ACPE, 2003).	ACPE has online CPD educational resources but the system has not shifted from CE to CPD. However CE process for re-registration started in 1965.
New Zealand	3351	Pharmacy Council of New Zealand (PCNZ, 2013).	Mandatory CPD practice since 2005.
Japan	276,517	Council on Pharmacist’s Credentials (CPC, 2013).	CPD system is voluntary, also challenges are being faced in it’s implementation. (FIP,2014)

Table 1. An overview of the case studies depicting trends of CPD in high income countries.

Source : Global report of International Pharmaceutical Federation (FIP) on Continuing Professional Development/ Continuing Education in Pharmacy 2014 (FIP, 2014).

Some provinces in Canada such as Saskatchewan or Newfoundland and Labrador are facing challenges in adopting a model of Continuing Professional Development (CPD) in their pharmacy practice system. This is due to insufficient resources for establishing a CPD programme (Karim and Nott 2011). Ontario and Quebec which comprise of 58% of total pharmacy workforce have adopted the CPD intervention while the other provinces such as Saskatchewan or Prince Edward Island are following a Hybrid system (Mainly Continuing Education (CE) with portions of CPD) or the Continuing Education (CE) system (FIP, 2014).

It is challenging to compare and contrast these findings as Canada is a high income country with an advanced health and pharmacy system. Ideally all countries regardless of their health system should have a mandatory system for CPD and CE. However some provinces of Canada, such as Saskatchewan or Newfoundland and Labrador are not yet successful in implementing a Continuing Professional Development (CPD) model for their pharmacists. However a Continuing Education (CE) programme is well established and mandatory in all provinces of Canada (FIP, 2014).

1.4 The Status of Pharmacy Education and Practice in Low and Middle-income Countries (LMICs)

<u>Country</u>	<u>Requirement of accredited degree for licensing</u>	<u>Regulatory Authority for licensing pharmacists</u>	<u>Formal system for licensing of pharmacist</u>	<u>National licensing Exam</u>	<u>Requirements to maintain Licensure</u>	<u>Competency framework for foundation level practice</u>	<u>Competency framework for advanced practice</u>	<u>Continuing Professional Development (CPD)</u>
<u>Pakistan</u>	<u>Yes</u>	<u>Pharmacy Council of Pakistan (PCP,2020)</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>In development</u>	<u>No</u>
<u>Ghana</u>	<u>Yes</u>	<u>Pharmacy Council of Ghana (PCG, 2009)</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>In development</u>	<u>Yes</u>
<u>Trinidad and Tobago</u>	<u>Yes</u>	<u>Pharmacy/Board of Trinidad and Tobago(PSTT,2020.)</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>Yes</u>	<u>No</u>	<u>No</u>

Ethiopia	<u>Yes</u>	<u>Ethiopian Food and Drug Authority (EFDA,2020)</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>In development</u>	<u>No</u>	<u>In Development (Gelayee et al., 2018)</u>
Nigeria	<u>Yes</u>	<u>Pharmacists Council of Nigeria (PCN,2020)</u>	<u>Yes</u>	<u>No</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes</u>	<u>Yes (PCN,2020)</u>
India	<u>Yes</u>	<u>Pharmacy Council of India (PCI,2020)</u>	<u>Yes (PCI,2020)</u>	<u>Yes (PCI,2020)</u>	<u>Yes (PCI,2020)</u>	<u>Yes (PCI,2020)</u>	<u>In development(PCI,2020)</u>	<u>No (Adepu & Sharrif.,2010)</u>
Costa Rica	<u>Yes</u>	<u>Ministry of Health of Costa Rica (Ministeriodesalud,2020)</u>	<u>Yes</u>	<u>No</u>	<u>No</u>	<u>In development</u>	<u>No</u>	<u>No</u>
Afghanistan	<u>Yes</u>	<u>General Directorate of Pharmaceutical Affairs,2020)</u>	<u>No</u>	<u>No</u>	<u>No</u>	<u>In development</u>	<u>Yes</u>	<u>No</u>

Table 2. Status of Pharmacy Education and Practice Development in LMICs’.

Source : According to the Global report of International Pharmaceutical Federation on Continuing Professional Development/ Continuing Education in Pharmacy 2014 (FIP, 2014).

Pakistan

Pakistan is a low middle-income country and is the world’s sixth most populated nation (Farrukh et al., 2017). Many pharmacies in cities are being operated as per modern and international standards but this practice is limited to the main cities. Unfortunately, population in the rural areas and small towns have little access to quality pharmacists and pharmacies. A shortage of pharmacists has also been reported in the country (Atif et al., 2017). The government is still unable to meet the target set by the World Health Organization (WHO) which is 5 pharmacists per 10,000 persons population whereas the actual availability is 0.06 pharmacists per 10,000 persons population (Malik et al., 2019).

In Pakistan, majority pharmacies and medical stores are run by the non-pharmacists where the prescriptions go unattended, where many prescription medicines are available to the population without prescription and where no record of dispensing of prescription drugs is maintained

(Ghayur, 2008). Pharmacy Education system in Pakistan demands continuous improvement in the curriculum being taught in pharmacy schools to train future pharmacists for improved patient centered practice and help develop essential skills to provide optimum pharmaceutical services to the population (Khan et al., 2016).

The pharmacists in Pakistan are struggling in terms of unattractive salary packages, poor health and pharmacy support infrastructure and little acknowledgement of their role as a patient centered practitioner (Malik et al., 2019). According to a survey conducted in 2015 of pharmacists working in different fields, reluctance of pharmacists towards taking up their roles in retail pharmacies was observed as 85.42% of the respondents showed unwillingness to work as a retail pharmacist (Khan et al., 2016).

Ghana

The Ghana has a population of 29.7 million and is a lower middle-income country (The World Bank Group, 2020). According to Pharmacy Council of Ghana the total number of pharmacies is 1759 and total number of pharmacists are 2640 with 1629 pharmacists who are practicing (PCG, 2009). The pharmaceutical policy goals in Ghana are public access to essential medicines, ensuring the quality of medicines, efficient medical supply and rational use of pharmaceutical products (Seiter & Gyansa-Lutterodt, 2009). In Ghana academia, industry, hospital, retail and regulatory practices are the different stakeholders in the pharmaceutical system (PCG, 2009).

A study was conducted in 2008 in Ghana among the final year pharmacy students to analyze their perceptions regarding future opportunities and professional aspirations. The study highlighted that the pharmacists have a committed and goal-oriented attitude towards the profession. On the contrary lack of interest by the policymakers was indicated a reason for an underdeveloped pharmacy practice system in Ghana (Owusu-Daaku et al., 2008).

According to the report released by the Pharmacy Council of Ghana (PCG) in association with the World Health Organization (WHO) and The European Union (EU), Continuing Professional Development (CPD) was considered compulsory for the pharmacists in Ghana. Multiple Continuing Professional Development (CPD) courses of pharmacy practice in Ghana were

conducted which included courses on the standard treatment procedures, safe use of medicines as well as drug management (PCG, 2009).

Trinidad and Tobago

The total population of Trinidad and Tobago is 1.33 million (Dhingra et al., 2017) and as of 2012 there are 1050 registered pharmacists in the country (Yearwood., 2012). There are various ways in which the pharmacy curriculum in Trinidad and Tobago can be improved which may include incorporation of technology courses or introducing clinical experience throughout the Bachelors of Pharmacy programme (Ramrekha et al., 2015).

Alongside many other countries, Trinidad and Tobago is following a path towards patient-centered practice and is facing numerous challenges to improve pharmacist's roles and responsibilities. Trinidad and Tobago has started building reforms in their current curriculum and to enhance the existing practice settings (Dhingra et al., 2017). It is compulsory for a pharmacy graduate to complete an internship of six months to get registered with the Pharmacy Board of Trinidad and Tobago (Maharaj et al., 2020). The low and middle-income countries (LMICs) can take advantage from the experience of the developed world in carrying out research on pharmacy practice. A collaborative effort is needed which could involve health sector researchers working alongside experts from social sciences, statistics and public health. This can improve patients' clinical and economic outcomes (Bond, 2015).

1.5 Rationale of study

There is limited literature on pharmacists' involvement in Continuing Education (CE) or Continuing Professional Development (CPD) in low and middle income countries. Hence this research aims to explore the parameters of a CPD model and whether this should be made compulsory by the regulatory authorities in Pakistan, Ghana and Trinidad and Tobago. Pakistan, Ghana and Trinidad and Tobago are located in three different geographical regions, however the research has shown that the countries with the similar Gross Domestic Product (GDP) and health system has similar "medicines use", "medicines access" and "Broader pharmaceutical policy and practice issues". The similarity in issues is more visible with the income status, economics and

The Gross Domestic Product (GDP) of the country. This has been seen in a large number of published studies (H. Håkonsen et al., 2017), (Kaplan et al., 2017). In this context, all three chosen countries are commonwealth nations, at varying levels of low- to middle-income status, hence they are a suitable sample to study.

This study will also provide us an insight about what is the stakeholder's perception about the concept of Continuing Professional Development (CPD) or Continuing Education (CE) activities and how do they differ from each other.

The stakeholders' stance, perceptions, views on Continuing Professional Development (CPD) activities in pharmacy practice will help us to develop and build a CPD model for these countries. If implemented this would change the way pharmacists are educated and practice pharmacy in these countries. Till to date, no such study on the Continuing Professional Development (CPD) among the low and middle-income countries which involves the views and perspectives of policymakers, practitioners and educators is being done.

1.6 Aims & Objectives

This study aims to explore the stakeholders' views, perceptions and practices regarding the Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago. The aims and objectives have organically evolved from the review of the literature on Continuing Professional Development (CPD). The synthesis conclude scarcity of work for pharmacists in this area necessitating to conduct an in-depth qualitative research on the topic. Overall study findings and conclusion support the objectives, also a framework encompassing a generic model has been built.

The stakeholders include academic, pharmacy practitioners and regulators for pharmacy profession. The work has the following objectives:

- To understand the stakeholders' views regarding Continuing Professional Development (CPD) and Continuing Education (CE) in Pakistan, Ghana and Trinidad and Tobago.

- To explore facilitators, barriers, opportunities and recommendations in developing a Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan, Ghana and Trinidad and Tobago.
- To explore future expectations related to Continuing Professional Development (CPD) for the pharmacists in these countries.

2 LITERATURE REVIEW

This chapter provides a thorough insight regarding research on this topic. A literature search was conducted to explore Continuing Professional Development (CPD) literature with regards to pharmacy globally.

Following is a synthesis of the studies.

2.1 Literature Search

A literature reviews was conducted of the literature of the published literature between January 2000-February 2020 in English language. The literature includes full text articles, reports, Journal articles and Book chapters. Keywords used to explore the literature include pharmacy practice, pharmacy education, high income countries, low and middle income countries, Continuing Professional development (CPD), Continuing Education (CE), Pharmacy Practice Research, Health services research in pharmacy.

The literature review was conducted from late February 2019 till February 2020. The databases used were Science Direct, google scholar, PubMed and Medline. The chapters were also reviewed from the books and other resources. Various chapters were reviewed from the pharmacy education section of Encyclopedia of Pharmacy Practice and Clinical Pharmacy. The other relevant books on continuing education and pharmacy education, and practice research were also explored.

2.2 Synthesis of Literature review

2.2.1 Pharmacy Education in Low- and Middle-Income countries (LMICs')

Pharmacy Education provides a great deal of knowledge to pharmacists regarding the secure and rational medicinal use and providing good pharmaceutical care to the public. To facilitate optimized patient care, pharmacy education can play a primary role (Babar, 2005). Also in recent years, a much-needed development was observed in the education system of pharmacy in high-

income countries which resulted in the rebirth of the pharmacy profession as the new education system is providing roots for a modern pharmacy practice (Babar et al., 2013).

However, education alone is not sufficient for the pharmacist to deal with complex on-ground challenges faced during the practice, as this requires great competence and advanced knowledge (Tran et al., 2014). This significant development in clinical pharmacy and pharmacy practice in the high-income countries has impacted in many different ways and sometimes these concepts are not clearly understood because of the lack of strong health systems in Low and Middle-income countries (LMICs).

In many low and middle income countries, the bachelor's degree was switched to Pharm D (Doctor of Pharmacy), however this was based on the models in developed countries but the underlying problems in the system stood unresolved indicating a desperate need to stabilize the pharmaceutical systems in the low and middle-income countries. With a strong health system then only you can strengthen and focus on the expanded roles of pharmacists (Babar et al., 2013). The number of pharmacy education institutes has risen enormously but this is a more quantitative change with a minimal effect on the quality of pharmacy education (Babar, 2005).

2.2.2 Pharmacy Practice in Low and middle-income countries

The term "Pharmacy Practice" involves various pharmacist positions in the health care system from the traditional duty of monitoring and management of the pharmaceutical supplies, together with the growing clinical role (Scahill et al., 2017). However the culture of pharmacy practice in the low and middle-income countries does not depict the significant progress the profession has achieved in the last four decades (Rasheed et al., 2019).

The gaps in pharmacy education is causing hindrance in the development of pharmacy practice and this is impacting on patient care (Babar, 2005). In low and middle-income countries (LMICs) the pharmacy profession has a long way to go to cover the latest trends in pharmacy practice which are being followed in the developed world (Babar & Scahill, 2014). This is the need of the hour in low and middle-income countries is to direct the current approach of pharmacy practice towards the continuously developing practice methods and the recent advancements of the profession (Babar & Scahill, 2014).

The pharmacists are the drug experts and if their knowledge is fully utilized and implemented, this would add great value in the promotion of pharmacy practice in the country (Babar & Jamshed, 2008). The pharmacy profession in Pakistan is lagging behind due to the gaps in both the practice and the education of the pharmacists. There is a need to modify perceptions of pharmacy regulators and policymakers to achieve Good Pharmacy Practice (Babar, 2006).

2.2.3 Continuing Education (CE)

The emphasis on Continuing Education (CE) is for many years in the developed countries and it can be described as a planned action collection designed to enhance professional's capabilities and competence (Donyai et al., 2011). The Continuing Education (CE) is a taught professional development intervention that includes various designed modules and activities based on the general needs of the practitioners to improve patient care (IOM, 2010). The commonly followed Continuing Education (CE) formats include printed information, audio/videotapes, seminars and workshops, telephonic conferences and live chat discussions (Maio et al., 2003).

According to a survey, the top 3 reasons for the motivation for lifelong learning are personal ambitions to learn, maintenance of licensure and pleasure attained from the change of routine (Hanson et al., 2007). Another survey in Belgium, pharmacists showed a greater interest in Continuing Education (CE) if their participation in Continuing Education (CE) offers some rewards (Driesen et al., 2005). According to (Hanson et al., 2007) the barriers usually faced by the practitioners towards this method of learning are job pressure, scheduling of learning activities and family engagements.

2.2.4 The Origin of Continuing Professional Development (CPD)

“ The new vision for Continuing Education (CE) are based on an approach called Continuing Professional Development (CPD), in which learning takes place over a lifetime and stretches beyond the classroom to the point of care” (Cervero & Moore, 2011; Moulton, 2009). Alongside this traditional practice of Continuing Education (CE), a more holistic approach to improve pharmacy education and practice was designed and this advancement was the introduction of continuing professional development (CPD) (Driesen et al., 2007).

The purpose of Continuing Professional Development (CPD) is to provide a lifelong learning opportunity and approach to the pharmacists. It involves the reflective practice strategy which helps the healthcare professionals to decide best treatment for the patients and this is based on their previous experiences. It's motive is to ensure that all Continuing Education (CE) activities and all structured/unstructured forms of learning gets implemented in practice. The Continuing Professional Development (CPD) is not a replacement of Continuing Education, in fact CE is an intrinsic part of CPD (Driesen et al., 2007).

Pharmacy Practice is undergoing continuous evolution worldwide thus leading towards the expansion of pharmacists' roles in the field. The personalized need-based learning is also the need of the hour to achieve optimum patient care and to maintain proficiency (Schindel et al., 2019). Unlike Continuing Professional Development (CPD), Continuing Education (CE) approach does not cater to the individual needs of the practitioner as the CE programmes are structured to meet the learning requirements of the majority of the participants (Driesen et al., 2007).

2.2.5 Continuing Professional Development (CPD)

According to International Pharmaceutical Federation (FIP), Continuing Professional Development (CPD) helps fulfill the learning needs of the professionals by enhancement of personal learning thus improving patient satisfaction and optimal pharmaceutical care. It is also the learning which is based on actual needs that the pharmacists identify and address after a self-assessment process. Every pharmacist has an exclusive need for education as per their present status of knowledge, abilities and responsibilities (FIP, 2002).

The learning needs of a pharmacist are increasing as the developments in pharmacy practice is progressing day by day (Rouse et al., 2018). The Continuing Professional Development (CPD) is termed as a lifelong dedication to learning and practice improvement to provide best professional services to the patients (Tran et al., 2014).

2.2.6 Continuing Professional Development (CPD) and Continuing Education (CE)

The transition of Continuing Education (CE) towards Continuing Professional Development (CPD) is based on various shortcomings of Continuing Education (CE) mainly including having little or no focus on addressing individual practice needs (Driesen et al., 2007).

Hancox (2002) in *the pharmaceutical journal* described Continuing Professional Development (CPD) as an approach that enables the practitioner to be one's driver on the journey of skills development. Hancox described that unlike the formal Continuing Education (CE) activities, CPD facilitates self-learning and improvement. It provides a chance for the pharmacists to plan their professional development strategy based on the knowledge gaps and practice needs whereas the approach of Continuing Education (CE) caters to improve the generalized development needs of the pharmacists (The Pharmaceutical Journal, 2002). Table 3 describes the comparison between Continuing Education (CE) and Continuing Professional Development (CPD).

No.	Parameters	CE Activity	CPD Activity
1	Education based needs	Predesigned by the session speaker	Self-selection based on the gaps in the knowledge of the individual
2	Results	Hard to assess nearly absent	Depends on the process
3	Application in Practice	No requirement	Documenting after implementing in the practice to maintain CPD portfolio.
4	Activity	Passive	Active
5	Measurement of success	CE hours completion	Achievement of planned objective
6	Direction	Program managers	Self-directed
7	Motivation to participate	External	Self-motivated
8	Time	Defined time period	No designated time end point when the objective is met.

Table 3. Brief Comparison of CE and CPD

Source : This is derived from (Moulton, 2009).

A study assessed the differences between CPD and non CPD pharmacists in terms of self-assessment. It also looked at the issues such as planning an intervention for their learning, evaluation of their performance as well as the final stage of documentation. The findings showed

that with the adoption of a Continuing Professional Development (CPD) model the professional performance of the pharmacy practitioners can be enhanced (Dopp et al., 2010) .

2.2.7 Continuing Professional Development (CPD) Components

The Accreditation Council for Pharmacy Education (ACPE) has described Continuing Professional Development (CPD) as a sequential process which is self-driven by the pharmacist and involves components of reflection, planning, learning, evaluation and recording (ACPE, 2014).

The procedure of self-analysis leads to determine the gaps which can help the individuals to assess their learning needs. This perhaps forms the basis of creating a plan for learning. The learning goals are defined as what pharmacists' intends to achieve as per their needs (Mantzourani et al., 2019).

1-Reflection

As explained by (Zarembski & Rouse, 2019), reflection is the first and main step of this process and the pharmacist shall be able to reflect one's self, one's work and workplace and also the patients' population. The pharmacist shall be able to reflect on their current knowledge, strengths and responsibilities. They should be able to assess their knowledge gaps and the opportunity to improve (Mantzourani et al., 2019).

According to (Zarembski & Rouse, 2019) questions under consideration during the process of reflection include the following:

- What are the patient needs and common medical conditions of the population being served?
- What is the status of pharmacist's knowledge in addressing those patient needs and what needs to be looked at?
- What new services can help deal with those needs and conditions?
- Where do the pharmacist's competencies lack in fulfilling the assigned responsibilities?
- What are the patient care areas where services can be improved?
- What hurdles are being faced currently in fulfilling the designated responsibilities?

- What are pharmacist's career aims?
- What proves to be the best learning style and method for the practitioner?

2-Planning

A personalized learning plan is designed by the pharmacists at this stage to overcome the shortcomings discovered during the process of reflection. As per the individual learning needs goals are set and objectives are formulated. The decided objectives shall be prioritized for the introduction of advanced services, expansion of pharmacist's roles or responsibilities and providing a higher quality of patient-care (Rouse, 2004). The possible areas of development that were identified in the previous step by the individual would need a well-planned strategy to have a kick start.

The learning goals need to be written as SMART objectives according to the CPD resources in the Accreditation Council for Pharmacy Education 2014 (ACPE, 2014). These are described as follows

- **Specific:** Be definite about the desired outcome.
- **Measurable:** The goals shall be quantified in order to determine whether the intended objectives are achieved.
- **Achievable:** There needs to be a realistic approach towards the achievement and it should be practical to gain success in the designated time and selected method.
- **Relevant:** They should be well aligned with the current roles and identified learning needs during the reflection process.
- **Timed:** A reasonable and practical deadline shall be set to achieve the prioritized objectives, this is keeping in mind the various factors affecting the process.

These objectives help in the assessment of progress and growth of the learner and also shows a way that how this can be applied in the real world and if this is self-motivating (Dopp et al., 2010).

3- Learning

During this stage the previous stage of planning comes in to practice. Various factors are to be kept in consideration during this process which includes the selection of learning methodologies and activities. They can be formal/informal or structured/unstructured. The learning planned can be immediate however applying the information learned into practice is essential (Zarembski & Rouse, 2019).

4- Evaluation

This step involves reflection on the learning, it is necessary to determine one's progress in gaining their objectives and to assess what upgrading is needed for the continuum of the process (ACPE, 2014).

5- Recording and Reviewing (CPD portfolio)

According to the Accreditation Council for Pharmacy Education (ACPE) recording and reviewing is an integral part of every step of a person's CPD and would help in providing evidence to an individual's self-directed efforts and achievements at every stage. It has also been made compulsory in many countries to maintain a structured CPD portfolio and is found to be beneficial for regulatory purposes (PSI, 2010; Tran et al., 2014).

2.2.8 Importance of Continuing Professional Development (CPD)

The incorporation of a Continuing Professional Development (CPD) model into the existing Continuing Education (CE) system of the professionals can lead towards advancement in pharmacy practice as the CPD allows individuals to adopt improvement techniques and the strategies can be developed based on individual's shortcomings. This thus ensures maximum professional competence (Wheeler & Chisholm-Burns, 2018).

Another benefit of Continuing Professional Development (CPD) is that it does not let learning be separated from practice. It provides an opportunity to plan individual professional development strategy on the basis of one's knowledge gaps and practice needs. The Continuing Professional Development (CPD) helps in linking current practice to what is expected by the profession in terms of professional ability and conduct (The Pharmaceutical Journal, 2002).

A mixed method research was conducted at the University of Alberta in 2019 to identify the pharmacist's learning requirements. This was in order to meet evolving demands in pharmacy practice. Main themes under assessment which came out were "the needs for skill development", "methods preference for professional learning" and "advantages of post graduate certifications". The results show that the Continuing Professional Development (CPD) was found to be a perfect strategy for addressing professional learning needs of the pharmacists (Schindel et al., 2019). Furthermore it was observed that to deliver the pharmaceutical care safely and effectively ; broadening of knowledge, continuous skill development and professional competence is required. (Tran et al., 2014).

2.2.9 Facilitators & Barriers of Continuing Professional Development (CPD)

(Donyai et al., 2011) has stated several facilitators and barriers experienced by the pharmacists in different areas of the practice in Continuing Professional Development (CPD) model. These barriers are in the following categories (Donyai et al., 2011)

- Time, support and facilitation to carry out CPD
- Understanding of the CPD
- Finances and resources
- Interest in accepting CPD
- System constraints
- Technical problems
- Attitudes towards compulsory CPD

Many pharmacy professionals have considered time as major barrier in their involvement in Continuing Professional Development (CPD). They consider it a workload as it demands extra hours (Attewell et al., 2005). Time has been observed as a major obstacle for the pharmacy professionals who are willing to participate in the CPD (Donyai et al., 2011).

2.2.10 The Impact of Continuing Professional Development on Pharmacy Practice

In 2010, the research was conducted on pharmacists in the USA to gauge the effect of Continuing Professional Development (CPD) on the various aspects of their practice in comparison to the

pharmacists who followed a traditional CE learning style for their professional development (McConnell et al., 2010).

A total of 100 pharmacists from a broad range of pharmacy practice setups were enrolled in this research. Factors under assessment included effects on self-confidence during practice, learning experience, professional knowledge, skills, and attitude, motivation towards learning, implementing learning to practice, ability to answer patient queries and counsel patients, regime management and communication. According to the results, the Continuing Education (CE) participating pharmacists did not report an improvement in their practice as often as was done by those following the Continuing Professional Development (CPD). The CPD participating pharmacists claimed to have gained more clarity in understanding regarding various aspects of pharmacy practice and an improvement in their practice after a CPD activity (McConnell et al, 2010).

2.2.11 Key findings of the Literature

Our literature review informed the current trends and challenges with regards to pharmacy education and practice in low- and middle-income countries. It has also helped us to identify the reasons that why the pharmacy profession is lagging behind in these countries. It has also explored the weakness in the pharmacy education system and the way pharmacy is being practiced. There is a need to strengthen the pharmacy practice in these countries while advancing Continuing Education (CE) and the Continuing Professional Development (CPD).

The literature has outlined the concept of Continuing Education (CE) of pharmacists in developed countries, the transition of these countries towards Continuing Professional Development (CPD) and the challenges they faced to implement CPD. The literature has also outlined that how and why Continuing Education (CE) is better than Continuing Professional Development (CPD). This is being done by comparing it with the literature and how significant is the role of Continuing Professional Development (CPD) in the development and strengthening of pharmacy practice.

The literature above has highlighted the role of CPD in advancing pharmacy practice in high income countries. However, there was a scarcity of literature on the topic in low- and middle-

income countries. This has led to develop this qualitative study to explore the topic in Low and Middle-income countries (LMICs) context.

3 RESEARCH METHODS

This section elaborates the study design followed by a descriptive detail of how the data was collected. The section also provides an insight into the methods adopted for the research. The methodology in the research is the explanation of the approach and procedures adopted by the researcher with a suitable justification (Smith, 2002).

3.1 Study Design

The qualitative research methods was adopted to conduct this research. The target of this research was to explore the viewpoints of stakeholders on CPD. In the health care sector qualitative research is comparatively an advanced phenomenon and has gained popularity in the past two decades (Shuval et al., 2011). It is designed to incorporate views, experiences, behaviours, and opinions of a wide variety of pharmacy-oriented stakeholders, which may include pharmacists, patients, and other health-care providers (Tonna & Edwards, 2013).

The qualitative research assists us to answer questions regarding why is the situation so and how do our participants think and react to these circumstances (Austin & Sutton, 2018). In particular, it has been influential in researching the attitudes of those interested in health-care, including exploring perspectives and how individuals and groups interact and respond to the environment (Austin & Sutton, 2014).

The qualitative approach grants the opportunity to the researcher to carry out in-depth conversations with the participant to gain an insight of the participants' motivation and feelings, which govern certain behaviours (Rosenthal, 2016a). Qualitative research helps a researcher in gaining a better understanding of human behavior as it provides the complete picture of the actual scenario and enables them to listen the point of view and the difficulties participants are facing in their day-to-day life (Austin & Sutton, 2018)

The qualitative research is used in pharmacy practice research to recognize and enhance current practices and beliefs by recognizing the experiences of patients and health care providers on medication and treatment that eventually reinforce the influence of research (Kaae & Traulsen,

2015). Nonetheless, pharmacy scholars, researchers, and practitioners need to establish a certain level of expertise and confidence in conducting qualitative research. This can be done by carefully preparing and implementing effective professional development opportunities (Behar-Horenstein et al., 2018). The qualitative research offers a platform to the participants to openly express themselves, gives the researcher a chance for an in-depth assessment of the current situation and to derive fruitful conclusions (Austin & Sutton, 2014).

As qualitative research is used to explore pharmacists' and key stakeholders' in-depth knowledge, attitudes and practices towards CPD, this is indeed very helpful to assess the situation in these countries. A quantitative analysis in the first instance may not have been useful in the context that broader questions related to "pharmacy and CPD in LMICs" are not defined yet. A qualitative study has provided this option, to fill the gap and to come up with a series of in-depth, open ended relevant questions. In pharmacy practice research, it is a norm to use qualitative methods to explore key stakeholders' perceptions. Also, it is accepted that just testing of hypothesis or the quantitative analysis of variables is not sufficient to be able to provide answers to certain research questions (Herrera, 2019) whereas qualitative research provides contextually rich data exploring an issue (Austin & Sutton, 2018). To explore multiple types of practices and behaviors (Babar, 2015) qualitative research is a fantastic tool that enables the researcher to carry out an in-depth assessment of the underlying issues (Patton, 2014). Hence, in this context, qualitative techniques were employed to explore pharmacy practitioners and the stakeholders' views in this thesis.

A general inductive study was conducted which involved semi structured interviews to explore perception of stakeholders on the status of Continuing Professional Development (CPD) in low and middle-income countries. The process of inductive study involves planning to collect data which is then analyzed to identify patterns and relationships between variables (Gray, 2018). The study is either inductive or deductive if the researcher is analyzing the collected data (Herrera, 2019). In an inductive approach the researcher looks for themes that emerge purely from the data without any anticipation (Silverman, 2013).

The reason behind adapting the inductive approach in this study was to discover new themes from the obtained data. This was in order to build a theoretical model based on our research findings. An inductive approach allows the researcher to generate new theories or ideas after analyzing the gathered qualitative data whereas a deductive research approach involves testing of a preselected theory or hypothesis in the lights of the collected data (Thomas , 2006). To gather views and perceptions of various stakeholders a semi structured interview guide was designed which was finalized after a pilot interview and then further interviews were conducted. In this study the researcher adopted the inductive approach. Data Analysis led to the extraction of themes which helped in building a model.

3.1.1 Recruitment of Participants

A purposive sampling technique was followed. Overall 70 stakeholders were approached, out of which, 12 agreed to participate. A total of 12 telephonic interviews were conducted, which were audiotaped and then transcribed. Table 4 shows the number of participants approached and responded for this study in each country.

Countries	The number of participants approached	The number of participants responded
Ghana	29	4
Pakistan	16	4
Trinidad and Tobago	25	4
	70	12

Table 4. Participants' approached and responded in each country

The participants were selected from three countries which are Ghana, Pakistan and Trinidad & Tobago. The reason behind selecting these countries is that all are commonwealth nations and range from a spectrum of low- and middle-income countries. Pakistan and Ghana are low-income countries, while Trinidad and Tobago is a middle-high income country (The World Bank Group, 2019). Though Trinidad and Tobago is a middle-high income country however it's a country with a developing health system hence it's been included in this study.

A special invitation was designed including information regarding research objectives, project procedure, assurance of participant confidentiality, interview details and funding behind the

research project. The participants were approached via LinkedIn, Facebook, Twitter, WhatsApp and through emails. The issues of anonymity and confidentiality require great consideration in the practice of Ethical Research (Herrera, 2019).

The participants were sent an information sheet (given in Appendix 2) and they were also required to sign a consent form which included all the details regarding the confidentiality. The identities and exact designations of the participants were not revealed and they were all made aware of their interviews being audio taped. A semi-structured interview guide was designed and four participants from each country were individually interviewed. The participants were selected from regulatory authorities, academia and the community pharmacy setup. Table 5 provides the details of the interviewees.

Countries	Participant	Area(s) of Practice
Ghana	1	Community Pharmacist
	2	Lecturer in Pharmacy Practice
	3	Officer in Pharmacy Regulatory
	4	Lecturer in Pharmacy Practice
Pakistan	1	Community Pharmacist
	2	Assistant Professor of Pharmacy Practice
	3	Senior official of National medicine policy unit, Ministry of health
	4	Member of Pharmacy Regulatory Authority
Trinidad & Tobago	1	Community Pharmacist
	2	Lecturer in Pharmacy Practice
	3	Senior member of Caribbean Regulatory system
	4	Community Pharmacist

Table 5. Details of interviewees

3.1.2 Development of semi structured interview guide

The interview guide was designed based on the issues and questions drafted from the literature (Rosenthal, 2016). The development of the semi structured interview guide revolves around broad aims and objectives of this study. The interview guide was divided into themes and these themes emerged from the literature review. The guide was then pilot tested by conducting a pilot interview of a pharmacy stakeholder from Pakistan and the feedback from the pilot study led to the inclusion of more themes, modification of the themes and addition of more questions.

The final semi structured interview guide was divided into the following themes:

- The concept of CPD
- The current Status of CPD in the particular country.
- The opinion on the effectiveness of the CPD model, producing CPD ready graduates and interest of pharmacy practitioners towards following of the CPD model
- Ideas on the key components of building this model for their particular country.
- Solutions suggested to the barriers identified in the CPD
- Future expectations

3.1.3 Conducting the interviews

Interviews are the most common method in order to investigate one's understanding, attitudes, experiences or ideas. Through interviews critical issues being faced in current practice can be easily highlighted therefore addressed later on for an effective resolution (Babar, 2015).

In our study, each participant was asked about their opinion regarding their understanding of the Continuing Professional Development (CPD) model. How important and beneficial its existence is and what sort of efforts are needed to make it work in their country's current pharmacy practice/education system. Audio recording was used to collect the data as telephonic interviews were conducted. The duration of each interview was about 30-35 minutes. All interviews were conducted through telephonic calls.

The questions regarding assessment of participant's knowledge about "What is Continuing Professional Development (CPD)" and "How it is different from the concept of Continuing Education (CE) were included in the semi-structured interview guide. There were also a few questions whether if there was a CPD model in their country or whether it was compulsory. The complete semi structured interview guide is listed in Appendix-1.

There are a few questions on the effectiveness of Continuing Professional Development (CPD), motivation and how knowledge about CPD can be incorporated into pharmacy curriculum. As the objectives were to develop an understanding regarding what is required to build a model for

these countries, questions about their plans and ideas were also included. This allowed the participants to deliver their expectations, possible contribution and the support for the ideas.

Also the participants were asked to give their opinion about the support which can be provided to regulatory authorities if they would like to implement a plan of Continuing Professional Development (CPD) model in pharmacy practice. The participants' future expectation regarding the CPD model practice in their country was also explored.

3.1.4 Transcription

Transcribing is a strenuous task but it is necessary to convert the spoken to the written so that it facilitates the analysis. Transcribing is a long and time-consuming process but holds great importance to develop a better understanding of the research topic (Sutton & Austin, 2015). Transcription can be a very lengthy process depending upon the experience of the researcher and the quality of the recording (Rosenthal, 2016). The transcribing provides ease in the complex process of finding meanings from the dataset (Herrera, 2019). Twelve audio recordings were conducted. It was mentioned in brackets whenever the informant laughed or any disturbance occurred.

3.1.5 Field Notes

After the interviews were finished and the audio taping was stopped, the researcher took some notes of the informant-researcher conversation which was off the record and this was included in informant's personal experiences.

The notes taken were kept confidential. These field notes help the researcher during the data analysis or coding (Austin & Sutton, 2014; Sutton & Austin, 2015).

3.1.6 Coding

Coding was done once all research interviews were transcribed verbatim and checked (Sutton & Austin, 2015). A qualitative research software NVivo was used to manage the coding of transcriptions (NVivo,12). In Nvivo the coding process was done by creating different sections called nodes and various theme nodes were then named according to the data included in that

specific theme node. This helps in generation of further codes in case of inductive research as well as in determining relationships among different themes. (Silver & Lewins , 2014).

3.2 Ethical Considerations

Ethical clearance for conducting this study was received from the University of Huddersfield Ethics Committee (Reference number: SAS-SREIC 14.5.19-1).

4 RESULTS

This section gives a detailed overview of our research findings.

4.1 Demographics

The main goal of this research was to assess pharmacy stakeholders' views on Continuing Professional Development (CPD) practices in low- and Middle-income countries (LMICs). The countries selected were Pakistan, Ghana and Trinidad and Tobago. As the purpose of the research was to explore stakeholders' views and perceptions regarding the Continuing Professional Development (CPD) all participants selected were pharmacists by profession belonging to different areas of practice. Table 6 outlines participants' profiles from Pakistan, Ghana and Trinidad and Tobago.

Countries	Profile	Abbreviation used in the results section
Pakistan	Assistant Professor Pharmacy Practice	A1
	Senior official of Ministry of Health	R1
	Community Pharmacist	CP1
	Member of Drug Regulatory Authority	R2
Ghana	Lecturer Pharmacy	A2
	Lecturer Pharmacy	A3
	Officer in Pharmacy Regulatory Affairs Department	R3
	Community Pharmacist	CP2
Trinidad and Tobago	Assistant Professor Pharmacy Practice	A4
	Community Pharmacist	CP3
	Community Pharmacist	CP4
	Senior member of Caribbean Regulatory system	R4

Table 6. Participants Profiles from Pakistan, Ghana and Trinidad and Tobago

4.2 Themes

The following themes emerged when the transcribed data was analyzed

- 1- Understanding of Continuing Professional Development (CPD) and Continuing Education (CE) in global pharmacy practice
 - a- What is Continuing Professional Development (CPD)?
 - b- What is the difference between CPD and CE?
- 2- Current status of Continuing Professional Development (CPD) in Ghana, Pakistan and Trinidad and Tobago.
 - a- Is it Compulsory?
 - b- Process of Continuing Professional Development (CPD)
 - c- The regulatory bodies for the development/implementation of Continuing Professional development (CPD) for pharmacy practitioners
 - d- Barriers towards the development of Continuing Professional Development (CPD)
 - Time and Finances
 - System Constraints
 - The Attitude of pharmacists towards participating in Continuing Professional Development (CPD)
- 3- Importance of Continuing Professional Development (CPD) Model in Pharmacy Practice
- 4- Facilitators in developing/improving a Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan, Ghana and Trinidad and Tobago
 - a- The role of Pharmacy Professional Regulatory Bodies
 - b- The role of the Academics
 - c- The role of The Commonwealth Pharmacist Association (CPA)
- 5- Attributes of a Continuing Professional Development (CPD) model for Pharmacy Practitioners.
- 6- Key components needed to build a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago.

- 7- Future of Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago.
- 8- Currents in Pharmacy Practice Research in Pakistan, Ghana and Trinidad and Tobago.
- 9- Gaps in Pharmacy Education system of Pakistan, Ghana and Trinidad and Tobago

The below Figure 1 represents a thematic map.

