

**REPUBLIC OF KENYA**



**MINISTRY OF MEDICAL SERVICES  
MINISTRY OF PUBLIC HEALTH AND SANIATION**

**PHARMACY AND POISONS BOARD**

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**CPD PROGRAMS FOR PHARMACY PROFESSIONALS  
ASSESSMENT REPORT ON  
STATUS OF IMPLEMENTATION IN KENYA**

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**Feb 2013**





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## FOREWORD

Continuing Professional Development (CPD) is an internationally accepted approach that facilitates professionals to acquire the necessary knowledge, skills and ethical attitudes so as to remain current and competent in their practice as enshrined in the sessional paper No. 4 of 2012 (National Pharmaceutical Policy). This is beneficial to pharmacy professional practice, and also enhances professional integrity to the ultimate benefit of the patient or client.

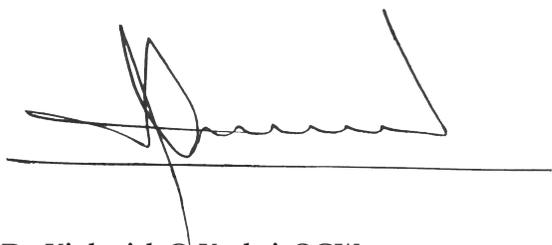
The Pharmacy and Poisons Board (PPB) in its mission to ensure the availability of quality pharmaceutical services in the country developed the 1st edition of CPD guidelines in 2006 and thereafter adopted it for use by pharmacy professionals. To further guide and strengthen its implementation, this baseline assessment was proposed.

Subsequently in March 2012, the Board with technical assistance from Management Sciences for Health (MSH) / Health Commodities and Services Management (HCSM) Program undertook a survey to determine the implementation status of CPD programs among pharmacy professionals in Kenya. The main objectives of the survey were;

- To collect baseline information on implementation of CPD programs in Kenya among pharmacy professionals (pharmacists & pharmaceutical technologists)
- To identify problems that constrain the implementation of CPD programs in the country
- To obtain information to support plans and strategies for scaling up the implementation of CPD programs.
- To establish the appropriate means of computing and documenting accrual of CPD points, and
- To determine the scope of the supervisory and regulatory framework for implementation of CPD programs

Following the survey, which is the only one of its kind to be conducted in Kenya in recent times, a report has been developed and is now ready for dissemination to all stakeholders. It is important to note that this report is vital in addressing gaps in the implementation of CPD programs and inform the review the current CPD guidelines.

Finally, I would like to express my appreciation to the Board's secretariat, MSH/HCSM and the data collectors for their tremendous contribution in the compilation of this report, and those who were interviewed during the survey for making this exercise a success.



**Dr. Kipkerich C. Koskei, OGW  
REGISTRAR.**

## ACKNOWLEDGEMENTS

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Finally, we wish to acknowledge the technical assistance provided by Management Sciences for Health/Health Commodities and Services Management (MSH/HCSM) program through funding from United States Agency for International Development (USAID) for supporting the whole process.

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## ACRONYMS

AMR	Antimicrobial Resistance
CE	Continuing Education
CME	Continuing Medical Education
CPD	Continuing Professional Development
FBO	Faith-Based Organizations
FIP	International Pharmaceutical Federation
HCSM	Health Commodities and Services Management (Program)
ICT	Information Communication Technology
KNH	Kenyatta National Hospital
KNPP	Kenya National Pharmaceutical Policy
KPA	Kenya Pharmaceutical Association
MOMS	Ministry of Medical Services
MSH	Management Sciences for Health
NGO	Non Governmental Organization
PPB	Pharmacy and Poisons Board
PSK	Pharmaceutical Society of Kenya
USAID	U.S Agency for International Development

## EXECUTIVE SUMMARY

Continuous Professional Development (CPD) encompasses the period of learning post registration and is intended to enable pharmacy practitioners to keep their knowledge and skills up to date with the ultimate goal of maintaining best practices. In Kenya, implementation of CPD programs is still at its infancy and needs to be developed and strengthened to meet the needs of practitioners in all the pharmaceutical sub-sectors.

The Pharmacy and Poisons Board (PPB) in collaboration with Management Sciences for Health/Health Commodities and Services Management (MSH/HCSM) program conducted a survey to obtain national baseline data on the status of implementation of CPD programs among pharmacy professionals in Kenya to support the development of policy guidelines, plans and strategies for scaling up CPD implementation.

The specific objectives were:

1. To determine attitude, understanding and practice of CPD among pharmacy professional in Kenya
2. To explore the most appropriate approaches for implementation of CPD in Kenya
3. To identify appropriate activities for accrument of CPD points
4. To identify challenges faced by pharmacy professionals in implementing and undertaking of CPD programs
5. To determine pharmacy professionals' perspectives on mandate for CPD coordination.

This was a cross-sectional survey with the study sample selected from pharmacists and pharmaceutical technologists practicing in the country. For sample selection, multistage sampling procedure was adopted. The country was first divided into 8 provincial clusters from which counties were randomly selected. Within each of the selected counties stratified random sampling was used to select a representative sample of each of the pharmaceutical cadres. The final sample size was 437 consisting of 164 pharmacists and 237 pharmaceutical technologists.

Research assistants were trained on the data collection tools who then visited selected pharmacy establishments to administer the questionnaire. Informed consent was sought from the pharmaceutical professions available at the time of the visit with the questionnaire administered to those agreeing to participate. In depth discussed were further conducted to probe for more information on the professionals' practices and challenges faced in the process of implementing CPD.

Data from the study was entered into a data base using pre-designed data entry screens, cleaned and analyzed using EPI info version 7. Descriptive characteristics of the pharmacy professionals were summarized as proportions and means as appropriate. The other variables were also summarized as percentages.

The study found that the majority of pharmaceutical practitioners (85.6%) perceive that they undertake CPD with most indicating that they derive some benefits from CPDs. Only 6% indicated that they do not see any benefit of CPD. However, opinion on what activities constitute CPD is varied. The top reasons for undertaking CPD were cited as –Skills improvement (30.7%) and career development (24.8%). With regard to reasons for not attending local courses or CPD workshops, the distance to venue (21.6%), other commitments (20.9%) and lack of information on what CPD/CME activities are available (19.3%) were cited as the most frequent constraints

Over 90% of the respondents suggested the imposition of some form of sanctions for members who do not comply with CPD requirements. Competence reassessment (28.2%), compulsory remedial training (26.3%) and denial of annual practice license renewal (24.7%) being the most cited sanctions. Only 9.7% of the respondents suggested that no action should be taken for non-compliance.

