KNOWLEDGE, PERCEPTIONS, COMPLIANCE AND CHALLENGES AMONGST HOMOEOPATHS IN SOUTH AFRICA REGARDING THE NEWLY IMPLEMENTED CONTINUOUS PROFESSIONAL DEVELOPMENT (CPD) ACCREDITATION SYSTEM

By

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Declaration

This is to certify that the work is entirely my own and not of any other person, unless explicitly acknowledged (including citation of published and unpublished sources). The work has not previously been submitted in any form to the Durban University of Technology or to any other institution for assessment or for any other purpose.

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I, Adri Miller, declare that this dissertation is representative of my own work, both in concept and execution.

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Dedication

I WOULD LIKE TO DEDICATE THIS RESEARCH TO PRESENT AND FUTURE HOMOEOPATHIC STUDENTS TO GUIDE THEM THROUGH THEIR JOURNEY TO BECOME MASTERS OF THE ART.

"JUST AS THE WHOLE WORLD IS A SCHOOL FOR THE WHOLE OF THE HUMAN RACE, FROM THE BEGINNING OF TIME UNTIL THE VERY END, SO THE WHOLE OF A PERSON'S LIFE IS A SCHOOL FOR EVERY ONE OF US, FROM THE CRADLE TO THE GRAVE. IT IS NO LONGER ENOUGH TO SAY WITH SENECA "NO AGE IS TOO LATE TO BEGIN LEARNING". WE MUST SAY: "EVERY AGE IS DESTINED FOR LEARNING, NOR IS A PERSON GIVEN OTHER GOALS IN LEARNING THAN IN LIFE ITSELF".

Jan Comenius (1592 – 1670) (cited in Longworth and Davies (1996)

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There's a reason why God brings us closer to certain people, people who will either teach us important lessons about life or about ourselves.

Abstract

Introduction

Continuous professional development (CPD) refers to educational activities after graduation for the maintenance and improvement of knowledge, skills, attitudes and practices of health professionals, in order to continue to safely and effectively provide health services (World Health Organization 2013). CPD is one of the 12 recommendations of the World Health Organization to transform and improve the level of education that health practitioners receive.

Since the introduction of mandatory legislation from the Health Professionals Council of South Africa (HPCSA) on CPD in 2002, no research has been published on this topic in relation to the profession of homoeopathy in South Africa. Global research on CPD indicates that various professional bodies experience difficulties in compliance and have identified challenges regarding incorporation of knowledge and skills gained via CPD events into practice (Naidoo 2016). Continuing professional development has provided an opportunity for advancement in the field of continuing education, and in maintaining excellence in patient care and safety (Pillay 2011). This study explores the experiences and challenges of homoeopathic practitioners in South Africa when faced with newly implemented CPD requirements and their challenges.

Purpose

This study was aimed at exploring the knowledge of, perception of, and compliance with CPD, of homoeopaths in South Africa. It also sought to outline the challenges that practitioners face and how compliant they are regarding CPD. Continuous professional development allows registered homoeopaths to maintain skills, accumulate new knowledge and enhance ethical performance required in professional practice to improve the quality of service and to promote professional integrity (Health Professions Council of South Africa 2014).

Method

This study employed a quantitative descriptive approach based on a questionnaire with open-ended and closed-ended questions. South African homoeopaths were approached to conduct a self-administered questionnaire. The 31-item questionnaire comprised seven sections which covered the objectives of the study. The national list of registered homoeopaths maintained by the Allied Health Professional Council of South Africa (AHPCSA) had 630 names up to 2017/05/03. In this study 396 questionnaires were administered but only 187 questionnaires were answered in full which resulted in a 47% response rate. Data from the questionnaires were subjected to descriptive statistical analysis using the SPSS statistics version 25 to systematically show patterns and trends. Frequency distributions were generated to describe data categories. Bivariate analysis was conducted using Chi-square and Pearson correlation tests.

Results

The mean age of participants was between 40 to 49 years. Overall, the ratio of males to females was approximately 1:3. Lack of available CPD opportunities was identified as the most problematic challenge and ways to address the issue were raised by participants and these should be brought to the attention of AHPCSA. The cost of CPD participation and to a lesser extent the time constraints involved were also regarded as challenges. Finding ways to address these issues will improve the quality of CPD and its acceptability by members of the homoeopathic profession.

Conclusion

This study provided some insights into homoeopaths' perceptions of the recently implemented CPD system. Finding ways to address these issues will serve to improve the quality of CPD within the homoeopathic community in a way that is acceptable to its members.

Homoeopaths in South Africa were experiencing numerous CPD challenges. Suggestions were made to overcome these challenges as well as improving the system. The direction in which homoeopaths want to move, going forward, what is done and how it is done, will not affect the fact that homoeopathy is a primary healthcare discipline where the aim is to benefit the patient, and to serve the community and the healthcare system.

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List of Acronyms

AHPCSA	Allied Health Professionals Council of South Africa
CE	Continuing education
CEU	Continuing education units
CME	Continuing Medical Education
CPD	Continued Professional Development
DUT	Durban University of Technology
HPCSA	Health Professions Council of South Africa
HSA	Homoeopathic Association of South Africa
KZN	KwaZulu-Natal
UK	United Kingdom

Definition of Terms and Clarification of Concepts

Homoeopathy

Homoeopathy works with the body's own natural healing energy, the Vital Force (De Schepper (2010). Homoeopathy as a discipline is classified under the umbrella term of complementary and alternative medicine, and involves a holistic approach towards the treatment of patients on a mental, physical and emotional level (Jayasuriya 1993).