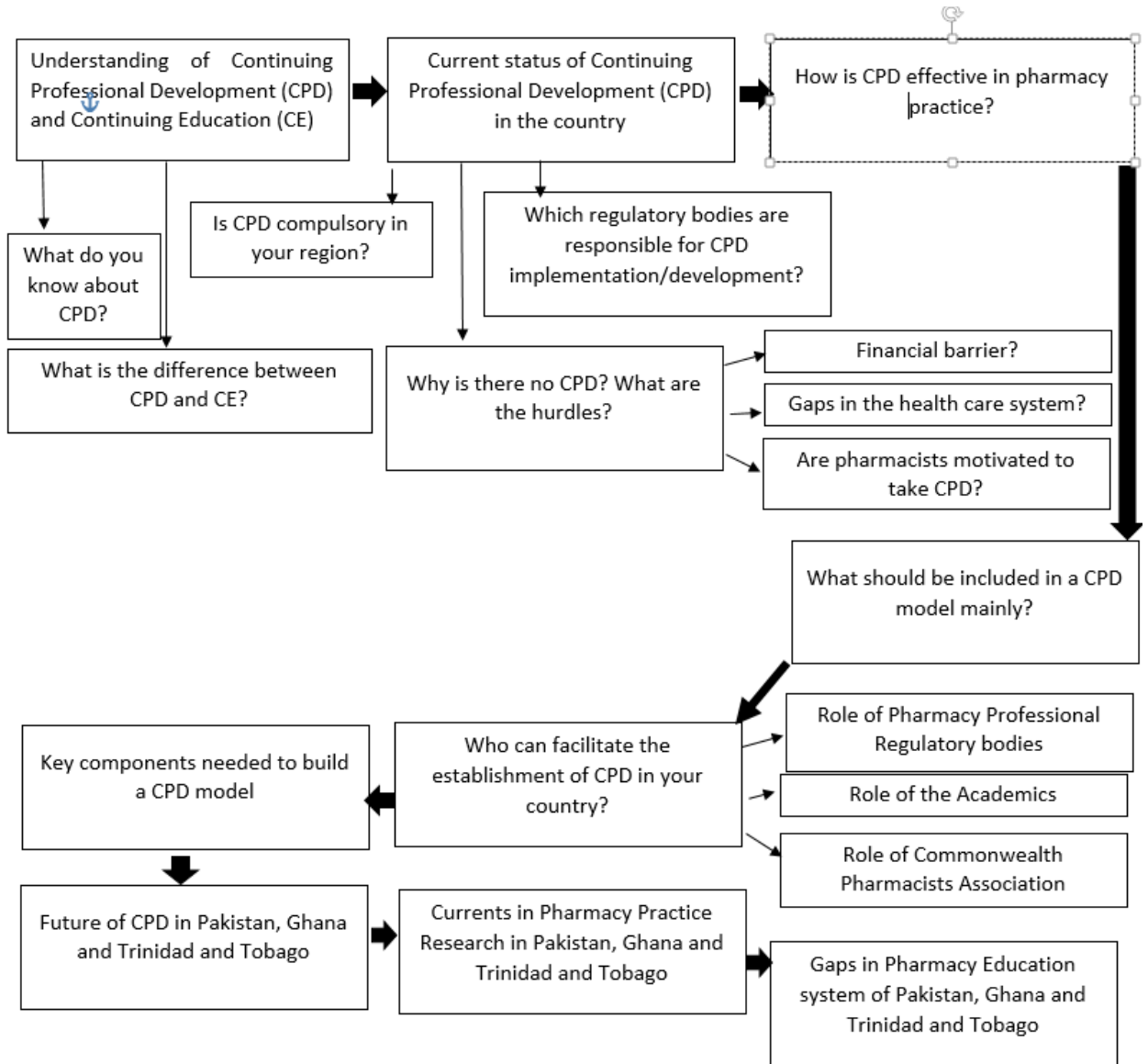


Figure 1. Thematic Map

The following Table 7 represents themes and sub themes of the study.

Main Themes	Sub themes
1-Understanding of CPD and CE in pharmacy practice	1-What is CPD? 2-What is the difference between CPD and CE?
2-Current status of Continuing Professional Development (CPD) in Ghana, Pakistan and Trinidad and Tobago.	1-Is it Compulsory? 2-Process of Continuing Professional Development (CPD) 3-The regulatory bodies for the development/implementation of Continuing Professional development (CPD) for pharmacy practitioners 4-Barriers towards the development of Continuing Professional Development (CPD) a)Time and Finances b)System Constraints c)The Attitude of pharmacists towards participating in Continuing Professional Development (CPD)
3- Importance of Continuing Professional Development (CPD) Model in Pharmacy Practice	What role a CPD intervention plays in order to achieve good pharmacy practice
4- Facilitators in developing/improving a Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan, Ghana and Trinidad and Tobago	1-The role of Pharmacy Professional Regulatory Bodies 2-The role of the Academics 3-The role of The Commonwealth Pharmacist Association (CPA)
5-Attributes of a Continuing Professional Development (CPD) model for Pharmacy Practitioners.	What should be included in an effective CPD model for pharmacists?

6-Key components needed to build a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago.	What factors should be under consideration while building a CPD model for pharmacists in these countries
7-Future of Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago.	What should be the future of CPD in these countries in a five years' time, when it will be established or more streamlined?
8- Currents in Pharmacy Practice Research in Pakistan, Ghana and Trinidad and Tobago.	
9-Gaps in Pharmacy Education system of Pakistan, Ghana and Trinidad and Tobago	

Table 7-Thematic Analysis of Data

4.3 Understanding of Continuing Professional Development (CPD) and Continuing Education (CE) in terms of Global pharmacy practice

All participants were aware of the terms “Continuing Professional Development (CPD) and Continuing Education (CE) however their understanding of these terms were different. During the participant recruitment process, responses of pharmacists from Pakistan showed that they were not aware of these terms. However, in Ghana and Trinidad and Tobago participants have some understanding of these terms. One of the participants from Ghana revealed:

“I think that the concept of CPD for us is a bit new in this part of the world.”(R3)

4.3.1 What is Continuing Professional Development (CPD)?

The concept of Continuing Professional Development (CPD) seems to vary for all stakeholders.

An Academic from Pakistan when asked about her understanding of Continuing Professional Development (CPD) said:

"As a pharmacist my stake on this CPD or continuing professional development is that I refer to it as one of the lines of the audit you take as a pharmacist. That it is my responsibility to update myself on the professional knowledge. And it is of particular importance to a practicing pharmacist because after graduation, pharmacists can undertake different lines and among that one is practicing pharmacists' means that pharmacist in an interaction with either patients or the practitioner or nurses or other healthcare workers"(A1)

The participant's concept regarding Continuing Professional development (CPD) reflects that it is necessary for pharmacists to upgrade their knowledge during their practice.

The process of Continuing Professional Development (CPD) was well defined by a regulator in the Trinidad and Tobago:

"It's more in the center and it involves reflecting on what a person has to think about what their needs are and then they identify the plan for it. And then the learning material, then they need to implement it, so it's more of an individual need based learning."(R4)

A senior official in the Ministry of Health, Pakistan stated his understanding of Continuing Professional Development (CPD) in the following words:

"I think on professional level brushing up your knowledge between new technology, new techniques, new knowledge, or continue to upgrade the knowledge, skills and competencies to go up is CPD."(R1)

An Assistant Professor of Pharmacy from Trinidad and Tobago described Continuing Professional Development (CPD) as:

"Basically, in terms of their professional competencies you know that lead to the maintenance and development and broadening of their knowledge. And it is not only knowledge. I would say apart from knowledge as well as the attitude to what they practice, how they have to lead the profession in terms of competency that could prove their career as long as they're a pharmacist."(A4)

A community pharmacist from Ghana shared his concept of Continuing Professional Development (CPD) in the following words:

“Continuing professional development is a form of an educational program for a group of people to introduce new practices, new ideas, new methods of- modern practices, that helps improve the way they are servicing towards their community or service to the society. Ways that they can improve on what they do already.” (CP2)

A member of Pharmacy Regulatory Authority of Pakistan summed up his understanding in the following way:

“I think CPD it’s basically the gaining of all new knowledge into the application and application is being transferred by the professionals into practice. “(R2)

Academics from Ghana had the following idea of the Continuing Professional Development (CPD):

“A training that professionals should be in whilst they are on the job, mainly to update them on current practice.”(A2)

“To provide some form of education to professionals in this field and continuously updating on what’s new and how to better practice to give the best care to each client”(A3).

One of the informants from Trinidad and Tobago described Continuing Professional Development (CPD) in the following manner:

“CPD is just improving your skill sets or also your education concerning your profession. I think it’s just to develop more knowledge and skills in specific areas, you know, and help you to upgrade in your day to day practice as a pharmacist, you know, improve your education and your skills.”(CP3)

4.3.2 What is the difference between Continuing Professional Development (CPD) and Continuing Education (CE)

This section covers the participants’ views of differences between the Continuing Professional Development (CPD) and Continuing Education (CE).

A pharmacist from Ghana stated that the Continuing Education (CE) is continuity of professional degrees while Continuing Professional Development (CPD) is to undertake courses to improve practice:

“Continuing education is basically like it’s a progress. Let’s just say that someone has been to school, been to secondary school the person needs to go back to do maybe a diploma or something. That is continuing education.

It’s totally different from CPD. As for CPD, it belongs to a certain group of people, a certain group of professionals where modern trends of what to improve their practice and stuff like that are taught and discussed”(CP2)

Similarly an academic from Pakistan stated her understanding that Continuing Education (CE) is based on an individual’s choice to continue education in the form of degrees, whereas CPD courses are offered by an organization which is taken up by an individual to obtain the points attached to it:

“Continuing Education is like a personal choice that I want to take this diploma course and do that or this course to add to a degree. So, I think it as different thing because CPD is, you know, you have a bit of options like what CPD courses are offered and which you want to take. But still there is somebody or an organization who is like designing a wholesome picture, and then you have to like take your chunk from that to gain your CPD points.” (A1)

An academic from Trinidad and Tobago shared his opinion on the difference between these two terms and considered Continuing Education (CE) as a component of Continuing Professional Development (CPD).

“Basically, I think that continuing Professional Development basically it is more goal oriented of which, continuing education is an important component. That is an important part of CPD. In Continuing Education, you’re learning the things. But when it comes to the practice, when it comes to implementation and the profession, those requirements maybe slightly change from individual to individual that is why CPD is there so it is more personalized when it comes to the CPD, individual care has to be taken and I will say reflection, there must be some reflective component in this professional role but remember continuing education is very important for CPD.”(A4)

An academic from Ghana said that Continuing Education (CE) is not necessarily related to your profession but Continuing Professional Development (CPD) is purely related to the profession:

“Continuing Education could be anything you want to learn and it may or may not be related to your profession, whereas Continuing Professional Development have to do mainly with whatever profession you are in.”(A2)

A community pharmacist from Trinidad and Tobago gave a detailed opinion regarding how Continuing Professional Development (CPD) is different from the Continuing Education (CE):

“CPD would be like a process to enhance personal need based skills, knowledge and experience formally and informally whereas continuous education is more like attending formal programs and like courses designed to educate, augment and improve your skillset.” (CP4)

A participant working as a member in the pharmaceutical society of Trinidad and Tobago distinguished Continuing Professional Development (CPD) from the Continuing Education (CE):

“I kind of understand in comparison to Continuing Education CPD is more involved, it’s more in the center as it involves reflecting on what a person think about what their needs are and then they identify the plan for fulfilling it and then find the learning material or method then they need to implement it, so it’s more skills based it’s not somebody telling you there’s something going on, but it’s based more on the needs that is relevant to an individual.”(R4)

An informant from Pakistan highlighted this difference in the following manner:

“Continuing education, unlike CPD will just go through all this new knowledge but not by the application, not by the practice, so this is the difference which I feel.”(R2)

One of the academics from Ghana delivered his viewpoint in the following way:

“So, I think that continuing education could be anything you want to learn and it may or may not be directly related to your profession, whereas continuing professional development have to do mainly with whatever you are practicing as a professional, it has a direct link with your on ground practice.”(A2)

An informant from Pakistan who holds a high position in the National Pharmacists Association was unable to highlight any differences between Continuing Professional Development (CPD) and Continuing Education (CE):

“I don’t know, I don’t have any knowledge about it. I thought of them as pretty much the same thing” (R1).

4.4 Current status of Continuing Professional Development (CPD) in Ghana, Pakistan and Trinidad and Tobago

This section involves the participants' views on the current status of Continuing Professional Development (CPD) system for pharmacy practitioners in these countries.

4.4.1 Is Continuing Professional Development (CPD) Compulsory?

This section includes the information gathered from the participants regarding the existence of Continuing Professional Development (CPD) system for pharmacists or otherwise.

One of the informants from Ghana revealed the status of Continuing Professional Development (CPD) in his country in these words:

"Maybe about two years ago that they started introducing CPD and then the last year, it's been enforced. So, it's a bit new for us but compulsory for renewal of pharmacist registration every year."(R3)

Another pharmacist from Ghana stated this in the following manner:

"At the moment, so working as a practitioner in pharmacy, you've got to undertake CPD every year and there's a minimum number of credits you need to acquire."(A2)

An academic from Pakistan stated the following view:

"The CPD should have been compulsory but on floor practically, there is nothing like compulsory CPD programs."(A1)

Informants from Trinidad and Tobago revealed that no CPD is in practice:

"It is missing at the government side. I've never seen any program being, you know a pharmacist in Trinidad and Tobago."(A4)

"I think it's very involved. It is not established."(R4)

4.4.2 Process of Continuing Professional Development (CPD)

It seems that the participants from Pakistan and Trinidad and Tobago do not have much knowledge regarding the process of Continuing Professional Development (CPD) for pharmacists as these countries have no such established system.

However, participants from Ghana briefly described how Continuing Professional Development (CPD) is carried out in Ghana and what does it involve. A community pharmacist from Ghana explained in detail how Continuing Professional Development (CPD) events are currently being organized and what do they involve:

“What happens is that CPD events are usually organized at a venue where you usually go, you need to book in advance that what CPD course you want to participate through a moderator. There’s a moderator there to do the CPD. Usually there’s a resource person too there. And after that, even sometimes we even been bring into groups first to discuss this within groups, solve problems that we’ve learned and to implement the things that we’ve learned there before we leave. And then usually, certificates are issued out to participants of the CPD.”(CP2)

The participant working with the pharmacy council of Ghana briefly explained how accreditation system for pharmacists’ Continuing Professional Development (CPD) actually works:

“So, by the end of the year, you have a number of points that you are supposed to hit via the institution that are accredited to all past CPDs. So, what happens is that those institutions, they get accreditation from the pharmacy council.”(R3)

The community pharmacist from Ghana also gave information about how Continuing Professional Development (CPD) courses are offered:

“We have so many different categories of CPD programs for different pharmacists who practice in different areas. For example, we have separate CPDs for people who are within the regulatory space. We have separate CPDs for people who work within the clinical setting. We have CPDs for people who work in the community space.”(CP2)

4.4.3 The regulatory bodies for the development/implementation of Continuing Professional development (CPD) for pharmacy practitioners?

Ghana

Participants from Ghana told that Pharmacy Council of Ghana is responsible for the Continuing Professional Development (CPD) of pharmacy practitioners.

“For these professional development programs for pharmacists the authority in Ghana is Pharmacy Council of Ghana.”(CP2)

Pakistan

Participants from Pakistan informed that Pharmacy Council of Pakistan (PCP) and Pakistan Pharmacists Association (PPA) can work together for developing a Continuing Professional Development (CPD) system for pharmacy practitioners in Pakistan *“You see both the pharmacy council and the PPA need to join hands as both have the authority and the capacity to build a CPD model for pharmacists.”(R2)*

Trinidad and Tobago

In Trinidad and Tobago the responsible bodies for the implementation of a Continuing Professional Development (CPD) model for pharmacy practitioners are the pharmacy board of Trinidad and Tobago and the pharmaceutical society of Trinidad and Tobago as revealed by the informants of our research: *“The pharmaceutical society of Trinidad and Tobago or the pharmacy board of Trinidad and Tobago are the responsible ones for developing a model like CPD for pharmacists.” (R4)*

4.4.4 Barriers in the development/following of a Continuing Professional Development (CPD) model

Our research participants from Ghana informed us about the barriers they face in completing their CPD hours. The informants from Pakistan and Trinidad and Tobago also highlighted the existing barriers due to which there is no established Continuing Professional Development (CPD) system in these countries.

Time and Finances

A pharmacist from Ghana suggested a system for taking up online CPD courses to complete their points as he considered it very time consuming to go and attend the event:

“ I have a very tight schedule, so if I need to be at a confined place within a certain time, it's going to be tough. But if it is an online program, maybe when I'm closed after 10:00 p.m. and I'm relaxed at home, I could just start- I could just log on and start doing the training at my own time. It could even be a Sunday or a weekend which may be okay for me. But if I need to be at an event it's a burden particularly space are usually done during the week, between Monday and Friday “(CP2)

“You have to look at the hours that pharmacists work with. You have to look at the bosses if they would give them time off to attend to the lectures.”(CP3)

Similarly another Pharmacist from Trinidad and Tobago highlighted finance as a major issue in the implementation of a Continuing Professional Development model

“one of the major hurdles is financial constraints, off course a lot of financial resources are required to bring such a model into practice, our government seems to be unable to spare funds to take up such a big project for us pharmacists.”(CP4)

Another participant from Ghana considers both money and time to be a barrier

“you know, sometimes these CPDs, they’ve been organizing at other parts of the country where you are not or it’s really, really, really far for me, so sometimes the difficulty in accessing that program this is what puts people off in a way as it consumes time and money to travel, it’s like, demotivates you” (CP2)

4.4.4.1 System Constraints

A few participants completely blamed the National pharmacy regulatory system for not implementing a Continuing Professional Development (CPD) model for pharmacy practitioners in their regions.

A pharmacist from Trinidad and Tobago revealed the inefficiency of the local Pharmacy Regulatory Authority:

“We have a lot of new projects proposals, we always have foreigners who want to come with these fantastic ideas, but it never gets over the floor because there’s no implementation and there’s nobody monitoring it.”(CP3)

Another participant from Ghana described the problem in the Pharmacy Regulatory System in the following words:

“so it’s the way a CPD program is structured, yet different from our needs and in different locations of the country, so for the CPD, a lot of people turn up for CPD programs the organizers should manage how to properly organize and catch all the data of the people who have to attend specific CPDs you know, and at near locations to the participants” (CP2)

One of the members from the Pharmacy Regulatory Department of Ghana also highlighted that

“In terms of the course contents, there are different aspect of pharmacy practice and the institutions do not offer a variety of courses ones offered are mainly related to hospital pharmacy

etc. So, many people in other aspects of other areas of pharmacy practice do not really find the CPD relevance to what they are doing.” (RG)

A pharmacist from Pakistan pointed out the negligence of national pharmacy council for having no CPD for pharmacy practitioners.

“Wherever the pharmacist is working, requirement of their job should be mandatory requirement of CPD, and this can be implied only if the system will be properly structured and strict then everybody will have to do CPD.”(R3)

4.4.4.2 Attitude of the pharmacists towards participating in Continuing Professional Development (CPD)

The participants from Ghana shared their experiences regarding the attitude of pharmacists towards the compulsory intervention of Continuing Professional Development (CPD). The participants from Pakistan and Trinidad and Tobago also shared their thoughts on the expected behavior of their colleagues towards following a Continuing Professional Development (CPD) model. A community pharmacist shared his thoughts on pharmacists’ interest towards Continuing Professional Development (CPD) activities:

“I think most people participate in it because they really want to be eligible to practice the following year. Not really their motivation that they are going to learn new things, but most people, their motivation is that they are going to be eligible to practice the next year.”(CP2)

One of the pharmacy regulators from Pakistan emphasized on making Continuing Professional Development (CPD) mandatory for pharmacists in Pakistan to develop their interest in attending CPD events:

“I think the majority people may not actually be able to relate unless it was somehow mandatory and see either it was necessary for their getting their job, getting their registrations renewed, or for one other reasons it becomes mandatory on that, so that’s when the majority of the people would be actually ready, and if it’s not mandatory then there could be rather smaller proportion of people who would be really keen on updating themselves after all, so there has to be some kind of incentive or some kind of scheme to motivate pharmacists to come towards CPD.”(R1)

A pharmacist from Trinidad and Tobago stated that the fresh graduates would be more enthusiastic towards learning:

“I think it is mixed. I think there are some people who want it and see the need and are very interested in learning, I think particularly fresh graduates. But I think there are people who

wouldn't have want it because in their mind, they don't think they need it, they think their experience is maybe enough.”(R4)

An informant from Ghana highlighted pharmacist's interest in CPD in the following way:

“Everybody is interested in development but people are really interested in developments that is relevant to what they are doing or what they can internalize or what they can gain in return. I think they are beginning to find it a bit monotonous because it's the same topic year and year.”(R3)

A community pharmacist from Trinidad and Tobago shared her opinion regarding the expected level of interest of the pharmacists in following a Continuing Professional Development (CPD) model:

“So, I can't see practitioners in my area being interested in CPD because the program is not compulsory for licensure maintenance and we have a culture whereby they want maximum benefit with minimum effort or if it adds any kind of accreditation or something to the end of their name, you know, yes, maybe then they'll be interested otherwise I hardly see a positive attitude towards skill development.”(CP4)

4.5 The importance of a Continuing Professional Development (CPD) model in pharmacy practice

All participants expressed their views on the effectiveness of Continuing Professional Development (CPD) in pharmacy practice. Those participants who attend Continuing Professional Development (CPD) activities also highlighted it's advantages as explained below:

“Well, the topics that are discussed, basically are diverse in a way. It helps, me for instance, I've benefited too much from CPD. There are certain things that I didn't know. And even modern trends or treating certain diseases, I got to know them through as. I finished school way back and there are modern trends which certain diseases are handled which I wouldn't have known if not for these CPDs.”(CP2)

One of the participants from Pakistan talked about the benefits of Continuing Professional Development (CPD) in pharmacy practice:

“For the profession CPD is quite paramount because in pharmacy like any other scientific profession, the updated knowledge is always essential and as new knowledge is coming and

practice is evolving very fast thus the professional people continue to update themselves on that.”(R2)

A pharmacist from Trinidad and Tobago working in academia also shared his opinion in the following words:

“You see things what I look for that is basically professional development program for the pharmacist. And that is really actively managed through a CPD program because they're really effective in terms of learning, when it comes to professional competencies and the whole application of fresh knowledge in terms of the action plan, how the things are being implemented.”(A4)

An academic from Trinidad and Tobago also delivered his viewpoint on the advantages of a Continuing Professional Development (CPD) in pharmacy practice:

“CPD according to my knowledge aids in continuing self-improvement definitely in terms of pharmacy practice, it will help the pharmacist to maintain, to enhance or to increase their competency both in terms of their duty and in terms of their future service development.”(A4)

A participant from Pakistan explained how Continuing Professional Development (CPD) can help in making pharmacy practice effective:

“If CPD gets implemented and becomes mandatory for every pharmacist to get it for renewal of their license, then it is the most effective thing to uptake and to develop professionally as it will help the pharmacists on floor to asses and improve their abilities and update their knowledge and to overcome the gaps in their skill, most importantly it will focus on advancement of patient care. (R2)

A community pharmacist from Trinidad and Tobago stated her expectations from a Continuing Professional Development (CPD) intervention and it's impact on pharmacy practice and expressed the opinion in the following manner:

“I think it would be effective in the sense that it would assist all the pharmacy practitioners and more importantly I think there will be improved patient care and therapeutic outcomes So, we wouldn't have all these things happening where we have misdiagnosis and patients getting improper treatment because they weren't aware of co morbidities or what are other drugs possibly that the patient was on.”(CP3)

Another participant from Trinidad and Tobago considered Continuing Professional Development (CPD) to have a positive impact on the current pharmacy practice of Trinidad and Tobago.

“Well, I think it would be excellent. It will ensure that pharmacists do not lag behind and pharmacist are quite informed about modern technology, use the latest drugs, because what I realized is that the older pharmacists, they are unaware of certain technologies and drug use for certain drugs. Some of them refuse to read. So after experiencing CPD you can counsel your patients well, you guide them properly using your knowledge so I truly believe that it’s a positive thing to have continuing professional development as a pharmacist.”(CP3)

4.6 Facilitators in developing and improving a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago

According to our informants, the national pharmacy regulatory bodies, academics and Commonwealth Pharmacists Association (CPA) can be the key facilitators in developing/improving a Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago.

4.6.1 The Role of the Pharmacy Professional Regulatory Bodies

The stakeholders which were interviewed gave opinions on how Pharmacy Professional regulatory bodies can facilitate the implementation of Continuing Professional Development (CPD) model in pharmacy practice. For example a participant from Pakistan highlighted his viewpoint in the following manner:

“The pharmacy council has to actually take this responsibility to incorporate CPD in pharmacy practice because their mandate is to ensure good quality human resource in the pharmacy profession, and by good quality you need people who are actually enough to address the contemporary issues and able to also take up the future growth in the future potential in this area, so I think it’s primarily within the realm of the pharmacy council to start a CPD program and make it mandatory.”(R1)

A pharmacist from Trinidad and Tobago also shared her views regarding the role of pharmacy professional regulatory bodies:

“There is a dire need to make CPD compulsory for licensure and it would be necessary to ensure all the professionals meeting a minimum standard of competence so such a policy has to be made

and such support in terms of making resources available and managing resources and tools that facilitate that exchange teaching and learning experience. All this can only be done if the Pharmaceutical Society will act responsible.”(R4)

Another pharmacist from Ghana who is currently working for the national pharmacy council provided a detailed perspective on how pharmacy council of Ghana can facilitate the practice of Continuing Professional Development (CPD):

“Contribution of the regulators will be first of all, bringing themselves up to date on global trends in professional development. This has to do with training for themselves or capacity building for the regulators themselves so, building for themselves and also reviewing the contents based on their capacity and relevant for industry in terms of where we are going as a country and then also global where pharmacy practice is headed globally.”(R3)

A community pharmacist from Pakistan also suggested:

“Pharmacy Council can initiate steps to partner with other international organizations who are administering CPDs for pharmacists, collaborate with their members and seek best practices.”(CP1)

A pharmacy academic from Pakistan talked about incentives and motivational factors in improving CPD:

“I think that the push from the international organizations like FIP or Commonwealth Organization, recommendations from them, a push from them, an incentive from them. Some incentive given to the councils or the pharmacists Associations, can act as a motivator for our pharmacy council” (A1)

4.6.2 The Role of the Academics

The participants highlighted the role academics can play in the development of a Continuing Professional Development (CPD) model in low and middle income countries. They also gave their views on what approach should be taken while teaching pharmacy students to produce CPD ready graduates.

One of the participants from Trinidad and Tobago proposed that academia can design a model for pharmacy practitioners for the country:

“As a teaching pharmacist we know the priorities of our country. We know what other diseases we are suffering from in terms of like chronic diseases. And we can hold a very good program for the pharmacy practitioners based on that. So I think we can play a big role if the regulators initiate a CPD program for the pharmacy practitioners and support good pharmacy practice and we can design an effective model for them as per our country needs”(A4)

A pharmacy practice lecturer explained briefly the part academics can play in the development of a Continuing Professional Development (CPD) model and how can they help in developing an understanding of CPD among the pharmacy students:

“As we know the curriculum well that what all is being taught before our pharmacists graduate, so it’s up to us to modify our teaching style in this current trend or we can liaise with the pharmacy council to update the curriculum according to current global trends in pharmacy practice and we can train the students for CPD. There are couple of ways that, you know, as a teacher or academics you can equally impact CPD campaign” (A2)

Another pharmacy stakeholder from Pakistan added that if the concerned pharmacy council makes practice of Continuing Professional Development (CPD) mandatory then there is also an expectation from the academics to step forward and design a suitable Continuing Professional Development (CPD) program for the pharmacists on ground. He presented his thoughts in the following words:

“Well I think good universities in the region do have the capacity and the capability to actually undertake this kind of work to develop a CPD model as per the requirements, given if it becomes compulsory. I think there are enough academic institutions to undertake this challenge, although it a big one but I’m not worried because there are enough people to actually do this kind of work to a reasonably good level.”(R1)

Another pharmacist from Pakistan who is involved in teaching pharmacy students also showed great enthusiasm towards the role they can perform as pharmacy teaching professionals in the development of a Continuing Professional Development (CPD) model:

“Keeping the students equipped of the recent technology advancements and being updated about the advanced practice guidelines is the responsibility which should be imparted from the academia means like the technology chunk and the updated revisions of the treatment modules, the academia should step forward and this will also improve the teaching standards as well. So, I think skill development should come more from the practicing side and for continuous learning and keeping up to date for a pharmacist on floor I think as an academician, I can contribute better.”(A1)

Informants also proposed an approach to assimilate concept of Continuing Professional Development (CPD) in the pharmacy curriculum so that graduates can be well aware about the CPD practice when starting off their careers. A participant from Ghana shared such an opinion in the following way:

“Once the learning is inviting them from school and then also when they land in practice so such exemplary CPD programs can be organized on campus so if you have these accredited CPDs that are being organized that definitely will give an opportunity to the students to become well aware and interactions with the practicing pharmacists who will be attending those CPDs when students will have that sort of interaction life from school so once they come out of school, they will have that sense of what happens on real ground.”(R3)

Another pharmacist from Ghana with a similar opinion shared his thoughts on the possible role of academia in implementing a Continuing Professional Development (CPD) model for pharmacists in his country:

“Well, I would say that maybe the Pharmacy Council which is the regulatory body for pharmacists organize a joint venture with the dean of the faculty of pharmacy school to incorporate CPD education into the curriculum and they can slot a course in there and talk about maybe the extent and what it brings to the pharmacy profession and then also organize actual CPD events maybe one or two in a year to show the students.”(CP2)

One of the stakeholders from Trinidad and Tobago exchanged her views on the role of academia in developing a Continuing Professional Development (CPD) strategy:

“Schools would need to facilitate students so they know how to learn the professional environment, what their job requires, what the aspects of the job are, what the required input is and how to spend resources and also how to continuously develop the professional skills so when they graduate they will be ready for CPD. It should be in the final year course where they have to think about I’m in a setting, this is what my job would require, these are the resources and this is what I learned and this is how I can apply it.”(R4)

A Pakistani pharmacy academic also proposed the approach to introduce CPD education in the undergraduate curriculum of pharmacy schools:

“In the current scenario, Academic institutions in all low and middle income countries should add in their curriculum something that can be helpful for future incorporation of CPD programs for these undergraduates so that when they go to a CPD program, they are more mentally prepared to receive what is given out of that CPD program and will actually benefit from it. In a way, you know, having a CPD model and linking it to undergrad studies and programs can be effective, but for that thing, the presence of the CPD model it's compulsory. Without having that if you're going to do the changes in the undergrad curriculum and you don't have a CPD program afterwards, it's not going to work like this way.”(A1)

4.6.3 The Role of the Commonwealth Pharmacists Association (CPA)

Our research informants considered Commonwealth Pharmacists Association (CPA) as a major facilitator if a Continuing Professional Development (CPD) model has to be implemented to strengthen pharmacy practice in low and middle income countries.

One of the key informants from Pakistan described in detail that how Commonwealth Pharmacists Association (CPA) can provide aid in developing a Continuing Professional Development (CPD) model in low and middle income countries:

“My suggestion would be that Commonwealth Pharmacist Association host pharmacist membership from diverse countries who have started CPD programs in the recent years .So the best from the group of these lower and middle income countries go for instance can be given to us as a model or as a like a mentor or like a facilitator and link us with them so that we have a direct peer-to-peer discussion and we learn from their experience closely and they take some ownership in developing our CPD model.

Help in like initiation of some student or faculty or practice pharmacists exchange programs through Commonwealth pharmacists that people go and attend the CPD events somewhere else and then they come back and they tell the story. Also having occasional online streams or lectures can also be helpful.”(A1)

The similar views were also described by a pharmacist from Pakistan regarding the role of the Commonwealth Pharmacist Association (CPA):

“It’s always good to actually get their ideas in exchange programs and learn from each other, so in that sense I think the council should actually be talking to a counterpart organization like CPA to observe practice of CPD in pharmacy in other countries to learn from them.”(R1)

A participant from Trinidad and Tobago emphasized the idea of the Commonwealth Pharmacist Association to act as a facilitator in developing a Continuing Professional Development (CPD) model for low and middle income countries:

“Well, they can propose a model or they can work with the society to develop a model that’s useful as they would have some experience in CEs and CPDs. But in terms of the implementation they can provide guidance into things to think about what was people’s experiences, the members of the CPA will share the experiences or they can assist with like making arrangements or sharing arrangements or facilitate, if another society internationally had online CPD that join in advance as if they joined to kind of get credits recognized by that body that they can help facilitate those kinds of networks.”(R4)

Another pharmacist from Ghana suggested that the Commonwealth Pharmacists Association (CPA) can help in developing interactions among countries who have recently developed a Continuing Professional Development (CPD) model for their pharmacists and those who intend to design a CPD model for their pharmacy practitioners:

“Commonwealth Pharmacist Association you know can create that platform for information sharing of what is happening in the countries that have already started administering CPD as opposed to a country which just started with that process, they can also provide an expertise who can help with the tool, like, the fact that, digitalizing the CPD are major challenge and there are tools of systems that can be accessed by the developers. It should also be good maybe if the CPA has any dashboards in terms of monitoring your main evaluation when you have to assess how the performance is.”(R3)

A community pharmacist from Trinidad and Tobago also considered that the Commonwealth Pharmacists Association (CPA) can play a vital role in the development of a Continuing Professional Development (CPD):

“I think once the Commonwealth Pharmacist Association partners with our local pharmacist association, with the pharmacy board and the designated committee, they can come up with ideas for seminars that are free of charge to bring awareness of CPD and gradually they could assist in developing a CPD system for pharmacists. It would be great if CPA can keep a strict check

whether this all is actually happening on the floor or is it just like shown in the papers you know. They could show what the benefits are of having such a model in pharmacy practice benefit not only for the individuals but for the healthcare practice as a whole in terms of adherence and being up to date actually on what is going on in that field globally.”(CP4)

A pharmacist from the Pharmacy council of Pakistan gave valuable suggestions and ideas regarding the role of Commonwealth Pharmacists Association (CPA) for the development of Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan:

“CPA can involve the national pharmacist association, national statutory and ministry of national health, all three to involve initially and if CPA can give them a model that we will provide you this model, and this is the requirement and this is the content of the CPD, then definitely our regulators will conduct the CPD once they have support, then this is possible, because CPA definitely as they are developing such CPD model for other countries, so they can bring the best practice in this country by bringing success stories of those countries.”(R2)

Another pharmacist from Pakistan added that Commonwealth Pharmacists Association (CPA) can aid in the development of Continuing Professional Development (CPD) model by providing resources:

“I think mainly by providing resource materials for some of the CPD models as in CPA can come up with something like relevant CPD models based on what is the current trend in the well developed nations, and then provide the resources like their trained officials come here for training us and you know can also provide some sort of funding to facilitate us in conducting the CPD programs.”(A2)

The participants from academia shared similar views while suggesting ways in which Commonwealth Pharmacists Association (CPA) can help in designing a Continuing Professional Development (CPD) model for the pharmacists.

“I think the CPA can provide technical expertise. I mean, they can provide materials that are needed, you know, which can provide access to latest information mainly, you know, if we’re talking about skill and access to materials that are maybe needed to train our students. Because it’s a bit tricky getting a hold of that in current trends but and you are unable in accessing those

so CPA can make them available, so you know, academically, you can fuse it into whatever is the current curriculum in the pharmacy school.”(A3)

4.7 Attributes of a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago (Model for Pharmacy Practitioners)

The participants proposed the following attributes in a Continuing Professional Development (CPD) model. A pharmacist from Pakistan stated the following:

“CPD model has to be realistic and practical and should addresses the on-floor skills, problems, issues, ways to tackle them, the complete which is needed to handle those things So, I think that the practicality and relevance should be the prime attributes of any pharmacy practice CPD model.”(A1)

Another pharmacist from Trinidad and Tobago gave a detailed opinion on what a pharmacy practice Continuing Professional Development (CPD) model should cover:

“It should be current to what’s being seen in practice and in public health, so it should definitely be relevant. If there’s a particular series of learning activities in a particular area, it should allow them to learn a certificate that they could renew over time. And that this should be recognized by the regulatory body of the country. So that’s one very important attribute. Also one more that CPD should be recognized by the health professional society, by the board and by other stakeholders both locally, regionally, and internationally so that it can be accredited, you know. This one maybe a goal but that’s ideal.”(R4)

One of the community pharmacist from Ghana strongly suggested that a Continuing Professional Development (CPD) model should include activity demonstration by the moderator and the pharmacists attending those sessions can learn and perform there and then during the CPD session:

“I think that hands-on training is absolutely the most important in this if every session of CPD is designed kind of practical it prints so hard on your mind there should always be a practical section of CPDs where the participants are allowed to rehearse all that they’ve learned. The moment we do them practically there it sticks and probably sticks forever.”(CP2)

Another participant from the pharmacy council of Pakistan put forward his opinion:

“I think it should be tailored according to currents in the pharmacy profession and the professionals’ needs and their ambitions and their aspirations for the future, so you need a multi-track program there.”(R1)

4.8 Key components needed to build and improve a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago

The stakeholders involved delivered a variety of opinions regarding what is needed to build a Continuing Professional Development (CPD) model as per their understanding. Their ideas are narrated in this section.

A participant who is professionally an academic pharmacist from Pakistan suggested the following:

“I think the key components would be, number one, the attachment of the requirement of registration or the license validity to CPD courses. Then the priority should be given to what is the need of the country. When you choose the topics, topics should relate to somehow feeding to the improvement of the health indicators of the region.”(A1)

A pharmacist from Pakistan stated the key components needed to build a Continuing Professional Development (CPD) model as the following:

“I think the technical aspects, the communication and patient counselling aspects, the technology and the leadership with the management aspects, I think you can’t put them all together into one program, but all of these need to be there and people should be able to pick and make their own recipe according to their needs, this will all be geared towards the pharmacy profession, so if you’re talking with management, leadership, it should be focused on the case studies that pharmacist actually have to deal with, so then they can actually have a multiple grounding in the management sciences and management practices, so these are the kind of key constituents for designing a CPD strategy according to my thinking.”(R1)

A pharmacist from Trinidad and Tobago shared her views in a detailed manner highlighting that what is the key to develop a model for Continuing Professional Development (CPD) for the pharmacists:

“Well I think you would need to have, first of all, a mandate, and you need an association as well to take on that mandates like stakeholders, that would be the ministry and anybody that create bills and adjust recommendations because you have to have a legislative framework to start with. You also need to have international partner so those credits are recognized. Also partnering with local universities and keeping a representative in a space where they can get information from people what their needs are. So those are key components, a way in which you can engage stakeholders and get new recognition and a legislative frameworks.”(R4)

4.9 Future of Continuing Professional Development (CPD) in pharmacy practice in Pakistan, Ghana and Trinidad and Tobago

The opinions of our research participants about the future of Continuing Professional development (CPD) in pharmacy in Pakistan, Ghana and Trinidad and Tobago are mentioned in this section. The participants revealed regarding where they see CPD in pharmacy practice in Ghana, Pakistan and Trinidad and Tobago in five years’ time. All participants shared that they see positive future for Continuing Professional Development (CPD) in these countries.

A participant from Pakistan shared a positive expectation with regards to the practice of Continuing Professional Development (CPD) in pharmacy:

“The pace with which the knowledge pool is changing so having CPD is inevitable. You know, we have to start at a point. And if you get started somehow in this one year or two years' time, now in five years I see that CPD will grow and will identify its priority areas and definitely be a success.”(A1)

Another informant from the national pharmacists association of Pakistan also stated a positive approach towards this development:

“In the recent years the council has been kind of restructured, the good thing is that we have resettled the council, we have capacitated it in a way that it could actually take such programs, so I think in the next five years, this CPD program should be out there in the practice as I expect a healthy pace to work on this.”(R1)

Another stakeholder who is an official in pharmacy council of Trinidad and Tobago briefly described how she foresees the CPD practice in pharmacy in her country:

“I think a CPD model would be developed by then because we’re getting more and more calls from institutions that want their pharmacists to be more advanced in so now they are interested in more structure and advanced practice, it’s going to be slower but I think in a public sector, we will have CPD and we’ll see more modules being offered or being requested from teaching institutions.”(R4)

A pharmacist working with the pharmacy council of Pakistan shared his optimistic views regarding the future of Continuing Professional Development (CPD) in pharmacy practice:

“Well if you say in five years’ time the whole paradigm shifts, yes, that could be possible here in this country, these are very resilient people and they are ready to change. I then hope that the Pharmacy Council will make sure that every pharmacist who wants to remain a licensed pharmacist will have CPD.”(R2)

An academic pharmacist from Ghana expects Continuing Professional Development (CPD) to be much more developed in pharmacy practice:

“In the next five years I expect to see a more streamlined CPD model where it’s easier to assess the CPD courses, and we move more towards online CPD programs where it’s readily accessible rather than physical seminars.”(A2)

4.10 Current situation in Pharmacy Practice Research in Pakistan, Ghana and Trinidad and Tobago

A few participants discussed the current situation of pharmacy practice research, also uncovered some gaps in the research and how the present gaps can be overcome in these countries. One of the informants from Pakistan shared her views on the current pharmacy practice research.