The range of activities for which the respondents undertake as CPD is varied. The top four activities are- reading professional/pharmaceutical journals (25%), attending professional association meetings (20%), reading manufacturers literature (19%) and attending CPD provider workshops (18.7%). When probed further on what would motivate them to engage more in CPD activities— about 20% indicated availability of CPD activities closer to pharmacy/ workplace location; 18% indicated availability of an enhanced range of topics that meet practice needs; 16% indicated support from employers and 15% indicated more access to online or technology-based learning methods for CPD as possible motivators.

On the issue of recording participation in CPD activities, 98.5% of the respondents indicated that some form of mechanism should be implemented to capture accrued points. Over half of the respondents (54.4%) indicated preference for a PPB CPD/CME logbook

Most participants were familiar with the structures, systems and framework for CPD with the need to expand the pool of providers and availability of an enhanced range of topics expressed as measures to improve implementation and participation. Majority of the respondents (88.9%) were of the opinion that PPB should provide oversight and supervision for the implementation of CPD programs for pharmaceutical practitioners in the country. In addition, 74.3% indicated that for effective enforcement, CPD should be entrenched in a legal framework. Over 75% of the respondents indicated that PPB should consider other institutions [apart from PSK & KPA] as CPD providers in Kenya.

From in-depth discussions conducted during the survey to probe further on priority topics for CPD, challenges that hinder implementation of CPD activities and approaches for enhancing implementation, the following suggestion were received:

#### *Priority topics for CPD*

1. HIV/AIDS, Malaria & Reproductive Health (family planning)
2. Pharmacovigilance
3. Pharmaceutical care
4. Antimicrobial resistance (AMR)
5. Rational drug use/ medicine use
6. Management of chronic diseases
7. Pharmaceutical policies and laws
8. Communication skills
9. Updates on new medicines in the market

#### *Challenges that hinder implementation of CPD activities*

1. Workload
2. Poor or lack of motivation
3. Lack of knowledge on CPD
4. Poor or improper communication
5. Lack of proper coordination of CPD activities
6. Distance to training venues
7. Funding/lack of finance
8. Lack of facilitators during CPD meetings

### *Approaches for enhancing implementation of CPD programs*

1. Frequent workshops/CPD programs or activities
2. Improve access to CPD e.g. online materials and journals
3. Improve funding for CPD activities
4. Make CPD mandatory
5. Enhance coordination between professional associations and their branches for CPD implementation
6. Engage employers to support CPD
7. Have CPD topics that are related to pharmacy practice
8. Use of ICT in delivery of CPD

### **Recommendations**

1. To strengthen implementation, the CPD program for pharmacy practitioners should be entrenched in a legal framework with the PPB taking lead to fast track the process.
2. CPD policy guidelines need to be revised taking into consideration the outcome and recommendations of this survey. This should include aligning the guidelines to the Kenya National Pharmaceutical Policy [KNPP]. . The guidelines should clearly stipulate what activities qualify for accrue ment
3. The pool of CPD providers should be expanded to include other stakeholders in addition to the professional associations- Pharmaceutical Society of Kenya and Kenya Pharmaceutical Association
4. CPD providers and their programs should be accredited by PPB with the criteria clearly stipulated in the guidelines to ensure best practices , quality assurance, transparency and accountability
5. PPB should work with CPD providers to expand the range of courses/ topics offered so as to meet the practice, knowledge and skills needs of all practitioners working in the different sub-sectors of the pharmacy profession
6. CPD providers should explore and utilize innovative approaches for delivering their programs/ courses. This may include e-learning and web- based platforms. In addition, to reach practitioners serving in peripheral locations, CPD providers should work with stakeholders including regional branches/offices of professional associations to improve access to available programs/ courses.
7. A versatile system for recording and evaluating participation in CPD activities should be developed and implemented. This should provide for the linkages and seamless flow of information between the professionals, CPD providers, the regulatory body and policy makers.
8. To ensure growth and sustainability, funding and other challenges that constrain participation in CPD activities should be addressed including exploring the issue of levying retention fees during renewal of annual licenses to raise required fund. Additionally, this may also involve advocacy for increased involvement and support by employers and stakeholders in implementation. However, conflict of interest issues would need to be addressed.
9. Put in place and strengthen monitoring and evaluation system for CPD programs implementation
10. Inculcate and promote culture of participation in CPD for professional development

## BACKGROUND

The practice of pharmacy has been evolving over time as the demand for quality pharmaceutical services by patients and other clients increases. This emerging and growing need by patients require that pharmacists and pharmaceutical technologists keep abreast of all the necessary knowledge and skills to remain competent and relevant in practice.

University education alone does not fully equip pharmacists with all the necessary knowledge and skills required to practice— it is therefore necessary for them to continually update their knowledge and professional skills [1]. A Pharmacist can use various approaches to achieve this goal including but not limited to; continuing education (CE), weekend lectures, monthly seminars, evening courses and workshops. However, studies have shown that the best flexible way to update knowledge and professional skills is by engaging in Continuous Professional Development (CPD) programs [2-3].

The International Pharmaceutical Federation (FIP) adopted the concept of CPD in 2002 and defined CPD as the responsibility of an individual pharmacist for systematic maintenance, development and broadening of knowledge, skills and attitudes to ensure continuing competence as a professional throughout their career [4]. Hanson has described CPD as "...post graduate professional education, involving a cycle by which individual practitioners assess their learning needs, create a personal learning plan, implement the plan, and evaluate the effectiveness of the education intervention as it applies to their pharmacy practice." [5].

From the above definitions, four specific features of CPD are distinctive: It is based on the practitioner's self-identified learning needs, not those identified or imposed externally; CPD is self-directed learning, requiring the learner to demonstrate motivation and responsibility for his/her learning; CPD is linked to needs within the practice itself (that is, issues that arise out of the unique features of the individual's professional practice); and outcomes (in terms of maintenance of competence, professional development, and the meeting of individual or organizational goals). In general, CPD incorporates principles of reflection (or self-assessment), planning, implementation, evaluation, and documentation. Taken together, these steps are integral to the maintenance of competency, especially within a professional context.

The Global Pharmacy Workforce and Migration Report [6] recommends that pharmacy practice in all sectors and setting should be based on competencies and maintained through CPD and that such systems should be flexible and focused on needs based learning to ensure practicability and valid incentives. The report further recommends that such systems should be designed to facilitate career development and increase job satisfaction and specialization in areas of need.