Continuing Education Unit (CEUs)

This is the value attached to a learning activity for CPD purposes (AHPCSA 2013-2015).

Challenges

Demanding task or situation (*Oxford English Dictionary* 2006).

Knowledge

Knowledge is the sum of what is known: the body of truth, information, and principles acquired by humankind (Webster 2016).

Skills

Skills are the ability to do something well (*Oxford English Dictionary* 2006).

Jurisprudence

The study and knowledge of the Allied Health Professions Council of South Africa Act, Act 63 of 1982, Regulation 2001 pertaining to the Act, and the rules and the application of the principles of law to health and medicine (AHPCSA 2015b).

CHAPTER 1: INTRODUCTION AND RESEARCH OVERVIEW

1.1 Introduction

The definition of continuing professional development (CPD) provided by the South African Qualifications Authority and the Financial Planning Institute (2015) is suitable to the homoeopathic profession. "The maintenance and enhancement of knowledge, expertise and competence of professionals throughout their careers to a plan formulated with regard to the needs of the professional, employer, the profession and society."

Continuing professional development has been defined by Arunachallam (2009) as a system of continuing education and training that is needed to keep abreast in a fast-changing medical profession. Pardy (2012) explains that CPD is about providing ongoing opportunities for individuals to seek the knowledge and skills needed in order to remain competent in their role. In this day and age, physicians are more focused on opportunities to apply practical skills as opposed to informational updates from attending CPD activities. The general expectation is that CPD programmes are professionally delivered in order to cover needs, and the success of CPD depends on identifying needs and gaps in the system (McMahon and Skochelak 2018).

1.2 Background

Continuous professional development for allied health professional practitioners is a relatively new requirement in South Africa (de Villiers 2008). It is intended to encourage registered practitioners such as homoeopaths to maintain their skills, accumulate new knowledge and enhance ethical performance. Continuous professional development is a requirement for professionals (Allied Health Professions Council of South Africa [AHPCSA] 2015 - 2017). However, there are questions regarding compliance and awareness. Research indicates that such issues are common in the implementation of similar CPD programmes

executed in other professions in many other countries (Naidoo 2016). This study aimed to ascertain the awareness of CPD as determined by the Professional Board of Homoeopathy in order to maintain registration for the practice of homoeopathy in South Africa. This research intended to shed light on whether homoeopaths in South Africa face a similar lack of knowledge and barriers to compliance as seen in other health professions. This study was conducted using a quantitative, descriptive research approach in the form of an online survey with both closed and open-ended questions. The questionnaire was distributed amongst 396 homoeopaths of which 187 were answered in full, a response rate of 47%. The questionnaire included questions on the perceptions, level of awareness, participation and challenges experienced by homoeopaths with regards to CPD as well as their suggestions for CPD improvement.

1.3 Rationale

The Allied Health Professions Council of South Africa (AHPCSA) stipulated in April 2015 that as from the 01 July 2015 that all registered homoeopaths should comply with the requirements of CPD as laid down by the Professional Board of Homoeopathy in order to maintain registration for the practice of homoeopathy in South Africa (Government Gazette 2015a).

According to Alsop (2013), CPD involves lifelong learning that will equip practitioners with necessary skills, knowledge and personal competence. Lifelong learning improves knowledge and personal competence in order to participate actively within society. This is relevant for one's entire lifespan and not just in one's working life (Murgatroyd 2011). As stated by the AHPCSA (2015b), the onus is on each individual practitioner to keep records of the standard certificates of attendance for every activity attended. Certificates need to be available at all times in case of random compliance verification for any two-year cycle. According to the AHPCSA the appointed CPD Committee will take the necessary actions against practitioners who fail to submit their portfolios on time (AHPCSA 2015b).

The main reason behind CPD is to improve health outcomes, therefore this study was essential for the homoeopathic profession so as to facilitate changes to CPD activities that might improve patient health outcomes (Ibrahim 2015).

No research currently exists which has investigated or described issues around CPD compliance and its efficacy amongst homoeopaths in South Africa. A study conducted among radiographers and clinical technicians in South Africa found compliance to be as low as 50% as revealed by audits in 2009 to 2013 (Naidoo 2016). Such poor compliance may suggest issues regarding understanding, access to and readiness for CPD training. This study serves to highlight any hurdles that homoeopaths may face in regard to achieving effective CPD training, and offers potential solutions to such hurdles so that CPD training has its maximum intended effect for better patient treatment and practice outcomes. This study may serve to potentially improve CPD training outcomes by drawing attention to practitioners' lack of understanding and unawareness of CPD itself. If homoeopaths are not well informed and ready for CPD training they are unlikely to fully utilise CPD, and its potential to enhance the profession will be diminished. The study encouraged homoeopathic practitioners to engage in problem solving and to make suggestions to overcome potential issues affecting homoeopaths (Naidoo 2016).

1.4 Aims

The aim of this study was to assess the knowledge, perceptions, compliance and challenges amongst homoeopaths in South Africa regarding the newly implemented CPD system.

1.5 Objectives

1. To assess the level of knowledge regarding CPD requirements and training amongst homoeopaths in South Africa by means of a questionnaire.
2. To assess the self-reported compliance and practises of CPD amongst homoeopaths by means of a questionnaire.

3. To assess the perceptions of CPD amongst homoeopaths by means of a questionnaire.
4. To determine the challenges encountered by registered homoeopaths around compliance with CPD requirements as set out by the AHPCSA, by means of a questionnaire.