“Most of the research is being done by the academicians and the purpose is having more publications for adding to their career promotions and also so that they can get incentives for having more publications. So, it mostly has no relevance to contribution to the pharmacy practice research that is needed by the country. A success will be that the academics, they get trained in doing collective research and they engage in-practice people and they work with them in cross-liaison and then develop practice research, then this will give out the evidence which can inform the policy.”(A1)

Another participant from Pakistan shared his views regarding the pharmacy practice research in the following manner:

“I think within the country pharmacy practice research has really taken off recently in the last five to ten years, and the concept has actually come to kind of take home and it’s been developing very nicely.”(R1)

An academic from Ghana shared his thoughts on who is involved in pharmacy practice research in his region and how is it being taken up:

“Not just in Academia we also got pharmacists in hospital who are doing lots of research on, you know, on different aspects of potential areas of pharmacy practice. So not just the academics, there’s lots of research going on in the various hospital as well.”(A2)

4.11 Gaps in Pharmacy Education system of Pakistan, Ghana and Trinidad and Tobago

Lack of resources to conduct pharmacy practice research and update the pharmacy curriculum was an issue which was raised by one of the participants from Ghana:

“For a developing country like we are in, there’s always this issue of resources. I mean, even though we are trying to incorporate a lot of the research aspect in the training but then at times, the resources they are just not available to the institution.”(A2)

According to an academic pharmacist from Trinidad and Tobago, the degree program should be updated as per the global standards of pharmacy education:

“If you ask me in terms of pharmacy practice and see in four-year course that is pharmacy practice oriented I feel it is not sufficient. Clark ship component should be more in shifting some gears from four-year program to Pharm D so that is going to raise the level and then also the financial constraint that if you propose a strategy then the industry doesn’t have funding for you.”(A4)

One of the pharmacists from Ghana indicated the need for improving the pharmacy curriculum:

“I think the pharmacy curriculum should be made more practical so the focus should be more on the field work as opposed to classroom learning. So that the learning is more practical. Students should be aware of what is the actual practice and so that, whatever you are doing within your field of practice is the continuation of that learning.”(R3)

5 DISCUSSION

This section involves discussion of our research findings in view of literature.

5.1 Understanding of Continuing Professional Development (CPD) and Continuing Education (CE) in terms of Global pharmacy practice

As per the findings of the research, the stakeholders interviewed were aware of the terms Continuing Professional Development (CPD) and Continuing Education (CE) but each individual had a different understanding of these terms.

5.1.1 What is Continuing Education (CE)

The McConnell et al states that the activity of Continuing Education (CE) involves various modules and lectures in a classroom-like setup (McConnell et al., 2010). However, our results informed that the majority of our participants had difference of opinion in their understanding of the Continuing Education (CE). As stated by one of the pharmacy stakeholders during the interviews that “Continuing Education is like the diplomas or PG courses you obtain to add to your degrees”.

The results showed that except three informants, all other stakeholders had the wrong concept of Continuing Education (CE). Their understanding showed that in pharmacy the process of Continuing Education (CE) is a personal choice of the professionals and there is no formal process. However, according to Tran et al Continuing Education (CE) in pharmacy practice is a mandatory learning programme for the professionals to maintain their competence on the floor (Tran et al., 2014).

The results of our research indicate a big gap in the knowledge of participants from Pakistan, Ghana and Trinidad and Tobago regarding the professional development models of pharmacy practice. This is contrast to the United States of America, where pharmacy Boards of all 50 states of USA require completion of a specific number of Continuing Pharmacy Education (CPE) hours from a pharmacist for the renewal of their license. This is to practice as a pharmacist. (State CE Requirements for Pharmacists, Accessed 2020.)

It is evident from the results that the informants had little or no knowledge of Continuing Education (CE) and also that is a compulsory practice component for the pharmacists on the ground. They considered it as further degree levels of education which may or may not be related to their profession.

5.1.2 What is Continuing Professional Development (CPD)

According to the findings of our research Continuing Professional Development (CPD) is a learning process of a pharmacy practitioner to remain updated with the currents of the profession.

Some participants stated an in-depth understanding of the Continuing Professional Development (CPD) and this is further supported by a study by Schindel et al which explains that Continuing Professional Development (CPD) caters to the need of the pharmacy practitioners to carry out additional training in order to perform well as per their continuously evolving roles in pharmacy (Schindel et al., 2019).

According to the results obtained, Continuing Professional Development (CPD) is an audit taken by pharmacists which is supported by a study (Driesen et al., 2006). Our study findings showed that the participants were clear on this that Continuing Professional Development (CPD) is to maintain professional competence.

As per our results, some of our informants were unclear of the actual process of Continuing Professional Development (CPD); what does it involve and how is it carried out by the pharmacists around the globe. The same phenomenon is elaborated in a study regarding how Continuing Professional Development (CPD) is a cyclic process involving the stages of reflect, plan, learn and to evaluate (McConnell et al., 2010).

The results obtained regarding the understanding of Continuing Professional Development (CPD) are mixed. A few stakeholders had an extensive knowledge whereas some lacked in-depth knowledge of this process. It can be said that the pharmacists in low and middle-income countries have very little or no understanding of Continuing Professional Development (CPD).

Also it was observed that the pharmacists who were enrolled in Continuing Professional Development (CPD) could not provide an in-depth detail on how a CPD is carried out and what steps does it involve.

According to our findings, academics from all three countries especially Pakistan and Trinidad and Tobago revealed great detail about Continuing Professional Development (CPD) in terms of global pharmacy practice. According to them, Continuing Professional Development (CPD) enables pharmacists to continuously update their professional capabilities by broadening their knowledge of advanced pharmacy practice. Their concepts can be related to the following studies of (Zarembski & Rouse, 2019) , (Rouse, 2004) and (IOM,2010). This also highlights that Continuing Professional Development (CPD) is as a self-driven and lifelong learning process and is vital towards enhancement of professional competence of a pharmacist.

5.1.3 The Differences between Continuing Education (CE) and Continuing Professional Development (CPD)

A few participants had a wrong understanding of Continuing Education (CE) as they explained that Continuing Professional Development (CPD) is to enhance the competence as a pharmacist by keeping one's knowledge and skills updated whereas Continuing Education (CE) is just an upgrade to the degree levels. While those who had a clear understanding of both concepts gave interesting comments like one of the participants stated that CE is an important component of CPD.

As a reflection of views evaluated in our study it can be said that both activities are to enhance professional development but Continuing Professional Development (CPD) involves need-based learning which enables a person to assess or reflect their need for learning. The purpose behind the practice of Continuing Education (CE) is to remain updated with the advancements in pharmacy practice around the world which can include knowledge about new drugs in the market, advanced and improved methods of delivering patient care and awareness regarding the continuously evolving roles of pharmacists in health care. Whereas the practice of Continuing Professional Development (CPD) involves process of Continuing Education (CE) along with identifying personal learning needs of the pharmacists. This also involves developing and

implementing a plan to fulfill those identified learning needs and then evaluating their success in meeting their learning goals (Tran et al., 2014).

As per our findings, the participants did not have knowledge about why Continuing Professional Development (CPD) is being preferred over Continuing Education (CE) in the developed countries. According to our results, the Continuing Education (CE) is more towards attending formal events and seminars to update the knowledge whereas Continuing Professional Development (CPD) explores where learning is needed. It also enables a practitioner to design a learning strategy and then evaluate the progress. The lack of knowledge regarding the concept of Continuing Professional Development (CPD) of the stakeholders in Pakistan and Trinidad and Tobago is also considered a barrier. If the goal is to establish a successful Continuing Professional Development (CPD) model for pharmacists, this particular matter of developing an understanding about the process of Continuing Professional Development (CPD) should be of primary importance as highlighted in this study (Donyai et al., 2011).

5.2 Current status of Continuing Professional Development (CPD) in Ghana, Pakistan and Trinidad and Tobago

Our participants from Pakistan, Ghana and Trinidad and Tobago gave a detailed description of the present scenario regarding Continuing Professional Development (CPD) in the pharmacy practice of these countries.

As per the results obtained Ghana have an established Continuing Professional Development (CPD) for pharmacy practitioners whereas Pakistan and Trinidad and Tobago has no such system for pharmacists.

5.2.1 Is Continuing Professional Development (CPD) Compulsory for Pharmacists?

The results obtained through the information gathered during our interviews revealed that Ghana has an established Continuing Professional Development (CPD) system and pharmacists are obliged to complete their CPD hours in order to retain their license (PCG, 2009).

Whereas in Pakistan and Trinidad and Tobago pharmacists do not have to engage in Continuing Professional Development (CPD) activities to renew their licenses to practice. The pharmacists in Pakistan and Trinidad and Tobago just have to pay a fee for the renewal of their licenses and it is not compulsory for them to carry out Continuing Professional Development (CPD) as there is no established system of CPD in the country (FIP, 2014).

The results of this research revealed that stakeholders from Pakistan and Trinidad and Tobago believed that many of the pharmacists who are in practice in these countries may not be even aware of the term Continuing Professional Development (CPD) as the curriculum in pharmacy schools does not include information about the CPD.

5.2.2 The Process of Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago

As mentioned before there is no developed Continuing Professional Development (CPD) model or a Continuing Education (CE) model for pharmacy practitioners in Pakistan and Trinidad and Tobago.

In Ghana Continuing Professional Development (CPD) in pharmacy practice has been recently developed. Our results showed that in Ghana pharmacists have to engage in Continuing Professional Development (CPD) as it has been made compulsory by the Pharmacy Council of Ghana that pharmacists have to complete a specific number of CPD hours every year to renew their license to practice (PCG, 2009).

They briefly described that pharmacists book their Continuing Professional Development (CPD) courses which are arranged at a venue by a moderator and then they have to go attend them and this involve lectures and discussions and then there is a group discussion that how can this all be implemented. By the end, certificates are awarded and when a pharmacist logs in at the venue their CPD is recorded and they gain points. These results partially satisfy the concept of Continuing Professional Development as a cyclic process of learning which is self-initiated and covers the components of reflection, planning, learning, evaluating, implementing and documenting (Zarembski & Rouse, 2019).

As per our interpreted results, there are different Continuing Professional Development (CPD) courses in Ghana for different cadre of pharmacists like for hospital pharmacists there are relevant CPDs. However, our results have also highlighted gaps in the designed Continuing Professional Development (CPD) activities for pharmacists in Ghana.

In Ghana there exists rare relevant Continuing Professional Development (CPD) activities for all disciplines of pharmacy practice as the majority CPD courses offered are related to Hospital Pharmacy Practice which indicates a room towards designing of Continuing Professional Development (CPD) courses for other aspects of pharmacy practice.

5.2.3 The regulatory bodies for the development/implementation of Continuing Professional development (CPD) for pharmacy practitioners

In Ghana, the accreditation body for Continuing Professional Development (CPD) for pharmacists is The Pharmacy Council of Ghana (PCG, 2009) whereas in Pakistan, the participants suggested that the development of a Continuing Professional Development (CPD) model should be of joint responsibility of the Ministry of Health, Pharmacy Council of Pakistan (PCP) and the Pakistan Pharmacists Association (PCP,2020), (PPA,2020).

In Trinidad and Tobago, it was suggested by the participants that both the pharmacy board of Trinidad and Tobago and the Pharmaceutical Society of Trinidad and Tobago are responsible for the implementation of a Continuing Professional Development (CPD) model for pharmacy practitioners (Ramrekha et al.,2015),(PSTT, 2020).

5.2.4 Barriers in the development/following of a Continuing Professional Development (CPD) model

Our results show that there were reasons for having no established system of Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan and Trinidad and Tobago. Our results also highlighted the barriers faced by the pharmacy practitioners of Ghana in completing their compulsory Continuing Professional Development (CPD) hours.

The barriers as per our findings can be divided in the following:

1-Time and Financial Resources

According to our results, one needs to spare time for carrying out Continuing Professional Development (CPD) and it is difficult to do so due to pharmacists' hectic job routines. The employers show hesitation to grant pharmacists some time off so that the pharmacists can go and attend a CPD event as mentioned in a study that time is a major barrier for Continuing Professional Development (CPD) (Donyai et al., 2011).

The similar views were also obtained in our results regarding time as a constraint in following a Continuing Professional Development (CPD) model for pharmacy practitioners from Pakistan and Trinidad and Tobago where there are no established Continuing Professional Development (CPD) programmes. Our results revealed that the difficulties were faced because of the employers not being understanding enough to let their employee pharmacists go for a Continuing Professional Development (CPD) activity.

Our research outcomes highlighted that in Ghana if the Pharmacy Council introduces an online system to participate in Continuing Professional Development (CPD) then it would save time for the practitioners which is otherwise not possible. It is a common complaint that at times the venues where the Continuing Professional Development (CPD) activities are arranged are usually far away. So the practitioners along with time have to spend money to get there and there are only a few employers who sponsor these trips. The employers should pay for the CPD of their employees as per the results obtained from our research. The financial cost required for participating in a Continuing Professional Development (CPD) programme can affect the involvement of pharmacists in the CPD as this is also highlighted in the literature (Donyai et al., 2011).

There was also an emphasis to run Continuing Professional Development (CPD) online for the pharmacy practitioners. The participants from Pakistan and Trinidad and Tobago also expected that the model for Continuing Professional Development (CPD) for pharmacy practitioners should be carefully designed in order to motivate and facilitate the pharmacists.

Non-availability of financial resources was also a significant barrier in not having an established Continuing Professional Development (CPD) by the stakeholders interviewed in Pakistan and Trinidad and Tobago. The findings are similar to what is being observed in the literature. The financial barrier in the development and implementation of advanced pharmacy practice techniques and interventions in the LMICs is also indicated as a key barrier in a systematic review of literature (Rasheed et al., 2019). The findings can also be correlated with the situation in some provinces of Canada which are not yet successful in implementing a Continuing Professional Development (CPD) model for their pharmacists, however Continuing Education (CE) programme is well established and mandatory in all provinces of Canada (FIP, 2014).

According to our research findings there is a desperate need for designing and implementing of a Continuing Professional Development (CPD) for pharmacists but the responsible authorities do not have sufficient funds to do so. The pharmacy councils and boards in these countries do not have enough money as this development requires finance. It needs money to hire experts who will design a CPD model as per the country needs then the next step is perhaps training sessions and training of the trainers.

2-Systems Constraints

Almost all key informants blamed the Pharmacy Councils and Pharmacy Boards in Pakistan and Trinidad and Tobago for not having an established system of Continuing Professional Development (CPD). Though Ghana has some CPD courses but the participants complained of not having relevant CPD courses and considered it as a major barrier. This argument is also supported by the Pharmaceutical Society of Ireland stating that in CPD a range of activities must be arranged for the pharmacists rather than restricting to a few typical ones. This is to broaden the exposure of the pharmacy practitioners (PSI, 2010)

The informants revealed that the pharmacy boards and pharmacy councils in these countries are not capable of implementing the advanced practices in pharmacy although there are many research proposals towards this development.

As per our results, it is the weakness of the government, and the pharmacy professional regulatory authorities that there is no Continuing Professional Development (CPD) for

pharmacists. Perhaps the pharmacy practice in low and middle-income countries has a long way to go to meet the global standards (Babar & Scahill, 2014). Another study also supports our results that for introducing Continuing Professional Development (CPD) and making it mandatory, pharmacy professional regulatory authorities can play a vital role in this regard (Donyai et al., 2011).

The pharmacy professional regulatory authorities actual roles are to be a facilitator in the advancement of pharmacy practice in these countries, however unfortunately this is not the case. However this seems to be a norm in many LMICs' as a study highlights that the policymakers lack of ownership towards their duties as the reason for underdeveloped system of pharmacy practice in low and middle-income countries (Rasheed et al., 2019).

3-Attitude of pharmacists towards participating in Continuing Professional Development (CPD)

According to our research, in Ghana, the main motivation of the pharmacists towards attending the Continuing Professional Development (CPD) programs is the renewal of their licenses as CPD is mandatory in Ghana. This clearly shows that carrying out the process of Continuing Professional Development (CPD) is compulsory and necessary for the pharmacists as highlighted in a study by (Donyai et al., 2011). Completing Continuing Professional Development (CPD) hours has been made a statutory requirement for the renewal of pharmacists' registration in Ghana but according to our study the pharmacists consider participating in Continuing Professional Development (CPD) programmes a burden. Our respondents suggest the need to address the reasons regarding pharmacists' lack of motivation towards attending Continuing Professional Development (CPD).

In contrast, it seems that the participants interviewed from Pakistan and Trinidad and Tobago were interested in the Continuing Professional Development (CPD) model. They were interested in learning and improving their professionalism and skills by participating in the Continuing Professional Development (CPD) activities and to record their CPD hours.

Our results from Pakistan shows that the participants thought a very small population of pharmacists will attend Continuing Professional Development (CPD) events until it becomes

mandatory. The Pharmacy Council of Pakistan should make it mandatory to keep the pharmacists interested. The participants also suggested that if some incentive is offered to the pharmacists in the form of a stipend the encouragement level might increase towards undertaking Continuing Professional Development (CPD).

In Trinidad and Tobago, the participants thought that some pharmacists may not feel the need for Continuing Professional Development (CPD) as they consider themselves well trained and fully skilled. Low motivation level and negative attitude of pharmacy practitioners towards Continuing Professional Development (CPD) were considered as a barrier.

As a reflection of views obtained in our study it is the need of the hour to establish a Continuing Professional Development (CPD) model for the pharmacists. The pharmacists' behaviors towards taking up of Continuing Professional Development (CPD) can be improved if support is provided at both professional and regulatory levels (Donyai et al., 2011).

5.3 The importance of a Continuing Professional Development (CPD) model in pharmacy practice

According to our results, the Continuing Professional Development (CPD) model can be very beneficial for the growth of pharmacy practice in low and middle-income countries. However, this needs to be implemented properly. There were also expectations from the participants regarding the effect of an intervention like Continuing Professional Development (CPD). The process of Continuing Professional Development (CPD) for the pharmacists can be highly beneficial as it involves individual need-based learning which is of prime importance in the field of pharmacy (Driesen et al., 2005).

All participants from Pakistan and Trinidad and Tobago stated that the Continuing Professional Development (CPD) in pharmacy will be the most effective thing to improve practice. The stakeholders from Ghana highlighted the advantages of Continuing Professional Development (CPD) on the basis of their experiences and they also consider this process fruitful. A pharmacist from Ghana shared his views that Continuing Professional Development (CPD) has helped him a

great deal in enhancing his skills and guided him well in handling various diseases treatment. He was unaware of this before undertaking CPD. The Continuing Professional Development (CPD) can aid the pharmacists to update their knowledge and develop advanced skills which ultimately would lead towards optimized patient care (Zarembski & Rouse, 2019).

Our research findings strongly emphasized that Continuing Professional Development (CPD) has undoubtedly a great impact on the practice of the pharmacists. According to the views recorded in our results Continuing Professional Development (CPD) is in the best interest of both the patient as well as the practitioners. It was considered a great initiative by the Pharmacy Council of Ghana to make CPD mandatory as this practice of attending Continuing Professional Development (CPD) enables every practitioner to learn and overcome their gaps which could definitely improve patient care in the long run (PCG, 2009).

5.4 Facilitators in developing and improving a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago

All pharmacy stakeholders involved in this research gave different suggestions regarding who can facilitate the development of a Continuing Professional Development (CPD) for pharmacy practitioners in Pakistan and Trinidad and Tobago. The results obtained from Ghana also pointed out that the improvements need to be done in Continuing Professional Development (CPD) setup of Ghana.

5.4.1 The Role of Pharmacy Professional Regulatory Bodies

The participants suggested that it is the duty of the pharmacy council or pharmacy boards to set-up continuing Professional Development (CPD) in their countries. The national pharmacy associations also need to respect their mandates and work hard to develop the pharmacy practice as per the global standards (Donyai et al., 2011).

According to the informants belonging to national pharmacy councils and pharmacy boards, the policymakers need to take this step of establishing a Continuing Professional Development (CPD) model for pharmacists and to make it mandatory for the practitioners. This is in order to meet the advanced global practice standards.

The findings also showed a strong emphasis on training of the professional pharmacy regulators so that their understanding regarding pharmacy practice can be improved. The results highlighted that the responsible professional pharmacy regulatory bodies in Pakistan, Ghana and Trinidad and Tobago can also collaborate with International Organizations like International Pharmaceutical Federation (FIP) or with the Commonwealth Organizations for developing a Continuing Professional Development (CPD) model for pharmacists in these countries. The pharmacy councils of Pakistan and Ghana, and the pharmaceutical society of Trinidad and Tobago can also approach pharmacy councils of other countries where the CPD models are developed or are in working. This is to learn from their experiences and approach.

5.4.2 The Role of the academics

Our results suggested that a great part can be played by the academics in developing a Continuing Professional Development (CPD) model for the pharmacists. It is also highlighted in the literature that that the pharmacy teaching should aim for preparing pharmacists who can perform well to maintain their skill set and to enhance professional knowledge throughout their careers. The academics' knowledge should be up to date in accordance with the current pharmacy practice in the world (Piascik et al., 2011).

According to our results, it was also suggested to incorporate the concept of Continuing Professional Development (CPD) in the pharmacy curriculum. The role of academics to promote Continuing Professional Development (CPD) is also supported from the literature (McLaughlin et al., 2013). It was stated in the literature that pharmacy academics can contribute in updating the current curriculum and to train the students (McLaughlin et al., 2013).

Our findings suggest that the pharmacy councils in respective countries should approach academics, and should work and collaborate with them to organize joint events of Continuing Professional Development (CPD) at the Universities. This is indeed a good suggestion as it will definitely affect the mindsets of the incoming pharmacists, and this could be helpful for the pharmacists to adopt Continuing Professional Development (CPD) in their practice in the future.

5.4.3 The Role of the Commonwealth Pharmacists Association (CPA)

Our results highlighted the role of The Commonwealth Pharmacists Association (CPA) as a major facilitator if a Continuing Professional Development (CPD) model has to be implemented in the pharmacy practice of low and middle-income countries.

Our results suggest that the Commonwealth Pharmacists Association (CPA) can arrange exchange programs among the low and middle-income countries in a way that a country who has recently developed a Continuing Professional Development (CPD) model for their pharmacy practitioners can be approached by another country who has no such model. The lessons can be learned from other countries. This can help to create a platform where success stories can be shared and mentorship can be offered which would ultimately lead towards improving in the development of a Continuing Professional Development (CPD) model.

As suggested by the key informants The Commonwealth Pharmacists Association (CPA) can also initiate a program where students or faculty members or members from the pharmacy regulatory councils can attend Continuing Professional Development (CPD) events in other countries and perhaps experiences could be shared.

Our findings also suggest that The Commonwealth Pharmacists Association (CPA) can assist the concerned pharmacy regulatory councils in designing a Continuing Professional Development (CPD) for pharmacy practitioners in the low and middle-income countries. This could be done by arranging free of charge online or in person seminars for the participants. In the past, the CPA has taken an active initiative in organizing seminars, workshops and conferences to create awareness. The association also has prominent representation at government level and is actively involved in policy making. They have recognized that there is a need for grass root level and training (The Pharmaceutical Journal,2015).

The Commonwealth Pharmacists Association (CPA) can also help in initiating the process of Continuing Professional Development (CPD) for pharmacists by arranging training sessions by involving expert panels. According to our results, The Commonwealth Pharmacists Association (CPA) can be a key facilitator in developing a Continuing Professional Development (CPD) model for the pharmacists in low and middle-income countries since The Commonwealth Pharmacist

Association (CPA) is able to take pharmacy national regulatory bodies and councils on board (The Pharmaceutical Journal,2015).

5.5 Attributes of a Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan, Ghana and Trinidad and Tobago

According to our results the Continuing Professional Development (CPD) should be practical, realistic and relevant and should be according to the status of the pharmacy practice of the specific country for which the model is being designed. The participants stated that the Continuing Professional Development (CPD) model for pharmacists should address the practical problems faced by the practitioners. This should be coupled with the solutions.

Our results suggested a focus on multiple attributes while designing a Continuing Professional Development (CPD) model. As suggested in our results, the primary focus of Continuing Professional Development (CPD) should be to deliver optimized patient care. A Continuing Professional Development (CPD) model should be practical in order to meet fruitful learning outcomes. The model should support the ideology of CPD which is self-driven, lifelong learning of practitioners after reflecting their learning gaps. The model if designed for pharmacists should cater all disciplines of pharmacy practice so that pharmacists from all pharmacy settings can gain maximum benefits. This is also highlighted in the global literature and in a report from the Pharmaceutical Society of Ireland (PSI, 2010).

In addition to our findings it is very important that Continuing Professional Development (CPD) is made compulsory for the pharmacists in low and middle-income countries. Our results also suggested that the Continuing Professional Development (CPD) model for pharmacists should also include practical and hands on activities and training.

5.6 Key components needed to build and improve a Continuing Professional Development (CPD) model in Pakistan, Ghana and Trinidad and Tobago

The participants highlighted key components which are required to design a Continuing Professional Development (CPD) model for the pharmacy practitioners in Pakistan and Trinidad

and Tobago. Our results from Ghana also labeled multiple aspects which need to be incorporated into the existing pharmacy Continuing Professional Development (CPD) system of Ghana.

The participants highlighted that the registration renewal of pharmacists should be linked with the appropriate level of achievement of CPD in the respective countries. The participants also highlighted to include topics in public health while designing a Continuing Professional Development (CPD) model for the pharmacists. The courses which should be offered at the Continuing Professional Development (CPD) events need to be relevant and according to the current health indicators of the country (PSI, 2010).

The Continuing Professional Development (CPD) model designed should be able to cover the aspects involved regarding day to day pharmacy practice. Along with relevance to the present need of the health sector the Continuing Professional Development (CPD) model should also address the technicalities involved in administering patient care as well as patient-pharmacist communication (Zarembski & Rouse, 2019). A Continuing Professional Development (CPD) activity should also involve methods of advanced managerial skills and leadership enhancement. The continuing Professional Development (CPD) model should be designed in a way that it can cover pharmacists holding different designations and performing different roles.

The goal of a Continuing Professional Development (CPD) model is to improve pharmacy practice in the given country. A Continuing Professional Development (CPD) course can involve exemplary case studies that can ultimately assist pharmacists in dealing with on-ground situations easily. The Continuing Professional Development (CPD) aids in translating knowledge into application as supported by a study in the USA (Trewet & Fjortoft, 2013).

Our results also suggested partnering with the International associations so that Continuing Professional Development (CPD) activities get accredited into a partnership with the local universities and associations. This interaction and partnership can be very beneficial to develop a practical Continuing Professional Development (CPD) model for the pharmacists in practice.

In nutshell an exemplary CPD model should include the following components:

1. Managerial and leadership skills

2. Pharmacotherapy and pharmacy management CPD courses
3. Updated knowledge on diseases and public health
4. Local needs of the country and the regions
5. Support from pharmacists' employers
6. Links with the International Organizations
7. Efficiency in renewal and registration of the pharmacists

The below model (Figure 2) highlights these components.

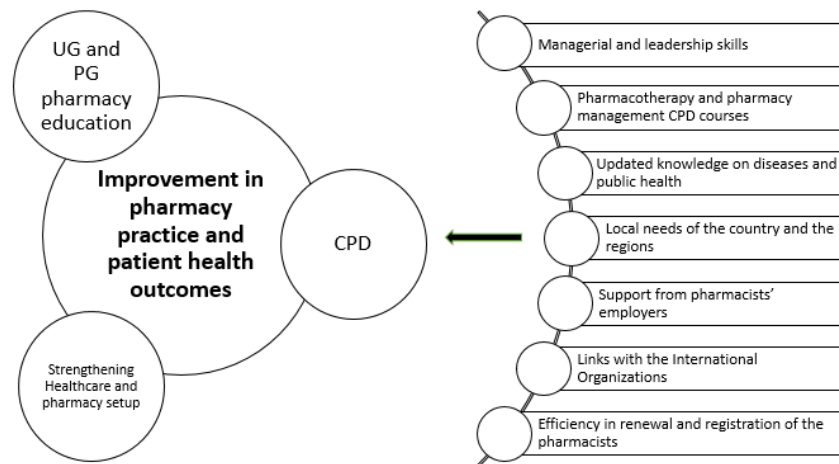


Figure 2. A CPD model for pharmacists in LMICs'

5.7 Future of Continuing Professional Development (CPD) in pharmacy practice in Pakistan, Ghana and Trinidad and Tobago

We asked participants' opinion about the future for the next five years' time in terms of Continuing Professional Development (CPD). The participants from Ghana were hopeful for the future and mentioned that the CPD may grow.

Our findings indicated positive beliefs towards the establishment of a Continuing Professional Development (CPD) system for pharmacists in five years' time in Pakistan and Trinidad and Tobago.

According to our results, the expectations of the stakeholders from a Continuing Professional Development (CPD) intervention for pharmacists can be related to a report of Pharmaceutical

Society of Ireland which included a review of International CPD models(PSI, 2010). This report identified the future of CPD in Ireland and this is similar to themes coming out from our study.

5.8 Current situation in Pharmacy Practice Research in Pakistan, Ghana and Trinidad and Tobago

The participants involved in this study gave a brief insight regarding the present situation of pharmacy practice research in these countries. Informants from Ghana told us that both hospital and academia are contributing towards pharmacy practice research in Ghana. A pharmacist from Pakistan informed us that mainly the research is being done by the academia with a focus on the quantity of publications rather than what is actually needed as per the health sector demands. In low-and middle-income countries low quality research has become a growing issue in pharmacy practice. This also adversely affects the reputation and professions' ability to educate policy makers and to influence the decision making process (Rasheed et al., 2019).

This is also highlighted in a study that future pharmacy practice is likely to include a range of extended stakeholders (Almarsdottir & Babar, 2016).The lack of ambitious approach and leadership to decide long-term goals for the profession, the inability to recognize public health needs and failure to take ownership are the main reasons why these LMICs fall behind in pharmacy practice (Rasheed et al., 2019).

5.9 Gaps in Pharmacy Education system of Pakistan, Ghana and Trinidad and Tobago

The participants exchanged views on the present status of pharmacy education system in these countries. The participants from Pakistan considered lack of insight of the pharmacy educators and non-availability of resources as the barriers in not having an updated pharmacy curriculum in accordance with the public-health demands. Research is an essential part in educating and training of a pharmacist however participants stated that many pharmacy schools do not cover research methodologies. This is also seen from the literature (Rasheed et al., 2019) and the

reason that's why pharmacy education has not contributed towards Pakistan's healthcare system (Hussain & Jamshed, 2016).

Our results revealed that strong emphasis on the courses in pharmaceutical sciences is observed in comparison to pharmacy management and administrative courses in pharmacy. In many LMICs, the pharmacy curriculum still does not cover socio-behavioral aspects of pharmacy although the western education system made this addition between the 1950s till the early years of 2000 (Ibrahim & Wertheimer, 2017). In all above areas Continuing Professional Development (CPD) courses and programmes can be started in LMICs.

The participants also highlighted some other gaps in the pharmacy education and in curriculum. The participants from Trinidad and Tobago revealed the need to update their four year bachelors' degree in pharmacy to a five year Pharm-D programme. The barriers identified by the participants from Trinidad and Tobago were lack of finance and the strong retaliation from physicians (Ramrekha et al., 2015).

The participants from Ghana proposed the modification in the current pharmacy curriculum which included addition of practice-oriented teaching thus giving students an opportunity to learn beyond the classroom. The obstacles mainly involve lack of ownership by the policy makers and the professional authorities. This is a hurdle and contributing towards non-development of pharmacy education (Owusu-Daaku et al., 2008).

5.10 Comparison of pharmacy education and practice of Pakistan, Ghana and Trinidad and Tobago with their neighboring countries

In Pakistan, the pharmacy education system was upgraded to a five-year Pharm-D program in 2004(Hussain & Jamshed, 2016) yet standard dispensing practices are not a norm in the majority of the hospital and community pharmacy setups (Atif et al., 2017). Similarly in India the Pharm-D programme was introduced in 2008(Patel et al., 2014) however the pharmacy practice system

is yet facing challenges to provide effective pharmaceutical care services throughout the country (Gurumurthy & Arun, 2019).

In Nepal, Bachelors of Pharmacy is a 4 year programme (PCN, 2020). However, pharmacy practice is facing similar challenges as been seen in other countries of South Asia such as Pakistan and India. There is a lack of qualified and skilled personnel in the pharmacies (Gyawali et al., 2014). Self-medication practices and irrational drug usage are also common due to inadequate knowledge of retailers about the medicines, as well as because of a weak regulatory infrastructure to dispense and prescribe medicines (Poudel et al., 2009).

This perhaps also shows that a strong involvement of pharmacists in the community pharmacies is needed to promote the safe use of medicines (Bhuvan et al., 2013). The “medicines use” issues and challenges faced by Pakistan, India and Nepal are very similar. Pakistan has approximately 6 licensed pharmacists per 100,000 population while Nepal has 3 licensed pharmacists per 100,000 people. Afghanistan has <8 licensed pharmacist available per 100,000 people, whereas Oman has 36 pharmacists per 100,000 people. (World Health Organization, 2011)

Ghana is a lower-middle-income country and it is situated in the West Africa (World Bank Group, 2020). Although several African countries rely heavily on the foreign aid however some African nations have worked well to improve health system (Drame et al., 2019). One of the common problems in Africa is the shortage of pharmacists across the continent (Bates et al., 2018).

Benin, Burkina Faso, Cape Verde, Cote d’Ivoire, Gambia, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo are the countries that are part of West Africa (The United Nations, 2020). The health care sector in West Africa is improving, however many countries in the region are struggling with inadequate financial resources, limited health care workforce and poorly developed health infrastructure. Although the majority governments provide sponsored health-care services in these countries, however due to limited resources, the governments are unable to meet the demand (Global Health Africa, 2014). As discussed earlier, pharmacists’ workforce is a huge challenge. Nigeria has 7 pharmacists per 100,000 and Ghana has 12 pharmacists per 100,000 whereas the number of pharmacists in Sierra

Leone is 4 per 100,000. This is perhaps less than Nigeria and Ghana (World Health Organization, 2011).

There are 40 pharmacy schools in West Africa and 8 of them are situated in Ghana whereas Senegal has 2 and Sierra Leone has 1 active pharmacy school (FIP, 2018). All countries of Africa are ready for growth, development and innovation in pharmacy profession (Drame et al., 2019).

Trinidad and Tobago lies in the region of Latin America & Caribbean (World Bank Group, 2020) and has a ratio of 4.8 licensed pharmacists to 10,000 people (Yearwood, 2012). Trinidad and Tobago has a better pharmacy system with improved “medicines access and use indicators”, however there are still deficiencies in the pharmaceutical system (Dhingra et al., 2017).

As far as the Americas and neighboring countries of Trinidad and Tobago are concerned, the availability status of licensed pharmacists to a population of 10,000 is 0.97 in Columbia (World Health Organization, 2011) which is much lower than Trinidad and Tobago. The Columbia belongs to the middle-income tier of countries whereas Trinidad and Tobago is an upper-middle income country (World Bank Group, 2020).

In other countries, Barbados is a high-income country (World Bank Group, 2020) there were 9 pharmacists available for a population of 10,000 (World Health Organization, 2011). This is almost double as compared to Trinidad and Tobago. The number of pharmacists is a challenge in developing countries all across the globe. These numbers are optimal to improve pharmaceutical care, however the shortages of pharmacists hamper the demand to deliver pharmacy services (Bates et al., 2018). The issues and challenges in the development of a sustainable healthcare system are observed to be the same across a spectrum of countries which share similar economic backgrounds (Håkonsen et al., 2017).

5.11 Implications of our study results on the existing and prospective pharmacy practice

This research aims to focus on exploring factors impacting on Continuing Professional Development (CPD) for pharmacists in low- and middle-income countries. This is to achieve and promote good pharmacy practice. This qualitative study has highlighted information regarding the current status, gaps, and barriers in pharmacy education, pharmacy practice and Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago. The research has also explored pharmacy stakeholders' views on the key facilitating factors in developing CPD as well as futuristic changes in pharmacy practice. A generic CPD model has also been designed and incorporated in this context.

5.12 Limitations of the study

Recruiting suitable key stakeholders was a challenge in the study. The researcher spent a number of months and great deal of time and 70 participants were approached, however, only 12 participants gave consent to participate in the study. A large number of stakeholders were approached to participate in the study. Though hospital pharmacy is an important setup however the study does not specifically focus on the hospital setting. The focus was primarily on primary care and the CPD and CE system in community pharmacy practice. Further studies could include hospital pharmacy and how a CPD model could be useful in this context. Nevertheless, the present study provides useful information to build policy changes for CPD and pharmacists.

The countries chosen Pakistan, Ghana and Trinidad and Tobago are at a different level of development in pharmacy and health systems. This perhaps also highlights the similarities, differences and problems in many other low- and middle-income countries which are of similar socio-economic status (H. Håkonsen et al., 2017). The results from this study may be generalized in other settings as the issues and findings may not be very different from the other countries with the similar socio-economic and health status.

6 CONCLUSION AND FUTURE RECOMMENDATIONS

6.1 Conclusion

The study reported the current status of Continuing Professional Development (CPD) in Pakistan, Ghana and Trinidad and Tobago. The Ghana has Continuing Professional Development (CPD) for pharmacy practitioners whereas there are no established Continuing Professional Development (CPD) for pharmacists in Pakistan and Trinidad and Tobago. This study helped us identify the

facilitators and barriers in the implementation and development of Continuing Professional Development (CPD) and the possible key components to develop such a model. This research has also informed us about the pharmacy stakeholders' understanding of Continuing Professional Development (CPD) in pharmacy practice and the future strategies regarding the establishment of a CPD model in these countries.

In Ghana, the Continuing Professional Development (CPD) has been made mandatory for pharmacy practitioners, however, compliance is an issue and there is a call to revise and improve Continuing Professional Development (CPD) programmes. The pharmacists' engagement in Continuing Professional Development (CPD) can lead to purposeful learning, improvement in skillset and the maintenance of professional competence in meeting public health needs. An ideal Continuing Professional Development (CPD) model for pharmacists in low and middle-income countries was suggested. The model needs to be practical to meet the public health needs.

To incorporate Continuing Professional Development (CPD) into the pharmacy practice of Pakistan and Trinidad and Tobago, there is a need to produce CPD ready graduates and this can be done by introducing the concept in the curriculum of pharmacy schools. It is concluded that the pharmacy regulation councils and authorities in these countries can work with the international organizations such as FIP (International Pharmaceutical Federation) and CPA (Commonwealth Pharmacists Association) to bring coherent changes towards CPD.

The views and perceptions of key stakeholders in Pakistan and Trinidad and Tobago were mapped. The results show the inefficiency of the regulatory councils as one of the main barriers in developing a Continuing Professional Development (CPD) model for the pharmacists in these countries. There is a need to make CPD mandatory and asking policymakers to bring coherent changes. This will be certainly be helpful to improve pharmacy practice in these countries.

6.2 Future Recommendations

The results showed gaps in pharmacists' training, education and research and this could be strengthened by building individual Continuing Professional Development (CPD) models in these countries. This could be very useful to help build a skilled and informed pharmacy workforce.

In future, there is a need to do quantitative studies involving multiple countries. There is also a need to include pharmacists from the hospitals as well as other stakeholders including research organizations. However despite the limitation of not having a hospital pharmacist, the data obtained from this study is contextually rich and the findings can be used to build the questions for a quantitative survey, as well as policy recommendations. The findings and key results from this study are also helpful to build the different aspects of a generic CPD model.