In Kenya, the Ministry of Health mandated regulatory boards and professional associations to carry out continuing educational programs for their respective professionals. For pharmacy practitioners, the importance of CPD is clearly articulated in the Kenya National Pharmaceutical Policy (KNPP) which states as a policy direction, the need for mandatory CPD through PPB and professional associations as a way of enhancing skills for improvement of service delivery [7]. To guide implementation, the Pharmacy and Poisons Board (PPB) developed the first edition of CPD guidelines in the 2006. Currently, CPD programs are administered on behalf of PPB by the two professional associations, the Kenya Pharmaceutical Association (KPA) for pharmaceutical technologists and the Pharmaceutical Society of Kenya (PSK) for pharmacists.

However a number of challenges have emerged in rolling out of CPD programs including lack of proper enforcement by the regulatory body due to limitations in legislation; available programs are not tailored to the needs of practitioners; lack of support from employers; and lack of proper information about CPD programs available in the country.

To ensure adequate uptake and scale-up of CPD programs, PPB is envisaging a situation whereby the program will be introduced gradually through voluntary CPD schemes which will in time be transitioned to a mandatory system when the appropriate legislation is in place. In some countries, it is already mandatory for pharmacy professionals to undertake CPD and satisfactory participation is a pre-requisite for renewal of annual practice licenses for pharmacists. However, many countries are in various developmental stages of CPD implementation and are yet to reach this stage.

The slow progress in the uptake of CPD in Kenya prompted the PPB to carry out this survey to assess the current status of CPD implementation and in particular identify barriers and facilitating factors. The findings are to be used in the finalization of the review of the CPD policy guidelines which will serve as a blue-print for enhanced implementation of CPD for pharmacy professionals in Kenya.

# GOAL AND OBJECTIVES

## Goal

To obtain baseline information to support the implementation and scaling-up of CPD programs for pharmacy professionals in Kenya.

## Specific objectives

1. To determine attitude, understanding and practice of CPD among pharmacy professionals in Kenya
2. To explore the most appropriate approaches for implementation of CPD in Kenya
3. To identify appropriate activities for accrument of CPD points
4. To identify challenges faced by pharmaceutical professionals in implementing and undertaking of CPD program
5. To determine the pharmacy professionals' perspectives on mandate for CPD co-ordination

# METHODOLOGY

## *Study sites*

The study sites were the forty seven (47) counties of the country.

## *Study design*

Cross-sectional study design was adopted to collect necessary data from the participants. The survey design was appropriate for exploration of quantitative and qualitative information regarding understanding and practice of CPD from pharmacy professionals.

## *Study population*

The study population consisted of pharmacists and pharmaceutical technologists practicing in various pharmacy establishments in the country.

## Sample size

A representative sample size was determined using the following formula:

$$N = \frac{Z^2 pq}{d^2}$$

Where

N= the desired sample size (if the target population is greater than 10,000)

Z= the standard normal deviate at the required confidence level

P= the proportion in the target population estimated to have characteristics being measured. 50% will be used in this case [recommended to be used when no estimate is available]

Q= 1-p

D= the level of statistical significance, in this case, 5%

Hence

$$N = \frac{(1.96)^2 (.50)(.50)}{(.05)^2} \\ = 384.$$

For a population of less than 10,000, and in our case (Pharmacists 2435 & Pharmaceutical Technologists 4163) 6598

$$\frac{Nf = n}{1 + n/N}$$

$$1 + n/N$$

Where

nf = the desired sample size when the population is less than 10,000

n = the desired sample size when the population is greater than 10,000

N = the estimate of the population size (6598)

$$nf = \frac{384}{1 + 384/6598} = 363$$

363/5 = 73 Pharmacy professionals per region.

### *Sampling procedure*

Multistage sampling procedure was adopted. The country was divided into 8 provincial clusters from which counties were randomly selected. Within each of the selected counties stratified random sampling was used to select a representative sample of each of the pharmaceutical cadres.

### **Case definition**

1. Pharmacy professionals- defined as pharmacists or pharmaceutical technologists registered/ enrolled with the Pharmacy and Poisons Board and working in a pharmacy establishment
2. Pharmacy establishment - defined as a facility where pharmaceutical services are offered.

### **Eligibility criteria**

#### *Inclusion*

1. Pharmacy professional who has worked for more than 6 months
2. Pharmacy establishment should be situated within the selected county.
3. To be selected, a pharmacy establishment should offer at least any of the following services; trade in medicines, dispensing of medicines, research in pharmacy, provide education to the public, train students undertaking pharmacy programs, provide regulatory services, perform pharmacy-related administrative functions, manufacture drugs or offer expertise service in areas of pharmacy.

#### *Exclusion*

1. Pharmacy professional who has worked for a period of less than 6 months.
2. Pharmacy establishment whose workers will not consent to participate in the study.

### **Data collection procedure**

The data collection instrument was pre-tested on a small sample of respondents working in selected pharmacy establishments in Nairobi and the questionnaire subsequently revised based on the results of the pilot. Data collection was conducted by research assistants who had been trained on the instrument and sufficiently instructed on how to conduct the survey.

Data collection was conducted between 19th and 23rd March 2012 by eight teams. Each team was assigned to cover a province and consisted of a pharmacist and a pharmaceutical technologist. Informed consent was sought from the pharmacy professionals available at the time of the visit with the questionnaire administered to those agreeing to participate. In-depth discussions were conducted to probe for more information on the professionals' practices and challenges faced in the process implementing of CPD.

#### *Data management and analysis*

The filled questionnaires were received from the research assistants at the end of the data collection exercise and stored securely. The data was cleaned and subsequently entered using pre-designed data entry screens into a data base. Analysis of quantitative data was done using EPI Info Version 7 software.

Descriptive analysis was done for quantitative data, with frequencies and proportions generated to reflect the responses on the various questions and variables of the study. Graphs were used to present the quantitative findings. Thematic analysis was done to analyze qualitative data in order to identify, synthesize and report on any recurrent patterns on the open-ended questions which specifically sought to determine preferred topics for CPD, challenges and approaches to enhanced CPD implementation

#### *Ethical considerations*

Permission to carry out the survey was sought from the administrative offices in the counties. During data collection, informed consent was sought from the pharmacy establishment where the questionnaire was administered. Confidentiality of information about the pharmacy professionals interviewed was maintained by use of codes instead of names of the professionals.

# RESULTS

## Demographic Data

A total of 437 practitioners from public, private, FBO, industrial and academic sectors were interviewed. The participants were predominantly male (69%) with the vast majority between the 20-45 years of age (Figure I). Pharmaceutical technologists comprised the majority of the sample (62.2%) – Figure II.