CHAPTER 2: LITERATURE REVIEW

2.1 Introduction

The worldwide emphasis on lifelong learning, the continuous and fast pace of change, and the competitive nature of practice forces professionals in all sectors to remain abreast of the latest knowledge, skills and/or innovations (Frick 2007). One of the reasons why CPD has become so important, according to Petaloti (2009), is the rapid development of science and technology on a global level.

Across South Africa, CPD is an emerging practice with many individuals and professionals keen to undertake CPD for ongoing educational purposes. When a CPD system is adopted by new practitioners it allows them to foster habits for professional growth that will advance their profession and most importantly benefit patient care (Embo and Valcke 2015). Increased awareness amongst the public regarding health and diseases gained via the media and the internet make it vital for healthcare providers to be informed regarding new knowledge and trends (Srivastava, Sullivan and Sanghvi 2015).

The literature indicates that professionals in the health care system agree that the implementation of CPD is a tool that enables practitioners to strengthen their knowledge in their particular areas of specialisation (Balmer 2013). Pillay (2011) explains the purpose of CPD as being to assist advanced life support providers to maintain and acquire new and updated levels of knowledge, skills and ethical attitudes that will benefit and enhance their professional integrity. The European Union of Medical Specialists defines CPD as “the educative means of updating, developing and enhancing how physicians apply knowledge, skills and attitudes required in their working lives” (Sullivan 2018). Continuing professional education is a system that exists in most countries around the globe. The Professional Development Consortium (2018) accredits all forms of professional development and CPD activities in many parts of the world as they have an international reputation as the strongest currency in professional development. Continuing professional development is helpful in the South African health

sector in maintaining high standards, which is also beneficial for homoeopaths in their practices.

A literature search was undertaken using the Cumulative Index to Nursing and Allied Health Literature, Medline, and Summons from the DUT library electronic databases. Google Scholar was often used for confirmation to give direction to Google search for discovering of CPD literature (Chipchase, Johnston and Long 2011). The search terms used were CPD compliance, mandatory CPD, continuous education and CME. The search was supplemented using citation tracking and secondary references.

2.1.1 History of CPD

According to van Vuuren and Nel (2013), the importance of educating health professionals to keep up with changing needs was advocated more than a century ago by Abraham Flexner. However, it was only in the early 20th century with the development of the science-based foundation of medical training in the United States that it became formalised (Duffy 2011).

Parboosingh (n.d.) states that before 1900 physicians were trained under a master in what was relevant in a system known as apprenticeship. According to this author, the American Medical Association was the first to set out ongoing education standards in the 1960s, which included an accreditation system as a reward for attendance. Figure 2.1 illustrates the changes over time of educational practice.

BEFORE **PRESENT DAY**

Figure 2.1: Illustration of progress in educational practice

Source: What is a webinar (2011), Wikipedia 2019

2.1.2 CPD within the South African context

Schostak *et al*. (2010) explain that CPD is not one concept but needs to be understood as a totality with individual elements contributing to the aim of improving and maintaining the quality of care given to patients to ensure high standards in a multidisciplinary team. Table 2.1 depicts what CPD is and what it is not (Schostak *et al.* 2010).

Table 2.1: What CPD is and is not

CPD IS:	**CPD IS NOT:**
Independent training and opportunity to improve professional practice.	CPD is not an extra qualification given to become a member of a professional body.
CPD can be incorporated into the professional's time schedule.	CPD is not subjected to taking time out of work to complete.
Informing professionals of new information and technical skills in their field.	CPD is not an activity that results in learning with no bearing on work or career development.
CPD refers to any activity, formal or informal, that helps develop skills and knowledge.	

Source: Schostak *et al.* (2010)

2.1.3 Background

The Health Professionals Council of South Africa (HPCSA) regulates the medical health care professions in South Africa and states that CPD was introduced to improve the standards of clinical competence (Health Professionals Council of South Africa [HPCSA] 2008). According to Arunachallam (2009), the Medical and Dental Council was the first professional body that required CPD and since the establishment of the HPCSA a formal CPD system was implemented from 1 January 1999. Various professional bodies accept that CPD is helpful as a tool to improve skills and competencies as well as professional values in the medical and dental professions (Mpuntsha 2001).

2.1.4 Health Professionals Council of South Africa

The Health Professionals Council of South Africa Act 1974 (Health Professionals Council of South Africa [HPCSA] 2007) gives health care practitioners certain rights and privileges; in turn, practitioners are required to adhere to specific

standards of compliance, care and conduct. A mutual trust between patient and health care practitioner must be established in order to ensure a lifelong commitment, and dedication between them, allowing high standards of care and conduct. The HPCSA was established by the Health Professions Act, 1974 (Act 56 of 1974) as a quality assurance body for education and training in the professions which fall within its ambit. The vision of the HPCSA is to guide the profession and to protect the public (HPCSA 2017).

2.1.5 Allied Health Professions Council of South Africa

The Allied Health Professional Council of South Africa (AHPCSA) serves as the statutory body for 12 health care professions (including homoeopathy) in terms of the Allied Health Professions Act, 63 of 1982. The Council carries the responsibility to advise the Minister of Health and the National Department of Health on matters of public importance that are acquired in the course of its functions (Allied Health Professions Council of South Africa [AHPCSA] 2013).

According to the guidelines of the AHPCSA (2015b), the purpose of CPD is to ensure that any practitioner who is registered with the AHPCSA maintains current but also acquires new and updated levels of knowledge, skills and ethical performance that will be of measurable benefit in professional practice and promote and enhance professional integrity.