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8 APPENDIX

8.1 Appendix-1: Semi structured Interview guide for pharmacy stakeholders in Pakistan, Ghana and Trinidad and Tobago

Continuing Professional Development (CPD) for pharmacists in low and middle income countries

Concept of CPD

1- Do you know what Continuing Professional Development (CPD) is?

2-How in your opinion does it differ from Continuing Education (CE)?

Current status of CPD

3- Does such a model exist in your region? If yes, can you briefly describe what does CPD involve in your region?

4-Which professional body/Authority/organization is responsible for the development of CPD model in your region?

5-Is CPD compulsory?

Opinion

6- How effective in your opinion is the CPD in pharmacy practice?

7-How in your opinion should pharmacy schools in your region be encouraged to establish an approach for assimilating the CPD model in the current curriculum to produce CPD ready graduates?

8-How interested do you think your colleagues are/would be in following the CPD?

Plans/Ideas

9- As a pharmacy professional what can be the potential, contribution, expectations and support from your area in designing a CPD model for pharmacy practitioners

10-What could be the attributes of a pharmacy practice Continuing Professional Development model?

11-Can you explain/highlight the key components needed to build this model?

Solution to Challenges/ Barriers

12-What are/can be the enabling factors for the authorities which would create ease for them to partake in CPD in your region?

Role of Commonwealth Pharmacists Association (CPA)

13-How do you think Commonwealth Pharmacists Association can be a help in designing and implementation of CPD model in the current curriculum of the pharmacy schools nationwide?

Future Expectations

14-Where do you see CPD practice in your country in a 5 years' time?

Pharmacy Practice Research

15-How well developed is pharmacy practice research in your country? Is it just being carried out by the universities or is being done by the pharmacists in the field as well?

16-Is research incorporated into everyday pharmacy practice in your region?

17- Can you identify a few gaps in pharmacy practice teaching as you are involved in undergraduate training of pharmacists?

8.2 Appendix-2: Participant Information Sheet

Department of Pharmacy,
University of Huddersfield,
Queensgate, HD1 3DH
United Kingdom

PARTICIPANT INFORMATION SHEET

Continuing Professional Development (CPD) for pharmacists in low- and middle-income countries

Dear Sir / Madam,

We would like to invite you to participate in the above-mentioned research study and below is some information about the survey. If you agree to take part, kindly fill in the consent form and return by e-mail.

Study Description

The study intends to explore Continuing Professional Development (CPD) for pharmacists in selected low and middle income countries.

The objectives of this project are to

- To understand the stakeholders' views regarding Continuing Professional Development (CPD) and Continuing Education (CE) in Pakistan, Ghana and Trinidad and Tobago.
- To explore facilitators, barriers, opportunities and recommendations in developing a Continuing Professional Development (CPD) model for pharmacy practitioners in Pakistan, Ghana and Trinidad and Tobago.

- To explore future expectations related to Continuing Professional Development (CPD) for pharmacists in Pakistan, Ghana and Trinidad and Tobago.

Project Procedure

A semi-structured interview guide has been designed and participants from each country will be interviewed individually. The stakeholders involved in the research will be asked questions regarding their standing on the CPD that how important and beneficial its existence is and what sort of efforts are to be made in order to make it active in their country's current pharmacy practice/education system.

The participants are selected from the following departments of pharmacy

- Regulatory councils/boards
- Academics
- Community pharmacist.

The interviews conducted will be audio-recorded, transcribed and then analyzed.

Confidentiality and Trust

Participation in this study is voluntary; however, after giving the interview, one cannot withdraw from this research. Audio recordings will be deleted after the transcription is complete and all the identifying information will be deleted from all the electronic and paper resources. The data may be used for writing a paper or a report, yet to be established. Any details you provide can be quoted in articles or presentations; however, confidentiality will be retained.

Interview

The interview will last approximately 25-30 minutes; via phone.

In the final report the information shared by the participants during the survey must be quoted anonymously however individual participation will not be recognizable.

Finances for the study

The project has been funded by the University of Huddersfield, United Kingdom.

If you decide to take part?

If you accept this invitation, kindly fill the attached consent form and send back to us with a suggested time, date and your contact details. If you have any questions, please feel free to contact, details are:

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8.3 Appendix-3: Transcribed interviews

Timecode	Speaker	Transcript
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00:00:08	S1	Okay. So, let's just start with the concept of CPD. Would you know about continuing professional development?
00:00:16	S2	It just so, about this thing. What I know is that, yeah, for professions that, I mean, I think that the concept of CPD for us is a bit new in this part of the world that the environment usually changes like, with changing technology, with changing scenario that everything, there are changes that happen within the profession as you go along and so that it's important that one is updated with of what's up to speed with the current or the changes which may be different from perhaps, what we studied during the time in the school and so part juniors professional development says to bridge that gap and provide that learning to professionals so that the updating on whatever changes are happening in the industry. That's my understanding of continuous professional development. Yeah.
00:01:12	S1	How do you think does it differ from the time of continuing education?
00:01:19	S2	Continuing education, what—I think that is sense likely different in the sense that continued education would probably take into cognizance and education and like, education that's another level for instance you have a level 3 and giving you all the best degree and you getting a Master's Degree. That's continuing education. That's another level but I mean, not necessarily be relevant to the industrial changes or changes within the industry but it's obviously an upgrade of one's educational level. That's the standard that I have.
00:02:07	S1	Alright. What's the current status of—does such a model exist in your country? And if does, can you tell me about it and what does it actually involve?
00:02:24	S2	It is so—so, currently, yes. We do have CPDs in Africa. The foreign countries have CPDs that, especially therefore, [inaudible 00:02:38] for instance and in medicine also and we are glad to take a certain number in CPDs within the year and every CPD, actually, not certain of number, yes, certain points such late points within the year. So, by the end of the year yeah, you have a number of points that you are supposed to hit via the institution that are accredited to all past CPDs. So, what happens is that those institutions, they get accreditation from the pharmacy council and accurately and the institution that are accredited to all past CPDs. So, what happens is that those institutions, they get accreditation from the pharmacy council or in the case of medical practitioners, medical and dental council. Do they get to evaluate the cost contents and then see what is that, maybe, to them, with this course, you're going to need just one point or this course would get you past score of 3 points. The accreditation is such and then during the year, we have the whole year to accumulate the points and we also are restricted in terms of what program study we attend accumulates the point. So far as those program are accredited by the council. That's how it works right here.
00:03:58	S1	For the pharmacy (Overlapping Conversation)
00:03:58	S2	I don't know if that adds to—sorry?
00:04:02	S1	For the profession of Pharmacy practice?
00:04:05	S2	Yes, for Pharmacy. Yes, for Pharmacy. Yeah. That's how it works.

00:04:08	S1	Which authority is responsible for the development of such a mode?
00:04:14	S2	So, like, I was saying, there are different and obligations that they love the mood you stand. At the end of the day, the model has to be approved by the Pharmacy Council of the country. So, Ghana points that it's the Pharmacy council, yes. So, what some organization is joined by CPD or administering the CPD, they need to get a point from the Pharmacy council of Ghana.
00:04:45	S1	So, the CPD is compulsory in your region? Registration renewal (Overlapping Conversation) except....
00:04:51	S2	That's compulsory. Yes.
00:04:53	S1	Alright.
00:04:53	S2	That is compulsory. Yes, it's compulsory. Maybe about two years ago that they started introducing CPD and then the last year, it's been enforced. So, it's a bit new for us but compulsory for renewal of pharmacist registration every year
00:04:58	S1	How effective do you think the present CPD model is right now? Whatever is being practiced or whatever is being followed in you region, how effective in your opinion do you think it is?
00:05:13	S2	Well, in terms of (Laughs)—in terms of the learnings, I don't think it's that effective. I think that, one example, because what happens is there are a lot of people who are really busy and so, what people do is that they just go sometimes and then write their names and other institutions because obviously, you are paying for the CPD. So, they go—they make the payments sitting for an hour or two and then they disappear. And also in terms of the cost contents also, I realize that most of the cost contents are say, learn towards hospital pharmacy and I mean, for instance, most of the CPDs maybe we are looking at diabetic care or some other aspects of hospital practice. But you know, there are different aspect of pharmacy practice. So, many people in other aspects of other areas of pharmacy practice do not really find the CPD relevance to what they are doing and adds—but it add points in time and so, I mean, they don't see why they should spend time soliciting those CPDs but of course, you need that every year, so another thing that every year, you need to renew your pharmacy license with the Pharmacy Council or you cease to be recognized as a pharmacist. So, in doing the renewal of the pharmacy license, you need to comply the evidence of having attended certain CPDs, so because people need that for the license, don't pay and then sit through the course for maybe an hour or two and then leave. But in terms of the actual learnings, I don't think gets in very beneficial.
00:06:59	S1	Right. So...
00:07:03	S2	Yeah. Does that make sense? That's all to you or....(Chuckles)
00:07:07	S1	It does, of course. In order to produce CPD ready graduates, what is your opinion. What should pharmacy schools in your region should do. How can they be encouraged to establish an approach or to incorporate the concept of CPD in the current curriculum? How can they be encouraged?
00:07:31	S2	Okay. So, I think that [inaudible 00:07:34] the curriculum should be made more practical so that they should be more on the field work as opposed to classroom learning. So that, I mean, it is more practical.

		<p>People have the sense of, okay, they actually practice and so that, whatever you are doing within your field of practice is the continuation of that learning. So, for somebody who is, let's say, I mean to be a true pharmacy. So, what I'm doing—what I do basically does not—I do not, necessarily come into contact with a lot of [inaudible 00:08:10] in my line of work. So, you cannot do a CPD that would ask me, like, basic pharmacy stuff that are related to prices and administering prescriptions or seeing to prescriptions. You understand? I won't find that relevant to the core of what I'm doing now or where I'm headed. So, I think that it should be first why it should be relevant to practice in the industry. Whatever has been meant and showed in the classroom knowledge. That's should be on the ground of industry alignment also with what has been taught in the classroom so that, once there's that sort of alignment, it's easier for people to continue. Yeah, with the development. And then the other thing also is that, I think that the concept of CPD for us is a bit new in this part of the world and it's only, maybe about two years ago that they started enforcing it. And then the last year, it was only and I mean, it was a requirement but it was not enforced. But this year, it's been enforced. So, it's a bit new for us. So, I think that it is incorporated and within even right from the beginning, in the pharmacy training that right from the start, you see, you know that. Even after graduating from the school of pharmacy, there is continuous development that has to be none or this is a continuous learning that should be done and it would help to make prepare or yes, CPD ready graduates and once it is incorporated—once the learning is inviting them from school. And then also in the programs and it's—they could organize programs like [inaudible 00:09:57] campus if you have the CPDs that are being organized that the students—with students, that gives an opportunity to inform [inaudible 00:10:08] within the students and then the practicing pharmacist. You have that sort of interaction life from school and so once you come out of school, you have that sense of, this is something that happens even after school.</p>
00:10:26	S1	<p>Alright. What do you think the level of interest of your colleagues or your subordinates or the pharmacy practitioners have? How interested do you think they are in following the CPD model?</p>
00:10:41	S2	<p>So, as I said, I think—so, most people are interested in just obviously, I think that's natural for people. Everybody is interested in development but people are really interested in developments that is relevant to what they are doing or what they can internalize or what they can do. And so, how to test now. People are only interested that's because of how the model is designed and as I said, it's looking at just, it's not a holistic and continuous development but it's just looking at one aspect of pharmacy because of how the model is and the interest is simply to get the points so that you can do your license but I don't think the interest is really in the learning. However, in my line of work, I do on-the-job training. I have to train and every now and then to for my work. The way that I do my organization of course, that I do training, extend our organizations. We are glad that I do training. So, if the trainings that I do that borders of my work can also be recognized as parts of continuous professional development which is accredited by the council that whatever training that I'm taking up on the job. Because that's also continuous development within the industry. So, if it's a training that is relevant to the industry and is also relevant to my job and it can be recognized by the pharmacy council then, I think that, that would pick people's interest more because then, it's aligned to what they are doing and also, it's also, practically it's also aligned to what the industry, the changes in the industry is a win-win for everybody as it is now, I think that the interest only lies in certain points for people to do their license, well, except for those in hospital practice who</p>

		probably, may find it a bit useful but even for them, I think they are beginning to find it a bit monotonous because it's the same topic year and year and it's coming a bit more yeah.
00:13:08	S1	Alright. Thank you. As a pharmacy regulator, what do you think, what can be the potential contribution, expectations, and support from your area. If we design a CPD more for the pharmacy practitioners especially if you talk about community pharmacist, what about the practice in community pharmacy or other professions, other branches of pharmacy practice, I must say. So, what can be the potential contribution, expectation, and support from your area?
00:13:50	S2	Well, okay so, I am not a regulator per se. I mean, I work in regulatory affairs but the regulators are for instance, the authority. The Food and Drugs but, because I work with the pharmacist company, so, I mean, I do regulating affairs with the pharmacist in the company the regulator in this instance will be the pharmacy council and then the FDA. So, if you want me to speak to my contribution, my contribution probably will be to provide contents that is relevant to the industry. The changing aspects of pharmacy practice within the regulatory affairs. So, probably what my contribution will be, will be to provide a sort of content. Now, in terms of what the contribution of the regulators will be, I think that one, their contribution has to first of all, stem from be themselves, bringing themselves up to date on—okay, so I think that's the main contribution. The first one has to do with training for themselves or capacity building for the regulators themselves where the regulators themselves are up to speed with the current trends in multi-disciplinary areas of pharmacy practice so that with the modules that are presented to them, they can work probably few and then analyze and see that, okay, this is relevant for the practice or will suggest areas that modules can be developed for continued professional development. So, building for themselves and also reviewing the contents based on their capacity and show that the models or the modules that are developed for continuous professional development are relevant from industry or relevant for industry in terms of where we are going as a country and then also global where pharmacy practice is headed globally. That would be the contribution yet.
00:15:57	S1	Alright.
00:15:59	S2	And then maybe to also partner now or list with other international or collaborates with other international organizations who are administering CPDs for, there are members and share best practices more or less.
00:16:15	S1	Great. I've mentioned the list in my interview about why I hope you can see the themes. Would you be able to prioritize the given list as per your area of practice needs as per your region needs? Would you be able to prioritize this list?
00:16:44	S2	Okay then, as that list that has, the list of the 1 to 12?
00:16:50	S1	1 to 9.
00:16:54	S2	Okay 1 to 9. If you have chance and ideas, right?
00:17:00	S1	Yes.

00:17:03	S2	Okay. Yeah. So, you'd want me to do that now?
00:17:13	S1	You can do that later on but it's really hard to catch you. (Laughter)
00:17:20	S2	Look, it's the time of the year. It's the time, this time, we close our year in November, so this time of the year is really crazy like so much work and then currently also, my colleague in Istanbul one of my [inaudible 00:17:32].
00:17:33	S1	The next question would be, what do you think can be the attributes of a pharmacy practicing or practice CPD model? As my research is based on what could be the attribute of a pharmacy practice CPD model? What can be included?
00:17:53	S2	For the barriers that had it's the barriers.
00:17:59	S1	No what are the attributes of a pharmacy practice CPD model?
00:18:03	S2	Oh, what are the attributes?
00:18:06	S1	Yeah and...
00:18:05	S2	Sorry?
00:18:07	S1	Like, yes. Can you please highlight any key components which can be used and which are needed to build the sort of a model for this sort of a mind question for you.
00:18:21	S2	Oh, okay. Okay. Alright. Okay, then. So, the key components that should go into the CPD model, right?
00:18:28	S1	Yes.
00:18:29	S2	Okay. So, I think that what components obviously should be what maybe we can—the first component should be, what is the continuous vision. So, what is currently happening in terms of whatever area is this like, one [inaudible 00:18:46] and you can look at it in terms of what is the current situation and then you can look at what are they changing or the imagined trends and that can be another component. It's also the CPD related to whatever topic it is. I mean, this is something that gets acquired to. We can look at what the current situation is. What the imaging trends are and perhaps what does feature looks like. And then maybe for example, the final thing that I would like to see should be how we can position ourselves with what we have currently. How we can position ourselves be able to take advantage of the opportunities or the changes that happen soon. Maybe, those will be my fault and people will tent to watch.
00:19:34	S1	Great. I would like to know....
00:19:41	S2	Unless of course, you have a specific, sorry?
00:19:43	S1	Yes, so? Yes, you were saying something?
00:19:50	S2	Yeah, I want to say that, unless for course you have a specific area you would like me to speak to, yeah.

00:19:59	S1	My area of concern is basically pharmacy practice, so I have thoughts about it.
00:20:06	S2	So, yeah. Those will be, it's all—so, whatever area of pharmacy practice we are looking at, I think these are the three areas you can look at. What is the current—it it's for example, definite [inaudible 00:20:16] pharmacy or hospital pharmacy or if you're looking at [inaudible 00:20:21] or if you're looking at polypharmacy. Whatever topic you are looking at, I think that the key components what the current situation is and what's the imagined trans or changes, what the future looks like and what we can do as pharmacist or how we can position ourselves within the changes that are having to take advantage of what the, that looks like?
00:20:48	S1	Okay.
00:20:48	S2	That should be like?
00:20:51	S1	Alright. I would like you to comment on the enabling factors which can sort of create comfort or a bit ease for the regulatory authorities to incorporate CPD in your region? What can be....
00:21:10	S2	Okay.
00:21:10	S1	Yeah, yeah. I hope you don't know about yet.
00:21:13	S2	Bye bye. I'll see and perhaps maybe strictly as can be. So, what are the major challenges, is that, most of the CPDs are face to face CPDs where you have to leave to leave. Maybe if I were to attend CPD, one CPD perhaps only one credit point or two credits points. I need to this time of work, why I said, it's been for two or four hours somewhere and then attend the CPD and for many people, it's very challenging. It means that your dream is about four or five times just to gather the points that you need. So, if the CPDs can be made electronic way, you have, let's say, the online, you can go online. The modules are there and you can take them because, I mean, we do have trainings within our obligations. All our trainings are online. And then, there's an assessment where you should you should take below the trainings will show that you have actually started with the training and you imbibe something. So, if the CPDs are made electronic as opposed to, I get physical, face to face thing that has to happen, that will be more, I think acceptable and then also, I think that if the CPDs are organized and I don't know how to or also, we have practice groups. We have like, for instance, we have the industrial pharmacist. We have the hospital pharmacist, the community pharmacist and then within these practice groups, there are meetings. So, if the CPDs or the meetings that members will have to attend anyway, so, if the CPDs are administered first, maybe other practice would made to ensure that practice maintains. Maybe they can administer one or CPDs for everybody there anyway. Then you can save time on having to take time, another time of attend the CPDs. So, I think that to allow this thing is about ensuring that access or ease of assessing the CPD. Then, secondly also, the contents. The contents of the CPDs have to be relevant because if to take a CPD that maybe talks about an aspect of pharmacy that I am not practicing or I don't intend to practice, then it become very laborious or tedious for me to take that CPD that I'll do it if that's the requirements except that only something that I'll do generally. So, I think that the CPD should also be tailored towards in practice areas and it should be, yes. So, practice area CPDs should be developed and then—because that's the essence and there's no point administering a CPD for one aspect of pharmacy to another and for practitioners and it means, that's more continuous professional

		development too. I think that, that's the content of the CPD should also be looked at and then also there should be ease of access where I advised is electronic online or during the meetings or the practice.
00:24:33	S1	Great. How do you think Commonwealth Pharmacist Association can be a help in the implementation of CPD model and that kind on pharmacy practices to move your region? Or in the improvement of incorporation of CPD model in your current practice?
00:24:56	S2	With the law, I think that what the Commonwealth Pharmacist Association has is that under your umbrella, you have a number of countries represents pharmacy practice, yeah. So, first of all countries and I believe that in a number of them have already had CPDs and/or model, even administering CPDs for some years now. So, maybe you can create that platform or information sharing of what is happening in the countries that have already started administering CPD as opposed to a country like Canada which just started with that process. If you have that platform, so on interaction and then you can share your help. That will be a good start and then also maybe, you can also provide an expertise or aspects who can help with the tool, what I talked about, the fact that, digitalizing the CPD are major challenge and that's what we need to do. So, and there are tools of systems that can be accessed by the developers over the—to digitalize or make the CPDs electronic, then that should go through. It should also be good maybe if you have any dashboards in terms of what is your main evaluation dashboards that you have to assess how the performance is and then you have the market or you have the [inaudible 00:26:29] that would also a useful tool that will be [inaudible 00:26:31]with the [inaudible 00:26:32]. Those are the ways in which I think that the CPA can.
00:26:39	S1	Perfect. Okay. Hello?
00:26:45	S2	Hi.
00:26:46	S1	Yeah. My next question is regarding your future expectation. Where do you see this practice in your region in five years time? I think it's going to be electronic by then. I hope.
00:27:05	S2	Yeah. Sure. My next—I see that the first thing that I see is, CPD more that five years is electronic and there is easier access or access to that and I also see a model where I can even think at CPD have maybe in another country that is recognize this maybe a harmonized model sort of where they've been able to harmonize the system so much which be treating the country. Maybe, that will be another thing that the Commonwealth Pharmacist Association can take up. Since you have all of these associations under your umbrella, you can work towards harmonizing the CPD such that the exact sort of harmonization even if I do not wait because you know that, I know more pharmacists who make training going to, from me, in a different kind of be or may not be recycle awakening kind of at anytime as the days passes where people come at your friend's markets outside of yeah, their country and yet maybe while you are taking models in the country where you're working at anytime but those models may not be recognized in your own or home country. So, I see as if somewhere the model is a harmonized model or harmonized platform where a CPD that I take, let's say in Kenya, would be recognized in Ghana so that I don't need to take while I don't need to involve CPD. I don't like this all.
00:28:44	S1	Correct. Good point. Any other comments you would like to share regarding this. Do you think it will prove to be effective and what's your encouragement to our service?

00:28:59	S2	Yeah. I think you'll be, I get this visit or interview useful. So, maybe you can share the outcome with [inaudible 00:29:08] with the latest and the way forward. Yeah. I would also be keen on knowing what the outcome.
00:29:16	S1	Right. Okay. Thank you so much, This ends my interview with you.
Timecode	Speaker	Transcript
00:00:04	S1	So, let's start with the concept. What do you know about continuing professional development? What do you think it is?
00:00:14	S2	Okay. Continuing professional development is a form of an educational programme for a group of people called professionals. When new practises, new ideas, new modern practises of- modern practises, that's we help improve the way they are serviced towards their community or service to the society. Ways that we can improve on what they do already.
00:00:58	S1	Okay. How in your opinion, does it differ from continuing education? Are you familiar with the term of continuing education?
00:01:10	S2	Okay. Continuing education is basically like it's a progress. Let's just say that someone has been to school, been to secondary school the person needs to go back to do maybe a diploma or something. That is continuing education. It's totally different from CPD. As for CPD, it belongs to a certain group of people, a certain group of professionals where modern trends of what to improve their practise and stuff like that are taught and discussed.
00:01:56	S1	Okay. So, what exists in your region? Does such a model exist in your region of CPD? And can you tell me what does it involve?
00:02:10	S2	Can you come again? The line broke somewhere in between.
00:02:15	S1	Okay. I am asking that does a CPD model exist in your region?
00:02:24	S2	Yes, absolutely. Absolutely. There are so many. I'm a pharmacist. Way have so many different categories of CPD programmes for different pharmacists who practise in different areas. For example, we have separate CPDs for people who are within the regulatory space. We have separate CPDs for people who work within the clinical setting. We have CPDs for people who work in the community space.
00:03:02	S1	All right. So, what does it involve? What does it comprise of?
00:03:12	S2	Okay. I don't know what you mean what it's comprised of. If you could ask again for me to get what you mean? What's going on?
00:03:24	S1	Yes, sure. What does CPD involve? Like, what's in the CPD model? What do you have to do?
00:03:34	S2	Okay. First of all, what happens is they are usually organised at a venue where you usually go, you book in. Where you need to book in advance that what you participate in CPD through [inaudible 00:03:57] moderator. There's a moderator there to do the CPD. Usually there's a resource person too there. And

		after that, even sometimes we even been bring into groups first to discuss this within groups, solve [inaudible 00:04:16] problems that we've learned and to implement the things that we've learned there before we leave. And then usually, certificates are issued out to other participants of the CPD.
00:04:31	S1	Okay. So, both CPD and continuing education are being practised in your region, right?
00:04:40	S2	Yes, yes, absolutely.
00:04:42	S1	Okay. So which professional body is responsible for the development or regulation of CPD in your region?
00:04:53	S2	It's Pharmacy Council.
00:04:55	S1	All right. So is CPD or CE, both of them, if any of them is it compulsory?
00:05:07	S2	Yes. There are points that every pharmacist is supposed to hit within the year. And each CPD that you go, you accrue points. And you have a minimum of 10 points that you need to accrue that you need to hit within a year. If you don't hit that, you are not eligible to practise the following year, they will not allow you to renew your licence as a pharmacist the following year.
00:05:43	S1	All right. So, let's come to your opinion. How effective do you think present CPD model is in pharmacy practise?
00:05:58	S2	Okay. Well, the topics that are discussed, basically are diverse in a way. It helps, me for instance, I've benefited too much from CPD. There are certain things that I didn't know. And even modern trends or treating certain diseases, I got to know them through continuing education. I finished school way back 2009. There are modern trends which certain diseases are handled which I wouldn't have known if not for these CPDs, so I think it's a good thing.
00:06:56	S1	Okay. So, the pharmacy schools in your region, do they have CPD model in their current curriculum/
00:07:06	S2	No.
00:07:07	S1	They don't?
00:07:10	S2	No. At the pharmacy schools we do not have CPD models there. Not that- during the time that I was in pharmacy school there were nothing like that.
00:07:25	S1	Okay. So how do you think they can be encouraged to establish such an approach to involve the CPD model in the current curriculum? How can they be encouraged?
00:07:39	S2	Okay, well, maybe I would say that maybe the dean of for example, Pharmacy Council was the regulatory body for regulatory pharmacists. They can talk to the dean of the faculty of pharmacy school at their level to let's say incorporate it into maybe something like social pharmacy and they can slot a course in there and talk about maybe the extent and what it brings to the pharmacy profession. So, I think that's something that could be done.

00:08:29	S1	So, can you tell me how interested you think your colleagues are in following CPD model and completing CPD hours? What's their interest towards it?
00:08:44	S2	Okay, you see, as for that one, it's a mixed one. It's a mixed one because most people participate in it because they really want to be eligible to practise the following year. Not really their motivation that they are going to learn new things, but most people, their motivation is that they are going to be eligible to practise the next year. But even sometimes myself, that's my motivation, but when I get there, looking at when we get to the CPD event, you get to know things that you- and you say to yourself, oh well, it's really worth it that I came, not necessarily the fact that I'm accruing points to let me be eligible to participate the following year. So, it's this kind of mix in a way.
00:09:54	S1	All right. So, as a pharmacy practitioner yourself, what do you think, what can be the potential or contribution, or what are your expectations and how much support do you require from your area in designing a CPD model?
00:10:18	S2	Well, okay. As for [inaudible 00:10:23] of designing a CPD model, but I don't think all the CPD models, all the CPD training that I've been to, I do not have any issue about it. I think it's practical, it's straightforward. And it's particularly straightforward. Maybe sometimes the only one that I found quite controversial was malaria kids testing before catching malaria over here, which the idea is good, but maybe the implementation because most, the malaria case that we have, we don't know whether they were [inaudible 00:11:09]. Most of them weren't responding very well, it wasn't [inaudible 00:11:16]. We kept on pushing that sometimes [inaudible 00:11:21] they are saying that we should test before we do. When you're testing a person negative, but you treat and the person gets fine, so what does it mean? And the debate went on and on and on and on. It was, I think, was a government programme also so it was just allowed to slide. Secondly, I think publicity of the CPD is what I think is a challenge. Maybe a little more publicity about, it would be very, very, very good and maybe something catchy about it is fine. But you just put it out there just straightforward, if you're interested, come, if you're not, don't, which I think is not good enough. A little bit of publicity about the various CPD topics will help.
00:12:25	S1	All right. There is a list of themes which I mentioned in the interview guide if you have seen, I would like you to prioritise them as per your area of practise and your country needs. Can you do that?
00:12:51	S2	Okay. Is it the one that [inaudible 00:12:54]?
00:12:58	S1	Let me tell you which one is that. You know, the last document I shared on the 11 th of November?
00:13:06	S2	Okay, all right. Is it the one with the self-assessment, self-development (overlapping conversation)?
00:13:09	S1	Yes, yes. So, can you prioritise them? Because, as you told me, that CPD is being followed and you have been to a few events as well. So, these are the teams which usually are covered in most of the CPD models around the world, right? So, can you prioritise them as per your idea of the need, which is, you know, basically there in your area of practise?
00:13:41	S2	Okay. All right. I think- okay. So, the first one that I mentioned will be the first one and the last one will be my last one.

00:13:58	S1	Okay, so you think that...?
00:14:00	S2	[inaudible 00:14:00].
00:14:01	S1	(chuckles) So you're basically saying that availability of resources for following of CPD is the last one?
00:14:12	S2	Yeah. Okay, no. You've asked me to privatise them, you're asking me to rearrange this in my other priority, if I understand you?
00:14:21	S1	Yes, yes, yes. Yes.
00:14:25	S2	Okay. So, I will pick the self-assessment as one.
00:14:34	S1	All right.
00:14:42	S2	I'll pick availability of resources for following of CPD as two.
00:14:52	S1	Right.
00:14:57	S2	I will pick skills development as three. And I'll pick professional development through work experience four. And I'll pick keeping up to date five. Attending CPD events and workshop six. And requirement of compulsory CPD points seven. I don't know whether I missed something, but.
00:15:44	S1	Keeping up to date and continuous learning, I think. But that's fine. I get the main idea. But it would be better if you number it yourself, because it's being recorded, and I need to transcribe it as it is.
00:16:02	S2	Okay. All right. So, keeping up to date, I think, okay. I think my last one will obviously be requirement....
00:16:14	S1	Of compulsory CPD.
00:16:16	S2	My last point will be formal education of CPD.
00:16:21	S1	All right. Thank you. What do you think can be the attributes of pharmacy practise CPD model? Of course, it's sort of something, how effective can it be. Because as my research is for all the low income and middle income countries, so, I would be designing a model for the low income ones. So that's why I've been asking you about you know, all these things. So, can you please highlight any key components which are needed to build this model, which are like very important?
00:17:08	S2	Okay, I think that hands-on training is absolutely the [inaudible 00:17:20] of all this. Hands-on, what I mean is that if every session of CPD there is a break where people are allowed to try one or two [inaudible 00:17:40] at least even if there are a whole lot of things being said at a CPD programme by a moderator. But the moment you break into sessions is kind of practical and it prints so hard on your mind. At least you go away with something rather than just somebody standing there telling you a lot of things for you to try to absorb. So, I think that there should always be a practical section of CPDs where the participants are allowed to rehearse all that they've learned. Typical example, if there's a CPD for safety issues or ways to handle emergency things. If the moderator or the moderator or the resource person talks about when someone collapses this is what you need to do and perform. If at the end of the session there's no

		practical section for the participants of the CPD to try and do it at the CPD event, I'm sure we are likely to forget it. But the moment we do them practically there it sticks and probably sticks forever.
00:19:06	S1	Okay. So, what do you think can be the enabling factors for the authorities or the Pharmacy Council in your region for example- incidents that would actually create some ease so that they can implement the practise of CPD in your region, make it more common? What can be the factors? How can it be made a bit easier for them so that this practise gets implemented almost all over the country?
00:19:47	S2	Okay. As for, as for Pharmacy Council, I think that maybe they will have to- their human resource will have to be stepped up and little bit for them to be able to monitor these CPDs and what is happening and how- for them to monitor at least our-, the output of these CPDs. Currently, not that I know of, but I think that they themselves should be picking up service about CPDs they are responsive and everything . And even publish it annually. It would help them if [inaudible 00:20:36] which CPDs were beneficial, which ones weren't beneficial based on the response that they get from the study. But they are not resourced enough. Over here, their office is just a small office, you can count the number of people who works there. I don't think they have enough people to even help them collect this information.
00:21:00	S1	And what do you think the background reason is? Do you think there's a scarce availability of funding or something of the sort that they are not able to accommodate more human resource?
00:21:15	S2	Yeah. Basically, it's a government institution, so I will say that simply the government cannot hire more.
00:21:27	S1	Okay. I hope you know about the Commonwealth Pharmacist Association.
00:21:34	S2	Commonwealth?
00:21:36	S1	Yeah. Commonwealth Pharmacist Association.
00:21:42	S2	Commonwealth Pharmacist Association.
00:21:43	S1	Yes.
00:21:47	S2	Okay. No, I don't, but go ahead and ask me what you want to ask me and see.
00:21:54	S1	Okay. It's an association which include a lot of countries which are middle income, lower income, and they work for them. And then there comes the higher income countries, which basically, you know, are sort of at the president or they rule over it. And they basically provide a facilitation funding, like, you know, such unions are, such bigger (overlapping conversation).
00:22:29	S2	Okay, okay. All right. Okay, I get it.
00:22:34	S1	Yes. So, do you think- how exactly can Commonwealth Pharmacist Association help in implementation of CPD model in the current pharmacy practise of your region? How do you think they can be helpful to your Pharmacy Council so that CPD system can be prevailed?
00:23:00	S2	Okay. Well, basically what I will say is that Commonwealth Pharmacist Association will help because excuse me to say, pharmacy practise in London or in UK is far advanced than that of what we do here in

		Ghana. So, at least with the international, it gives an opportunity for us to also emulate the standards where UK pharmacy practise has reached. At least we have a reference point to compare with, so I think it's good. And two, as for funding and all that, I believe that the regulatory body here should be up and doing and willing to cause a change or to improve on standards of pharmacy practise. If they are not willing, no matter the funding that you bring in, it will [inaudible 00:24:12]. So, I think that it starts from Pharmacy Council here, their willingness to affect good standards in pharmacy practise. Other than that, whatever that Commonwealth Pharmacist Association will bring on board, they will just [inaudible 00:24:36] because they themselves are not motivated to do it. But they should be self-motivated to do it at least, if not for anything, for the fact that the activities affect people's lives in this country.
00:24:54	S1	Okay, I would like to ask you about your future expectations from the CPD model practise as in where do you see it in your country in five years' time?
00:25:09	S2	Okay. In fact, I'm an optimistic person, I believe that pharmacy practise is going to get better, and standards are going to increase simply because people are travelling, people are trying to catch up, there are more pharmacists here, there's competition. That in itself is forcing the system itself to be competitive, so a competition comes with finer practise and higher standards. So, I think that that's simply the way forward. I'm not too optimistic that Pharmacy Council is going to set huge standards or improve standards for us to follow, that one I'm not too optimistic, but I'm optimistic still because a lot of people are getting into pharmacy practise. That in itself sets an internal competition.
00:26:19	S1	So, where do you see CPD model practise?
00:26:25	S2	Okay, well, I think that it shouldn't necessarily be confined in a classroom only or in a certain space only. For some of them, it could be conducted online, for some of them, it could be done in the confinement office space. So, I think that an electronic way of doing will also be fine, simply because me, for instance, I have a very tight schedule. So, if I need to be at a confined place within a certain time, it's going to be tough. Maybe other time I may have equally important things to do. But if it is an online programme, maybe when I'm closed after 10:00 p.m. and I'm relaxed at home, I could just start- I could just log on and start doing the training at my own time. It could even be a Sunday or a weekend which may be okay for me. But if I need to be at an event [inaudible 00:27:37] particularly space are usually done during the week, between Monday and Friday.
00:27:46	S1	Great. I would like you to comment on this survey. So, do you think will this survey be effective? Will it prove to be effective?
00:28:00	S2	Yeah, it depends on depends on the next point of this survey. If your findings, if you are really going to push for its implementation of course, it's going to help. But if it's just going to be shelved, then there's no point.
00:28:24	S1	Okay. So, do you encourage set surveys ?
00:28:35	S2	Oh yes. Yes, I do. I do.
00:28:42	S1	Great., that's the end of our interview. Thank you so much for your time.

00:28:48	S2	All right. You're most welcome.
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Timecode	Speaker	Transcript
00:00:01	S1	All right.
00:00:03	S2	What do you know about continuing professional development?
00:00:08	S1	All right. So, it's basically, in my opinion, training that professionals should be in whilst they are on the job, mainly to update them on current training and also, I think they have to speed on things that they learned previously.
00:00:29	S2	Great. So how do you think it differs from the concept of continuing education?
00:00:37	S1	All right. So, I am thinking that continuing education could be anything you want to learn and it may or may not be related to your profession, whereas continuing professional development have to do mainly with whatever profession you are in. So, you could be a pharmacist and you could decide to learn about psychology without continuing education, but I mean they really be in line with whatever your professional development is directly. That's my opinion, you know, about the continuing education and, you know, CPD.
00:01:18	S2	Does such a model exist in your region?
00:01:22	S1	At the moment, so working as a practitioner in pharmacy, you've got to undertake CPD every year and there's a minimum number of credits you need to acquire, or I'd say, you know, that's continue practise [inaudible 00:01:40] such a model like this.
00:01:45	S2	Which professional body is responsible for the CPD model in your region?
00:01:55	S1	The Pharmacy Council.
00:02:01	S2	Yeah, so which organisation or which authority is responsible for the implementation of CPD in the following and the monitoring of CPD in your region?
00:02:13	S1	The Pharmacy Council.
00:02:14	S2	The Pharmacy Council of Ghana?
00:02:17	S1	Yeah.
00:02:19	S2	Okay. A bit of your opinion about the effectiveness of CPD in pharmacy practise?
00:02:30	S1	At the moment, from my perspective, you've got to take it to continuing practises. But at the way that people are doing it for the right cause, if you know what I mean, I mean they might do a variety of practising, so maybe just attend the CPD and as well there to, all right, go for the CPD and gain the

		knowledge. So, I think the main pushing factor is the fact that people want to continue practising so they will acquire the point, all right? So that's what pushes them to go. We are [inaudible 00:03:08] at the end of the day so we can't really know whether they are actively doing that, being responsible or—and that is the issue.
00:03:18	S2	How, in your opinion, should pharmacy schools be encouraged to establish an approach regarding CPD so that CPD-ready graduates can be produced?
00:03:34	S1	That's kind of like tricky because, I mean you get continuing professional development on the job, all right? So, I mean, the curriculum is going to be designed like that it's meeting current demand. But when graduates have finished, they obviously need continuous professional development because trends will be changing every now and then, so I believe, yes, graduates can be trained to be ready for it but with regards to incorporating CPD into the curriculum, I think the [inaudible 00:04:08] to be teaching current trend so, you know.
00:04:17	S2	What's the level of interest your colleagues have in the following of CPD?
00:04:28	S1	When my colleagues—I'm talking about my colleague lecturer or my colleague pharmacist because I feel lecturer and the pharmacist are tend to be two different fields where I think [inaudible 00:04:39] that question.
00:04:45	S2	As an academician.
00:04:48	S1	As an academician. So, I think it involves whatever profession you are in because we are expecting academics that are not actually that professional body so they may not need to take CPD. All right? But if you are committed to one way of taking CPD then at that point, then more of the professional body mandating you to [inaudible 00:05:07] your practises. Because you don't know [inaudible 00:05:11] continuing to be an academic [inaudible 00:05:14] the CPD to continue to be an [inaudible 00:05:16] professional body it belongs.
00:05:20	S2	Yeah, of course.
00:05:22	S1	And this is what I mean, actually I can't say for academics in general but I can say for pharmacist because pharmacists [inaudible 00:05:26] if you want to continue pharmacy, you've got to take these training module not only because you are pharmacist but because you are an academician.
00:05:40	S2	Great. So, as a teaching professional, what can be the potential, the contribution, expectations, and support from your area?
00:05:53	S1	I mean, if you know the curriculum, you know, that those are being taught before they graduate, so it's up to you to modify in this current trend or if that is [inaudible 00:06:04], then you can liaise with the [inaudible 00:06:09] throughout whatever current trend that's happening to them. Or you could give [inaudible 00:06:16]. There are couple of ways that, you know, as a teacher or academics you can equally impact whatever CPD professional or whatever that professional body they belong to that they can...