Figure I- Age

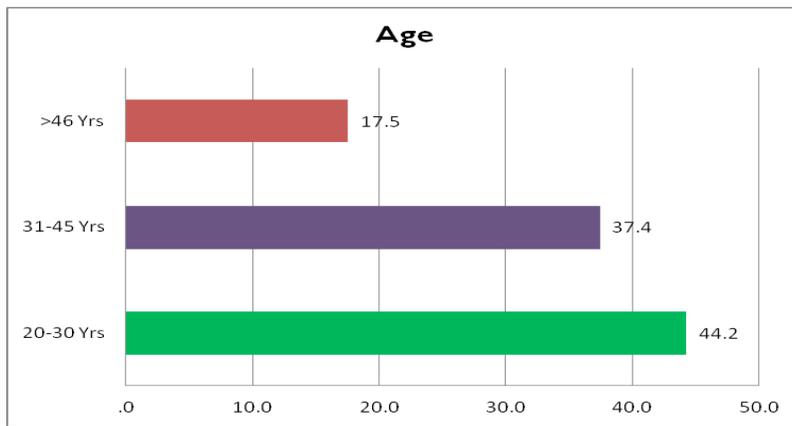
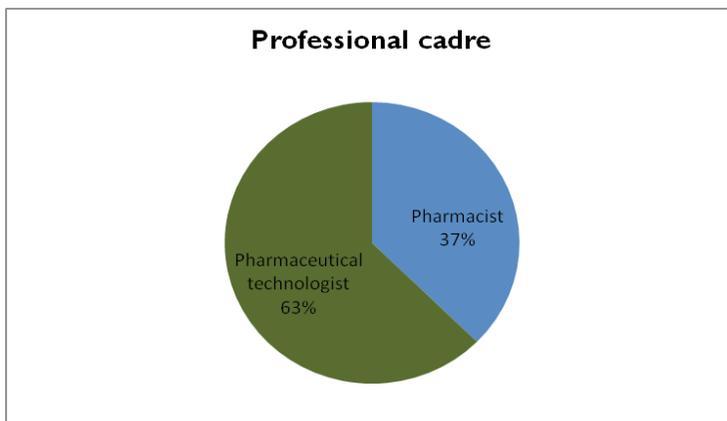


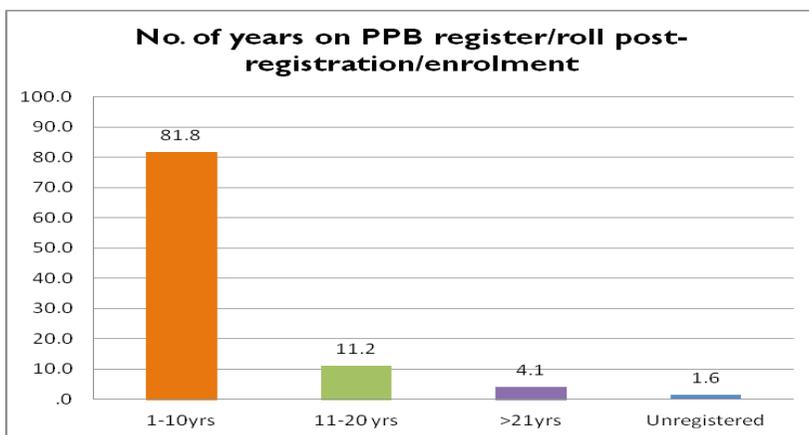
Figure II-Pharmaceutical Professionals



The sampling strategy employed sought to ensure that approximately two thirds of the respondents would be pharmaceutical technologists and one third would be pharmacists in line with the total absolute numbers the registered/ enrolled of each cadre.

Over 95% of the participants indicated that they have been licensed by the PPB to practice pharmacy in Kenya with over 80% indicating that they have been on the PPB register or roll for between 1-10 years (Figure III) Only 1.6% of the respondents indicated that they are unregistered.

Figure III-No. of years of practice post-registration/enrolment

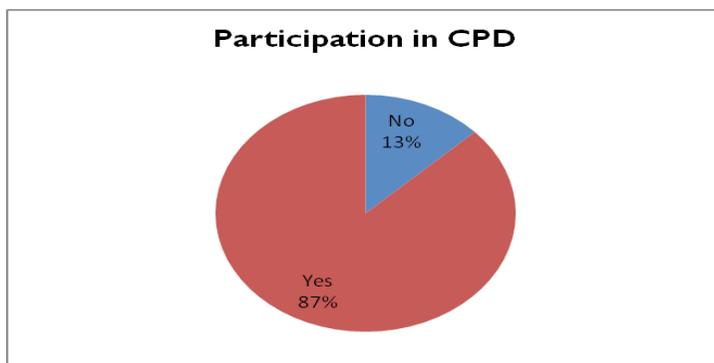


With regard to the working area, the majority of the respondents were drawn from the community pharmacy and hospital pharmacy sectors with the academia (2.9%) and industry (1.5%) having the least representation in the sample.

### Understanding and Practice of CPD among Pharmacy Practitioners

A vast majority (85.6%) indicated that they undertake some form of CPD- (Figure IV) with most indicating that they derived some benefits from undertaking CPD. Only 0.6% of the respondents indicated that they see no benefits from CPD. Most indicated that undertaking CPD improves their performance in their current roles; enhances the status of the profession with the public and other health practitioners or enhances career prospects/development.

Figure IV-Participation in CPD Activities



The top reasons for undertaking CPD were 'skills improvement' (30.7%) followed by 'career development' (24.8%) whereas compliance with requirements' (14.1%) and 'intrinsic interest' (9.5%) and were the least cited reasons. With regard to reasons for not attending local courses or workshops on CPD/CME- 'Distance to venue' (21.6%); 'Other commitments' (20.9%) and 'Lack of information on what CPD/CME activities are available' (19.3%) were cited as the most frequent constraints. Lack of funding (19.3%) and timing of the course (15.8%) were also indicated as reasons for not undertaking CPD by many of the respondents with a small minority (2.4%) of the respondents marking 'CPD programs/ topics are not relevant to me' as a contributory factor.