According to the AHPCSA (2015b) CPD Guidelines, administration of CPD is managed by the Registrar and carried out by the CPD Committee. In order to comply with the statutory requirements laid down by the AHPCSA, practitioners that attend CPD activities need to ensure that they are in possession of a certificate of attendance and that they keep a record of these certificates for a minimum period of two years after the completion of the relevant cycle. Certain amendments to the AHPCSA guidelines were published in 2015 including the following:

- CPD will run over a two year cycle for all registered practitioners and therapists and they are required to accumulate forty (40) CPD points per cycle.

- When accumulating more than 40 points in a cycle they are able to carry over a maximum of 10 points to the next cycle.
- Professionals registered in multiple professions are allowed to carry a maximum of 10 points over to the next cycle for the main profession and a maximum of eight points for each subsequent registered profession.
- When registered in more than one Allied Health profession 40 CPD points will be required for the main profession and 30 points per subsequent profession with a minimum of two points for AHPCSA specific rules and regulations and the application of the principles of law to health and medicine per cycle.
- Registered practitioners that attend CPD activities in order to comply with the statutory requirements as set out by the AHPCSA must ensure that they are in possession of a certificate of attendance and must keep such certificates on record for a minimum of two years after the end of a cycle in order to comply with any random compliance audit (AHPCSA 2015b).

As stated by AHPCSA (2015b) every practitioner has a responsibility to make certain that they are keeping a record of all CPD activities attended. These CPD attendance records are expected to be kept safe for at least two years and to be produced whenever needed for random compliance verification, by the CPD committee. By law each practitioner that is selected for verification needs to forward their individual CPD activity record for each profession registered under the AHPCSA during the CPD cycle under review to the Registrar within 21 days on receipt of a notification. In terms of Section 29 of the Act disciplinary actions will be implemented accordingly against non-compliant practitioners, for non-compliance with any CPD requirement, whether by an act or by omission, in respect of which the council or professional board may take disciplinary action (AHPCSA 2015b).

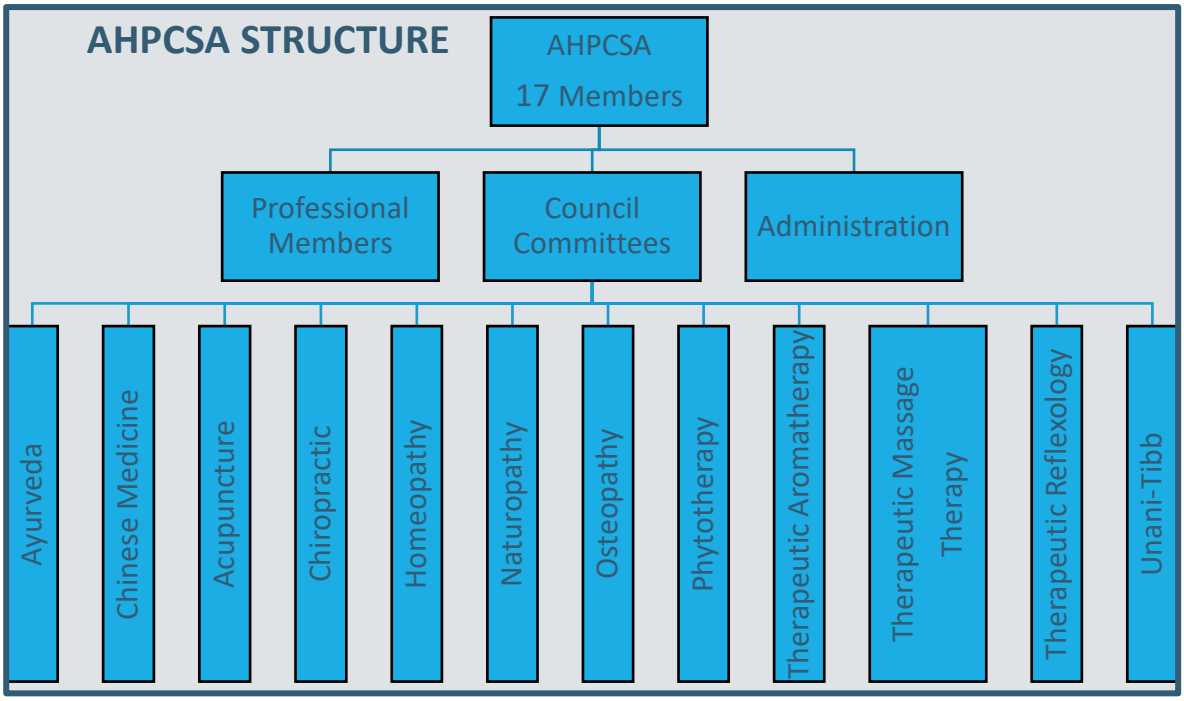

Figure 2.2: AHPCSA organogram
Source: HPCSA (2012)

The AHPCSA is structured with three divisions (Figure 2.2). The primary role of the Council is to uphold their functions regarding legislation as well as the formulation of policies applicable to the members. The main focus of the professional boards is to provide the Council with the relevant professions' specific standards and policy contributions. The administration division is responsible for the administration of the council, the professional boards and the professions (AHPCSA 2018).

Every CPD activity is accredited on merit and a specific number of points are allocated to the activity linked to the criteria and within the indicated range of CPD points. According to Maharaj (2013), within the context of South Africa most CPD learning activities are time based and generally carry one point per hour, with the exception of ethics and workshops, which carry two points per hour.