00:06:38	S2	A few things have been mentioned which are covered in most of the CPD models which are being followed around the world. Can you prioritise them as per your country and the area of practise?
00:06:55	S1	All right. So that is like that one to nine you've got there, right?
00:06:59	S2	Yes.
00:07:02	S1	Oh, I think skill development is first and then skills assessment. Then continuous learning and keeping up-to-date I think, in my opinion, that's same thing to like keep them together. I don't know how you do that, like people told them to [inaudible 00:07:20]. I'd go for availability of resources as my next one. And then requirement of compulsory CPD points and then attending the CPD events and workshop, and then professional development through work or experience and then finally, formal education of CPD.
00:07:54	S2	Great. Nice. So, what could be the attributor for the pharmacy practise CPD model?
00:08:04	S1	[Inaudible 00:08:03].
00:08:09	S2	Sorry?
00:08:09	S1	[Inaudible 00:08:09]. Because at the moment, a couple of people are going to travel to attend CPDs because they are not [inaudible 00:08:20], all right? But if you got the role of CPD and it's running in the [inaudible 00:08:26] aspect of the country, people wouldn't need to [inaudible 00:08:30]. And I think the CPD, not to mention quite recently there have been a couple of [inaudible 00:08:38] CPD, so I think that is mainly addressing those issue but then it was a challenge of [inaudible 00:08:44] that in my opinion is an important or critical attributor of the pharmacy practise CPD model.
00:09:02	S2	Can you highlight a few key components which should be there to build this model?
00:09:10	S1	I mean, centralising the trainings I think, I think that is very important. But if you would have them by workshop or seminars, it shouldn't be too much centralised or, you know, move around. I think that is the major issue or key issue for me.
00:09:35	S2	Okay. Can you please explain how your authorities would face a bit ease if they would want to incorporate CPD in your region or the maintenance of CPD in your region, how can they be provided a bit of ease? What can be the solution to the barriers they face?
00:10:05	S1	Well, at the moment, it's a [inaudible 00:10:07] thing. I mean, you have to take it if you want to continue practising. You know, it's a law now so it's just a matter of making these accessible. I mean people would obviously go through whatever means to attend this but if their inconvenience is causing for them at the cost of [inaudible 00:10:29] because if you got the whole day to attend the CPD rather than a few hours in the day, I think it sort of worked well with the employer and then the employee but then if they are [inaudible 00:10:47] and you don't think it would be [inaudible 00:10:49] a bit of an issue, and then you need as well to continue practising so I mean, [inaudible 00:10:54] is the law and people do attend this and get a minimum credit needed to continue practising.

00:11:07	S2	But what I meant to ask was how the authorities can be provided a bit of ease so that it would be possible for them to monitor the CPD following?
00:11:21	S1	No, at the moment, they are monitoring that because [inaudible 00:11:25] to do with attendance and training [inaudible 00:11:29] the monitoring system. They know who attend them or don't attend. So, at the moment, they don't really have an issue with monitoring attendance. And once you attend—each member that belong to professional body and got an account whereby these credits are automatically logged on, so they are able to track and knew who have attended at the end of the year.
00:12:01	S2	You would be well-aware of Commonwealth Pharmacist Association; how do you think CPA can be a help in the implementation of following of CPD model in the current curriculum of the pharmacy school nationwide?
00:12:21	S1	I think the CPA can provide technical expertise. I mean, they can provide materials that are needed, you know, can provide access to information mainly, you know, [inaudible 00:12:40] if we're talking about skill and access to materials that are maybe needed to train these students. Because it's a bit tricky getting a hold of that in current trends but, you know, if you are not accessing these and made them available, so you know, academically, you have to [inaudible 00:13:01] fuse it into whatever time current curriculum or curricular in the pharmacy school. Whereas it's a bit tricky in the curricular not in the modified [inaudible 00:13:15], yeah, where it can be a bit tricky as well they could be [inaudible 00:13:19] these current trends that [inaudible 00:13:24].
00:13:32	S2	Great. And where did you see CPD practise in your country in five years' time?
00:13:41	S1	You know, I think it's [inaudible 00:13:41] because I mean, unless you don't want to continue practise in your profession, you would have [inaudible 00:13:48] but I think it gets the—I think it's still going to keep going on and anybody understand the importance of it, the fact that they need to attend the training to continue practising. So yeah, it's [inaudible 00:14:06].
00:14:10	S2	As a part of an academic, how well-develop is pharmacy practise research in your country? Is it just being done in the universities or it's being done by the pharmacists in the field as well?
00:14:27	S1	Well, no, I don't think that—I mean, we got pharmacists in hospital, mainly those in the hospital that are doing lots of research on, you know, on different aspect of potentially into their practise. So not just the academics, there's lots of research going on in the various hospital as well.
00:14:50	S2	Is this research being followed in everyday pharmacy practise in your region? Do they get updated, the pharmacy practitioners, do they get updated of the research and then incorporate it in the practise?
00:15:08	S1	I think it's institutional, whatever institutional research being conducted is presented to people in the institution and [inaudible 00:15:20]. If it comes to national research, I mean there are [inaudible 00:15:26] the journals , so it's just a matter of people trying to get a hold of them, so yeah. But when it comes to the practise itself, there are rules to [inaudible 00:15:49] practise which are very much [inaudible 00:15:52] standard treatment guidelines, so that is what it being too much followed. And what about the research decision to effect any change, it is effected at a national level, whatever [inaudible

		00:16:04] going to these changes on everything that are being conducted by the one individual, you know, and that's not going to be [inaudible 00:16:14].
00:16:19	S2	Can you please highlight a few gaps in pharmacy practise teaching, as you are involved in the teaching of undergrads?
00:16:31	S1	For a developing country like we are in, there's always that issue of resource. I mean, [inaudible 00:16:37] even though we are trying to incorporate a lot of the [inaudible 00:16:44] aspect in the training but then at times, the resources they are just not available to your institution.
00:16:57	S2	Great. Okay, thank you. This ends the interview.

Timecode	Speaker	Transcript
00:00:01	S1	So let's start with the concept first.
00:00:03	S2	Yeah, okay.
00:00:04	S1	What do you know about continuing professional development?
00:00:09	S2	Well it's- the whole idea behind continuing professional development, I mean my understanding is provide some form of education to professionals in this field and my field is my pharmacy, even at graduating from school, so you don't go still on a job and continuously updated on what's new and how better practice to give the best care to each client.
00:00:45	S1	Do you think it differs from the concept of continuing education?
00:00:52	S2	No by continuing education may not necessarily be professional education, I mean the pharmacies would go in in taking courses maybe in IT, in business, I mean it's continuing education but then it's not going to mean professional development or something relating to pharmacy, I mean their career that's what makes it a professional development.
00:01:28	S1	Let's talk about the current status of CPD practice in your region, does such a model exist in your region?
00:01:41	S2	Yes, we have a CPD in here as we go by, so practicing pharmacist is required to get in a more CPD point every year to renew the licensure, and so if you don't get those points you can't work essentially.
00:02:07	S1	Okay. Which professional authority is responsible for the regulation of CPD in your region?
00:02:15	S2	The pharmacy council.
00:02:17	S1	Right, so it's compulsory.

00:02:20	S2	It's compulsory for you need to practice as a pharmacist [inaudible 00:02:24]
00:02:26	S1	Let's talk about the importance of CPD, what do you think about the effectiveness of CPD, is the present CPD model which is being practiced right now, how important do you think it is?
00:02:46	S2	Well for me, I think it really went so fast, the models and all the little things is just same for the CPD [inaudible 00:03:00] and so that sometimes [inaudible 00:03:07] I mean we have [inaudible 00:03:11] online CPDs [inaudible 00:03:13] log on, and then just take a CPD course online for the [inaudible 00:03:18] or you can attend a seminar physically where you participate in the seminar, at the end of the day also you have the CPD points, so because they're- so based on this two, I mean with the online, and it has its own questions at the end of it maybe, CPD [inaudible 00:03:38] anyway, but then it's possible for me to get [inaudible 00:03:41] put on my hat up, not necessarily pay attention the whole time [inaudible 00:03:49]
00:03:53	S1	And how in your opinion should pharmacy schools establish and approach to incorporate CPD model in their curriculum so that the CPD ready graduates can be produced, that they would be having an idea about the graduate- after their graduate about what exactly is CPD?
00:04:14	S2	Thinking on that from pharmacy school even before [inaudible 00:04:21] every students you meet [inaudible 00:04:30] I mean it should be [inaudible 00:04:37] CPD for which you will have to every year are taking [inaudible 00:04:43] stay relevant to today [inaudible 00:04:48] register to practice in the country, if not, I mean you're- your name is on the books.
00:04:55	S1	So what's the level of interest do your colleague show in follow this CPD system, do they seem motivated?
00:05:11	S2	Some are motivated, some are not so motivated.
00:05:16	S1	Any reason?
00:05:20	S2	Oh, some are just [inaudible 00:05:27] you know, sometimes the similar, they've been organising at other parts of the country where you are not or it's really, really, really far for me, so sometimes the difficulty in accessing that seminar is what puts people off in a way, it's like, demotivates you, yeah, but only last year we have the CPD programmes coming online, so in a way [inaudible 00:05:55] so fine, in a way where people were put off, but now maybe there's some motivation because you know [inaudible 00:06:03] did those CPD courses [inaudible 00:06:08]
00:06:12	S1	Okay. So as a pharmacy practitioner, what can be the potential or contribution from your side, and what do you think your expectation in support from a CPD model is?
00:06:30	S2	Okay. In prioritising the [inaudible 00:06:42]
00:06:43	S1	No, I'm asking about what are your expectations at what can CPD actually do for you as an- and what can be your contribution in you know, improving the CPD model, what are you expectations?
00:07:03	S2	I think at the end of the day after that I'm always scanning the seminar or online course we take with less opinion, I mean it doesn't really matter the CPD if you know, there's no new information then there's-

		there's nothing there for you, your knowledge base, where it should be something new, what is going on, what's the new trend, in that way [inaudible 00:07:31] waste of time, and I mean there should be you know, the way to contribute is there should be feedback from- or a way to provide feedback at the end of every CPD programme, so whatever- I mean one of our challenges is where, there should be a way for a system to give- get those challenges and then improve on them subsequently.
00:07:52	S1	Okay So there's a list given, and can you prioritise that as per your area of practice needs and according to the requirements of your region- or requirement of the pharmacy practice in your region, can you prioritise that list?
00:08:13	S2	And the list is- let me go on to nine, so it's seven, nine...
00:08:26	S1	It's better if you just read it all for that you know, because it is easier for me to...
00:08:33	S2	Okay. So attend CPD events and workshops, have the ability of resource of growing CPD, official development through work or experience, keeping up to date, continuous learning, requirement for compulsory CPD points, school development and self-assessment.
00:09:04	S1	Right. So what can be the attributes of a pharmacy practice CPD model?
00:09:16	S2	This is not clear.
00:09:19	S1	As you know, the researches about developing the CPD model for the low and middle income countries, your country already has a CPD model, right, but what do you think what can you know, what can- or what all can be included in like, something you think the CPD does not include the model itself, the cycle itself, what do you think what other attributes of an effective continuing professional development model, what do you think what else can be included?
00:09:53	S2	Yeah, I think that having board that the models for the CPD is not skewed in any field course or areas, so whatever the field in they are practicing, I mean if I find something that's relevant to you and then you learn and go in that field.
00:10:25	S1	Okay. Can you please highlight the key components which can be you know, which are needed to build that sort of a model?
00:10:42	S2	I think it's mainly with the pharmacy council, I mean they are the body that council all of the CPD, and whether they are source for the various models as the resource process, it should be carefully selected, I mean with this on [inaudible 00:11:12] they should be carefully selected and then there should be some form of audit of what the case that they are going to [inaudible 00:11:20] or what it says as their [inaudible 00:11:24] CPD, so it's relevant to the [inaudible 00:11:29] at the end of the day.
00:11:32	S1	Right. So the authority, the pharmacy council of Ghana which is responsible for the regulation of CPD in your region, they must be facing a bit of barriers or challenges, so how can ease be created for them, what- how can they be provided with some sort of ease so that it would be easier for them to you know, regulate this model?

00:12:03	S2	I think it's high time that they make a lot of attempts [inaudible 00:12:10] I mean our tenants is easily [inaudible 00:12:13] electronically, so again the you know, the points can be credited to- base on your tenants so that CPD programme, it's easier that we- other than going [inaudible 00:12:26] trying to [inaudible 00:12:28] at the end of the day, they have challenges [inaudible 00:12:33] CPD and then probably because they didn't get [inaudible 00:12:36] to show, their points are not credited into the account or [inaudible 00:12:41] so once maybe [inaudible 00:12:43] electronically, it's easier [inaudible 00:12:46] as part of the CPD programme, you have there the points probably allocated, and there are no issues I mean regarding the [inaudible 00:12:58] at the end of the day.
00:13:01	S1	So you know, in order to regulate all of this and you know, giving the stability to the system or according to the requirements as you just described that a pharmacist needs to go through these things before you know, attending a CPD programme, how do you think authorities be- like what sort of challenges do they face, how come they are not able to o stabilise the system?
00:13:33	S2	Okay. So first that is just [inaudible 00:13:36] we are quite a number of pharmacist practicing now, so it's [inaudible 00:13:45] the way a CPD programme are structured, yet different from us [inaudible 00:13:50] and different locations of the country, so for the CPD, a lot of people turn up for CPD programmes [inaudible 00:13:58] how to properly organise and catch all the data of the people who attend specific CPDs you know, and the reason the locations of the CPDs [inaudible 00:14:09] and I think while we're obvious to sort of decentralise by going online, that way [inaudible 00:14:17] we don't have to necessarily travel like, kilometres like, several [inaudible 00:14:23] CPD programme.
00:14:26	S1	Okay. It would be...
00:14:28	S2	And now it's [inaudible 00:14:30]
00:14:34	S1	So commonwealth pharmacist association, do you have any idea what organisation is that?
00:14:45	S2	No, I don't know how they [inaudible 00:14:49]
00:14:54	S1	How do you think commonwealth pharmacist association can be a help for your current pharmacy practice in the implementation or the regulation of CPD model?
00:15:11	S2	I think mainly by providing resource materials for some of the CPD models [inaudible 00:15:24] it can come up with something relevant CPD models based on what is on where the current trend in the- or well developed nations, and then we provide the resources so that's [inaudible 00:15:45] we catch up towards the current trend in pharmacy practice, and I think [inaudible 00:15:56] who aren't as facilitated as some of the CPD programmes, then we will learn a lot, pass on, and then we're able to catch up you know, the current trends on [inaudible 00:16:07] are no longer- I mean there is a lot to learn also from them that way, and I think- and as whether this thing can also provide some sort of funding to facilitate with some of the CPD programmes and be the online programmes [inaudible 00:16:32] they're very similar so we can provide some, and then to cover the course [inaudible 00:16:38] and research material or the [inaudible 00:16:43] and et cetera, and- which is on the end of the day.

00:16:51	S1	Okay. What are your future expectations regarding the CPD practice in your country, for example if you see it in a five years' time, how developed do you think how- and what more things can be added?
00:17:08	S2	I think as the years go on in the next five years I expect to see a more streamlined CPD model where it's easier to assess the CPD courses, and we move more towards online CPD programmes where it's readily accessible by people, so far I mean there's internet that's more readily accessible to people rather than physical seminars, and then there should be a better way to catch that and then- and [inaudible 00:17:46] attendance to streamline the whole process at the end of the day, and there should be broader range in- that the models at the end of the day because the way I see- still see, we are lacking in some of the areas that we will have in terms of the CPD programme models and output, so we should see more, I mean [inaudible 00:18:14] pharmacy practice, more CPD models, and it should be more streamlined and easy- more easy to asses by everyone.
00:18:24	S1	Right. Any other comments you would wish to share regarding the study? Do you think it will prove to be effective and what's your level of encouragement for such study?
00:18:41	S2	I think at the end of the day, the [inaudible 00:18:46] benefit especially to the low and middle income countries where CPD programme is still [inaudible 00:18:54] I think that's what those- a country like Canada has just started their CPD, it's still quite young, I guess they're three-years-old, so I learn a lot based on like what they study and their publications or what data [inaudible 00:19:09] at the end of the day, it can help to [inaudible 00:19:12] in terms of what's it's lacking, and I guess all in all help improve the implementation of CPD in [inaudible 00:19:23] so I think it's a lot of whole study.
00:19:29	S1	Right. Thank you so much.

Timecode	Speaker	Transcript
00:00:03	S1	Okay. Now we're on. Yes, so let's start with a bit of the concept that what do you know about continuing professional development?
00:00:22	S2	Okay. So, with my stake on this CPD or continuing professional development is that I refer to it as one of the lines of the audit you take as a pharmacist. That it is my responsibility to update myself on the professional knowledge. And it is of particular importance to a practising pharmacist because after graduation, pharmacists can undertake different lines and among that one is practising pharmacists means that pharmacist is an interaction with either patients or the practitioner or nurses or in healthcare system any direct [inaudible 00:01:05] interaction. So, in that scenario CPD gains a much critical importance, more critical importance to have themselves updated on what's going on in the one especially regarding the [inaudible 00:01:21] medicines and things like that because the knowledge we acquire during the undergrad education doesn't remain static. It keeps on changing, so if I'm a very diligent pharmacist and very intelligent, very sincere to my work, I've done very good undergraduate studies, still I cannot perform good for my patient or give a good advice to inspire her because my knowledge is not up, and it can be, you know, dangerous for the patient because it's just not the best advice, and sometimes it could be, you know, really very damaging. So, I think that continuing professional education is more about keeping yourself updated for the period of your career from the point of your graduating to the time you want your practicing licence to remain active. So, I consider it

		<p>that update is one important thing which the CPD is mandated about and why is it important [inaudible 00:02:26] in case. And there could other specialities and factors added to it like your...apart from being updated, you need to know about the emerging technologies and the scientific innovations which are going on in the world. So there is some which is like technology update which you actually are not the user of it, but being a professional, you need to know about these concepts like gene therapy's coming, insulin is going to come and the information form, and there will be 3D printing for the specialised dose and for paediatrics. So, you can't get yourself, you know, disconnected from what's going on regarding technology and advancement in research in the world. The CPD, apart from the update on the practicing aspect, you need to have the technology update there as well, and then comes that there has to be a refresher. Refresher means the concepts which are the basic concepts which you use in the pharmacy profession. You can't hold them when you don't use them and you don't discuss about them. So, there has to be a forum where that all needs to be recollected and revised again so that you are not outdated, so that you don't forget about all those things. So, with that person and has this all of the keep yourself alive in this aspect. So, this doesn't get you out and out because you can't, you know, you're not going to the classes, you're not going to the examination so it's not getting skipped out of your mind. So, but some of basics are so important you shouldn't skip. So, update on the practice and technology and the scientific advancement, you need to be aware of that. And then, you know, you need not to forget the basic concepts. So, I think these are the basic components which if taken up then right from the graduate...graduation 'til the point of your retirement as a practitioner, that covers...they're discovered under continuing professional development.</p>
00:04:52	S1	<p>So, you might be having an idea about the continuing education. So, what in your opinion, how does it differ from continuing education, the term continuing education, it covers a lot of things as well. So, do you think a CPD...on what grounds CPD is a better opportunity for professionals as compared to the continuing education?</p>
00:05:18	S2	<p>Continuing education for, what I presume with this seems to be like more of a like well the degrees which you get a diploma, the PG courses you get, and these are more specialised and they are more towards what kind of work you are doing. So, these are the planned activities which you've undertaken. CPD means what are the skills and the tools which a practitioner should have. So, it can have something...something like leadership and management and, you know, some of the soft skills are also added into it and focused on the efficiency of the practice which is [inaudible 00:05:56] or expected out of the pharmacist. So continuing education is more like degrees and diplomas a physician...I consider it like that. And given for a team professional development is, you know, how do you want to see Pakistani pharmacists in the five years' time, in the current scenario. After five years this scenario is going to be different. So, somebody, some organisation or a body thing of it that now the pharmacist should be, you know, aligned in a different fashion and their thinking thought process should include these aspects as well. So, their CPD should...their CPD should be revised now to this role. There's continuing education is like their personal choices that I want to take this diploma course and do that or this course to add to a degree. So, I did it as different thing because CPD is, you know, you have a bit of options like what CPD courses are offered and which you want to offer. But still there is somebody or an organisation who is like designing a wholesome picture, and then you have to like take your chunk from that think, or your CPD points. Continuing education is totally based upon what...</p>

00:07:17	S1	[Inaudible 00:07:16] yeah.
00:07:19	S2	...a candidate is, you know, is going to plan about his skill diverse.
00:07:23	S1	All right. Thanks. Thanks. So, let's just talk about the present status of CPD. I mean does such a model exist in the origin, and if it does, can you just briefly describe what does it involve?
00:07:40	S2	So, I belong Pakistan and [inaudible 00:07:43] in Pakistan. It's basically so that the institutions, pharmacy, reporting institutions are aggregated or recognised by a central council. And then there are provincial councils who register the pharmacies. At the moment, the provincial council say that the CPD or continuing professional development comes under their domain. And they work...they can work with the central council to design what the CPD format can be. For instance, Punjab has taken some initiative and they are like off and on , offered some CPD course and some people take it...take it up. But it's not like mandatory or so because for instance, pharmacists have to renew, get their degree...registration status renewed five yearly or like after some period of time. So, it's not getting any...
00:08:39	S1	So, it is not getting practiced.
00:08:43	S2	The CPD should have been compulsory but on floor practically, there is nothing like compulsory CPD programmes. Yes, off and on there are CPD programmes announced and if someone wants to go and take it, it doesn't have a mandatory status on getting your registrations renewed which is the actual concept by which internationally it works. So, and one other province is doing that's sort of a blank scenario, it's not mandatory and so you can say that it's not formalised. The concept of CPD is not owned and formalised, not at the central level and not even at the provincial level in Pakistan. Whatsoever is being done is done of, you know, somewhere in the council, this personal interest, and in just some programmes but that is, you know, according to him what, you know, the course can be there, he organises but that is not structured. Like I said it should have some structure, that these many courses should be on revision of the things. These many courses should be on the updated standard treatment guidelines and something like that. And these many courses should be just about, you know, what's going on and the research model, technology role. Some courses are about, the management and finance. There has to be some structure which needs to be achieved. There's nothing like that at the moment.
00:10:09	S1	Very well. So how effective or do you think is the present CPD model. I'm talking about the model, the CPD model. If you have an idea about it, that how effective do you think it can be or it is which is being in practice right now.
00:10:32	S2	In Pakistan, like I said, the model which is being practiced is not of a mandatory status. It's just not compulsory. So, when it's not compulsory it cannot have an impact.
00:10:45	S1	Do you think...
00:10:46	S2	So, it's not formalised, it's not compulsory, so it...it cannot be effective as well. In order to be effective, it has to be structured, it has to be formalised, and it should be compulsory.

00:11:01	S1	So according to you, should pharmacy schools in your region, should they be encouraged to establish and approach, to include or assimilate the CPD model in the current curriculum so that we can produce CPD-ready graduates?
00:11:18	S2	In the long run, yes, but you know, in our system, the students just already for the five years in the hands of the academia who impart undergrad education. And in practice, in reality, academia is sitting far...at a very far distance from what is going on practically in any of the professional space of the pharmacists like in the...what's going on in the hospital, what's going on in the community pharmacies, or what's going on in the...in the industry or in the central organisations or regulatory. So, this distance...the more this distance will be starting about CPD currently with the institutions is not going to help unless the academic institutions change their perspective to being more practice oriented. To be more, you know, acknowledging towards people who are practicing. If I can convey what I mean to say...
00:12:27	S1	Yeah, yeah, you can.
00:12:28	S2	...that you know, if we...if we, I'll elaborate like this. If you...in the current scenario, if you see the academic organisa...institutions in Pakistan, that they should add in their curriculum something that can be helpful for future incorporation of CPD programmes for these undergraduates that when they go to the CPD programmes, they are, you know, they are more mentally prepared to receive what is given out of the CPD programme. Then it can work but for that academia, also have to change their stance. They also have to change their way they handle the undergraduate curriculum that make it more professionally contributing because the purpose of CPD is professional development. Somehow this can be experimented that if you attach a CPD model in the institution on the second thought. If you have a CPD model in institution, like not every institution, like one or two institution in the city. The city has like 10 institutions and one or two institutions has the CPD hub. And there are some CPD activity is in place. Then it will also indirectly affect the standard of the undergraduate education. Then you can think of, you know, will having this CPD...CPD hub there in the vicinity, then you can expect that now they can have some things included in their undergrad curriculum which makes the student gets better prepared for...for having these CPD lessons afterwards. And I was in Germany lately for PhD. There I saw this thing that in one city or region, they dedicate one institution as a hub and that hub organises all the CPD activities and people from the nearby towns and the vicinity come for the CPD activity once in a month as announced and scheduled by that particular institution. So that also reflects in the undergraduate, post-graduate studies teaching of that institution where the CPD is taking place because for us as most grad students, it was also compulsory for us to attend those CPD lectures. So, in a way, you know, having CPD model and linking it to some [inaudible 00:15:18] undergrad studies and programmes can be effective, but for that thing, the presence of the CPD module it's compulsory. Without having that...if you're going to do the undergrad curriculum and you don't have a CPD programme afterwards, it's not going to work like this way.
00:15:38	S1	True. So, do you think your colleagues working with you in your institution, would they be interested in following such a model as an academician?
00:15:47	S2	Very much. Very much. Because every person who wants to, you know, use as an academician or as a teacher quality professionals would always love to be engaged in CPD so that he is updated, so that he

		can deliver the students what is the updated knowledge. So, I think there will be reception from academia if the CPD system is started.
00:16:16	S1	Okay. So I would like to know that from your area, if you help us in designing a CPD model for pharmacy practitioners, what can...with the potential contribution expectation or as I say...what can be your support for designing a CPD model for pharmacy practitioners according to the, you know, the problems in your region or the scenario? So how can you contribute and what are your expectations, and in what way they can be a support from your area?
00:16:55	S2	Okay. So, you mean, for instance, that if I am given a chance to contribute...
00:17:02	S1	Yeah.
00:17:02	S2	...development of CPD programme, you want this thing. Are issues like I'm asked that, okay, CPD programme is being started, what do you expect out of that? This is one point...
00:17:14	S1	Yes.
00:17:14	S2	...and what's what, I can give, you know, like logistically. What can we provide like manpower and space and so and other technical things? I would say that...
00:17:26	S1	Yeah, it's kind of like that. Yes.
00:17:31	S2	...being in academia, keeping the people equipped of the recent technology advancements and like updation (sic) of the guidelines should be the responsibility that this should be imparted from the academia.
00:17:52	S1	Mm-hm. Right.
00:17:53	S2	Means like the technology chunk and the updated revisions of the...the treatment modules, the academia should step forward and, you know, develop...help develop. This will also improve their teaching standards as well because I'm teaching most of the time clinical pharmacy and pharmacy practice. So, my examples will also be in this area. So, I think skill development should come more from the practicing side and continuous learning and keeping up to date is [inaudible 00:18:37] here. This academia can, you know, or I can, you know, as an academician, I can contribute better.
00:18:48	S1	All right.
00:18:50	S2	And you know, organising workshops and events isn't a common thing. Usually academic institutions can do and then...and with the council or somebody they can have...
00:19:00	S1	Of course.
00:19:01	S2	...workshops, get accredited, and have like CPD points attached to it. So that can also be one way that can cut the load off the programme, CPD programme organisers that someone, as in the other organisations also known like contributing things which can add to the CPD points. And they could be one entry, you know, that we can get space of the universities and so there you can get...provide the

		space and the technical equipment with the encompassing facility, et cetera, for running the CPD programmes.
00:19:43	S1	All right. Thank you. So, as we would be having the interview guide with you, there's a list of things which I would like you to, you know, prioritise them as per the region needs and the area of practice needs.
00:20:02	S2	Okay.
00:20:05	S1	So, would you be able to do that for me?
00:20:07	S2	Okay. So, if these nine points need to be prioritised as per our country status...
00:20:16	S1	Yes. Yes.
00:20:22	S2	I think number nine should come at the top.
00:20:29	S1	All right.
00:20:33	S2	Okay, eight is the requirement of compulsory CPD points but for this I have this afterthought that, you know, if you can have the CPD points compulsory in the first hand where there is no system, it might just not work. We can have something like the organisations or the academic institutions, they have facilities and [inaudible 00:21:02] you know, they can also call in guest speakers also. So, resources can be lent out by the academic institutions very easily so that it doesn't add cost to anybody. The other thing the requirement of the campus, you see, we can be, you know, left out for sometimes in such a way that, you know, if you have attended like these many...and these many CPD points, you have a favour of registration fee of these many, this much amount. So, the people will start turning towards having CPD because it could give them, you know, the way out. it [inaudible 00:21:38] CPD so we have a [inaudible 00:21:40]. So, if you do start CPD...doing CPD from a lower number and groom it to a higher level where you think that the CPD now can become structured and be compulsory for everyone who gets the registration done must have these many CPD points. So, this CPD module, when you launch, it will take its time to groom itself so that it can cater such a vast number of pharmacists' community. So, this time lag can be, you know, utilised in this manner that, you know, you don't keep it compulsory in the beginning but you give some motivation for people to attend it. So, the organisers of the CPD will have room that they can, you know, develop it from the smaller scale to the higher scale. So, it's like scaling up so they can, you know, have a better chance of success rather than, you know, starting for everyone, make it compulsory, and then crashing out because you don't have any experience at all in it. So, the second point I would rate it, it is this important. You need to have, you know, some importance of CPD there that the people attend it, but not all tragically compulsory for everyone. So that can be in the form of behaviour or something. And then attending CPD events and workshops, yes, this one's in. And then I would suggest some number one, self-assessment and skill development.
00:23:21	S1	Okay. So, on number two basically, after the availability of resources, you would suggest self-assessment and skills development?

00:23:29	S2	Because this is more related to the what kind of content the CPD is encircling now. So self-assessment will enable people and make them realise okay, we needed that one.
00:23:40	S1	Of course. But...
00:23:41	S2	Okay. Now the skill development will enable them the opportunity to fill in the bad gap which they identified during self-assessment.
00:23:51	S1	Mm-hm. All right. Carry on.
00:23:55	S2	Then continue with learning, keeping up-to-date, and professional development through work experience. And I think they should come afterwards and professional development to work experience, this should be something which is like...should come earlier to continuous learning and keeping up with this. Because when you go to the self...you went to the self-assessment and then you invested on skill development, and now people will be interested...some people would be interested in, you know, having on-hand experience through work so that they are really confident of what they require through CPD, and they can use it in their career for, you know, promotions or for gaining next job or a better job or something. So, they will, you know, rate it, you know, more important than up-to-date, you know, and continuous learning things which will be, you know, which will be a, kind of an advantage. Which is just kind of an advancement from the basics. And then afterwards, the end result will be formal educational CPD, that you have a structured CPD programme running in the country. This will be the ultimate outcome.
00:25:18	S1	True. All right. Okay. Okay. So, another question which is, sort of, related but it's...it's one of the very important things that I need to know. So according to you, what could be the attributes of a pharmacy practice and continuing professional development model, the one which is going to be used in the field?
00:25:48	S2	In the field in the pharmacy sector?
00:25:49	S1	Yeah.
00:25:50	S2	That it has to be in the field. It has to be by the people who are in the field.
00:25:56	S1	Yeah, the practitioners.
00:25:57	S2	It has to be realistic and practical and addresses the on-floor skills, problems, issues, ways to tackle them, the knowledge fully which is needed to handle those things. It shouldn't have this aura of, you know, something sophisticated is going on in the rest. Let's learn about it.
00:26:20	S1	Yeah.
00:26:21	S2	And so you have to prioritise this because for the country who doesn't have a pharmacy back assistance it means if you start a CPD model and you opt for the courses for pharmacy practice, these bring the pharmacy practice professionals who are doing pharmacy practice in Pakistan on floor and get the larger lot exposed to them through the CPD. So, there we're talking about, you know, the practical things. How actually pharmacy practices can work in Pakistan or is working in Pakistan. So, I think that the

		practicality and relevance should be the prime attributes of any pharmacy practice, continuing professional development now, distinguish it in Pakistan.
00:27:12	S1	So, can you please highlight the key components you think which are needed to build this model?
00:27:24	S2	I think the key components would be, number one, the attachment of the requirement of registration or the licence validity to CPD courses.
00:27:43	S1	All right.
00:27:45	S2	So, if that is missing, then...then CPD programmes being offered sporadically in different organisation, even if you develop facility, it could not end up anywhere. So, they...it has to be owned by the councils of Pakistan. Those who are responsible, the central council and provincial councils. Those who are responsible for the accreditation of the institutions and for the registration of the pharmacies. I think that's...so any...any CPD model which falls out of this space will lose its legal standing. Then the second thing is this. That the priority should be given to what is the need of the country. When you choose the topics, topics should relate to somehow feeding to the improvement of the health indicators of Pakistan. So, number one, the audience should be honest, even the main CPD programmes should be aware of the current health challenges which the country faces. And the CPD courses should be prioritised to attend to the current programmes, for instance, Dengue epidemic ones in every year. For example, the syringe we use is a problem. For example, drug that we use is a problem. So, these are very relevant and...relevant issues which are circulating in the practice. So, if the CPD programmes are initiated and they are...they do not relate to at what actual problems the practitioner faces, then if you lose its...its importance and it's accessibility in the keeping it. If you...so the first thing is that it must have some legal linkage. So, some, you know, attachment with the council or regulatory agency that...that is...that it's...that it's standing of the CPD model. Second thing is the courses should in line with the indigenous...of the local needs. Number three it should be professionally handled and it should be given this chance that the professionally confident people around them. And there they can, you know, perhaps the element of updated on the issue invested in the same programme. So, relevance, being updated, being handled by professional hands. So, these are the important attributes which the CPD, and it should, you know, because the practice autonomy is now developing in Pakistan, or the CPD model will be the new thing in Pakistan. So, it should also give, you know, round ups, orientation on the diversity of the professional areas in which CPD can go, options that they can acquire, and I think if the CPD modules can be split up into the specialities, focus groups...
00:31:15	S1	Yes. Okay.
00:31:17	S2	...then people will find, you know, same kind of people will launch in the same kind of groups and, you know, the regular people would like to attend same kind of courses and the practicing will tend to attend some other kind of courses and the people in the community or where the management is also require something or logistics is required will mean that some other set of courses. So, if you like develop subspecialties and grouping, the designing the CPD module. So, the [inaudible 00:31:50] will also be different. So, this will be more participatory, more number of people from different backgrounds will

		be in...involved in managing and arranging CPD and likewise attending CPD. So, you know, it will have...it will lead to more acceptability and more chances of success.
00:32:12	S1	Good. So, I would like to know that according to you, what can enable the authorities or what are the enabling factors for the authorities which would make it easy for them to include CPD in your region?
00:32:34	S2	I think that the push from the international organisations like PHEP or Commonwealth Organisation, recommendations from them, a push from them, an incentive from them. You know, you run a CPD programme and you make it successful within like two years' time more so, then you will have a chance to represent your case in the coming PHEP or something like that or in Commonwealth Association meeting or Pharmacy's Association meeting or something like that. Some incentive like that given to the councils or the Pakistan pharmacies association, you know, can have...act as a motivator. So, this can like, you know, speed up the process, [inaudible 00:33:21] more involvement and...and ownership. So, I think this can be one of the enabling factor, you know, push them to do it the way many things were pushed up from B. Pharm programme converted to Pharm. D programme. So international partners also like the [inaudible 00:33:42] have the involvement in that. So similarly, if there's a push from international organisations under regulatory set up to have the CPD programme, not produce static pharmacists or stagnant system of pharmacy, education in Pakistan, then I think there will more chances that...that...that programme gets developed and gets implemented and has success story.
00:34:12	S1	Very well. Okay. As you mentioned earlier that, you know, Commonwealth associations can be a part of it. So, if Commonwealth Pharmacist Association decides to be a help, so how do you think they can provide it in designing...in designing or the implementation of CPD model in the current curriculum of the pharmacists' groups nationwide?
00:34:42	S2	What my suggestion would be that Commonwealth Pharmacist Association host pharmacist membership from diverse countries, major countries. So many countries have, you know, started CPD programmes in the recent years. And some countries might be sharing the same social economic characteristics just like us. So the best from the group of these lower and middle income countries go for instance can be given to us as a model or as a like a mentor or like a facilitator, a team from like some, for instance, Ghana or Namibia or supposedly Bhutan or Nepal, if they have some success stories or really good initiatives in developing CPD model in recent years in their country, so they can, you know, call investment heads, you know, guide them to be our mentors or guides and link us with them so that we have a, you know, direct peer-to-peer discussion and we learn from their experience closely and they take some ownership in developing our CPD model and we, you know, don't make the mistake which, you know, a beginner is likely to make. So, I think having some CPD model which is very close to us in a cultural and social economic sense being directed from the Commonwealth Organisation or supported from the Commonwealth Organisations to be implemented in Pakistan tethered to our need will be a great help. Discuss, of course, some logistics, consultancy, and things like that. Initiation of some student or faculty or practice pharmacists exchange programmes through Commonwealth pharmacists that people go and attend the CDs of CPD somewhere else and then they come back and they tell the story. You know, you always experience how effective it was. This can be one way. Having online...occasional online streams or lectures can also be helpful. So, there are many ways by which

		international linkages like Commonwealth Pharmacist Association can help a country start its CPD module.
00:37:30	S1	Right. I would like to know your future expectations. Where exactly do you see CPD model practice in your region of course. Normally it's like a five years' time.
00:37:45	S2	The best, you know, the knowledge pool is changing. The evidence has emerged day in, day out and the previous things that have changed and the footings are now not safer and not safer are now useless, you know. Some other indication or something...so having CPD is inevitable. You know, we have to start a point. And if you get started somehow in this one year or two years' time, now in five years I see that CPD will grow in Pakistan and will identify its priority areas. And that will be a success.
00:38:27	S1	All right. So, do you have any other comments related to this survey that do you think will the survey prove to be effective and do you...what about your encouragement? Do you encourage such surveys?
00:38:42	S2	Of course, this...these kind of surveys are important for, you know, people from academia and from practice because the practice people are the market. They hire professionals and they see them grooming over the years and they are the actual, you know, gauge. They can actually gauge what was lacking, what would have happened if the CPD model was there. How [inaudible 00:39:07] how they could add opportunity of getting better equipped pharmacist so that they can...they have return of the value of the money they invest on the pharmacies. And even in return, this whole process will increase the value of pharmacists in the...in the market. They will get better salaries because now they are more equipped and they're more competent, and they'll gain, you know, confidence and credibility and understand among the other healthier professionals. So...and this...I of course encourage these surveys because this will give feedback and it will ownership and [inaudible 00:39:42] you know, add to the changing mindsets. Attending the CPD survey, give me a thought process that I indulge myself in and I view that, okay, the times are changing and in five years' time, [inaudible 00:39:58] will be different, so I better start getting some opportunities and start taking what's my role in this respect. And somehow maybe I do take practically one of those perceptions in this regard. So, if you conduct some surveys, it will become the talk and the thought process, part of the talk and the thought process of the pharmacy community in Pakistan at different levels. And it will slowly change...change and then it will catalyse the process. So of course, it should be done and it...what I would suggest is this that kindly do keep the major stakeholders in, the regulators, the practitioners, the academicians, and, you know, the senior pharmacists and the junior practicing pharmacists or the fresh graduates. Means the fresh graduates, you know, feels that they understand the job and now I'm correct and I do not know nothing and I need some kind of a module, you know, to...to base up with my job requirement. And the senior one will tell you like okay; I've been in job and had there been CPD, what would have been my place in [inaudible 00:41:11]. And if I were to design the CPD right now [inaudible 00:41:15]. So, I think these partners are important to be surveyed.
00:41:23	S1	All right. Very well. Let's...let's come to the pharmacy practice research. How well-developed do you think it is in your country and is it just restricted or limited to the universities. Is it being done by the pharmacist who are working in the field?