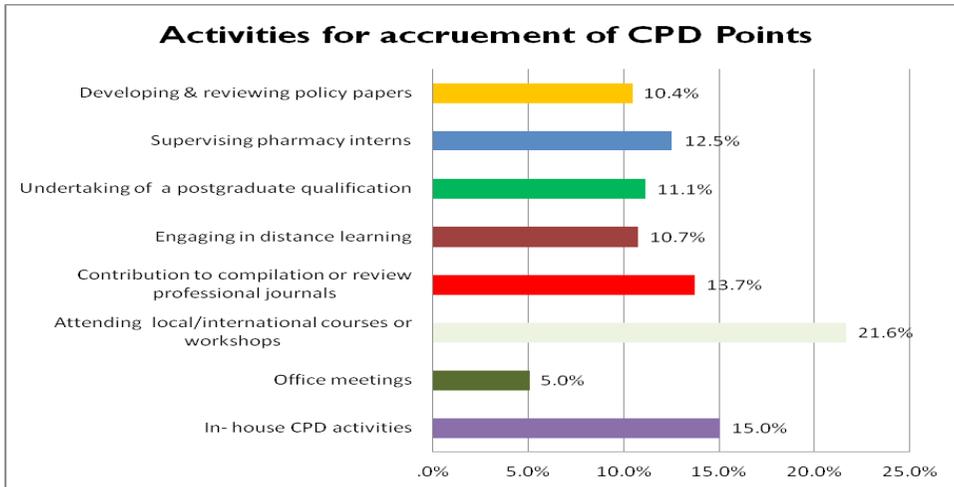
With regard to workplace arrangements by employers to ensure that pharmacists/pharmaceutical technologists undertake CPD, the most cited measure was 'allowing paid/unpaid time off for CPD' (26.7%) followed by 'providing in-house training and development activities' (22%). About 18% of the respondents indicated that the employers did not provide any form of support. Similarly on the issue of sponsorship for CPD activities, about half of the participants indicated that they funded the activities themselves with about 21% and 24% being funded by their employers and partners (NGOs) respectively. Only 13% of the respondents indicated that they did not receive any form of funding/support for CPD activities or programs.

Over 90% of the respondents suggested the application of some form of sanctions for members who do not comply to CPD requirements. Competence reassessment (28.2%) and compulsory remedial training (26.3%) were the most cited sanctions with over half of the interviewees selecting these options. 25% of the respondents settled for denial of practice license as the appropriate sanction for non-compliance whereas about 10% picked a more lenient measure- reprimanding non-compliant members; 9.7% suggested that no action should be taken.

### **Approaches to Implementation of CPD and Accrue ment of CPD Points**

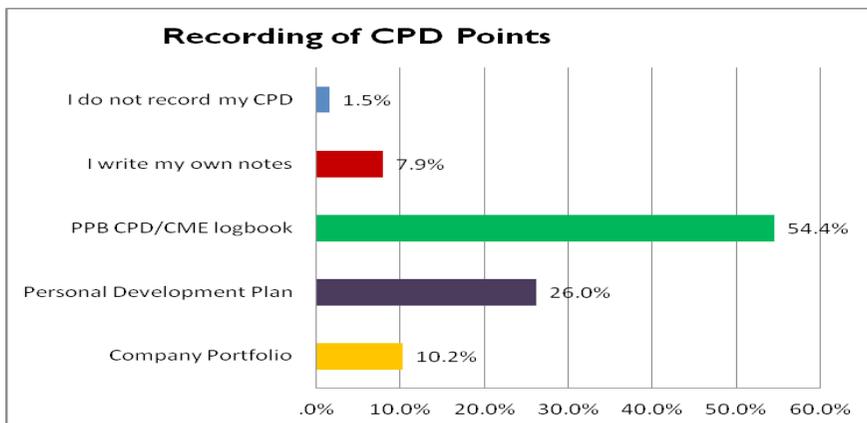
The range of activities which the respondents undertake as CPD was varied. The top four activities cited were 'reading professional/pharmaceutical journals (25%), attending professional association meetings (20%), reading manufacturer's literature (19%) and attending CPD provider workshops (18.7%). However, when asked what activities should qualify for award of CPD points, 'attending local/international courses or workshops' (22%) was the option picked by most respondents followed by 'in-house CPD activities' (15%); and 'contribution to compilation or review of professional journals'- 14%. When probed further on what would motivate them to engage in more CPD activities, about 20% of the respondents chose 'availability of CPD activities closer to pharmacy/workplace location'; 18% indicated 'Availability of an enhanced range of topics that meet practice needs'; 16% picked 'Support from employer (time off, funding) and 15% cited 'more access to online or technology-based learning methods for CPD'.

Figure V-Suggested Activities for Accrue ment of CPD Points



Finally with regard to recording individual CPD points earned, 98.5% of respondents indicated that some form mechanisms should be implemented to capture points accrued. Over half of the respondents indicated their preference of a PPB CPD/CME logbook; 26% picked Personal Development Plans and about 10% cited some form of company portfolio as a means of capturing participation and accrue ment of CPD points. Figure

*VI-Recording of CPD Activities*



### Knowledge and Perspectives on Mandate for CPD Co-ordination

Respondents were required to indicate their knowledge/ perspectives on a given set of statements by indicating whether they ‘strongly agree’; ‘agree’; or disagree.

The majority of respondents disagreed with the statement stating that ‘The Ministry of Medical Services (MOMS) regulates CPD for Pharmacy Practitioners in Kenya’. Only 43.7% of the respondents indicated that they either strongly agreed (13.6%) or agreed (30.1%) with this statement. An overwhelming majority- 88.9% either strongly agreed or agreed with the statement that regulation and supervision of CPD program implementation should be within the docket of Pharmacy and Poisons Board.

With regard to implementation of CPD programs, the majority (74.3%) were of the opinion that to be enforced effectively, the CPD program should be entrenched in a legal framework. Only 25% of the respondents indicated that they did not agree with these sentiments (Figure VII). In addition, 75.8% of the respondents indicated that the Pharmacy and Poisons Board should consider other institutions [apart from PSK and KPA] as CPD providers for pharmacy professionals in Kenya (Figure VIII). Less than 25% of the respondents expressed their disagreement with this statement. In addition, the participants indicated that they felt that CPD providers for pharmacy practitioners should be regulated by PPB before they roll out CPD programs. Only 16.7% of the respondents were of the contrary opinion. Finally on the issue enforcing CPD, over 80% of the respondents indicated their preference for making CPD mandatory to ensure compliance. Only 16% of the interviewees disagreed with this statement (Figure IX)