Table 2.2 indicates a comparison of how CPD accreditation is implemented in the HPCSA compared to the AHPCSA.

Table 2.2: CPD accreditation comparison

HPCSA	AHPCSA*
• All practitioner is required to accumulate thirty (30) CEUs • Five (5) of the units allocated for ethics, medical law and human rights. • Over twelve-month period.	• All practitioners is required to accumulate forty (40) CEUs per cycle • Four (4) CEUs for AHPCSA-specific Bioethics and Jurisprudence per CPD cycle. • CPD will run over a two (2) year cycle.

* Registered practitioners and therapists who are registered in more than one allied health profession will be required to obtain 40 CEU's per profession, with the minimum of four CEUs for AHPCSA-specific Bioethics and Jurisprudence per CPD cycle.

2.2 The purpose of CPD

The purpose of CPD is to develop the abilities of the individual and improve their practice (Gibbs 2011). This development task is managed via the implementation of CPD which has the capacity to control and guide the practitioner regarding their direction in practice (Frick 2007).

The AHPCSA (2015) strives to enhance the accumulation of knowledge through CPD, with the goal of ensuring that primary health care physicians, specialist and new practitioners who are registered with the AHPCSA maintain current and new levels of knowledge, skills and ethical performance for the betterment of their patients (Legare *et al.* 2010).

In the medical profession in the United Kingdom healthcare practitioners are required to accomplish 30 Continuing Education Units (CEUs) per 12-month period. In this programme it is stated that five of the units must be on ethics, human rights and medical law. The guidelines explain what is expected of health professionals to maintain and improve their practices through CPD (General Medical Council 2012).

Furthermore, CPD is an essential intervention in translating shared decision making in clinical practice (Graham *et al.* 2016). Glover and Law's (1996) description of CPD is that it is a continuum of professional training education

and professional support. There is global agreement that CPD is a lifelong learning tool (Pardo and Armitstead 2014). According to Lindgren and Karle (2011), social accountability of medical education is measured by the willingness and ability of practitioners to adjust to the needs of patients and health care systems both nationally and globally.

According to Alsop (2013), CPD is a term used by regulating bodies as a legal requirement for continuing registration. The Academy of Medical Royal College stated in a recent report that CPD is a continuous process that is implemented outside formal undergraduate and postgraduate training which enables individual doctors to maintain and improve standards of medical practice through the development of knowledge, skills, attitudes and behaviour. CPD should also support specific changes in practice (Schostak *et al.* 2010).

The CPD Standards Office (Professional Development Consortium 2018) states that the CPD system in the United Kingdom (UK) was originally implemented for the betterment of individuals across all professions and sectors. The need for CPD is born from the need for practitioners globally to experience personal satisfaction and self-assurance as it improves professional knowledge (Amerih 2013). The World Federation for Medical Education acknowledges the need for change regarding the innovations in the structure and process of medical education at all levels, and suggest the following steps for action to be implemented:

- Prepare doctors for the needs and expectations of society.
- Help individuals to cope with the explosion in medical scientific knowledge and technology.
- Instil in physicians the ability for lifelong learning.
- Ensure training in new information technologies.
- Adjust medical education to changing conditions in the health care delivery system.

According to Viljoen (2013), CPD allows professionals to keep up with the latest trends of technology. Working together, reflecting and evaluating on daily

practice and working within legal requirements is an important reason for CPD participation (Brekelmans, Poell and Van Wijk 2013). Continuing professional development is a system that works simultaneously to ensure that physicians can continue to advance their knowledge and skills and improve the care they provide with the aim of advancing the art and science of medicine (Aparicio 2015), and is of utmost importance to ensure professionals retain their capacity to practice safely, effectively and legally within their evolving scope of practice (Round 2013).

While there is generally positive comment regarding CPD in the literature, there are also some questions and concerns. Van Niekerk (2009) asks: "Why are CPD requirements being set and enforced?" The author points out that issues such as negligence, false certificates and incorrect billing are some reasons that necessitate CPD enforcement. Alsop (2013) is of the view that an enquiring mind may lead naturally to the enhancement of personal development through experience, and by embracing learning, professionals will be able to develop as an individual.

2.3 Benefits of CPD

The purpose of CPD is to ensure practitioners who are registered with the AHPCSA remain current but also acquire new and updated levels of knowledge, skills and ethical performance that will be beneficial to professional practices in promoting professional integrity (AHPCSA 2015b). However, homoeopaths' opinions regarding the benefits of CPD is unknown in South Africa as there is a lack of literature available on this topic (Naidoo 2016).

2.4 The concept of lifelong learning

Competency based CPD lays a firm foundation for new practitioners to enter practice equipped with a set of learning competencies that allow them to practice independently and sustain and expand their capabilities by acquiring new knowledge and skills. Previous research by Campbell *et al.* (2010) on competency base CPD suggests acquiring further learning before entering into

practice. According to various authors graduating residents should enter practice with a defined set of learning competencies as set out in Figure 2.3.