00:41:45	S2	<p>Well, this is a real important and I realise how grave the scenario is when I joined academia ten years ago. Earlier to that, I was a person working in hospital. I was a practice nurse and from here I can see the both ends, both perspective of the academician and as a practitioner. And the major thing that why we...we're speaking the status of the pharmacy back research in our country it is very important. The number of research, the type of research, the quality of research. Every indicator is dealt with. And the other important thing is this, the relevance. Most of the research is being done by the academicians and the purpose of having one more publications for adding to their career promotions so that they can get, you know, the incentive and motivation and incentives for having more publications then motions and so. So, it needs to not necessarily have the relevance to contribution to the pharmacy practice research that is needed by the country. So, they are most of the time done in total isolation from the practice people. A success will be that the academics, they get trained in doing collective research and they engage in-practice people and they work with them and cross-liaison and then develop practice research, then this will develop...this will give out the evidence which can inform the policy. And this...then the policy if [inaudible 00:43:34] can take place in the right direction and ultimately the whole system improvement takes place, which is ultimately the goal of your doing research in the first place. So, the linking of research to the practice is very important. Currently the field practitioner is not doing research, is not facilitated to do research, is not trained to do research. Whereas there are many modalities by which this can be done including pharmaceutical industrial engaging, regulatory agencies, there are so many areas of research on which we need data. And that research can only regenerate round the floor. What is happening in community pharmacies can only be generated on the floor of community pharmacy. What is happening in the hospital, this data can only be derived from the hospital [inaudible 00:44:32]. So, engaging people and collaborating with the re...with the practitioners is very, very important. It's crucial. The academicians also, there is a serious lack of seriousness over the issue as well because their purpose gets fulfilled when they have the publication done...</p>
00:44:55	S1	True.
00:44:55	S2	<p>...relevant or not. Relevant quality or not quality, they have one more paper added in there. So, the thing is what investment we are doing in the training regarding pharmacy practice research. Ironically, the course modules does not...do not include the current course modules of the HEC for the masters programme or pharmaceuticals which covers pharmacy practices where does not have any ward or any link with the pharmacy practice research methods. Pharmacy practice research methods are...is a different category of research methodology. And different techniques, different examples, different stories to learn from which I never share, which are never part of the curriculum. Even some of the universities do not even have the relevant books with them, and some universities are even out giving masters degrees and PhD degree on pharmacy practice research. So that is also one ignorance and negligence on the part of HEC that they fail to regulate this very important area. Number one, to organise, to recognise pharmacy practice research as a separate domain, number two, to ensure that wherever these degrees are imparted, they are done [inaudible 00:46:23] suitable books and the material and the engagers and the resources are there around these programmes without which, you know, there is no scope of having a quality pharmacy research in the country. There will be just more number.</p>
00:46:43	S1	Right. So, you think that there research is not being incorporated into everyday pharmacy practice.

00:46:51	S2	Absolutely not. Absolutely not.
00:46:55	S1	So...
00:46:56	S2	So, I'll give you an example like you know, the basic regulatory mechanism by which our pharmacy system [inaudible 00:47:06] pharmacy systems work, they are not updated since, you know, like since they were made for the first time or so. So, and if they were revised whatsoever one time or two times in between, there was no scientific background. So, the revision of the legal framework also needs research [inaudible 00:47:34]. So, the legal changes will come, you know, after some time. They will come after some time without having any research work behind, then it will add to the [inaudible 00:47:47] which is already there. So, it is [inaudible 00:47:52] crucial. Even I...I presumed that the HEC and the Central Regulatory Agency through CRF, Central Research Fund through public fund should fund such kind of research because this is important. Very important for the same use of medicine in Pakistan.
00:48:14	S1	Would you be able to identify a few gaps as Ukraine undergrad pharmacist? So, would you be able to identify a few gaps in pharmacy practice teaching as you had been in the field for the past ten years?
00:48:32	S2	Okay. So, the first and the very more important point is this. That the pharmacist [inaudible 00:48:37] teaching is being done without being...having...being linked to the floor through the practical floor of what's going on in Pakistan in the hospital or in the community. When the four, five years' programmes, if the student doesn't get to know how prescription is written in Pakistan, is unable to reach the prescription, he is unable to identify what is the patient, what is the social economics, what is his literacy level, I would just he speak or he can read or whether he can read or not, so if he gets totally disconnected, unconcerned, be indifferent, or what we're seeing is because you are teaching from the books which are written in the rest and you give them case studies which are written in the rest according to the drugs which are available in the rest , and then you consider that they're...that we have taught the student over the pharmacy practice and now our job is done, and very well done, his students will never get adjusted in the low consistence and that will be a big failure. Big failure to their confidence and they would not have this ability to apply what they learnt in the field. And this skill of transferring knowledge to the floor has to be imparted during your undergrad studies, not after that because afterwards, the people who hire are not interested to invest on the grooming of answers. So in return they've done less or they don't get these job...these job positions or these responsibilities because this was something which was supposed to be done at the undergrad level and seen as the case which is done with the nursing people and which is done with the medical people and the other people who are like in medical lab technology or physiotherapy or others, only pharmacists is this community who claims to be a healthier profession, but during the undergrad study, he has no encounter of the healthcare system of Pakistan. So I would consider any place where from the education is given and the students are not exposed to the clinical settings that degree isn't...the institution should not be at first time recognised to, you know, having facilities to impart education to the...to the pharmacy students for the pharmacy practicing. The thing it's very common that you give pharmacy practice subjects to anywhere just anybody who can read English and tall him to teach pharmacy practice.
00:51:26	S1	Of course not.

00:51:27	S2	<p>If you cannot allow a medical student to be taught surgery by a person who has never done surgery, then how can you allow a person who has never been to hospital, who has never worked in community pharmacy, but he can read like a book written on community pharmacy and he can read a book written on hospital pharmacy, tell him to teach the next batch of the future pharmacists on hospital pharmacy, on community pharmacy, on public health pharmacy, even clinical pharmacy, and you're okay with it. Then that's a disaster. That's also a fraud to the students and that's a professional disaster. How can you then expect quality and competency and skill out of this scheme? You cannot. And there the regulators, they have to play their role. If this is happening in 99 percent of the institutions in Pakistan, then everybody knows about it. So, these are the basic things of which there shouldn't be any compromise because on the first hand, this was why the degree was changed from B-Pharm to Pharm.D and this is why we recognise every degree as a clinical degree. So, the second thing is this. That the subject should be taught by the people who have the experience of practicing the profession. The third thing is this that the children should have an exposure of the best practices. Means often on, they should be exposed to the best models which are available in the city or the town or the country, and they should be exposed to the competency of the professionals working there. Third, the lack of indigenous books which are written in our healthcare system address the issues of our health system, discuss about the success stories and lessons from the pharmacy practice systems established in Pakistan.</p>
00:53:42	S1	Right.
00:53:43	S2	<p>So...so having these resources absent, you know, you train the people in a kind of Utopia and the ultimate thing is this, that the students cannot get relevance out of the whole thing. At the end if you ask them which subject you dislike the most, they will tell that, okay, this is the subject that we dislike the most because it didn't have any relevance. Third and the last thing is this that equipping pharmacy...pharmacists, graduate pharmacists who are handling both the current medical indices and equipping them [inaudible 00:54:34] own health needs are going their own pharmaceutical and health needs. So, keeping this perspective in priority, what their families are mostly getting, the kind of prescription their families are getting means...I mean to say that the public health issues, the government, NCBs, and things like that which are clinical and should have a prioritisation for these areas. It will create students in class, it will create a practicality of, you know, utilising this knowledge in their life, in their career, at their home, and so this develop ultimately more confident professionals because they are given so much and most of the things which they are impacted, they do not find the space and time and opportunity to practice that thing, but never becomes a part of their skill. It always remains like a memory or knowledge. So, in order to convert them to their skill, they have to actually practice. So, it's only common public health issues. this is the area where if you target, you will equip the pharmacist to deliver to the national health...the improvement of national health indicators and you will also be able to develop more confident, more competent, and more skilful pharmacists.</p>
00:56:01	S1	All right. Thank you so much for that, for your time.
00:56:06	S2	Lastly, lastly yes, lastly yes.
00:56:09	S1	Sure. Sure.

00:56:11	S2	Because in this...this regards for the pharmacy practice teaching thing.
00:56:15	S1	There's so many yeah. I can...
00:56:18	S2	Because the current health system around practice is based upon evidence base medicine and evidence-based medicine is grounded upon research. So [inaudible 00:56:33] undergrads to go into the post grad education and get exposed to what was researching and what are the different types of research and how to evaluate that kind of research. And for that purpose, using BNF, the current versions of BNF is an excellent tool where you can establish evidence base medicines in the practice system in any country where it is, that it doesn't exist before because the current BNFs is very much linked, directly linked and has these evidence grading system written with every information. So this helps...this will help the student learn what is actually evidence, how do you create it, what is this information, where is it applicable, how confident I can be in delivering this information and what if I get some information by doing my practice as a procurement officer from on a...from a pharmaceutical company, how should I regulate. So, one, that the implementation of the evidence-based medicine should be practically incorporated in a practical way should be incorporated in a...not as a topic. Doesn't have any role having it as a topic of actually practicing evidence-based medicines for which, you know, BNF can be used a very tool to conduct it. It's one thing which I think will rectify many of the issues.
00:58:04	S1	All right.
00:58:06	S2	So that's it. That's is from my side.
00:58:08	S1	Thank you so much. I took a lot of your time, but it was a valuable session I must say.
00:58:17	S2	Thank you.
Timecode	Speaker	Transcript
00:00:02	S1	So let's start with the concept like, what exactly is the concept about continuing professional development.
00:00:14	S2	Yeah, yeah. Can you ask that question again?
00:00:21	S1	What do you think continuing professional development is?
00:00:29	S2	(Speaks in Foreign Language) so I think professional degree lately or professional (Speaks in Foreign Language) just about you need to continue with brushing up your knowledge between new technology, new techniques, new knowledge, or continue to (Speaks in Foreign Language) up the knowledge, up (Speaks in Foreign Language) skills, to up and competencies, to go up (Speaks in Foreign Language)
00:00:56	S1	If you don't mind, this is going to be transcribed so it's better if you answer me in English, I'll have to transcribe it as it is.
00:01:10	S2	Sure, okay. So actually what I was mentioning was that to me, continued professional education is that once you have actually been graduated or once you have been labelled as a professional and you have started your practical life, you need to update your knowledge, your skill, your competency to the best

		of your time remits, so continuing education is about updating yourself, staying in charge with what are the new developments and in terms of the new knowledge and the skills.
00:01:50	S1	So basically there are two terms, one is continuing education and one is continuing professional development, so this is what you- how do you think these two differ, how does CPD differ from CE?
00:02:08	S2	I don't know, I'm not a professional in this particular field but this is what I actually thought it was.
00:02:19	S1	All right. So let's come to the present status of CPD in Pakistan, so does such a model exist and if it does, what do you think it involves?
00:02:31	S2	Now are we talking with particular reactions to pharmacy profession.
00:02:37	S1	Yes, yeah, yes, as far as pharmacy practitioners are concerned, yes, we are restricting ourselves to the professional pharmacy.
00:02:48	S2	I think there isn't really any very comprehensive or very well-articulated system for updating the education in pharmacy, but then there are some examples which exist actually, some initiatives in this area, where they do not actually consistently stay there for people to really come up back up to and then- there were some initiatives but it was not I guess utilised for the more long term sustainable development.
00:03:28	S1	So can you give me an idea that which professional body authority in the organisation which is responsible for the development of CPD?
00:03:37	S2	Yeah. Well the one which is responsible at the national level is the Pakistan pharmacist council that falls in the view of the pharmacy council at the national level, and there hasn't much actually happen at that level by the pharmacy council, the national council, but then like I said there were some initiatives on part of the badjao pharmacy council, they have been doing some induction programme, some continued education programme for pharmacist, other than that I don't know anywhere else in any national institution or any academic institution actually undertaking this kind of work.
00:04:28	S1	Okay. So let's come to your opinion, how effective do you think a CPD model can be in the pharmacy practice?
00:04:38	S2	Any model or the one that we had, the one that I was talking about, which model?
00:04:46	S1	You know, the typical model which is usually being followed worldwide.
00:04:52	S2	I don't know, but with me for the profession it is quite paramount because pharmacy like any other scientific profession, the knowledge is always up and new knowledge is coming and the professional people continue to update themselves on that, so the need for that is quite paramount, now since we do not have any well-articulated part of here, so I don't know, I can't really say anything about that, but yes, we do need them.

00:05:34	S1	Okay. So how do you think how pharmacies could in your region, how can they be encouraged to establish such an approach for assimilating the CPD model in the current curriculum?
00:05:48	S2	Yeah. I think most of the pharmacy's course are working on an economic model, so they have to have economic incentives to undertake anything new, either economic compulsions or any regulatory compulsions, if the pharmacy council actually makes it mandatory that schools have to undertake continued education programmes, then that would actually be one way out for actually going forward, also if that becomes- and that is something being part of the pharmacy council myself, we have been trying to kind of bring them out, so there is a need to do a bit of- this has led to updating on the pharmacy council act which could actually facilitate our making it mandatory for all new legislations of pharmacist to be linked with certain hours of CPD, and if that will be possible then I think there will be new appetite for these kind of programmes in the pharmacy community, and if schools of pharmacy started in anything like that then they would have a sure audience or sure update contact, because schools can only take on the charity basis, they have to have people who are willing to pay for it and people would be willing to pay for it only because only when it really becomes essential on their part to undertake this, so I think generally it should be in the domain of the pharmacy council, but pharmacy council needs to update the legislation in this sense.
00:07:51	S1	Okay. So can you comment about how interested your colleagues or other pharmacy practitioners who would be knowing- how much interested do you think they would be in following such a model?
00:08:11	S2	You see, the majority people may not actually be able to relate unless it was somehow mandatory and see either it was necessary for their getting their job, getting their registrations renewed, or for one other reasons it becomes mandatory on that, so that's when the majority of the people would be actually really, and if it's not mandatory then there are some only and there could be rather smaller ratio-proportion of people who would be really keen on updating themselves after all, so there has to be some kind of incentive or some kind of scheme in which I think the majority of the pharmacy people will not be interested.
00:09:13	S1	Right. So let's go to a bit of planning side, so as a policy making or regulator, what in your opinion can be the potential contribution expectation that's about from your area in designing a CPD model for pharmacy practitioners?
00:09:36	S2	Yeah. I think as a policy maker you know, I have to- I wear two hats, one is the- as the vice president of the pharmacy council and the other one is the work that I do at the national medicine policy level which is directly with the ministry of health, I think in the part- on my part as a member of the pharmacy council, I think I- it's in the front view of the pharmacy council, the council has to actually take this responsibility because their brand-new mandate is to ensure good quality human resource in the pharmacy profession, and by good quality you need people who are actually enough to address the contemporary issues and able to also take up the future growth in the future potential in this area, so I think it's primarily within the realm of the pharmacy council, the council currently is actually required to undertake a curricular revision the undergraduate curricular for pharm B is due for renewal of a review, primarily it's the reasonability of the pharmacy council to do that which it has not been able to do even though some pull that we can talk about it, but then that's where the- actually the bus should stop, and otherwise the pharmacy council is a semi-autonomous body, the government if- at the national level, the ministry of

		health, if they had anything new to do with the pharmacy education, that would actually move through the pharmacy council, but I think council is the primary in this part.
00:11:49	S1	Right. So there are seven things which have been covered in most of the CPD models around the world, so can you like, if I named them, if I haven't named them, can you prioritise them as per your country and area of practice needs? These involve self-assessment, skills development, continuous learning, keeping up to date, professional development through experience, formal education of CPD, attending CPD events and workshops, and the requirement of compulsory CPD points, and the liability of resources of following a CPD, I think these all are sort of those primary...
00:12:37	S2	You don't expect me to remember a listing that's...
00:12:41	S1	I thought you would be having the guide with you.
00:12:46	S2	No, I don't have it right in front of me, and if you want I can list it up and send it to you later.
00:12:53	S1	All right. Okay, I'll specifically send you these questions...
00:12:58	S2	But I do see quite a bit of overlap in there because you see this other way of expression were- might actually read different off those options quite similar.
00:13:16	S1	Almost, yeah.
00:13:17	S2	But I think, yeah, so let me come back to you on that and I'll send you a prioritise list on that to email.
00:13:26	S1	Thank you so much. So what could be in your opinion the attributes of a pharmacy practicing practice CPD model, what exactly do you think just a short version of you know, your thoughts.
00:13:46	S2	You see there are- within the pharmacy profession, we have number of areas where they would need updating, it could be at the community level, it could be at the hospital level, it could be at the regulatory level, it could be at the industrial level, so all the different field that the pharmacy people are actually working at, so only one of them should have a kind of the- it should have opportunity that they carry the pathways as different as they might be, it could be held through CPD, so I think there is a kind of area where they can require, it should be tailored to the people, to the pharmacy professionals or needs and their ambitions and their aspirations for the future, so you need a multi-track programme there.
00:14:42	S1	All right. Can you please highlight key competence which are needed to build this model?
00:14:54	S2	Okay. Just from the top of my head on that actually, I think some of those things would be in the realm of the technical knowledge and technical practice, but then also you see there's a need for better communication, there's need for improved management, and other skills like investing and skills which were need to go around in their professional life which may not be actually covered in the undergraduate programmes, or which might be so fundamental to the pharmacy practice or the pharmacy profession, and it keeps changing, the use of technology for example and so- so you see all of this, the technical aspects, the communication and housing aspects, the technology and the leadership with the management aspects, I think you can't put them all together into one programme, but it's all of them

		<p>need to be there and people should be able to pick and make their own recipe according to their needs, because people are ready from tracks and they have more possible level as well, they need varied manual according to their needs and their demands of the work that they would do, I think there should be multiple task there again within this, and this will all be geared towards the pharmacy profession, so if you're talking with management, leadership, it should be focused on the case studies that pharmacist actually have to be with a similar cases, so then they can actually have a multiple grounding in the management sciences at the management practices, so these are kind of things I think- well you see this is all the work, there essentially any such curricular model, any such teaching material available at the moment, whoever undertakes this kind of teaching will have to start from the very basic level. Well I think good universities do have the capacity and the capability to actually undertake this kind of work and given the- if it becomes essential, I think they should be enough for- there are enough academic institutions to undertake this sort of work, so though there's a lot of work but I'm not worried because there are enough people to actually do this kind of work as well to a reasonably good level.</p>
00:17:59	S1	<p>So this is an interesting part for you, so what can be the enabling factors for the authority such as pharmacy council in Pakistan that would create ease for them to partake in CPD in the region?</p>
00:18:14	S2	<p>Yeah. Now you see the- for example pharmacy council is a kind of like a semi-autonomous organisation, they have their own mandate, so it's a statutory body, and- but the issue is that is not autonomous, it's semi-autonomous, and still the umbilical cord with the ministries is existing, that sometimes gets more kind of stronger and sometimes it is weaker, so this umbilical cord, one would have actually expected would be cut in and out for this organisation to be independent during that hasn't happened, so while its ability to make its own decisions and the ability to execute those decisions is- and because of this, there are also other factors like I said earlier, the fact that they act- the pharmacy council act was written in 1967, it was like very old times for this profession, there hasn't been any further amendments of this lines, so there is actually one of the enabling things with regarding me is a review and revision in the pharmacy act in light of CPD and the discussion we are having besides some other amendments, but these are the particularly important, so those could actually enable the pharmacy council to undertake the kind of work necessary to start this programme, as well then their ability to then create an environment within the economic and the scholarly circles where the importance would be appropriately appreciated and a follow up question would be started, but again the ability to bringing them out, enforce it, lies with the statutory mandate of the pharmacy council.</p>
00:20:35	S1	<p>Let's come towards the role of commonwealth pharmacist association, so how do you think CPD can be a help in designing and implementation of CPD model in the current curriculum or in the current practice in fact of pharmacy?</p>
00:20:53	S2	<p>I don't know, I don't know, I don't know whether CPA could do anything about it, because you see, CPA is CPA, and PPA is PPA, so I think the- like I say, pharmacy association and the pharmacy council and the academia here is very crippled actually to know what is the situation on the ground or what is the actual requirements, what we're actually having, so I don't think there is a whole lot of need for that, but there's always- it's always good to actually get their ideas in exchange programmes and learn from each other, so in that sense I think the council should actually be talking to a counterpart organisation in other countries to learn from them, to see what are the best practices and how we could actually adapt some</p>

		of them, so while we know maybe our own situation, but what is the [inaudible 00:22:10] as well could be a good thing to learn.
00:22:16	S1	So where do you see CPD model practice in your country in five years' time?
00:22:25	S2	Yeah. I think within the next five years, I really see this there on the ground, because though we haven't been able to make a lot of move along this line, but the urgency is there, this ire is there, we have- I know there were many meetings within the pharmacy council structure where we talk about it but we were just about any- with a very small margin we could not undertake it, this was particularly my baby when I joined three years ago, and this is actually our mandate our video is three years and it is finishing now, I remember there in the first meeting, this is what actually I took up as my kind of thing being a part of the pharmacy council, I was- from the very first meeting I continuously hopped on the idea of review of the pharmacy curriculum and then add on the need to stay updated and all that, but somehow, since there has been a lot of transition going on and the capacity within the council was always limited, and for reasons, very local and very indigenous in our own situation, which I mean actually not able to really fight very effectively and come out of it, but I think they're just about out of it now after the recent years the council has been kind of restructured, the good thing is that we have reseted the council, we have capacitated it in a way that it could actually take such programmes, and the next- the next council should be able to undertake these things much better than we could do because of our own limitations, so I think we have overcome the limitations now, and the next council should be able to go at some speed on this, so I think in the next five years, this- the programme should be out, they should be a healthy pace to work on this.
00:24:48	S1	So can you share a few comments relating to the survey but do you think it will prove to be effective and do you encourage such a ways?
00:24:58	S2	I know I think this is very important work that you're doing and I would really look up to read your research and you need to find that you haven't have there and would jump together into recommendations, but- so I will really look forward to that, and I certainly think that this was very much needed and required, so you are doing this and I appreciate and I fully support, I think they should be fully work done at home as well and I only hope that you guys can have some kind of collaborative work with the- with either the pharmacy council or one of the universities there where we could actually look at it from a whole global to the ground angle.
00:25:52	S1	Exactly. I'm taking a lot of your time, just a few like, two more questions related to the pharmacy practice research. So how well developed do you think the pharmacy practice research in your region, is it just being carried out by the university, is it being done by the pharmacist in the field?
00:26:13	S2	Yeah. I'm not really able to really respond at the larger regional level, but I think within the country, within Pakistan, pharmacy practice research has really taken off recently in the last four, five to 10 years, and the very concept has actually come to kind of take home and it's been developing very nicely and there's not a work actually, even recently there was- was it last month? Yeah, I think at the end of the last month there was this international conference in the hall where [inaudible 00:26:54] as well and there were a lot of actually papers presenting and new researches, new scholars that are actually taking up this work, and I think there's a lot of good work actually happening, there's one thing which I've been

		continuously kind of coming back to and I've spoken to Zahir about it as well, is that that has been my worry that while this is quite a bit of work, there is a lot of repetition and a lot of overlap, so a country like ours, we need research which is more targeted and prioritised to the national needs and departments, so within the...
00:27:37	S1	Yeah, sorry.
00:27:39	S2	Yeah, go on.
00:27:40	S1	No, you go on, it's fine.
00:27:42	S2	Go on.
00:27:43	S1	Do you think it's...?
00:27:44	S2	Yeah, so while the research might be there, but we need some sense of clarity in there and other kind of repeating what has already been done, all overlapping with the similar work we should prioritise and I think [inaudible 00:28:09] some kind of work needs to be done and I've been continuously having this with Zahir, because Zahir has- had a lot to do with the pharmacy practice research in Pakistan, those people who have been kind of eclectic who, yeah, so I think the- all the sort of responsibility also lies with them, the crews and the mentors to really come up and develop some sense of discipline in this area in the sense that we could actually tell the new decision of the incoming colleagues to pick up the round research questions [inaudible 00:29:03] and then just doing it first is [inaudible 00:29:06]
00:29:07	S1	So do you think the researches being done, is it being incorporated into everyday pharmacy practice and do you think- is it getting useful?
00:29:20	S2	I think it is, I think it is, it has been quite actually useful in a number of ways, one, the change of the ground in terms of the systems that we have and the policies we have, I think it has been heard at the policy level and at the systems level that it has been quite well received at that level as well, but then again I think had there been a more prioritised better, we could have covered a larger ground, so we're having research which does not find any real application or there is no appetite for it, there is no actual interest in those areas, so you pick up the right interest areas, and for me like with those areas are those which deal with issues that we are actually dealing with now, that's the situation and what should be done now and how we can move from here to the next level, so the research has to guide and change the process and inform the policy making or systems development process, which it has done but to me, to a very limited extent.
00:30:42	S1	As you've mentioned earlier that you- that some changes are dully made in the curriculum of you know, undergraduate training of pharmacist, can you identify a few gaps?
00:30:55	S2	Yeah. I think at the particular level, I think there has been particularly good developments in the sense that there are lots of good which is actually happening there.
00:31:08	S1	So what are the gaps, can you identify any gaps which again particularly indicate right now?

00:31:15	S2	Yeah. You see one particular gap is that the teachers or the mentors do not come from- in most cases, in majority of the cases, the teachers have been teaching all their life, they have not had a good taste of the real world out there in the professional field, in the technical areas, so they don't actually know much yeah, so if we had mentors and supervisors coming from the practice, on the field or whatever section of it might be, those could actually bring the real issues and also they would actually be able to guide the researchers more appropriately, so one area is this that you kind of bring up more people from the field appropriately to each of them, and also you see that would actually help the carrier economics to kind of mix up with the field and do something- directly work together with this people who work in the field as a regular job, so the economic boundaries have to be a bit extended to be bought in realm of the whole [inaudible 00:32:45] so that is one, and secondly like I said the- there is this particular need to kind of have a prioritised list, and two- and three actually, the research has to be well integrated in the overall health [inaudible 00:33:06] for example you see, I know that there is lots of work going in there from the health area which our students and our academics don't even know about, so they have to integrate within the system to raise the knowledge level about what is the national priority, what is the national programmes doing and how they can actually work together with them, so those are some of the areas which I think at least three of them which I just list.
00:33:39	S1	Okay, thank you. Thank you so much for your time, the interview will end over here.
00:33:46	S2	Okay.

Timecode	Speaker	Transcript
00:00:03	S1	Okay. So, let's just start with the concept first of all. So, what's your concept regarding continuing professional development? What do you think it is?
00:00:15	S2	I think with professional development, with continuing professional development, it's very hard part because we have—because especially in the healthcare, there's all this updating in the systems so as a pharmacist, I'm talking about pharmacy practices in theory definitely, there's new drugs coming in the market, we have lots of work and kinds of information, so that's why they're continues, so professional development is very medical, it's not mean that they just have a knowledge about all the medicines. In fact, as well as the [inaudible 00:00:45] like how they have to communicate, how they have to, you know, present anything or factious, there's lots of things have to be in place. It's not just about the one profession but... And to be a professional, you have to have lots of other skill and rather than your just a degree and you have just, you know, your graduation degree like that. So in my view, definitely the continuous professional development is very, very managed. I think about when I was graduating, I think like lacking, you know, lots of lacking in these things, and that definitely while in the profession after, you know, in the general profession, you have to wait for so long and 0131, I become a – I think now a professional, and yeah, but 0136 we don't have the proper persistent or 0139 things for that. So, I really feel this lacking when I become the 0144, so it's mandatory thing in my point of view.
00:01:50	S1	Alright. You must be familiar with the context of continuing education. How, in your opinion, is it different from CPD?

00:02:01	S2	<p>Yeah, because the continuous education is particularly in my view it's about your particularly what academic degree you have. So, definitely, you have to gain continuously just suppose if I'm talking about doctors. Definitely, they must to have to be continuously there for lots of patients and there has to be you know work updated of their knowledge. So, it's same like pharmacist, nurses, or any health care professional whatever, so divided educations and if they want to – with the professionalism, definitely, it's a little more 0240 because then, you talk about the profession and just not you're looking like that, you have worked for your degree is. It's something come out of it. You have to see in the progress. So, that's where they have a little bit difference. Definitely, you must have some base. So, definitely, if I'm a pharmacist, I must have a pharmacy degree and after that, I have to become a professional in any profession because after that, I can see in which, you know, what 0308 pharmacist and the different is like the healthcare or the pharmaceutical industries or in the hospital or in the community. So, definitely, yeah. First, we need a healthy new education and then you become a professional. If we don't have education, you can't become a profession. And then you become a profession, we have to tell the person or definitely like if I did my pharmacy or the 0334 whatever so that it's 0337. So, this is the – after that, you have to be continuously educated about the ones that you in your own profession, regardless – particularly about the – your own degree and fit the profession definitely, there is a progress there that you have to be bold about things with your own industry or your own profession. So, both are important and they have a little bit difference like especially if I'm talking about the healthcare system like for the doctors as well as 0411 that is Cialis, they're definitely for the pharmacists, they are continuous pharmacy educations. CBEs, so it's regarded with the pharmacists. So definitely, both are important in their aspect and they have a difference and everybody has to declare about it because lots of people thinking that the CBE and 0431 are the same thing, so definitely, we have to think about that.</p>
00:04:38	S1	<p>Alright. Let's talk about the present status of CPD in your region. Does such a module exist? And if it does...</p>
00:04:47	S2	<p>Oh well, well, until now because I'm in my profession since last 12 years. It's done – I feel like there's a massive kick in the CPDs especially because now they're – there is the thing of always talking about specialities. That's now everybody has now focusing every profession. So, definitely, in my region, now this is a very new one because I'm belonging to the religion in Pakistan, so it's very new to that, but kind of – still it's that of time to be more aware about all of these things. Definitely, it's so much lacking, still so much and I think people don't know about the pharmacy, particularly if I'm talking about the pharmacists' education after the graduation and there are CNEs or CVs or there are professional development. So, yeah, some people are quite good doing some educations regarding the proper information, but definitely, there is not somebody, a revolution that is conducted in my region. So, a system like it, and I think a professional body has to take part in this.</p>
00:06:01	S1	<p>So, do you think the practitioners would be interested in adopting CPD? Of course, continuous education is still there, if I'm not wrong.</p>
00:06:12	S2	<p>Yeah. I think it's affected everyone. It's affected every professionals.</p>
00:06:18	S1	<p>Yeah.</p>

00:06:18	S2	<p>If I'm thinking about my own self, definitely, I really want to be, if I want to become a professional, I must try to know lots of things. So, that if there is not a wrong way, there is no – you know, education system or there is no brand with it, how – why continue about lots of things, because I truly experience all these in my life, in my professional life, they are looking like this since, you know, 2005 to 2019, so there – and I see the – you're not different with development, all of these things also. They know this is the concept that people are, you know, could differentiate what CPD and what is CNEs or, you know. So, still but we don't have proper proper infrastructures, and I think the targets has to be stronger rather than any person.</p>
00:07:14	S1	<p>With authority in your region is responsible for the development of CPD?</p>
00:07:20	S2	<p>In my country, the pharmacy council is basically – is one of the authority. They have to the take because we have a work policy council that deal with the fact of we have a provincial – we have a 0731 definitely, the 0733 is responsible for their and their doing. There has information. But that's not at the pharmacy council of Pakistan and then the pharmacy council 0743 to definitely the pharmacy council of 0745. So, definitely, it has to be taken – if I compare with the detriments like pharmacy council must send the Panjabi. Definitely, Panjabi has done a little bit of better job than the pharmacy council of sint and we have information of the proper infrastructure, the people who are 0803 because maybe some of them are not pharmacists. They don't understand that what we need basically. So, this is basically a kind of, you know, lacking and that's been – because of them lacking, then the structure they don't know which one is able to go to these people and 0821 this profession number 1 and secondly, definitely awareness, the most important thing if they don't know what to do, what not to do. So, the pharmacy council and we have a main body, this is Pakistan Pharmacists Association. So, this is also well on the, you know, the body that just regulated all the graduating pharmacists, but the pharmacy council is responsible for 0843 and obviously for the beginner's pharmacy education of CPD support or so, but in relation with the Pakistan Pharmacists Association, but both don't have a – still, they do not have collaborations because they both stand alone and they need to be collaborative and they have to work together because of like if you are talking about the degrees in the UK, so they have undergraduate association also as well as, you know, JPCs and RB's that bring between unit council and then the district council, and the association. So, it – so, they wouldn't work together because one is dealing with the legislation, one is dealing with the pharmacy, you know, the main continuous education. So, they have to work together. They stand alone, you can't 0933 and everybody has to be integrative and affiliations that they would make the things better and stronger relationship.</p>
00:09:43	S1	<p>Alright. I would like to have your opinion about how effective do you think the present model in pharmacy practice it is or how do you think CPD model would be, how effective do you think a CPD model would be in pharmacy practice?</p>
00:10:05	S2	<p>Unfortunately, I'm not going to give you a very good answer about this, because when I was working, as my experience in my home country, definitely, we don't have this kind of a model. Again, definitely, research a lot about it, because the loss of campaign we have right now because the factors where you know post graduation in the other country, so that's what I saw lots of things, there's lots of changes over there. Definitely, they have good, you know, academic structures and then they have lots of good pharmacy education as well as professional development of this. So, definitely, you know, it may help,</p>

		but in the present condition in my home country, we don't have these kinds of things right now. So, it's definitely, in the future, it will be effective if we have any type of continuous education because everybody wants to learn. If I'm out of my home and away working and I'm a professional, definitely, everybody wants to, you know, get and acquire some knowledge, information, and develop their skills, and I think the young generation is very keen about it, because I saw lots of my – and it's because of my loss of 1120 they're eventually talking about it. They want to do something and everybody's start doing, you know, until or to be able that this is not just that you have 1134 but you have look professionally yourself. So, for that, what they do, because they don't have any infrastructure over there, we don't have any skills programs, we don't have any proper kind of 1145, you know, established to that, so I think because of that, like in people that's you know, taking lots of degrees and sometimes, so frustrated because you graduated then got the post graduations, but still you don't acquire the professionalism. So...
00:12:04	S1	So, that's your point?
00:12:05	S2	I think, yeah, it's 1206. Yeah, it's very effective. Just implemented in the 1209.
00:12:11	S1	Right. Okay. So, how do you think the pharmacy schools should be encouraged? How can they be motivated to have this approach for incorporating CPD model in the current curriculum so that, you know, people would be knowing about CPD, yeah?
00:12:28	S1	I think it...
00:12:30	S1	Yeah.
00:12:32	S1	Yeah, but I think they have a little now in my country. They – definitely because of lots of, you know, information about the 1238 what they can and has to be done. So, definitely, people know about it in my home country. They have lots of, you know, programs, but now, we have a program like pharmacy based, that is the doctor of the pharmacy and basically, this is more towards clinical, hospital, or in terms all these came like that after the family pharmacist and that was trained and this was, you know, it can 1308 from 1309 pharmacists, you're a doctor, and all of these things, so...
00:13:12	S1	And that's amazing yeah.
00:13:14	S1	It – yeah, they had created this mindset which is very helpful for these students when they are starting in the profession because they feel like there's – they are not pharmacists, they are doctors, just to write 1330 or DR, it's not become a doctor you become a doctor and have a 1333 or anything. First, they pharmacists and 1335 custodians. So, academia has to pay a very important role to establish their own profession rather comparing them with any other profession because we are pharmacists, we are drug custodian, we know about 1348 about the drugs and undoubtedly, but we are not the doctors, and then we do not have to compare as – because I don't know if 1359 we have to compare ourselves to doctors, especially in my home country, and we feel like there's – we also 1404 degree, so now, we have 1406 doctors, no. We don't want, because we have nothing to do with the diagnosis. We are the custodians, especially about the drugs. I don't know about the drugs, if I'm coming at the hospital or even in the industry, if I don't know about the drug, how could I deliver? If I don't know what is the job 1419 prepare

		and I don't know, you know, their formulation methods and all of these things, their quality control or the chipping or 1429...
00:14:31	S1	Correct.
00:14:31	S2	And I just know that because, I'm a doctor. So, definitely, there's been – this will not develop my professional skills. So, I think academia has to provide these baseline knowledge with the 1444 students what they are basically. They don't have to compare because it's always 1449 in country about that about not enough or you know, whether you were allowed, you're not allowed.
00:14:56	S1	Yes.
00:14:57	S2	For me, I really don't care. I really am proud like I am just a pharmacist, and if I'm a pharmacist, for me, it's – I'm really proud about it because now, I'm a pharmacist, definitely, I'm a pharmacist. I cannot – I don't want to show that I'm a doctor or whatever, so yeah. I'm a phramasist, I'm a registered pharmacist, that is my career now. So, I should not feel for the people and 1523, I don't know and in that way, definitely, it has to be a very, very important role. It has to provide the baseline information that they have to know that they are pharmacists. They are know better to know about the 1537, what they are because we are – for me, we are drug custodians. Do they must think about it? It is a very important part, and if we have proper I think our teacher about it to and how they teach because – and not, I said that because there is not professional development. Definitely, it's also found in the academia also, and I, you know, curricular because if our teacher does not know about it because they are not as implemented that now you have to do the certian degrees and everybody got confused. I think because of this confusion, 1614 I think it wants a 1616 2004 that the pharmacy council made that decision that now the degrees become – because I was in 1623, so I do remember, so after that, all the 1626 five years program from the four to five years program, and it's 1630 country without knowing that – the consequences in the future, and now, the students, because in this 1639 a lot of juniors and subordinates and trainings with me, so it's still, they are confused and I feel like really this is not problem because what the information, they had a huge 1651 mindset. They had been set early, I think 1655 this impacts their professionalism. So, I think for us, we have to provide a baseline to these academic people who are providing these information to our graduates and then...(beeping) I think yeah, we would provide the baseline information to the students and the graduated students, so that's why they are ready to 1736 graduated, they must know about what they are basically rather they are comparing themselves with other professional care because they have to work in the scene, especially in the hospitals or any healthcare system and in fact in the industry also because the industry definitely, only the pharmaceutical industries, it's not just 1751 the pharmacy that can have people from the analytical chemistry, from the physics, 1757 and any, you know like MBAs and lots of different items professionals to 1803, so we must know about our baseline, what we are, so definitely, academic or the schools or the curriculum has to provide the proper information, what is basically their role rather comparing with any other profession. So, I think it will be 1823 for professional development of our graduates.
00:18:26	S1	Okay. How interested do you think has been working in the field for quite many years, you might be leaving the team, you might be a manager by now, so how interested do you think your colleagues would

		be in adopting a CPD model when it's going to be made compulsory. Do you think there would be a good motivation towards this adoption?
00:18:52	S2	I think everybody wants – because there is lots of competition in the market nowadays, we could 1859 in fact in my hometown, I think they have a – in fact we both calculated, you know, I think six or seven months before that, I think almost at least 700 to 800 pharmacy graduates per annum, so there's lots of competition, so everybody definitely quite some knowledge, some professionalism. So, yeah, people are so 1922 now. I don't remember when I was graduated, we were not thinking about to go any much 1927 these things, but now, the students and 1932 or graduate 1933 graduate they are thinking about it, and definitely, if there's a proper infrastructure and there is a model, only the – it's a kind of effective model. So definitely, everybody is interested and if we have a good affiliation, I think it would be the very best especially in our country and very especially in our province because and 1956 with the other province because we all 1959 everybody good friends in the Panjab also, so if we were very 2004 they are conducting loss of a 2006 and they have lots of pharmacists who are recruited in the public sector also but is not happening, this is not happening in the 2014, so that's why when we become – we have a very good model, we have a very good infrastructure. I think everybody will need 2023. In fact, the 2024 after doing 2027 of this job, so still I could 2029 like this. Everybody is 2032 because this is the healthcare and we have 2036 so everytime.
00:20:37	S1	Great.
00:20:38	S2	So definitely. It has been more so that everybody – In my opinion because I know lots of my graduates, my juniors, they – everybody because I also conduct these some sessions, so everybody wants to develop.
00:20:51	S1	Great.
00:20:51	S2	So, that's why I feel like this. There must be.
00:20:54	S1	For instance if you would be designing a CPD model for pharmacy practitioners in your region, so currently your idea or a plan you can give us that what can be the potential contribution or expectation and support from your area.
00:21:16	S2	I think...
00:21:17	S1	Yes?
00:21:17	S2	I think the involvement from me as like there must have a formal education, number one. So, they have to know where to work the profession they are learning and then they have to find it them self.
00:21:34	S1	Yes, of course.
00:21:36	S2	And because then when they have, you know, their formal education, their assessment, then they are only ones writing, then they are able to know which kind of skills they have then there's the start with development and then they have to continuously learn about all of these things and they have to keep updated their thing and then they become definitely professional, then they become professionals. Definitely, it has to be developed through their experience and yeah, and like lots of things like