Figure VII-Legal framework for entrenchment of CPD

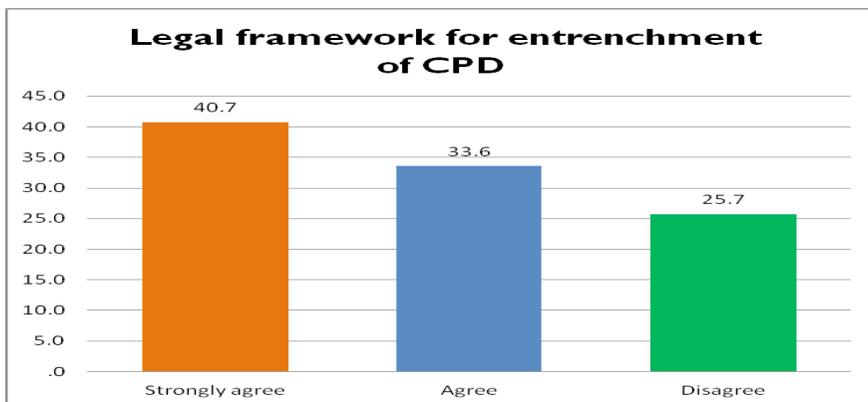


Figure VIII-Additional CPD Providers

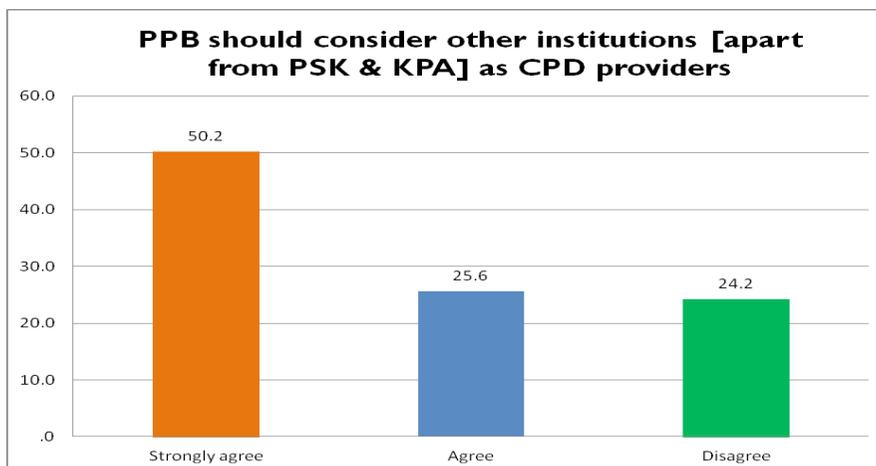
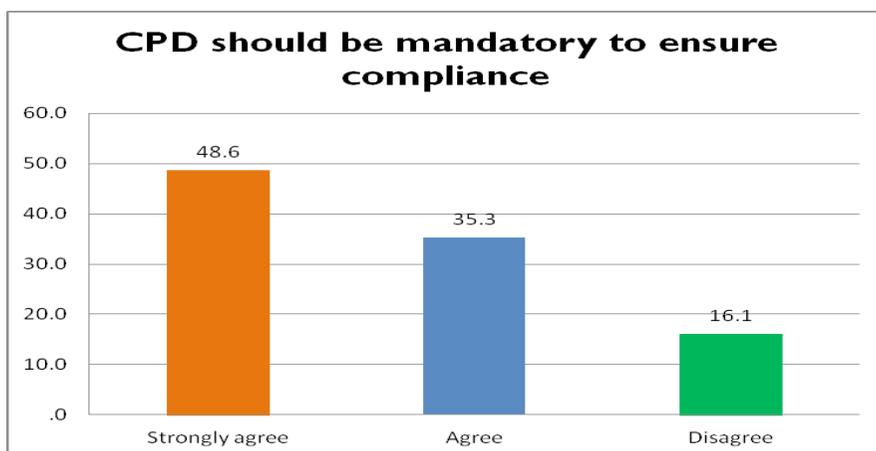


Figure IX-Mandatory CPD for Compliance



From in-depth discussions conducted during the survey to probe further on priority topics for CPD, challenges that hinder implementation of CPD activities and approaches for enhancing implementation the following suggestions were received:

*Priority topics for CPD*

1. HIV/AIDS, Malaria & Reproductive Health (family planning)
2. Pharmacovigilance
3. Pharmaceutical care
4. Antimicrobial resistance
5. Rational drug use/ medicine use

6. Management of chronic diseases
7. Pharmaceutical policies and laws
8. Communication skills
9. Updates on new medicines in the market

*Challenges that hinder implementation of CPD activities*

1. Workload
2. Poor or lack of motivation
3. Lack of knowledge on CPD
4. Poor or improper communication
5. Lack of proper coordination of CPD activities
6. Distance to training venues
7. Funding/lack of finance
8. Lack of facilitators during CPD meetings

*Approaches for enhancing implementation of CPD programs*

1. Frequent workshops/CPD programs or activities
2. Improve access to CPD e.g. online materials and journals
3. Improve funding for CPD activities
4. Make CPD mandatory
5. Enhance coordination between professional associations and their branches for CPD implementation
6. Engage employers to support CPD
7. Have CPD topics that are related to pharmacy practice
8. Use of ICT in delivery of CPD

## DISCUSSION

Continuing education encompasses the period of learning from post registration/ enrolment to end of the career. CPD is intended to enable pharmacy practitioners keep their knowledge and skills up to date with the ultimate goal of helping them provide the best pharmaceutical services, improve patient outcomes and protect patient safety. In 2002, the concept of CPD was defined by the International Pharmaceutical Federation as— the responsibility of individual pharmacists for systematic maintenance, development and broadening of knowledge, skills and attitudes, to ensure continuing competence as a professional, throughout their careers [FIP]

It is apparent from this assessment that the majority of pharmacy practitioners perceive that they undertake CPD and believe that they derive some benefit from the activity with CPD being undertaken mostly for skills improvement and career development. Surprisingly, only a minority of the respondents indicated that they undertake CPD activities just to comply with requirements or out of intrinsic interest. This is a very positive finding as it shows that pharmacy professionals in the country value CPDs and view it as a vehicle for career growth and development. However, opinion on what really constitute CPD is varied—from reading professional/pharmaceutical journals and manufacturers' literature to research. This is an indication of a knowledge gap on what activities should be classified as CPD and clear guidelines on activities that qualify for categorization as CPD and those that do not need to be developed and disseminated to all stakeholders.

It is clear from this assessment that pharmacy practitioners face specific challenges which hinder their participation in CPD activities. Some of the factors cited include inadequate support from employers for participation in CPD activities and lack of funding. It is imperative that employers and other stakeholders are brought on board in the implementation of CPD programs to obtain broader support for these programs and their benefits elucidated as this will ultimately impact on the success and long-term sustainability of such programs in the country.