Domain	Key competencies
Knowing one's practice	Ability to use practice information to • identify learning priorities • develop and monitor CPD plans
Scanning the environment	Ability to access information sources for • innovations in development • new evidence for potential integration into practice
Managing learning in practice	Ability to establish a personal knowledge management system to • store and retrieve evidence • select and manage learning projects
Raising and answering questions	Ability to • construct a question • search for evidence • record and track conclusions for practice
Assessing and enhancing practice	Ability to • use tools and processes to measure competence and performance • develop action plans to enhance practice

Figure 2.3: Competency domains of lifelong learning
Source: Campbell *et al.* (2010)

2.5 Challenges experienced by South African healthcare professionals

Various professional governing bodies have identified CPD to be an essential protocol to use in the professional environment to create growth in the work place (Naidoo 2016). However, a number of challenges have been experienced. Some of the common challenges experienced by dieticians in South Africa, for instance, in their fulfilment of CPD requirements, include financial limitations, leave from work, family obligations, poor or no notification of events, limited or no access to internet and topics not relevant to their field. These issues contribute negatively towards commitment to CPD (Martin *et al.* 2008). According to van Niekerk (2009), the HPCSA has set out clear standards of what the CPD activities entail and what the expectations are to remain registered. Research indicates that 70% of cases of where patients have sued a practitioner are due to negligence, lack of information, being misunderstood and poor communication, issues that are seldom addressed during CPD training (van Niekerk 2009).

According to de Villiers (2008), existing challenges faced by general practitioners such as time away from practice to attend costly seminars and conferences, would be better controlled according to the CPD system. In South

Africa it is necessary to address the issue of awareness of CPD amongst homoeopathic practitioners. The AHPCSA provides guidance, but there seems to be uncertainty about whether homoeopaths know where to find and access the guidelines of the CPD system.

2.5.1 Lack of CPD awareness

To date no data or records are available with information regarding homoeopaths' CPD awareness and compliance in South Africa. The issue of CPD awareness and compliance is of concern globally. CPD effectiveness and awareness are intertwined in the learning process and being fit to practise. The more CPD awareness is promoted the more it can be effectively implemented. Identifying one's own learning needs through reflection within the totality of one's practice can lead to the effective use of CPD opportunities (Schostak *et al.* 2010).

According to Gawugah, Jadva-Patel and Jackson (2011), healthcare practitioners in Ghana showed a lack of awareness of CPD to enable them to participate in CPD activities effectively. A research study conducted by the authors on radiographers in Ghana found that only a few have access to peer reviewed journals. One of the outcomes of the survey was to note the absence of a statutory body that registers and ensures effective CPD participation. In South Africa CPD guidelines are available to all healthcare professions registered with the (AHPCSA 2015b). A grey area that still needs to be investigated is whether homoeopaths are aware of and use this information.

A recent study of midwife students in Belgium on the awareness of CPD revealed that there is awareness of CPD activities, but that they lack awareness of access to CPD via the internet. As stated by Embo and Valcke (2015), awareness of CPD amongst midwives resulted in better compliance to CPD training which in turn resulted in higher confidence in practice and better patient care.

2.5.2 Lack of funding for CPD activities

According to Ross, Barr and Stevens (2013), lack of funding is recognised as a fundamental obstacle regarding face-to-face CPD programmes. The authors found that costs are high regarding the funding of seminars, conferences and mandatory training which are offered at or outside the workplace. They propose online learning as a viable option for practitioners from rural areas or those that cannot make CPD events for various reasons including family responsibilities. However, online material can be costly to make, and content needs care and control.

2.5.3 Lack of time to engage in CPD

Research indicates that lack of time and workload are perceived as obstacles that hinder participation in CPD (Sturrock and Lennie 2009). Time spent on CPD is time away from private practice and results in a loss of income (Martin 2014).

2.5.4 Factors influencing family commitment on CPD engagement

Previous studies reflect on family constraints as having a negative impact on CPD (Marshall, Punys and Sykes 2006). Advances in the field of dentistry are occurring at an exponential rate and the pressure of keeping up with the demands of CPD to remain competent is influenced by lack of time and family commitments (Nayak *et al.* 2016). A study performed by Henwood, Yielder and Flinton (2004) and Henwoon and Flinton (2012: 179-183) found that the attitudes of UK radiographers towards mandatory CPD was negative because their workload meant that free time was precious to be able to relax with family. The effect of family commitment on CPD compliance was examined in the current study.

2.6 South African perspective on mandatory CPD

The AHPCSA set out the requirements for compliance and non-compliance with CPD. The CPD policy has been articulated by the registrar Dr Louis Mullinder (AHPCSA 2015a). Mullinder states that CPD operates on a system of trust and all practitioners and therapists that attend CPD activities in order to comply with

the requirements need to be in possession of a certificate of attendance and assure that it is kept safe and secure for a minimum of two years to comply with any random compliance audit. However, regarding the newly implemented CPD accreditation for homoeopaths it is unclear if homoeopaths are aware of it and are compliant.

Murray and Sullivan (2015) state that it is crucial for the development of CPD that medical advisers ensure that scientific content is credible, accurate and non-biased. Essential factors that needed to be considered in CPD for it to be effective include pre- and post-activity assessment, accreditation of the associations that are overseeing the target group, and steering committees comprising experts in the target population. According to Murray and Sullivan (2015), Canada urgently needs a credible organization that is willing to facilitate the expansion of Canadian expertise internationally.

2.7 Related research on continuous professional development compliance

2.7.1 Continuing professional development: opinions, awareness and compliance challenges experienced by radiographers in KwaZulu-Natal South Africa

Since the introduction of CPD in South Africa, no research has been conducted to determine radiographer's opinions on the mandatory requirements for registration. According to Naidoo (2016), there is a concern worldwide regarding the challenges that need to be overcome regarding compliance, which prompted this study. As stated by Naidoo (2016) the profession of radiography is constantly evolving and due to technological advancements, the profession is in favour of CPD

2.7.2 A clinical skills unit: Addressing the need for continued professional development in allied health professions

According to van Vuuren and Nel (2013) a Clinical Skills Unit is a facility in which health professionals can learn clinical and communication skills. Van Vuuren

and Nel (2013) conducted a survey amongst three professional bodies registered under the HPCSA. The aim was to investigate the CPD needs of the following identified groups: physiotherapists, dietitians and occupational therapists located in the Free State and Northern Cape Provinces of South Africa. The motivation was to address the concern regarding non-compliance with CPD by dieticians, occupational therapists and physiotherapists.