		<p>conferencing of short because I had one experience then I went to the 2219 for a 2219 workshop and it's doing to change my whole concept of the pharmacy from that, and after that I think 2226 and I'm the best one and after that I feel like, I don't know anything because the 2230 somewhere else and their understanding now and then I started, you know, there in the hospitals. Definitely, it's not everybody's department the pharmacist is not exposed to that because of 2242 you know, we don't have that much resources. We don't have lots of pharmacists or lots of other, you know, problems. So, right after that, I'm comfortable. So definitely, these events and workshop is very important and the most important thing if you really want to have implement that because in my country, we have to renew our, you know, registration after five years. So, if they assign that point and everything and they didn't know they must do something like that. Definitely, everybody 2317 requirement of the points and everybody come to notice and it may become a more professional and people, you know, 2325 they also 2327 networking in these all things maybe, you know, 2332 that way. So, this is my 2336 about that. So, I think it's – we have it from the baseline, so we have a learner, you know. We have took 2345, they first come with the formal education then they have to do 2348 kind of and then continuous learning then they have to work with themselves and then they have to, you know, come up with their experiences, and again, because I have – I'm not experienced about anything, I would 2402 any workshop and we – so, this is 2405 your experiences and yeah, if it is a compulsory 2409 like I went lots of times for conference and workshop to the Middle East so either – it has to take, you know, there are some points to be 2420 regulating bodies. Do they have to 2423 that they have to 2424 us or CNEs for 2428 like that if I'm not wrong. So, these are the things that are definitely 2433 and then I went there and sort of 2436 lots of my old friends, my new friends, because we have a loss of 2441 also. So, these – and then they become 2445 loss of resources but because now, 2448 last year, you know 2451 that I was 2452 and it would 2455 my master's in pharmacy practice over here because I 2459 lots of people over there and we are also planning and then we can 2504 these are the resources that is 2506 and we have to – 2508 and we have to do this and that 2511 and also be 2514. I think there is 200 pharmacists have to study pharmacies and is it this group and we got the categorize this according to speciality. Somebody's from the class, somebody from the studies diseases, and somebody's from the oncology, and somebody is from the 2531 pharmacy and stuff like that and 2536 student or other people or the graduates really focusing on, this professionally on separately and we have discussed whom our, you know, real-time experiences and real-time 2547 with that. So, it's become very effective.</p>
00:25:50	S1	Great.
00:25:50	S2	So, this for me, this is, you know, the left leg to develop something or if I am able to do that, I adopted that. That thing.
00:26:02	S1	Great. You pretty much answered my next question. So, we'll just move to the next one. So, what do you think can be the attributes of this model and can you highlight any key components which can be taken in account while building this model.
00:26:26	S2	I think the infrastructure, number one, association and affiliations with other bodies because if you don't know the other people networking, it's a key because professional are definably are kind of way to sell on. Nobody can do or it in any association can stand alone if they don't have the networking and that's where problems if they can also for, you know, examples everybody has their, you know, association and

		affiliation with other bodies also. So, these things make them complete model because nobody can stand alone.
00:27:06	S1	Great. Can you please give me an idea about what can be the motivating factors for the target, for example, pharmacy council in your region that would create ease for those authorities to make...
00:27:25	S1	I think the...
00:27:27	S1	To make the compulsory or to implement CPD?
00:27:33	S1	I think because of everything comes in the finance, definitely. So, if there is some proper function, on it, or monetary services or whatever, definitely, it has become popular and it is a compulsory for every graduate to attend these and they have to pay some fees. If they have to pay some fees, definitely, they must come, you know, attend that, and they attend that, definitely, whatever, at least 2803 a single thing and this is also the resource generation for this council or the association, those they have attendees. So, they 2810. So, I think that for me, the finance and then number two is the human resources because if you, if you have human resources and you have – you don't have the finance, it's useless. You have a finance, but you don't have the human resource, it's useless. So, these two are very important thing and might expect cost of monetary with the human resources. It's what – if we have these things, definitely, we will come up with a very good solution.
00:28:40	S1	I'm sure you must be knowing about common wealth pharmacists association as you are related to this profession for quite some time. So, can you give me 2852 expectation or your idea? How can CPA be a help in the designing or the implementation of CPD model in the current practice?
00:29:07	S2	I think I have no idea about that the CPA's doing with Pakistan because the Pakistan Pharmacists Association is also in collaboration with the association of CPA as per my information, but I don't know. I never heard about any program to 2926 done then the collaboration maybe might likely I have no information about it, but because I'm in this profession since like more than 12, 13 years, but I never had experiences on 2940 any program associated with the CPA and the PPA because the Pakistan Pharmacists Association is the 2947 in the association of the common wealth pharmacist association. Definitely, common wealth has lots of other 2958 in it and they have brought different brought different kinds of experience, so definitely, it would be very, very powerful and impactful for I think in our country because they have a lack of lots of information knowledge because I heard that they have a very good 3014 or something in that area I think a couple of years before. I don't remember 3019, but I just heard about that and definitely, in the 3025, we have a 3025 of lots of things, so CPA may have been designed and the proper implementation because CPA's working with lots of other countries and they don't – especially with the low-income countries because they have experiences with 3039 countries now from the common wealth practitioners – sorry, from common wealth countries, so yeah. They have experience about it and 3052. They also I think in some program with India, so they – because they have 3058 with each other and we have 3105 the CPA can work with us or provided some – not only the technical I think because of the monetary reasons or the financial resources 3117, there's lots of programs that now are being conducted plus not – if it is from the some very good authority, definitely, 3127, definitely, it would

		be more effective and it's 3133 more infrastructurally designed and maybe able to implement if somebody else is monitoring 3137.
00:31:40	S1	Great. Where do you see this practice, the CPD model practice in your region in almost five years' time?
00:31:49	S1	We – still it's fast pacing this thing, I don't know. For me, it's a question mark because I feel unless we don't have the infrastructure, so first we have to come up with a certain design and you know, infrastructure.
00:32:05	S1	Of course, yeah.
00:32:05	S2	And then we can able to answer, I think I can able to answer it because I don't know the system and because lots of, you know, there's lots of other associations in my country also, lots of other people have come up with this and we are doing lots of – because now I've also become a member of this society because – and factors but this is basically – now, they have a really good pharmacist over there also. So, I'm working with them and then I conducted some workshops and I have also conducted a full-day workshop on their behalf and they speak to the pharmacists, so from 3244, it's a big chance for them and I 3246 that now we have to collaborate with the other, you know, associations like our associations with the 3253 practitioners. They are all 3256 and now, we have a lot of pharmacists who just start with this association and now we have two – after that, I think they are also conducted one more 3306 workshop with the pharmacist with the doctors. So I think, yeah, we can do that and I also try to do with the other, you know, practitioners or speciality like oncology, 3320 to come up and do something, because definitely, they are going to teach us because in that workshop, they were doctors, pharmacists, and other healthcare professionals. They are – we are all together. They are discussing that basically this workshop is only for the pharmacists and the other healthcare professional also reaching us are – give their experience about it. I think of this can happened, then definitely, any society or any association can do it if it is – you have proper infrastructure and we have a collaboration with other societies or other association, we will definitely be in the very good scenarios.
00:34:00	S1	Great. Any comments relating to this survey? Do you think it's – it will prove to be effective and what does your level of encouragement for such surveys?
00:34:12	S2	I think that it's good to know about – it's good to discuss about these things, but definitely, we are good progress talk about it. So, it's every time it's like my job for me. For me, it is effective if it is correct, that's for sure, because we have to, you know, action our employment for me, so if I can able to do something, so for me, this is important 3441 to talk about it, so that's why I feel like this – it will be effect – for me, it will be effective if we have a really good association of CPA with the PPA and the thing and the by the survey if they have to know and you can provide my information to them. I'd like to do that something for the pharmacy profession in my region and my country because some victory – because when I graduated, I already said that I had no idea what to do. So now, I really want others to have some direction and this direction come up when we have a proper infrastructure, we have the proper models, we have association, we have an accurate game, and we know each other because we don't know the – what has happened in our country, so by this networking and this is all of this and other part don't know how to contact about other countries. So, there's definitely a massive effective. If it is really – if it is really, you know, implemented and it is implemented right when we have our complete design models

		or infrastructure, and yeah, we can – we do encourage this kind of surveys because they come up mostly definitely some ideas. We can share different knowledges, and yeah, that’s – there’s but for me, but I can say that actually not a lot of works for me.
00:36:12	S2	Okay. Thank you so much, Our interview ends over here. Thank you so much for your time.
Timecode	Speaker	Transcript
00:00:02	S1	So, let’s start a bit about the background. What’s your knowledge about the Continuing Professional Development?
00:00:13	S2	I have been aware of it for some time. I kind of understand what’s continuing education is and that CPD is more involved , it’s more in the centre.
00:00:32	S1	Sorry?
00:00:33	S2	Yeah. Err, CPD? From my understanding, it’s more in the centre and it involves reflecting on what a person and to think about what their needs are and then they identify the plan for it. And then the learning material, then they need to implement it, so a small skills base it’s not somebody telling you there’s something going on, [inaudible 00:01:00] by the needs that is relevant to them.
00:01:07	S1	Great! So, this is how you think it differs from continuing education, right?
00:01:13	S2	Yes.
00:01:14	S1	So, what about your region? Does such a model exist in your region and if it does, can you tell me what does CPD involve?
00:01:26	S2	It’s very involved. It is not an established [inaudible 00:01:32] says, look, this is what a child look like, each country has its own approach. Most of it, it is mostly CE, mostly continuing education. There is not—I have not come across any countries where it’s strictly a CPD approach. You may have that where there’s a need in an institution or they found a [inaudible 00:01:59] training and they might have [inaudible 00:02:01] say, okay, we need training on this to do a job and that is where you may see it but it’s not set in stone, it is not like a policy thing, it is more us people identifying their needs, like if there’s a provider they can approach then they do [inaudible 00:02:25] generally. So, a lot of it is CE but you can still have some CPD in the [inaudible 00:02:34].
00:02:37	S1	Great! So basically, in Trinidad, CE is more commonly followed, right?
00:02:45	S2	Yes. Yeah. So, a lot of the CEs that follows [inaudible 00:02:52] will be put on by the association or it means something sponsored by a drug company which is now already on CE but more of a [inaudible 00:03:01] promotional event. We have had one or two incidents where the ministry and their staff will have a request or an educational something to implement but it is not common and it is not mandatory and [inaudible 00:03:20] actually.
00:03:24	S1	So, which professional body would be responsible if they would to develop a CPD model in Trinidad?

00:03:34	S2	That would be the Pharmaceutical Society of Trinidad [inaudible 00:03:37].
00:03:38	S1	Great! Okay. Let's go a bit towards your opinion. How effective in your opinion would be the—or how effective do you think the present of CE or CPD model is in your region? And how effective do you think CPD can be? What changes—what good changes can CPD bring?
00:04:02	S2	Well, first, I think it's minimally . It's effective only to a small proportion of people, and because most of [inaudible 00:04:15] is really driven not by the association, they don't have a lot of events, so that's [inaudible 00:04:26] would go and [inaudible 00:04:28] let's say online education for themselves. I don't think it's very effective. I think it's low to moderate. And how it can be improved? Well, first of all, it's not required for [inaudible 00:04:43] to people. So that means that [inaudible 00:04:51] don't need to do it, so if there's no need to do it and pharmacist can continue [inaudible 00:05:02] licences without that [inaudible 00:05:04] would be effective in improving or ensuring the professional standards [inaudible 00:05:12]. So, I think a major improvement is needed first of all. You know, it should be [inaudible 00:05:20], it should be a monetary , you know, a lot of credits tied to re-licensure so that [inaudible 00:05:29]. And there should be independent bodies offering CEs periodically, around once a year or twice a year where you have a convention that's expensive for some people, they should have more events but [inaudible 00:05:49] and they should have it in different forms, for instance, not just in live but they should also have options for online engagement, people who may not be able to attend a specific live event.
00:06:10	S1	Okay. So, what's your opinion that how in the curriculum, like how pharmacy schools can be encouraged so that they can establish an approach towards CPD in the current curriculum, so that it includes CPD?
00:06:28	S2	Yeah. Schools would need to facilitate many students so they know how to learn the professional environment, what their job requires, what are the aspects of the job that... or the content that we input onto them and how to spend resources, so for continuing education, and also critique appropriate resources that will be valuable to them. That school that training people how to—what to look for in terms of continuing education, schools consider offering it but they might not be aware of their own limitations because usually they don't have enough staff. So that's the approach I think they should use to integrate to [inaudible 00:07:30] when they graduate to continue a long part of CPD. It should be [inaudible 00:07:36] in the final year course where [inaudible 00:07:39] have to think about I'm in a [inaudible 00:07:41] setting, this is what my job would require, these are the resources and this is what I learned and this is how I can apply it, that kind of—that I think would help.
00:07:56	S1	Okay. So, how interested do you think the pharmacy practitioners in Trinidad would be in following a formal CPD model in their day-to-day practise?
00:08:09	S2	I think it is mixed. I think there are some people who want it and see the need and are very interested in learning, I think particularly [inaudible 00:08:18] graduates. But I think there are people who wouldn't have want it because in their mind, they don't think they need it, they think their experience is maybe enough or they don't think it could be [inaudible 00:08:35] enough. So, it is going to be mixed. It is

		hard to tell you what proportion would be for and what proportion would be against, but I think we would see more of the [inaudible 00:08:47] are more open to that CPD model.
00:08:56	S1	Great! So, as a policymaker or a regulator, what can be the potential, the contribution, your expectations, and the support from your area in designing such a model for pharmacy practitioners in Trinidad?
00:09:18	S2	What I think the potential for me is it would be a benefit for developing skills [inaudible 00:09:23] on the job. It will help people to assess, that will be the self-assessment path and [inaudible 00:09:31] competence. I think that [inaudible 00:09:36] benefits for sure. In terms of what—there is a need for support for [inaudible 00:09:52], I think [inaudible 00:09:57] compulsory would be necessary, maybe a certain [inaudible 00:10:01] would be necessary to ensure all the professionals meeting a minimum standard of competence so that's something that would mean to be [inaudible 00:10:12] that policy or that [inaudible 00:10:14] have to come in to think and would need to support in terms of resources available, future resources, [inaudible 00:10:23] resources and tools that facilitate that exchange teaching and learning experience.
00:10:34	S1	Okay. Given there's a list as I have provided you with the interview guide, a list of the themes which are mostly seen in the CPD model which are being practised around the ward, can you prioritise them as per your country and area of practise needs?
00:11:00	S2	Prior to the [inaudible 00:11:01] requirement, [inaudible 00:11:02] compulsory points would be the highest priority. Then the availability of resources, because it will be [inaudible 00:11:10] and really get—it won't be effective if [inaudible 00:11:16] will require to do it and it won't be [inaudible 00:11:19] more resources or insufficient resources. So, for me, [inaudible 00:11:24] having more resources would definitely be the second. And then we can look at the other things that we needed for professional development, that would be [inaudible 00:11:40] aspect and the skills development would be fourth. But definitely [inaudible 00:11:51].
00:11:58	S1	Okay. So, what could be the attributor for pharmacy practise CPD model?
00:12:09	S2	It should be relevant. It should be the current to what's being seen in practise and in public health, so it should be relevant. So [inaudible 00:12:21] but what's relevant is [inaudible 00:12:22], it should be flexible and it's more [inaudible 00:12:30]. It should not be [inaudible 00:12:33] in mind, and it should allow persons to gain such a [inaudible 00:12:48]. If there's a particular series of CEs in a particular area, it should allow them to learn a certificate that they could renew over time. And that this should be recognised by the regulatory body of the country. So that's one very important attribute, it should be recognised by the health professional society, by the board and by other stakeholders both locally, regionally, and internationally so that it can be accredited, you know, eventually, however they [inaudible 00:13:32] internationally recognised. That may be a goal but that's idea.
00:13:38	S1	Great! So, in order to build such a model, can you explain what key components are needed?
00:13:49	S2	You would need to have, first of all, a mandate, and you need an association as well to take on that mandates [inaudible 00:13:58] stakeholders, that would be the ministry and anybody that create bills

		and adjust recommendations because you have to have a [inaudible 00:14:11] framework to start with. You also need to have international partners so that if you yourself cannot—if you [inaudible 00:14:20] credit institution internationally so those credits are recognised. Partnering with local universities and keeping a representative in a space where they can get information, what their needs are, people what their needs are. So those are key components, a way in which the [inaudible 00:14:49], a way in which you can [inaudible 00:14:53] stakeholders and get new recognition and a legislative frameworks.
00:15:02	S1	Great! Let's talk about a bit about the challenges which are being faced by the authorities. What can be the factors which would create a bit ease for Pharmaceutical Society of Trinidad and Tobago to implement CPD in your region?
00:15:23	S2	They would need backing from the board because the board would be the one—they would [inaudible 00:15:29] and they would both need to work together and people would need to see this is [inaudible 00:15:37] standard, this is what we will consider [inaudible 00:15:40] in terms of CPD or credits that we would recognise for registration. So, they definitely would need to [inaudible 00:15:49]. They would need some guidance in terms of developmental programmes, maybe consulting with persons who have experience in developing continuing education. Because it's not something just going [inaudible 00:16:09] in content, you know, it should be working with persons with qualifications and instructional development so that it's relevant and useful for [inaudible 00:16:23].
00:16:25	S1	Great. We would be knowing about Commonwealth Pharmacist Association I believe, so in your opinion how can CPD be a help in designing such a model for Trinidad and as well as how can they play a role in the implementation of CPD practise on the current system?
00:16:52	S2	Well, they can propose a model or they can work with the society to develop a model that's useful, that they would have some experience in CEs and CPDs. But in terms of the implementation they can provide guidance into things to think about what was [inaudible 00:17:15] people's experiences, the members of the CPE will share the experiences or they can assist with like [inaudible 00:17:23] arrangements or sharing arrangements or facilitate, if another society internationally had online CE that join in advance as if they joined to kind of get credits recognised by that body that they can help facilitate those kinds of [inaudible 00:17:44].
00:17:47	S1	Great. So, what is your future expectation? Where do you see the CPD model practise in your country, in almost a five years' time?
00:17:59	S2	I think it would be a [inaudible 00:18:00] because we're getting more and more calls from institutions that want their pharmacist to be more advance [inaudible 00:18:09] to be able to implement new models. So, I think it would help more a little bit. I don't think it would like fully, in its full form that it could be, but I think it would have moved to a point where we are seeing things delivered definitely for institutional pharmacist because they [inaudible 00:18:32] to always want advanced technologies and they are also recognising the role of a pharmacist in patient care much more than before. So now they are interested in more structure advanced [inaudible 00:18:48], so that's going to drive the support for CPD in those areas. In private sectors, it's going to be slower but I think in a public sector, we will have

		and we'll see more modules being on [inaudible 00:19:06] or being requested from teaching [inaudible 00:19:10].
00:19:13	S1	Great! A few comments regarding the survey. Do you think it will prove to be effective?
00:19:25	S2	Well, what are you trying to achieve with it, like you want to be able to do...
00:19:37	S1	As in that interview you just gave, do you think this will prove to be effective, if these all information is going to be given to the CPA?
00:19:47	S2	Oh, okay. Oh, you mean something that to inform the CPA. Yes, I think it will be helpful to give them some insight.
00:19:57	S1	Great! And what about the research, the knowledge about what exactly is happening as a part of my research project, do you think it's going—is it an effective research?
00:20:13	S2	I think it is useful for, yes, for gathering information and [inaudible 00:20:21] in particular. And I think once you identified the challenges, it's very important because you may find similarities but you may also find differences depending on your country, you know, that's [inaudible 00:20:40] to you. So, I think it could be useful, definitely, in a qualitative [inaudible 00:20:49] kind of people.
00:20:53	S1	Great! So, do you encourage that sort of service?
00:20:58	S2	Generally, yes, because I think it's something we'd been really [inaudible 00:21:03] have to do depending on where it's done and who's doing it, [inaudible 00:21:08] may need to focus a little differently depending if, you know, it's a country where CEs and CPDs are well-established versus a country where it is not so well-established. You may find different answers. My [inaudible 00:21:27] ideas, that wasn't quite—that's slightly confusing kind of from when you ask but I think I understand what you wanted form it.
00:21:39	S1	Great. Thank you so much for your time
00:21:44	S2	Okay.
00:21:44	S1	Thank you. We will end it over here.

Timecode	Speaker	Transcript
00:00:02	S1	Let's start.
00:00:04	S2	Let's get started, yes.
00:00:08	S1	So can you tell me a bit of your concept regarding continuing professional development? What do you know about continuing professional development?

00:00:20	S2	When it comes to the model continuing professional development throughout it's okay as the practitioner. Basically, they will see the responsibility of the individuals on masses okay, in terms of the professional you know, in terms of their professional competencies you know that lead to the maintenance and basically developmental and broadening of their knowledge. And it is not only knowledge. I would say apart from knowledge as well as attitude session to what the practice, how they have to lead the profession in terms of competency that could prove their career as long as they're the pharmacist. So that is what we call continuing professional development. So here I will say three things are very, very important in professional career when you're working as a pharmacist that you have to maintain in terms of knowledge, in terms of the skills, in terms of the practice. So those are the things which are very, very important. And because I'm a competent pharmacist and continuous professional development plays a significant role. That is what my concept it. That is what I under the centre, around the CPD that is the continuing professional development.
00:01:45	S1	Right. So how do you think it differs from the concept of continuing your education? So how do you feel these two differ?
00:01:59	S2	Basically, I will say around continuous professional development basically it is more in goal oriented. Are you getting me? There is, continuing education is an important component. That is an important part of CPD. But when it comes to the CPD in terms of professional development, it must have some sort of practice involved. Are you getting what I'm saying?
00:02:29	S1	Yes.
00:02:29	S2	Whereas in continuing the education, you're learning the things. But when it comes to the practice, when it comes to implementation and the profession, those requirements maybe slightly change from individual to individual. Are you getting me?
00:02:42	S1	Yeah, that makes sense.
00:02:42	S2	So here it is more personalised when it comes to the CPD, individual care has to be taken and I will say reflection, you know reflective. Whatever you do, there must be some reflective component in this professional role. And it is on my mind may be different from the next person. So in terms of that, I think continuous professional development is different from continuing the education. But remember continuing the education is very important from CPD.
00:03:17	S1	Let's come to the current status of CPD. Does such a model exist in your region? Can you briefly describe if it does, what does involve in your region?
00:03:32	S2	In our region, continuous professional development, you're talking about CPD? Continuous professional development?
00:03:37	S1	Yeah.
00:03:39	S2	It still [inaudible 00:03:42]. Normally, pharmaceutical in Trinidad and Tobago and with who they are organising this type of things. But still it is missing at the government side. I've never seen any program being, you know the pharmacists in Trinidad and Tobago that is the [inaudible 00:04:00]. We are the

		against the traditional once they complete their pharmacy program. So what is missing from pharmacy board of Trinidad and Tobago. And in fact, I have recently have spoken to the pharmacy board president. And he told that pharmacy board was working on that component, the possibility that the pharmacists they have to register for the cost. They have to be enrolled for that. They have to go professional development program that is the thing.
00:04:30	S1	So you think it is going to be compulsory. It's not compulsory yet?
00:04:38	S2	They would get started but they may try to make it, you know the sum that is willing to start and once it is started, it is going to amended for all the working profession, all the pharmacist.
00:04:54	S1	Okay. Let's come on your opinion, what about the present CPD model in pharmacy practice? How do you think, how effective it is?
00:05:08	S2	When it comes to [inaudible 00:05:09] you're talking about Trinidad and Tobago (Overlapping Conversation)?
00:05:11	S1	Generally. I'm generally talking about how effective do you think a CPD model is in pharmacy practice?
00:05:20	S2	I will it depends on the country, the country system. I know two systems. One is from India. I know basically three systems. One is from India, other one is from Trinidad and the next one I've seen in the US. That is our neighbouring country. So there's a huge difference between all three countries so they are working on CPD. I have seen a system where under the pharmacy board and they usually conduct continuing professional development program. That program is generally based on a few lectures therefore link a few people and they're just speaking. If there is no reflection, more reflecting component in that getting benefit out of that. Are you getting me?
00:06:00	S1	Yes.
00:06:00	S2	And one hen component that's in Trinidad only the Pharmaceutical Society of Trinidad and Tobago, they are conducting their program. That also does not help that component that must be there when it comes to the individual growth, in terms of (Overlapping Conversation).
00:06:12	S1	It's not in practice, yes. It's not in practice.
00:06:15	S2	Not yet in practice. But when I see the US component, I attended on program [inaudible 00:06:20] last year. And I've seen the things what I look for that is basically professional development program for the pharmacist. And that is really actively managed because they're really effective in terms of learning, when it comes to professional competencies and the whole of maybe the way maybe in terms of the action plan, how the things are being implemented. Then once those things are implemented, all the system, automatically when you make them, you're not, so that cycle is [inaudible 00:06:55] so starting from the plan, how the [inaudible 00:06:59] so that there's [inaudible 00:07:03] that is very, very good. And I think [inaudible 00:07:08] in CPD holds all the recommendation in the form of the [inaudible 00:07:14]. So when it comes to the global system, I see US model I have seen that is the most effective one. But when it comes to the Third World Country maybe India, maybe, it comes under the development in terms of [inaudible 00:07:29]. When it comes to the pharmacy it is developing stage so CPD model is

		not that effective I will say. Still it can be continued to be done challenges as well as the opportunities you know.
00:07:43	S1	So as an academician, in your opinion, how should pharmacist in your region, how can they be encouraged to establish an approach for assimilating the CPD model in the current curriculum to produce CPD ready graduates?
00:08:01	S2	CPD ready graduates? I will say even the students already were here will not only repeat them. We take them the pharmacy practice. So we work on practice and all those things apart from their communication skills and other things. So people are required for the pharmacy practice. And for example in year four, who are most full year student they spend their time on different places so maybe hospital or community pharmacies. So that component, we introduce this [inaudible 00:08:40] but we maybe say at that level because [inaudible 00:08:43] about one year but they will do it in year three. But practice is lifelong because once you're entering the pharmacy practice profession, they have to be there for whole life. Their career is based on this. So in that component if you ask me how does School of Pharmacy, how the pharmacy school as an academician, [inaudible 00:09:09].
00:09:13	S1	What can be done in the curriculum, yes.
00:09:15	S2	It's in pharmacy, we have the recognition. We are the pharmacists and region pharmacist so we can be helpful we can conduct, we can input the programme when I was speaking to the president of Pharmacy Board of Trinidad and Tobago. When he told me that we're planning to start the CPD activity for all of our masses, understandably if you need any help, just let me know. We can hold the program for you. And we know the priorities of our country. We know what other diseases we are suffering from in terms of like chronic diseases. And we can hold a very good program for you based on that. So I think they can play a big role whether they continue the programme for the pharmacy practitioner. So they did support pharmacy practice and as a community pharmacist and [inaudible 00:10:12] and getting pharmacy students so I think we can design that model for them and can be very, every effective for them and we can do that. And the third is the role definitely.
00:10:25	S1	But how this part, my question is how this can be encouraged like you have these thoughts and you have these plans which I really appreciate but how do you think such things can be encouraged in other people as well. How can we encourage them to establish such an approach?
00:10:50	S2	Just they can speak to the stakeholders, different stakeholders. Like one of the stakeholders Board of Trinidad and Tobago. And another stakeholder is maybe from Ministry of Health and another stakeholders who are all pharmacy professional organisation for example Pharmaceutical Society of Trinidad and Tobago. So we have then we can have our own sector in hospital setup in different [inaudible 00:11:14]. We have our own pharmacist, committee pharmacist working in independent pharmacist [inaudible 00:11:19]. And we can increase them you know [inaudible 00:11:25] so the continuous professional development and they can participate once the program is structured in there. And with my experience with the working pharmacist, they run their programs in [inaudible 00:11:36] to start any program in CPD whether alone or in collaboration with some other organisation [inaudible

		00:11:45] they're quite interested to attend to those programs. And school weekend then creates to this organisation, our stakeholders [inaudible 00:11:57] time to be done.
00:12:00	S1	So how interested do you think your colleagues would be for such a model?
00:12:08	S2	They should be. Definitely, they will be interested. In terms of friends, I speak about my working professional colleagues in School of Pharmacy. They're already aware of CPD and they're really much interested for this program. But the only thing because of financial constraints you know or too much workload in terms of teaching, okay, in terms of credit hours. But it's reading out of that and also we're going to contribute our time there on the same terms of CPD. In fact over those five working days when I was speaking to the Pharmacy Board president I told them that Saturday and Sunday, we can still go do to continue program on weekends so the working pharmacists since it is easy for them to come on the weekends. Because you've been working in the pharmacy, it may not be easy for them to spare a day. You know like a few days from your practice site but you did Saturday and Sunday, pharmacist, you're there on location. So they can come in during that program on something that is worth their months and days to attend the programme when they start this program when they keep those activities on Saturday and Sunday. And there is a range where I didn't speak to the characters or the pharmacists, they need to provide you the lecture or they need to provide, you want to conduct this program. So we're really need money if you want to utilise our lecture whole on the infrastructure or contents [inaudible 00:13:38]. We're ready to provide all those facilities. And they technically you need lecturers who will assist you and deliver the lecture and see what topic you will give. We will make that.
00:13:51	S1	Okay, let's come to a bit of a planning site, as a teaching profession, what can be the potential contribution, your expectation and support from your area in designing a CPD model for pharmacy practitioners in your area as you're going to design a CPD model, right? If you're going to collaborate with the authorities. So what can be the potential contribution and your expectations? And what can be the support from your area? You have been explaining this before as well in the previous question. You just told me this. But can you just tell me about the potential and....
00:14:39	S2	So [inaudible 00:14:39] they will say I came with the right education so formal education of CPD. You bring any topic I'm ready to do that for them. I may complete them, [inaudible 00:14:52] as a change in profession. So what the lecture, if you give me the topic, if you'll give me the topic, I can deliver the lecture on any given topic, okay? That could be my condition.
00:15:09	S1	There are a few things which I find in most of the CPD models which have been practiced around the world, would you be able to prioritise them as per your country and area of practice needs?
00:15:23	S2	Sure.
00:15:26	S1	So I provided you with the interview guide but if I'm going to call them one by one, it would be really hard for you to remember them and then....
00:15:35	S2	I really have the line.

00:15:39	S1	The line, yeah. So would you be able to...?
00:15:43	S2	According to my country requirements?
00:15:47	S1	Yes.
00:15:50	S2	Okay, okay, okay. So the first thing I will say it would be the assessment. That could be the very first one.
00:16:00	S1	Of course.
00:16:02	S2	Because until unless you bring yourself assessment, it is very different role on the site. So the self-assessment would be the number one. Then second would be, again I would say secondly it would be the skill development skill development. So you assess yourself. You have to understand what skills you want to well, okay. So that would be second one. Then third would be once you understood then the third thing would be [inaudible 00:16:46] attending CPD and workshops. You have to find the point or area where you can attend those. So that would be the third one. Basically, I would say in terms of [inaudible 00:17:03]. Then the fourth would be, I would say continuous learning. Then followed by keeping up to date. Then sixth would be formal education really. Sometimes it's [inaudible 00:17:42] the professional development working experience, formal education of CPD. So this is more education of CPD first followed by professional development because once you get that internal view development through your educational program that you've attended. And then apart from that we will give resources for following CPD. I think that is the point which is required before [inaudible 00:18:15]. When I said [inaudible 00:18:25] CPD. Then I will say last point, I will say requirement of compulsory CPD points. Because that is something that should not be, if I'm working something, if they're learning something, [inaudible 00:18:48] no. Because if something is the [inaudible 00:18:55]. But in the practice, it will see [inaudible 00:19:04] critical role in the requirements of CPD. Those people will not do it. They will not understand and [inaudible 00:19:12] will not allow them to attend this program because sometimes [inaudible 00:19:20] your boss may not allow you to go. He will say, no, no, no. You can go some other time. And [inaudible 00:19:27] but will stay at pharmacy instead of learning this program. But once it's made compulsory, you will have to tell your boss otherwise they will not [inaudible 00:19:33] on my registration. And in looking my practice inside, it's going to be renewed.
00:19:43	S1	Okay. So what could be the attributes of a pharmacy practice CPD model?
00:19:51	S2	This question I could not understand. What exactly you want to take away? The term attributes of the pharmacy practice, what exactly do you want to know in terms of the attributes?
00:20:06	S1	As in the attributes, how can I explain?
00:20:19	S2	So in terms of property or quality you're talking about merits basically? Okay, what could be that? I think talking about in terms of merit or in terms of quality, one thing is sure if you're program is very effective, I'm sure this program is going to grow you know it continues self-improvement definitely because in terms of pharmacy practice, it will help the pharmacist to maintain basically, maintain and they will say to enhance or to increase their competency both in terms of their duty and in terms of their future service developments you know. So it is going to help.

00:21:04	S1	Yeah, you can say like, what can be the significant qualities or you know, you can answer in any way you understand this. It's not for me right now to give my input.
00:21:29	S2	I would say a little bit to this question. I don't [inaudible 00:21:34] to improve their competency. If this program is being implemented to that would be the merit of this pharmacy practice continuous professional development. It will help the pharmacists to maintain, enhance their competency in terms of what their current duty as well as the future service developments. And it should be, basically it should not stop anywhere. Usually, that is what I feel about the continuous, that is what we continue professional development more. It should [inaudible 00:22:06] basically that helps to, that will help you know the pharmacist improve their, I will say basically improve their competency and maintain or improve it competency through the field. You're not just [inaudible 00:22:27] basically.
00:22:30	S1	So if we design this model, can you highlight a few key competence in regards to your area as well?
00:22:41	S2	If I have to develop this program, I would think of an connection you're talking about that?
00:22:48	S1	Yes.
00:22:51	S2	If I have to develop this program from my country so, I see what the needs of my country. Do you know what I'm saying? Because if we compare the requirements because I've seen in England more than I've seen the US more than, and now I'm working here in Trinidad. So we can do it [inaudible 00:23:12] so first and foremost, they would see, on the national learning, [inaudible 00:23:18] pharmacy, in terms of pharmacists. And second thing is I would, I will see how we can more do it the pharmacies and how their individual competency can be improved. Okay, whatever advantages they're going to get out this program. For example this is the learning objective they're going to achieve if I'm designing their program for them. And designing is labelled for any curriculum not for any subject or any course [inaudible 00:23:51]. Then once that program is designed, I would like, by taking all the stakeholders with me and they will design the appropriate [inaudible 00:24:04] for the personal development so he personal development plan, okay. Then I will give them, I will try to facilitate that program that is the CPD programs, okay by providing them the opportunities needed the School of Pharmacy will call them in collaboration or in pharmaceutical associations, those types. And once the opportunity is there, once they're at the school for this program, CPD program, I will make sure that the objective should be very specific. For example, if somebody has come to [inaudible 00:24:46] they must have the information, proper information for the [inaudible 00:24:48] in terms of [inaudible 00:24:52] so objective should be very specific it will then show with CPD program and the objectives must be [inaudible 00:25:01]. Okay, so we can [inaudible 00:25:05] in terms of the activity. Then they must be achievable. Student or the pharmacy practitioner, the pharmacist should be able to achieve in the given framework. It should not happen that they called them for one day and then we [inaudible 00:25:21] to one month. Then they're not going to achieve anything of this in their practice. Then those things must be realistic and it should be completed. They should be able to finish it in a timely manner. That is what I will ensure. So I think that it's all. The program [inaudible 00:25:42] really those things then I will try to incorporate those sort of things in my next program to ensure that the proper quality assurance has been done against the given objectives. So [inaudible 00:26:02] it will be the last until unless you do the quality check in terms of believing the content. So we have to get the feedback from the [inaudible 00:26:12] and you have to do the quality check. And it would be [inaudible 00:26:17] process whatever the quality, whatever the

		shortcomings will be there. Those shortcomings will go to you know cover what we try to achieve, overcome those shortcomings.
00:26:30	S1	As you just told me that you had been in contact with the stakeholder regarding the CPD problem, so what do you think can be the enabling factors for such authorities that would create a bit of ease for them to partake CPD in your region for its implementation or it's development. What can be the enabling factors? How can this be made easy for them?
00:27:06	S2	Things leaving the school, I think you're going [inaudible 00:27:08] not only this country but from other English-speaking Caribbean. My thing would be you know if you're carrying out any of these programs, it would be useful [inaudible 00:27:25] because from this school you know if you see the pharmacy practice, honestly, we have a diverse experience in terms of the Caribbean coming from in there [inaudible 00:27:36] somebody from UK, somebody from US, somebody from some other country so we [inaudible 00:27:43] experience it would be. And when it comes to the role, that experience can be obliged and [inaudible 00:27:56] in terms of pharmacy practice on different countries in terms of their knowledge. So this knowledge, that might be very helpful and it might be [inaudible 00:28:08] because they didn't have to go for it. They didn't have to [inaudible 00:28:16] because we have the [inaudible 00:28:19] CPD programs were good for them. If they want to design a structure for CPD on those things, definitely, we can it for our stakeholders. And we know that these conditions, we know our requirement before when you asked me this [inaudible 00:28:44] and national learning needs in terms of pharmacy. So we can do it for them. I think that would be the most enabling factor because we have the [inaudible 00:28:55] the sources. We have our need for structure. We can provide them the lecture or there are three things required. One is the [inaudible 00:29:04]. Second thing is the infrastructure. The third thing is the delivery components so we have all three components with us definitely. We are in a position and we can do that thing for our stakeholders as well as for our own pharmacists, working pharmacists.
00:29:21	S1	So how do you think Commonwealth Pharmacist Association can be a help in designing an implementation of this model. In the current curriculum of the pharmacy school nationwide, how can you think that CPD will help you in designing such a curriculum that would in fact, again talk about the CPD ready graduate? So how do you think CPD could help you as an academician? So I would like you to please enlighten that.
00:29:57	S2	Okay, if you ask me about CPD, okay, so the Pharmaceutical Association, it is a big umbrella you know. And if the number of pharmaceutical association develop any program maybe because the lengths or recommendations or in terms of policy and in terms of so you know anything that these are the professional standards continuous professional development. I think it would be good and definitely not [inaudible 00:30:40] and the country from where I come from India that is also a Commonwealth country. So we can be part of that as long as you're getting good guidance, good statements, good professional standards, good [inaudible 00:30:55] professional development, we have got [inaudible 00:31:00] they will adapt them quickly. They will adapt them quickly. And they will given those things that they get the [inaudible 00:31:07] not a Commonwealth Pharmaceutical Association so a little work for that.
00:31:11	S1	So you just require the guidelines from them?