With regard to implementation of CPD through attendance of workshops, meetings and courses, the distance to the venues of such activities was cited as a constraint. In addition, other competing commitments, lack of information on what CPD activities are available and funding were identified as challenges. This is an indication that CPD providers need to explore the suitability and relevance of more innovate methods of delivering CPD programs such as the use of IT- Email, intranets, web-based or online delivery and e-learning. This would address the challenges related to travel and the requirement for a participant to take a course at a specific predefined time and location. This issue would need to be addressed comprehensively in CPD policy guidelines to ensure enhanced access to CPD materials and facilitate/encourage pharmacy practitioners to undertake the activity.

The assessment also provides useful insights on what would motivate pharmacy practitioners to engage in more CPD activities with availability of CPD activities closer to pharmacy/workplace location emerging as one of the key approaches to achieving this goal. This could partly be addressed by implementation of innovate strategies for delivery CPD that do not require travel as explained above but in addition, CPD providers should explore ways to decentralize CPD workshops from major towns so as to reach practitioners working in more rural and underserved areas. Regional professional association branches could work with CPD providers to identify suitable locations within their areas for conducting these decentralized workshops/meetings. A significant number of respondents indicated that availing an enhanced range of topics that meet practice needs would also motivate them to engage in CPD. This is an expression of the often expressed sentiment that current CPD topics that are offered in the country do not meet the needs of practitioners in all the pharmaceutical sub-sectors especially the industry and inadequate

coverage of other areas of interests. To maintain interest and promote participation of pharmacy professionals, it is critical that CPD providers design and structure CPD activities to meet the knowledge, application and practice-based education needs of pharmacists and pharmaceutical technologists.

Central to CPD implementation is the practitioner's personal portfolio, which is a comprehensive record of all CPD activities undertaken. The portfolio should be electronic or paper-based, should be readily accessible and simple to use [Rouse, M.J., 2004]. These sentiments seem to resonate well with local pharmacy practitioners as over half of the respondents indicated the need for some form of mechanism to record participation in CPD activities. It is therefore important that a system for capturing activities undertaken in carrying out CPD be developed and implemented. Ideally, a standardized format should be adopted to facilitate training, data entry, and where applicable, portfolio evaluation.

Regarding the mandate for CPD co-ordination, most pharmacy practitioners expressed the need for the CPD program to be entrenched in some form of legal framework under the regulation of PPB. In addition, the majority of the respondents were of the opinion that CPD should be mandatory to ensure compliance. For this to be implemented successfully, a number of measures need to be put in place including:

1. Finalization of CPD policy guidelines clearly stating what activities qualify for accrue ment of CPD points and the number of points to be awarded on successful completion.
2. Establishment of a system- manual or electronic- for recording an individual's participation in CPD activities
3. Establishment of the threshold, cut-off or the minimum number of points an individual has to accrue over a given time period to be rated as compliant. This will need to be clearly spelt out and agreed upon by all stakeholders.

Other findings on implementation include the need to expand the pool of CPD providers and the accreditation of such providers and their programs/courses. This is especially critical if the quality, standards and relevance of these programs/courses is to be maintained. This would require guidelines on accreditation of providers and programs to be developed and implemented to ensure transparency and accountability in these processes.

### **Study Limitations**

During data analysis, 1.6% of the respondents were found to be unregistered, hence should not have been interviewed as this was one of the exclusion criteria. Their responses may therefore skew the findings of the study although this should be negligible since they formed a very small part of the overall sample.

In addition, due to logistic and other constraints such as security concerns, some districts especially in the North Eastern Province of Kenya and some far-flung areas such as Turkana were not covered hence this limited the representativeness of the sample. However, these districts comprise only a small proportion of the districts in the country and their exclusion may not significantly affect the results of the survey

## RECOMMENDATIONS

1. To strengthen implementation, CPD programs for pharmacy practitioners should be entrenched in a legal framework with the PPB taking lead as the regulator to fast track the process.
2. CPD policy guidelines need to be revised taking into consideration the outcome and recommendations of this survey. This should include aligning the guidelines to the Kenya National Pharmaceutical Policy [KNPP]. The guidelines should clearly stipulate what activities qualify for accrument of points, their categorization, points awarding criteria and the threshold for compliance.
3. The pool of CPD providers should be expanded to include other stakeholders in addition to the professional associations- Pharmaceutical Society of Kenya and Kenya Pharmaceutical Association
4. CPD providers and their programs should be accredited by PPB with the criteria clearly stipulated in the guidelines to ensure best practices , quality assurance, transparency and accountability
5. PPB should work with CPD providers to expand the range of courses/ topics offered so as to meet the practice, knowledge and skills needs of all practitioners working in the different sub-sectors of the pharmacy profession
6. CPD providers should explore and utilize innovative approaches for delivering their programs/ courses. This may include e-learning and web- based platforms. In addition, to reach practitioners serving in peripheral locations, CPD providers should work with stakeholders including regional branches/offices of professional associations to improve access to available programs/ courses.
7. A versatile system for recording and evaluating participation in CPD activities should be developed and implemented. This should provide for the linkages and seamless flow of information between the professionals, CPD providers, the regulatory body and policy makers.
8. To ensure growth and sustainability, funding and other challenges that constrain participation in CPD activities should be addressed including exploring the issue of levying retention fees during renewal of annual licenses to raise required fund. Additionally, this may also involve advocacy for increased involvement and support by employers and stakeholders in implementation. However, conflict of interest issues would need to be addressed.
9. Put in place and strengthen monitoring and evaluation system for CPD programs implementation
10. Inculcate and promote culture of participation in CPD for professional development

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10. Are there any reasons why you may NOT attend local courses or workshops on CPD or CME?

- a. I am already undertaking post-graduate education [  ]
- b. CPD programs/topics are not relevant to me [  ]
- c. Other commitments [  ]
- d. Timing of the courses [  ]
- e. Distance to venue too far to travel [  ]
- f. Lack of information on what CPD (CME) activities are available [  ]
- g. Lack of funding [  ]
- h. Other (please specify) .....

11. What arrangements have been put in place by your employer (if applicable) to ensure all pharmacists/Pharmaceutical Technologists undertake CPD (incorporating CME)?