2.8 Homoeopathy

2.8.1 Background

Homoeopathy is globally known as a system of alternative medicine developed from cultural and traditional cures using plant, mineral and animal products (Ericksen-Pereira, Roman and Swart 2018). Homoeopathy originally came from Europe in the eighteenth century, founded by Samuel Hahnemann, a German physician and chemist (1755-1843), and based on the Law of Similars (De Schepper 2010). Bloch and Lewis (2003) describe homoeopathy as a system of medicine based on the principal of "like cures like" (*similia simillibus curentur*). The word homoeopathy is derived from Greek terminology "*homoios*" meaning similar and "*pathos*" meaning suffering (Bloch and Lewis 2003). Along with the rapid growth and popularity in the homoeopathic profession came concerns regarding good manufacturing practices and safety control as health authorities, especially within the pharmaceutical industry, raised their voice (World Health Organization 2013). Hence the need for CPD activities which can contribute to the development of the profession with the aim of improving patient care and outcomes (Craucamp 2012).

The Homoeopathic Association of South Africa (HSA) claims that homoeopathy is a safe and effective system of medicine with world-wide recognition that can be supported by scientific evidence through research and clinical trials (Homoeopathic Association of South Africa [HSA] 2018). In South Africa we have a dual healthcare system where the bulk of the population is dependent on public care and a smaller percentage rely on private healthcare (Majola 2015). Therefore, homoeopathy is largely unknown to many South Africans as it falls under private care. However, with the increase in chronic conditions there is a

tendency for people to seek alternative treatment options and with the help of some determined practitioners, homoeopathy can be made known to underdeveloped parts of the country (Sisoka 2018).

The homoeopathic approach to treatment is as different from conventional medicine as day is to night (Hahnemann 1996). Remedies whose pathogenic power is capable of removing natural diseases are selected by homoeopathic physicians to cure their patients (Jayasuriya 1993). Homoeopathy is highly individualised and focuses on treating the patient on a physical, mental and emotional level, rather than only treating the symptoms of the patient (Durban University of Technology [DUT] 2019). Homoeopathic practitioners strive to practice according to the laws and principles of homoeopathy as compiled by Hahnemann in his book The Organon of Medicine (De Schepper 2010). Aphorism 1 and 2 of this book outline the aim of homoeopathy (Hahnemann 1996):

> **Aphorism δ 1**
> The physician's highest and only calling is to make the sick healthy, to cure, as it is called.
>
> **Aphorism δ 2**
> The highest ideal of cure is the rapid, gentle and permanent restoration of health; that is, the lifting and annihilation of the disease in its entire extent in the shortest, most reliable, and least disadvantageous way, according to clearly realizable principles. (Hahnemann 1996)

2.8.2 Historical review of homoeopathy in South Africa

There is a scarcity of literature available on the origin and development of homoeopathy in South Africa. According to Prinsloo (2010), homoeopathy arrived in South African as early as 1820, with the first homoeopathic practice being establish in 1857 by Mr. Hugh Eaton. Most of the homoeopathic lay practitioners of those early years of homoeopathy became skilled through self-study or distance learning courses and mostly relied on textbooks to improve knowledge. As stated by Gower (2013), the first formal homoeopathic course

was introduced in 1951 by Dr William Henry Lilley and in 1953 the first homoeopathic practitioners qualified under his teaching. Research indicates that various professional associations were introduced with the passage of time, which eventually led to changes in legislation and the establishment of a recognized training program (Ericksen-Pereira, Roman and Swart 2018). CPD was implemented early in the 21st century to serve as a bridge closing the gap between medical science and clinical practice (Brand 2006). Important changes that occurred in legislation and CPD are set out in the timeline in Figure 2.4.

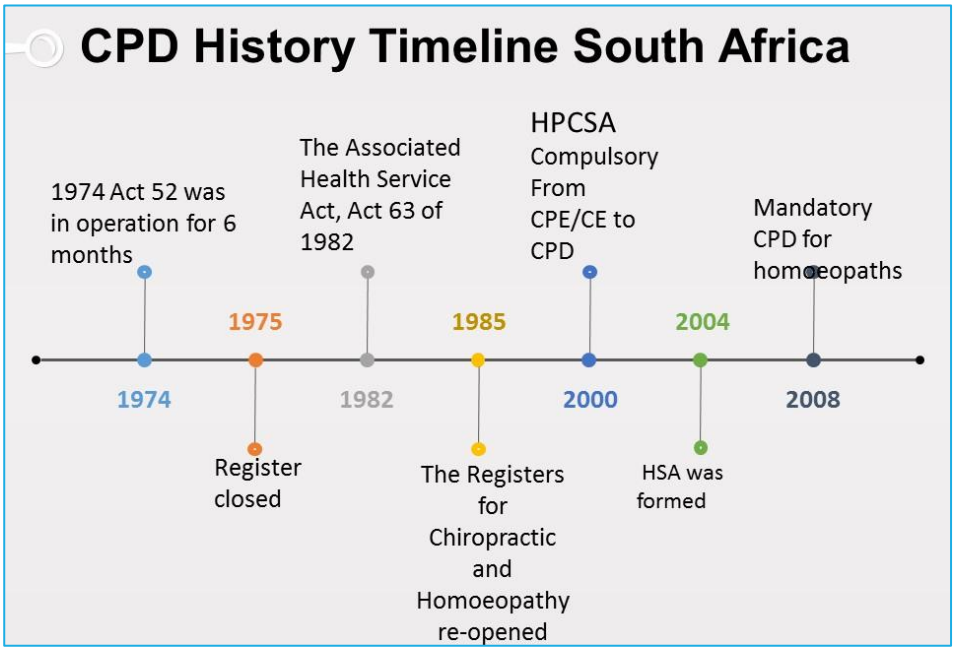

Figure 2.4: Timeline of CPD in South Africa
Source: Prinsloo (2010), Gower (2013)