00:31:15	S2	Yes, if they can work with the guidelines, if they can work with the kind of statement like either they have their own statement and other professional standards for continuing, if you [inaudible 00:31:26] will follow there. And we'd love to follow the reasoning because Trinidad and Tobago start of Commonwealth so they will pick it up.
00:31:41	S1	So where do you see this CPD model practice in your country in five years' time?
00:31:49	S2	[Inaudible 00:31:49] there is going to be a drastic change on the practice when it comes to next year, we are switching for the program to finally [inaudible 00:32:01] so that is the one thing. The second this as I already told pharmacy for Trinidad and Tobago, they're working on CPD model. They're trying to come up with the dialogues with the Pharmacy Board in terms of registration and I've been told that they want to make it [inaudible 00:32:20]. So the professional, they have to have those points. So in terms of professional role, in terms of professional competency when it comes to the CPD program, once [inaudible 00:32:40] I think it is going to be a good change coming next five years down the years. So I think that they bring the change in the working structure. The working professionals were already in the professional through CPD, they're trying to get, okay then the new [inaudible 00:32:59] more speciality so it is going to bring change CPD [inaudible 00:33:10] in Trinidad.
00:33:13	S1	So any comments you wish to share relating to this, do you think it will prove to be effective and do you encourage such service?
00:33:27	S2	Definitely, it is going to be very, very helpful. It is going to [inaudible 00:33:33]. I'm sure whatever will come out with this, that is going to help for the people who are looking for the guidance, who are looking for the guidelines or the other [inaudible 00:33:48] in terms of professional standards, in terms of funding professional development. So I think it would be good to [inaudible 00:33:57]. But definitely, it is going to be very, very helpful for us. And [inaudible 00:34:02] the system, the pharmacist, the teacher, we have [inaudible 00:34:06] pharmacy practice in the country and continuous professional development, definitely it is one of the biggest role I will say in terms of professional development once you enter into the profession, once you come our from your school. There is no other method other than the continuous professional development. And if you come up with this thing that is the welcoming step.
00:34:35	S1	I have a few question about pharmacy research as well. So how do you think how well developed it is in your country? And is it just being carried out by the universities? Or is it being done by the pharmacists in the field as well?
00:34:53	S2	Okay [inaudible 00:34:55]. This is one of the particular areas where we look from CPA, the Commonwealth Pharmaceutical Association and we look for someone like Professor [inaudible 00:35:07]. Because we are sitting in those countries. The research obviously and the information is not available but [inaudible 00:35:18]. But now because we're now planning the post graduate programs and other programs, and so far we have just year three program, four-year program with the research [inaudible 00:35:29]. So this is one of the area of research where we seek help from CPD apart from this continuing professional development.
00:35:45	S1	Can you identify a few gaps in the pharmacy practice teaching as you were in one undergraduate training of pharmacists?

00:35:57	S2	We have long lists of gaps. If you ask me in terms of pharmacy practice, like no other program [inaudible 00:36:07] and see in four-year course that is pharmacy practice oriented. This course is totally different from India where most of the time you know the pharmaceutical [inaudible 00:36:17] pharmacy practice base but I still I feel it is not sufficient. Flagship component should be more. And they [inaudible 00:36:35] shifting some gears from four-year program to [inaudible 00:36:42] so that is going to raise the level. That is going to find, that was the [inaudible 00:36:54] and most probably they will overcome that. Then second is the receptors. That is another question. We don't have [inaudible 00:37:03] because to train the pharmacy students or to train the pharmacy professionals, I think [inaudible 00:37:12] CPD program can play effective role. If [inaudible 00:37:17] the last 5 years, 10 years if they attend the continuing professional development program. It can be helpful for people who are really knowledgeable who are competent pharmacist. They maybe considered for the [inaudible 00:37:33] so that is another there. Then, [inaudible 00:37:49] maybe the financial constraint that [inaudible 00:37:52] then the industry doesn't have fundings for you. Those are the other things in terms of hiding the start and other things. So that is another part where I think those are the haps which needs to be seen.
00:38:11	S1	Okay, thank you so much.
00:38:14	S2	No, that's fine.

Timecode	Speaker	Transcript
00:00:05	S1	Okay. So, let's start with the concept. What's your knowledge about the continuing professional development and how do you think it differs from continuing education?
00:00:19	S2	I think that...I thought about it. I think they are both the same. Right? They can be used interchangeably. Right? Professional development, professional....I mean, continuing education I think is for development. Right? So, I think they are one and the same.
00:00:49	S1	Uh-huh.
00:00:52	S2	You know, just improving yourself and skill sets are also in education concerning your profession...
00:01:07	S1	Right.
00:01:07	S2	...you know.
00:01:09	S1	Great. So, you think like one is the professional development and the other is the continuing education. So, you think they are pretty much the same thing.
00:01:18	S2	Yes.
00:01:19	S1	Okay.
00:01:20	S2	Yes. I think...yeah, I think it's just develop more knowledge and skills in specific areas, you know, and help you to upgrade in your...as a pharmacist, you know, improve your education and your skills.

00:01:43	S1	Great. So, now, what about the present status that such a model exists in your region?
00:01:52	S2	In some countries, right? I would assume that they would have that developmental model but in Trinidad and Tobago, about 20 years ago, I remember, they tried to pass like the law to say we must have two units and attend some lectures every year before we are licensed and it was voted against by the pharmacy [inaudible 00:02:40] so it was never placed into the law books because I think that older pharmacists did not want to have to go through any kind of stressful experience before they can have their license renewed. Right? So, it is not something...it's up to you now if you want to do it to improve yourself and to keep on par with modern technologies, continuing education and upgrade but it is not a requirement at all...
00:03:19	S1	Okay.
00:03:19	S2	...in this region.
00:03:21	S1	So, which authority is responsible for the implementation of development of CPD model in your region?
00:03:29	S2	The Pharmacy Board Ministry of Health and the Pharmacy Board of Trinidad and Tobago. They work together on those for that, you know.
00:03:41	S1	So, the registration renewal does not require CPD hours?
00:03:47	S2	No, no, you just go and renew every year. You pay the fee and you renew your license. No CPD. No upgrade.
00:03:59	S1	Okay. So, (Overlapping Conversation) what's your opinion about its effect?
00:04:03	S2	What we do where I work...
00:04:05	S1	Yeah, yeah, sure.
00:04:07	S2	Huh?
00:04:08	S1	Carry on.
00:04:08	S2	Yeah, I was telling you what we do where I work is that the doctors and pharmacists come together on a monthly basis and we have drug representatives from different companies come and speak to us about different drugs that they have on the market that we are required to have in the health institution. So, that will get an update every so often but it is not unanimous to all the institutions.
00:04:51	S1	Great. So, in your opinion, how effective do you think a CPD model would be in pharmacy practice?
00:05:01	S2	Well, I think it would be excellent. It will ensure that people do not lag behind and people are quite informed about modern technology, use the latest drugs, because what I realised is that the older pharmacists, those who have not done the degree program especially, they are unaware of certain technologies and drug use for certain drugs that they may have known for, you know, for one therapeutic purpose and now it's extended and they would not know because they refuse to upgrade.

		Some of them refuse to read. I truly believe that it's a positive thing to have continuing education as pharmacist. I would tell you something. I went to live in the British Virgin Island, this was for five years, and it's a small country and when I came back here, I was lost because there was no education out there. There was no teacher, no lectures and, you know, when I came back home and I saw so many new drugs on the markets that I have never even seen or know the name for, you know how I felt [inaudible 00:06:53]. Yes, so, I think it's good. Right?
00:07:01	S1	So...
00:07:02	S2	Its good, you can tell your patients as well, you know, you guide them properly using your knowledge.
00:07:12	S1	Hmm. So, how do you think the pharmacy schools in Trinidad can be encouraged to develop such an approach for incorporating the CPD model in the current curriculum so that CPD-ready graduates can be produced?
00:07:30	S2	Well there, somebody would have to take on that mantle and watch it, mold it, and be very specific about requirements and, you know, I think we can do it because a lot of the old ones are now retiring and new pharmacists come on board and they could need a fresh start in improvement...improving, you know, the status of pharmacy but most pharmacists think that, okay, I am not getting paid to learn anything new and I don't have the time and I would just keep bare knowledge I have and we saw them really think negatively in that fashion. So, you know, it's just, you know, something else there. Right? But, I mean, they have to be shown that, you know, education is the way to go. You never stop learning as a pharmacist. As a professional on the whole, you never stop learning. Right? They'll always be development in technology and we have to keep abreast. Right? So, I don't know who is going to be responsible. I think the Pharmacy Board needs to get on board again, try and attempt, you know, to put some laws in place.
00:09:19	S1	So, how interested would be your colleagues in following a CPD model?
00:09:27	S2	Well, my colleagues are okay with it, the ones that I work with, they are fine. Right now, we're just implementing a new computer program [inaudible 00:09:38] to follow up on our drug use, et cetera. I mean, we're very happy, you know. Whenever we have a lecture, we all try to attend. Sometimes, we can't afford to attend because we don't have sufficient staff, you know, so somebody always gets left behind but we come back and share with the person what we have learned, you know.
00:10:08	S1	Great. So, as a pharmacy practitioner, according to you, what can be the potential and what can be the contribution or expectations and support from your area in designing a CPD model for pharmacy practitioners in Trinidad?
00:10:31	S2	Well, once we have the guidance to develop and implement such, I don't see a problem in, you know, trying to develop such a model because...I mean, eventually, it will help the country socially and economically in the long run.

00:11:01	S1	Uh-huh. Great. So, there is list which has a few themes which are covered in most of the CPD models which are being followed around the globe. Can you please prioritise them as per your country and the area of practice needs?
00:11:27	S2	I don't have the exposure. Can you call it out for me quick?
00:11:38	S1	Yes, I can (Overlapping Conversation). I guess I will do that. So, that was self-assessment, skills development, continuous learning, keeping up to date, professional development through work or experience, formal education of CPD, attending CPD events and workshops, requirement of compulsory CPD points, and availability of resources of following of CPD. These are nine parts. Can you prioritise them as per an ideal CPD model for Trinidad?
00:12:14	S2	Well, you have to have the resources for the CPD model. Right?
00:12:21	S1	Great.
00:12:25	S2	The...what's the first one you called? Social?
00:12:34	S1	No that was for self-assessment.
00:12:37	S2	Okay. Well, self-assessment would be lower along on the list. The last three that you called, you know, I would read them as the first three was for CPD model and be willing to follow. Right?
00:13:10	S1	Yeah.
00:13:12	S2	Yeah. The [inaudible 00:13:17] because I cannot write [inaudible 00:13:21].
00:13:23	S1	Okay (Laughs). It's...first of all, it's self-assessment and then it's skills development and then it's continuing...continuous learning (Overlapping Conversation) and keeping up to date.
00:13:38	S2	Skills development. Well, that one is important. You're learning and keeping up to date. That should be high on the list. Right? Probably like a number three.
00:13:53	S1	Great.
00:13:54	S2	Right?
00:13:55	S1	And what about the formal education of CPD?
00:14:02	S2	I don't think you'd have any formal education because you don't have to find your own time and exactly what do you want to learn and what be interested in and the areas of their career because there are different kinds of pharmacists, you know. So, you can't be...have a fast of when and where but just make it accessible, maybe online so that people can choose and assess, you know, some net certification at the Pharmacy Board. Right? Even if they say, okay, well you have maybe two courses a year or three courses a year, at least two hours and then, you know, you could, you know, at least something basic...
00:15:09	S1	Uh-huh.

00:15:10	S2	...to start with. Yes.
00:15:13	S1	So, what could be the attributes for pharmacy practice CPD model [inaudible 00:15:20]?
00:15:23	S2	Well, somebody has to take it under the mantle and I guess they have to make sure that it is well organised and planned out and be, you know, they have to hire people to work along to make sure that it is implemented and then we will see some success and improved professionalism in pharmacy...
00:16:07	S1	Hmm.
00:16:08	S2	...you know.
00:16:09	S1	Can you please highlight the key components which can be required or which are needed to build this model?
00:16:23	S2	Well, you have to look at the...you will look in the environment. You have to look at the hours that pharmacists work with. You have to look at the bosses if they would give them time off to attend to the lectures, you know. You could also even look at rewards or compensation for having achieved certifications. Well, I guess its about help.
00:17:10	S1	Okay. What can we...the enabling factors for the responsible authorities which would create a bit of ease for them so that they can implement CPD in your region?
00:17:36	S2	What they have to do is things like reporting of adverse reactions and pharmaceutical errors because I don't even think these things are taken seriously. Those kind of, you know, when you look at them, then you might be able to see, yes, we have to do this. We have to implement such a program, you know...
00:18:08	S1	But...
00:18:09	S2	...just to make sure.
00:18:11	S1	My question is that how do you think these barriers can be overcome? How can they...it can become a bit easier for them so that they can implement such a model? What are the constraints which are being faced by them? They can be financial. They can be, you know, there are other hurdles during the development of such a model, et cetera. How do you think they can...?
00:18:43	S2	It's just...well, they have to make... they have to make people see the importance [inaudible 00:18:52] that the older folks see how important it is to continue education. They would always [inaudible 00:19:04] and I know they don't like to have to study anything, you know, they just want to be free because [inaudible 00:19:15] the pharmacy more from degree...to the degree program from the diploma, the older ones say they're not doing it. Why? Because they're not going to get any more money on their salary. So, maybe if they give people a little incentive every time you get, you know, the...
00:19:44	S1	Yeah.

00:19:45	S2	...[inaudible 00:19:45]. Then, it would be encouragement for them to continue to further their education. But as it is, when they get nothing and they get not a cent, not a reward, not time off not a week off nothing. There's nothing I need. I don't need this, you know.
00:20:10	S1	Great. So, you know, about the Commonwealth Pharmacists Association, right?
00:20:17	S2	Yes, I know about it.
00:20:19	S1	So, how do think (Overlapping Conversation) CPA can be of help in designing and implementation of continuing professional development model in the current pharmacy practice system in Trinidad?
00:20:33	S2	Well, yeah, it can start with the Commonwealth Pharmacists because they represent the whole Caribbean so they can have it at their discussions especially through a yearly meeting they have every year and people like Dr. Renah She advises the Ministry of Health and the Caribbean pharmacists. She can, you know, ask...bring it back up in the conversation so that they can look at it again and see what can be done to bring it to fruition.
00:21:19	S1	Yes, okay. So, what are your future expectations regarding the CPD model practice in Trinidad in five years' time, let's say?
00:21:36	S2	Well, I think it's going to come on board and, I mean, I look forward to it coming on board but I need to see where it's going to start, you know.
00:21:59	S1	Yeah.
00:22:00	S2	About eight years now.
00:22:07	S1	Great. So, do you have any comments related to the survey? Do you think it will prove to be effective?
00:22:27	S2	Yes, I think so, if you get the views of the people and seeing that it is necessary. Then, you can build a model and try to pass it on to the various government ministry that is responsible for the pharmacist.
00:22:44	S1	Great. So, you encourage such surveys, do you?
00:22:48	S2	Yes, yes, I do. I do.
00:22:53	S1	Thank you so much
00:22:58	S2	Okay [inaudible 00:22:59] (Laughs).
Timecode	Speaker	Transcript
00:00:01	S1	Let's just start with a bit of your background knowledge about what's continuing professional development.
00:00:11	S2	Continuing professional development basically is a continuous job professionally [inaudible 00:00:21] new research- new research, whatever the research has got...

00:00:27	S1	So what do you know about continuing professional development?
00:00:32	S2	In continuing professional development, I think it's basically the conversation of all new knowledge into the application and application is being transferred to the all-new professions, all professions by practice through practice.
00:00:58	S1	So in terms of pharmacy practice, what are your knowledge regarding continuing professional development?
00:01:10	S2	Likely different terms in the pharmacy practice are being taught like in the past, most of the pharmacy practice was job oriented and now it is more patient centric and now the other one importance is to see our impact basis, outcome basis and this is the new professional development CPD that now all the professional pharmacist should work with the outcome based- what is the outcome of their work.
00:01:51	S1	How do you think it differs from the concept of continuing education?
00:01:57	S2	Continuing education is not for- I don't think so in the present we could consider, it's not for the professions, it's just for the other admission or other people who are not practicing professionals, those aren't for- I can say that those are continuing education, it will just go through all this new knowledge but not by the application, not by the practice, so this is different which I feel you know, maybe I'm wrong.
00:02:33	S1	Does CPD exist in your region?
00:02:37	S2	In Pakistan?
00:02:39	S1	Yes.
00:02:41	S2	I don't think so, there are few islands, CPD in Arakan, and CPD somehow in Shaukat Khanum, but not formally run in these places, CPD exist.
00:03:03	S1	So it's not a compulsory for the maintenance of your licensure basically.
00:03:09	S2	No, not at all.
00:03:11	S1	So which professional body is responsible for the implementation of CPD model in your region?
00:03:17	S2	In my region, not any professional body is responsible for this, but it should be Pharmacy Council of Pakistan.
00:03:31	S1	Great. Let's-
00:03:32	S2	Because that controls the practice of pharmacy.
00:03:37	S1	Okay, let's come a bit towards your opinion regarding the effectiveness of a CPD model in pharmacy practice, how effective do you think how- how effective do you think CPD can be if implemented in pharmacy practice in Pakistan?

00:03:56	S2	If it is implemented through the Pharmacy Council of Pakistan being mandatory for every pharmacist to get renewal of their licence, then it is the most effective thing to uptake and to develop professionally the pharmacist, most effective.
00:04:23	S1	So, the pharmacist schools, let's talk a bit about them, how do you think they can be encouraged to establish an approach so that CPD- the concept of CPD can be implemented or assimilated in the current curriculum?
00:04:43	S2	In the current curriculum, CPD can be definitely in the curriculum in Pakistan, know our place in this way that the old curriculum are controlled by the Pharmacy Council of- although I'm aware in this region of like, Pakistan, India, Bangladesh, and these countries [inaudible 00:05:05] no countries, Pharmacy Council is responsible for line to line, the curriculum of pharmacy work in Pakistan, it is 100% curriculum approved by the [inaudible 00:05:25]- pakistan being taught in the old schools, same curriculum is being taught in ordinary schools, so if the Pharmacy Council of Pakistan make mandately the pharmacy schools to use CPD with the curricular- in the curricular in CPD, then it will be very effective and they encourage the pharmacist school are available throughout in each and every part of the country, but it will be very easy for the pharmacist practice in any part of our region to get the knowledge from them, but the pharmacy school will not do until their renewal- their licence renewal approval is if they act with the- they're imparting CPD education to the professional pharmacist or practicing pharmacist.
00:06:20	S1	How interested do you think the pharmacy practitioners would be in following a CPD model?
00:06:29	S2	Definitely once in the beginning there will be very small groups which will be interested, but once it started, then everyone, but some will be interested for the sake of his renewal of his licence and after that then initially it will be a legal requirement mandatory but later on be [inaudible 00:06:57] because they'll feel that their knowledge is updated, they're professional, they're professionally updated now, and this is self-satisfaction, and even at their job, they can perform better.
00:07:17	S1	What could be the attributes of a pharmacy practice CPD model?
00:07:23	S2	It depends, the CPD model can be- many attributes could be considered like, on the areas in which the practice is being done- is being carried out, the highlighting on those areas and that could be the attributes of CPD model.
00:07:54	S1	Can you please highlight a few key components?
00:07:58	S2	Like a few people will definitely in Pakistan, regulatory is one of the major area where the pharmacist are involved, then practice at the community, then you come to the people involved in the education itself, the major impact- most impact and outcome base area is the people in academia, they need CPD most importantly because they have to teach their students.
00:08:48	S1	What can be the potential contribution expectation or support from your area if you design a CPD model for pharmacy practitioners?
00:09:06	S2	From my area, my area is mostly- I'm from a long time working as a public health pharmacist, and this is also one I can contribute or not in this area, and many new ideas, new things could be introduced to the

		new areas where the pharmacist like now, like the anti-microbial recent AMI shows the biggest issue of the [inaudible 00:09:40] but of the whole world, they seem to be CPD- one of the CPD area for pharmacist in each area and we can continue doing that definitely like, new model of essential medicine list or their concept of their list, the essential or [inaudible 00:10:22] or reserve list, this type of things need to be addressed in the national sanction medicine list on national anti-microbial resistance action plan.
00:10:42	S1	Great. Some of the barriers which are being considered worldwide in following a CPD, for example, time, do you think as it takes time for pharmacist to follow CPD, do you think it's a barrier?
00:11:03	S2	I don't think so it's a barrier because this is one thing if you will not do, you cannot do- whatever you are doing is not like doing your [inaudible 00:11:13] if you're doing wrong things, then it's better to stop doing the wrong thing and take a look some time and do the CPD.
00:11:26	S1	Great. So, what are the system constraints in implementing a CPD model in your region?
00:11:35	S2	System constraints, the- well wherever the pharmacist is working, the implied or requirement of their job should be- it should have mandatory requirement of CPD, then definitely the system will be supported through the CPD and everybody will have to do CPD.
00:12:03	S1	So, what can be the enabling...?
00:12:06	S2	Along with the licence, this can be an additional thing that if you are in a pharmaceutical industry and you are working in a production of GMP, then you should have a CPD of like, 50 hours a year and you have to do the 50 hours of the workshop or something like that with the new topics, and then you come back and you perform and your industry is better way and the industry should accommodate it, industry should pay for that time you spend for that, the same is with everywhere, if you are teacher, if you are doing- to updating yourself.
00:12:54	S1	Great. What can be the enabling factors for the authorities which would create ease for them to partake CPD in your region?
00:13:07	S2	I think our OKC and highlighting the importance and outcome of CPD to the authorities, but then definitely authorities will enable the CPD to enable them to do this complete the-
00:13:30	S1	And how can ease be created for the authorities, what help, what assistance do they require?
00:13:39	S2	Just you have to start it from the regulatory side like, Pharmacy Council, managerial or regulatory intervention by making like, every department will have, every pharmacist in the like, next level promotion is requirement a place for CPD is being conducted, but definitely this will in this way, the department and authorities will be easily- give them time for CPD and definitely they will- when they will receive the outcome of their CPD, that will be then easier to group them to this, enable them to do that.
00:14:34	S1	Great. How do you think commonwealth pharmacist association can be a help in designing and implementation of CPD model in the current pharmacy practice system of Pakistan?

00:14:49	S2	Yes, if the CPA could do this and the- at the level of start I think from the involving the national pharmacist association, national statutory body along with this, and ministry of national health, all three to involve initially and if you give them a model that we will provide you this model, and this is the requirement and this is the content of the CPD, and we will conduct the CPD, we have support, we conduct our CPD through Pharmacy Council of Pakistan and Pakistan Pharmacist Association, then this is possible, because for commonwealth definitely they are developing model for Ghana and other countries, so they can bring the best practice in this country, they're being success stories of those countries, so this country.
00:16:04	S1	Where do you see CPD model practice in your country in five years' time?
00:16:13	S2	In his country, it's a very strange country, if you say in five years' time the whole paradigm shift, yes, this will be possible, that could be possible here in this country, these is a very resilient people and they are ready to change, accept the change any time, and now only you need just the force who should have a sustained effort to change, just not like in doing six months or three months in that job and they say nothing is moving, but if you keep on stressing in next five year, I then hope that- I can I imagine the Pharmacy Council of Pakistan that every pharmacist who is- want to remain licenced pharmacist will have CPD.
00:17:16	S1	Can you please repeat?
00:17:17	S2	...available resource while following the CPD, I've mentioned the term over the most of the CPD models around the world, it- I think the requirement points is one of that and what could be the attributes of the pharmacy that is continuing professional- could produce very quick results.
00:17:55	S1	That is requirement of compulsory CPD points.
00:17:59	S2	Yes and then number seven, attending CPD event and workshops, yes, this is again as you- or any workshop, whatever, they are- before the acclimation of body, allow them if you attend any workshop on the- like the [inaudible 00:18:28] or different professional workshops being organised, you could turn anyone of that and you will get this much point after.
00:18:41	S1	Great. And the rest should be.
00:18:47	S2	I don't think so in the beginning self-assessment could work. (Pause) Yes, this is number five, professional development through work experience, this could be a good point that you're making separately, suitable definitely, and formal education of our CPD another way, good for them, this is- would be very useful.
00:19:37	S1	Okay, great. Okay.
Timecode	Speaker	Transcript
00:00:01	S1	So, let's start with the concept first. What do you know about continuing professional development?

00:00:13	S2	I only know about it with regard to my colleagues in other professions, like accountant and supply and procurement management where they have to maintain their certification by doing, I guess [inaudible 00:00:25] training things similar to what [inaudible 00:00:30] so they can maintain their certification, [inaudible 00:00:33] along those lines. So, they have to do like online courses or attend seminars and those kinds of things for them to maintain their certification, like ECC and etcetera, etcetera. But in relation to pharmacy, no.
00:00:52	S1	Okay. So, in your opinion, does it differ from continuing education?
00:01:04	S2	Well yeah, it does because, Like, CPD would be like a process, so like [inaudible 00:01:07] skills, knowledge and experience formally and informally as you would be on the initial training. Whereas continuous education is more like, you know, like formal programmes and like [inaudible 00:01:22] courses designed to educate, augment and improve your skill set. [inaudible 00:01:32]. Sorry, pardon?
00:01:37	S1	You carry on.
00:01:40	S2	No, [inaudible 00:01:41] that was my understanding of it.
00:01:45	S1	And does a model of CPD exist in your region?
00:01:52	S2	For pharmacy?
00:01:53	S1	Yeah.
00:01:55	S2	No, it doesn't.
00:01:58	S1	Okay. So-.
00:02:01	S2	Not even continuous education. It has to be sound directed. A person has to be committed to continuous learning, they want to do it, [inaudible 00:02:12] and you renew your licence [inaudible 00:02:20] you don't have to do anything [inaudible 00:02:23] registration with the pharmacy board. Once you pay your fee, that's it, [inaudible 00:02:28].
00:02:32	S1	So how interested do you think your practitioners would be in shifting from CEE to CPD?
00:02:46	S2	Well, since there is no formal CEE or CPD, I can't see them being interested [inaudible 00:02:52] because in my class when I graduated, we start with 100 students, 20% graduated [inaudible 00:03:01] whereas the rest of the class, they just scraped through the programme [inaudible 00:03:07] interested in the programme, they were just there to get a degree. So, I can't see practitioners in my area being interested in CPD or CEE. Because in the programme [inaudible 00:03:22] for my skills.
00:03:28	S1	Which professional authority is responsible for the development of CPD model in pharmacy practise in your region?

00:03:40	S2	It would have to be- can't be just one, it would be a collaborative effort between the universities, between pharmacist association, between the pharmacy board, between the chemical, food and drug administration , and maybe even [inaudible 00:04:03] between those [inaudible 00:04:09].
00:04:16	S1	How effective, in your opinion, is a CPD model in pharmacy practise?
00:04:35	S2	I think it would be effective in the sense that it would [inaudible 00:04:39] health practitioners and more importantly I think they will be improved patient care and therapeutic outcomes as the pharmacists will be more up to date in what is going on in terms of treatment which is [inaudible 00:04:55] market surveillances and so on. And in terms of being- instead of just being active to things that occur globally, they would be more proactive. So, we wouldn't have all these things happening where we have misdiagnosis and patients getting improper treatment because they weren't aware of co morbidities or what are other drugs possibly that the patient was on. So [inaudible 00:05:29] in that regard as far as I'm concerned.
00:05:35	S1	How can pharmacy schools in your region will be encouraged to establish CPD education in the current curriculum?
00:05:54	S2	Well, there had to be buy in and [inaudible 00:05:57] is if there's a working model that could be promoted to them and then the benefits [inaudible 00:06:06] benefit the graduates then it benefits the whole- this whole patient focused approach push that they have towards treatment and healthcare. [inaudible 00:06:23] they could be encouraged, it has to be done from the ground level, so they [inaudible 00:06:28] pharmacy school has [inaudible 00:06:30] model and this is how it's going to benefit everyone [inaudible 00:06:34] of course [inaudible 00:06:36] so it will benefit them. And then overall, how it will benefit [inaudible 00:06:43] who's ultimately supposed to be our focus. But then [inaudible 00:06:48] buy in and the only way you' re going to get buy in is [inaudible 00:06:51] they agree, and then of course, then they would make- they'll do whatever they have to do to kind of implement that in the curriculum. But [inaudible 00:07:00] don't do anything unless it's for points or marks, so it's contributing towards a grade and also [inaudible 00:07:09] part of the four-year course. And then [inaudible 00:07:16] the future [inaudible 00:07:18] maintain your licence every year or your registration, then you have to do X, Y, Z, that'll be the only way. Because [inaudible 00:07:26] pharmacy is more of a money-making enterprise as opposed to they're caring about the patient and [inaudible 00:07:35] we have like thousands of pharmacies [inaudible 00:07:39] pharmacies are there, but it's more about making money, you know. And it's less about healthcare. So, you find that in some pharmacies, patients could get drugs that you need a prescription for without a prescription, because it's all about the money. Whereas sometimes they really need a prescription but it's not standard and there's nobody that goes out [inaudible 00:08:04] ensure that the right thing is done. Of course [inaudible 00:08:07].
00:08:10	S1	So basically, you're saying that mainly the regulatory process is just there in the papers, it's not being practised?
00:08:19	S2	Yes. No, it's not being practised or enforced.
00:08:24	S1	So, your colleagues, how interested they would be in following a CPD model? Would they be interested in participating in CPD activities?

00:08:42	S2	(laughs) No, I don't think so. From my class alone, the people I interact with, I would say about 10% of my class would be interested because [inaudible 00:08:54] because you're really committed to the profession. So about 10% of the class, 10% would be interested but it wouldn't be something that they all would be interested in.
00:09:10	S1	Why so? Why wouldn't they like to enhance their professional capabilities?
00:09:18	S2	Because we have a culture whereby they want maximum benefit with minimum effort. And those are the facts. I mean, that's what it is. And I could say that because I was one of the [inaudible 00:09:36]. But I mean, it was very disgusting for me to see [inaudible 00:09:43] in our class watching us [inaudible 00:09:45] exam and the same people cheating and they did nothing about it. So, I know that most of them who did graduate didn't didn't graduate because they knew anything [inaudible 00:09:53] because they cheated. So, you have different terrible pharmacists there serving the public and some of them don't know what they're doing. But they're there because you know [inaudible 00:10:08] they can get a job and I could make money and you know [inaudible 00:10:12] wearing a white coat without having anything in my brain.
00:10:21	S1	If some incentive is offered to them, do you think their level of interest would elevate?
00:10:30	S2	What kind of incentive, like academic, sort of like qualifications or money? (laughs) What kind of incentive?
00:10:38	S1	Money of course. Money is I think an attractive incentive. (chuckles)
00:10:46	S2	Yeah, but why would you want to be paid to want to be- paid to be interested in the profession you chose? I don't know. Yeah, so in this scenario, mostly likely if there's an incentive, a monetary incentive, yes. I mean, if it adds any kind of accreditation or something to the end of their name, you know, yes, maybe they'll be interested. But that's just [inaudible 00:11:14] sustainable.
00:11:20	S1	So, if you're designing a CPD model for practitioners, what do you think can be the potential and what is your expectations- what can be the expectations from you and support from your area in designing such a model?
00:11:48	S2	That's actually [inaudible 00:11:48]. (chuckles) So [inaudible 00:11:53] my contribution would be, like me personally?
00:11:58	S1	Yeah.
00:12:00	S2	Or from the area I'm in as in like where I'm working? All I can do is probably identify the areas that [inaudible 00:12:14] things that will increase efficiency with any supply chain, so I mean like [inaudible 00:12:20] adherence to treatment [inaudible 00:12:25] how we could reduce wastage by probably reducing expiries or reducing duplication of medications that belong to the same pharmacological class, those kind of things, especially things like learning how to do accurate estimation of drug [inaudible 00:12:43] or forecasting quantification [inaudible 00:12:44] the right methodologies to quantify those particularly needs.

00:12:59	S1	Okay.
00:13:00	S2	So- okay, go ahead.
00:13:04	S1	So, I've given a list in which there are a few themes. These are the themes which usually, in a typical CPD model, which is being practised in developed countries. Can you prioritise them as per pharmacy practise in your country?
00:13:28	S2	Okay. So, like [inaudible 00:13:30] list from most important to least- well, from one to nine I have here. Okay. So formal education of CPD would be number one. Number two would be a treatment up to date . Three would be continuous learning. Four would be professional development through working experience. Five would be skills development. Six, self-assessment. Seven, attendance [inaudible 00:14:01] drugs. Eight, availability of resources. And nine, requirement of compulsory CPD points.
00:14:12	S1	Great. Can you please highlight a few key components which should be there in order to build such a model? Over here, [inaudible 00:14:27].
00:14:28	S2	[inaudible 00:14:28] I would need in a model to enhance my professional- what [inaudible 00:14:35] need or what my colleagues would need? [inaudible 00:14:40] what, my delivery of service to the healthcare sector?
00:14:47	S1	Yeah. Yes, yes.
00:14:56	S2	Well, [inaudible 00:14:57] frankly from where I'm at right now, but then I don't think [inaudible 00:15:01] in terms of we need that communication between like the ministry and us because we're not sure what their needs are, they're not sure what their treatment [inaudible 00:15:11] are, so their estimations are all [inaudible 00:15:14] they always help us in a state of crisis all of the time. It's difficult to answer that question in terms of what my needs are, because in terms of professionally [inaudible 00:15:31] because I subscribe to a lot of sites so I'm aware of what is going on in the medical arena in terms of drug development and so on. But as my personal commitments, I don't need to be tested, and I don't need to be told what to do to keep up to date, I do it on my own. But for others, they have to be told that they have to do it in order to maintain their certification [inaudible 00:15:59] we want to implement a CPD model.
00:16:03	S1	Great. So, the authorities must be facing barriers because they would want a CPD model in this pharmacy practise. How can...?
00:16:18	S2	Who want it? Who want it?
00:16:21	S1	The authorities basically, the pharmacy regulatory bodies or anybody who's responsible for the pharmacy develop- pharmacy practise development in your region. So, what are the- how can they be helped so that CPD can be implemented in your region? Do you want me to ask it again?
00:16:55	S2	Yes. (laughs)

00:16:58	S1	For example, there's a regulatory body, right? And they decide whatever interventions should be there for professional development. But they face challenges. So, what sort of help can be provided to those authorities so that ease can be created for them to implement such interventions into the system, or they can develop system...? I hope you're getting my point now.
00:17:31	S2	Okay, so the authorities you refer to, you're talking about the local authorities or are you talking about the authority [inaudible 00:17:39] come to Trinidad to implement?
00:17:43	S1	To Trinidad, yeah. In Trinidad.
00:17:46	S2	[inaudible 00:17:46] wants to come to Trinidad?
00:17:49	S1	Yeah.
00:17:51	S2	Okay. [inaudible 00:17:52] to make it easier, if they have a clear model that is easily understandable and can be easily adapted to Trinidad's local situation and just you don't have to start from scratch, that would be great. If they have something that can be easily adapted and integrated into what is currently available, which is nothing, then it would make it easier for them because Trinidad [inaudible 00:18:21] that is already are free. They would like [inaudible 00:18:25] lots and lots of [inaudible 00:18:27] it needs to have a model already there [inaudible 00:18:32] model, all we have to do is adapt it or adopt it to our situation. And then [inaudible 00:18:39] it has to be that [inaudible 00:18:41] pharmacy school with the pharmacy board and with the pharmacist association. And then they have to be like a certain committee with members of those [inaudible 00:18:52] for them to kind of [inaudible 00:18:55] how it is actually going to augment something that they already have the model and then implement it. And then who's going to be responsible for, you know, ensuring that what's supposed to be done is actually done and who's going there to [inaudible 00:19:10] see who's going to monitor it an all those kinds of things. The thing about it is, we have a lot of people projects, we always have foreigners who want to come with these fantastic ideas, but it never gets over the floor because there's no implementation and there's nobody monitoring it. So, for example, we got a grant to set up a lab in Trinidad to do quality assurance on medicines and of course, they had all the criteria and so on. And because nobody wanted to take the responsibility of doing the work, everybody sat there and then they eventually, they had to give it back.
00:19:54	S1	Great.
00:19:55	S2	You understand what I'm saying? I mean, this is from- this is my experience in Trinidad. This is what has happened.
00:20:03	S1	Okay. How do you think Commonwealth Pharmacist Association can be a help in implementation of CPD model in the current pharmacy practise of Trinidad?
00:20:22	S2	Okay, once the Commonwealth Pharmacist Association partnered with our local pharmacist association, with the pharmacy board, and the pharmacy school, and the [inaudible 00:20:33] committee, they can come up with ideas for seminars that are free of charge and they could have a system whereby that you know, [inaudible 00:20:44] where employees of pharmacies could get time off from work to attend these things from their employers. They could...

00:20:57	S1	Yes.
00:20:59	S2	...show what the benefits are of having such a model in Trinidad benefit not only for the individuals but to the healthcare practise as a whole in terms of adherence, so [inaudible 00:21:11] and being up to date actually on what is going on in that field. [inaudible 00:21:17] just make us more.... Not just because we have a problem whereby local pharmacies are not recognised internationally because they don't- I don't think they accept our educational- our degree is not accepted abroad, but maybe once we have this international partnership you know, the degrees could be recognised and pharmacists, local pharmacists could get work in other parts of the world, that's how I could see it [inaudible 00:21:53].
00:21:55	S1	Great.
00:21:56	S2	[inaudible 00:21:56] pharmacy practise.
00:21:59	S1	What's your future expectation regarding the CPD model practise in pharmacy in Trinidad?
00:22:06	S2	Sorry, could you repeat that? What is that?
00:22:09	S1	What is your future expectation regarding CPD in Trinidad in five years' time?
00:22:20	S2	I think if work begins now that it'll be something that all pharmacists would be aware [inaudible 00:22:28] because nobody's really aware of the CPD model for pharmacy practise [inaudible 00:22:32]. But if [inaudible 00:22:34] begins now where there's increased awareness and there's [inaudible 00:22:39] the benefits are known; I see in the next five years it'll be something that would be probably part of our certification in Trinidad in the next five years. So, I know the first two or three years would be hard to get it off the ground because we have to have a team committed to it. But once it's established, I could see that in the next five years, it'll be something that'll be part of our system.
00:23:12	S1	Your comments regarding this survey, do you think it's going to be an effective survey?
00:23:23	S2	What do you mean?
00:23:25	S1	Like the survey, the research I'm doing. Do you think it's going to be effective?
00:23:28	S2	If it's going to be- yes, yes. I think it'll be effective because one, it's building awareness of CPD model, one, and two, it's actually directing how we should go about developing our profession and how it goes beyond just, you know, studying things in a classroom to pass an exam, but it's more about application and real life situations and challenges. And once you have that forum whereby you have CPD models where those people will come together and they could share- I mean, people could share their experiences what they actually experience in a real life situation [inaudible 00:24:14] in a classroom. I think this kind of survey would add to the profession as a whole.
00:24:22	S2	Do you encourage such surveys?
00:24:26	S1	Yes, I encourage such surveys. We could [inaudible 00:24:31] that pattern that occurs when you just get caught in day to day, like [inaudible 00:24:40] just doing the same thing every day, every day and yes,

		<p>[inaudible 00:24:45] results but they're not doing anything differently. But once you have things like this to kind of shake you, kind of stretch your mind to another direction, it will improve- I think it would improve, as I said, the profession all around.</p>
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