- a. Allowing paid/unpaid time off for CPD (incorporating CME) activities [  ]
- b. Funding CPD (incorporating CME) activities [  ]
- c. Requiring pharmacists to undertake minimum levels of CPD (incorporating CME) [  ]
- d. Providing in-house training and development activities [  ]
- e. Providing a staff study area within the pharmacy [  ]
- f. None [  ]
- g. Other [  ] (please specify) \_\_\_\_\_

12. If CPD becomes mandatory and members do not comply, what sanction(s) do you think should apply? You may tick more than one box.

- a. Reprimand [  ]
- b. Compulsory Remedial Training [  ]
- c. Competence reassessment [  ]
- d. No action taken [  ]
- e. Deny renewal of practice license [  ]
- f. Other (Please specify) \_\_\_\_\_

13. Who sponsors your CPD activities/programs?

- a. Self [  ]
- b. Employer [  ]
- c. Partners(NGOs) [  ]
- d. No sponsorship [  ]
- e. Others (Please Specify) \_\_\_\_\_

### Section Three – Approaches for implementation of CPD

14. Which of the following CPD activities/programs do you engage in? You may tick more than one box.

- a) Reading Professional/ Pharmaceutical Journals [  ]
- b) Attending CPD Provider Workshops [  ]
- c) Attending Local Professional Association Branch Meetings [  ]
- d) Reading Manufacturers Literature [  ]
- e) Participating in Programs by online CPD providers [  ]
- f) Peer review of journals [  ]
- g) Research [  ]
- h) Other [  ] (please specify) .....

15. What would motivate you to engage in more CPD (incorporating CME)?
- a) Availability of CPD activities closer to pharmacy/ workplace location [  ]
  - b) Greater frequency and a more convenient range of times for CPD [  ]
  - c) Availability of an enhanced range of topics that meet practice needs [  ]
  - d) More access to online or technology-based learning methods for CPD [  ]
  - e) Understanding what workplace activities can constitute appropriate CPD [  ]
  - f) Further training to understand the concept of CPD [  ]
  - g) Support from employer (time - off, funding) [  ]
  - h) Other [  ] (please specify) \_\_\_\_\_

**Section Four – Activities for accrument of CPD points.**

16. In your opinion, which of the following should earn you CPD points (incorporating CME)?  
[Tick all that apply]
- a) In- house CPD activities [  ]
  - b) Office meetings [  ]
  - c) Attending local/international courses or workshops [  ]
  - d) Contribution to compilation or review professional journals [  ]
  - e) Engaging in distance learning [  ]
  - f) Undertaking of a postgraduate qualification: [  ]
  - g) Supervising pharmacy interns [  ]
  - h) Developing & reviewing policy papers [  ]
  - i) Other [  ] (please specify) \_\_\_\_\_
17. In your opinion, how do you think CPD points should be recorded? You may tick more than one box.
- a) Company Portfolio [  ]
  - b) Personal Development Plan [  ]
  - c) PPB CPD/CME logbook [  ]
  - d) I write my own notes [  ]
  - e) I do not record my CPD [  ]
  - f) Other [  ] (please specify) .....

**Section Five – Challenges of implementation of CPD**

18. List any three topics which should be included in CPD programs to meet your personal needs
- .....
- .....
- .....
19. Indicate two challenges that might have hindered implementation of CPD activities for Pharmacy practitioners.
- .....
- .....
- .....
20. Please suggest ways in which we can enhance CPD programs implementation.
- .....
- .....
- .....

## Section Six – Knowledge and Perspectives on mandate for CPD co-ordination

Use the following key: 1= strongly agree 2=agree 3=disagree to score genuinely that which represents your true opinion about the information provided here below.

21. Ministry of Medical Services (MOMS) regulates CPD for pharmacy practitioners in Kenya  
1. [ ] 2. [ ] 3. [ ]
22. Regulation and supervision of CPD program implementation for pharmacy practitioners in Kenya should be in the docket of Pharmacy & Poisons Board 1. [ ] 2. [ ] 3. [ ]
23. To be able to be enforced well, CPD program should be entrenched in a legal framework.  
1. [ ] 2. [ ] 3. [ ]
24. Provision of CPD for pharmacy practitioners should be limited to professional associations such as the Pharmaceutical Society of Kenya (PSK) and the Kenya Pharmaceutical Association (KPA) only  
1. [ ] 2. [ ] 3. [ ]
25. The Pharmacy and Poisons Board should consider other institutions [apart from PSK & KPA] as CPD providers for pharmacy practitioners in Kenya. 1. [ ] 2. [ ] 3. [ ]
26. CPD providers for pharmacy practitioners should be regulated by PPB before they roll out CPD programs. 1. [ ] 2. [ ] 3. [ ]
27. CPD should be mandatory to ensure compliance 1. [ ] 2. [ ] 3. [ ]

**THE END**

**Thank you for taking the time to complete this questionnaire**

## Annex II: The consent form

### CONSENT FORM/INFORMATION STATEMENT

Good morning/afternoon sir/madam,

The Pharmacy and Poisons Board is carrying out this survey to assess the CPD situation among pharmacy practitioners in Kenya. Your participation and cooperation is vital for the success of this study and through it, the results and the conclusions of this study will contribute to the implementation of CPD guidelines and rolling out of CPD activities for pharmacy practitioners in the country.

#### Investigators' statement

You are asked to participate in this study by answering questions about your knowledge, attitudes and practices regarding CPD. The purpose of this consent form is to give you the information you will need to help you decide whether to participate in the study or not. Please read it carefully.

#### Consent information

1. Your participation in this study is voluntary and you are free to refuse to participate in it.
2. You are free to withdraw from the study at any level without penalty.
3. Your selection is random and is based on no other reason apart from being situated in the country.
4. There are no risks and/or discomforts associated with this study.

There will be neither monetary nor material benefit that will be given to you in return to your participation in the study apart from sharing of the final results of study.

All information collected during this research will be held in the strictest confidence and no identifying information of any kind will be released to any other person or agency without your specific consent. I will not publish or discuss in public anything that could identify you unless with your written consent. Only the investigator will have access to information that will be used to identify you, however, once the study is complete all records that can be used to identify you will be removed.

In case of any questions arising from the conduct of this study or any information that has not been explained to your satisfaction about the study, you can contact the investigators (interviewers) through the contacts provided(0722 644 527,0721 227 520, and 0720 424142) or the Registrar, Pharmacy and Poisons Board, P.O. Box 27663-0506, Nairobi, Tel: 0720 608811.

Signature of investigator..... Date.....

#### Participant's statement

**The study described above has been explained to me. I voluntarily consent to participate in this activity. I have had an opportunity to ask questions.**

Signature of participant..... Date.....

Copies to: 1. Participant    2. Investigator's file