In the early stages of the homoeopathic profession in South Africa, the Chiropractors, Homoeopaths, Naturopaths, Osteopaths and Herbalists Act, Act 52 of 1974, was in operation for approximately six months, which provided a window of opportunity for the registration of chiropractors, herbalists, homoeopaths, naturopaths and osteopaths who qualified for registration. As homoeopathy evolved the acts were amended accordingly and in due course the Associated Health Service Professions Act, Act 63 of 1982 was implemented. This Act provided for the establishment of the South African Associated Health Service Professions Board and provided for application to be made to the Minister for the registers for chiropractic and homoeopathy to be

reopened. By the year 2000 the Chiropractors, Homoeopaths and Allied Health Service Professions Council Amendment Bill 2000, which amends Act 63 of 1982, was tabled before parliament and one of the changes was that the term continuous professional education was changed to continuous professional development.

2.8.3 Homoeopaths opinions regarding CPD

Mandatory CPD is still a new concept in South Africa (Brand 2006). Currently no research has been conducted regarding the perception of homoeopaths of CPD implementation. It is mandatory for homoeopaths to do CPD but there is no literature available on their views, hence this study is vital in order to gain insight into the understanding of homoeopath's views of CPD (Naidoo 2016).

2.9 Scope of this study

There is a lot of research which has been conducted on CPD in the healthcare profession in different fields such as radiography, dentistry, chiropractic and nursing, however not enough research to validate challenges experienced by South African homoeopaths. This study focused on the challenges, knowledge, perceptions, and compliance amongst registered homoeopaths in South Africa regarding the newly implemented CPD system.

Related research conducted by Maharaj (2013) found that rehabilitation therapists practicing in rural areas had great difficulty accessing CPD activities because of the geographical distances involved. One possible solution to address the geographical distance, as stated by Chipchase, Johnston and Long (2011), is the use of digital learning environments. Research indicates a considerable increase in the digital learning environments and the internet provides an alternative venue for interactive learning opportunities (Boulos, Maramba and Wheeler 2006). Wikis, blogs, podcasting, online videos and the advent of cheaper, better-supported mobile personal technology makes learning 'anytime, anyplace' more achievable. Naidoo (2016) conducted a research study on CPD compliance among radiographers and found that respondents' main concerns were lack of time to attend CPD events because of shift working,

lack of employer support, and a lack of funding with very little financial support from employers.

CHAPTER 3: METHODOLOGY

3.1 Introduction

This chapter provides a detailed description of the research procedure that was followed to conduct the study. There have been no previous studies regarding the impact of CPD in the field of homoeopathy so there is no other methodology to compare with.

3.2 The research type and design

This study was conducted using a quantitative, descriptive research approach by employing an online survey as the research tool. The survey contained open-ended and closed questions (Appendix C). A five-point Likert scale was used for most of the closed questions. A purposive random type sample methodology was used whereby each element of the available population had an equal chance of being selected in the draw (Steyn, Smit and Strasheim 1994: 22). The self-administered questionnaire included questions on the perceptions, level of awareness, participation and challenges experienced by homoeopaths with regard to CPD as well as their suggestions for CPD improvement. The population was all registered homoeopaths in South Africa (630) as per the national list of the AHPCSA up to 2017/05/03. Approval to conduct the study was granted by the institutional research ethics committee (IREC), number: IREC 0661/17 at the Durban University of Technology (DUT).

3.3 Study location

This study on knowledge, perceptions, compliance and challenges amongst homoeopath in South Africa regarding the newly implemented CPD accreditation system was conducted in South Africa.

3.4 Selection of the research population

This study was conducted with homoeopaths that were registered with the AHPCSA in South Africa up to 2017/05/03.

3.5 Sample selection

The AHPCSA online register, which is available to the public, was used to identify the participants. There are approximately 630 registered Homoeopathic practitioners with the AHPCSA. Due to the fact that the AHPCSA's records include homoeopaths that are deceased, have left South Africa or have retired from the profession but are still reflected on the register, the exact number of practising homoeopaths could not be accurately determined. The total sampling method was employed for this study, in other words, an attempt was made to get a response from every single homoeopath registered with AHPCSA who had an e-mail address. The ideal appropriate sample size for this study was determined by a statistician, Mr D. R. Singh (personal communication via e-mail, 26 January 2017), as being 230. A participant information sheet which explained the questionnaire, how the study was to be conducted and its purpose was included in the e-mail to the participant (Appendix B). If the recipient was willing to participate, they proceeded to the questionnaire and this was then deemed as consent for participation. Data was gathered from returned e-mail surveys (Survey Monkey 2009). The study was conducted from January 2018 – May 2018.

Figure 3.1 is a map which shows where in South Africa participants were located.

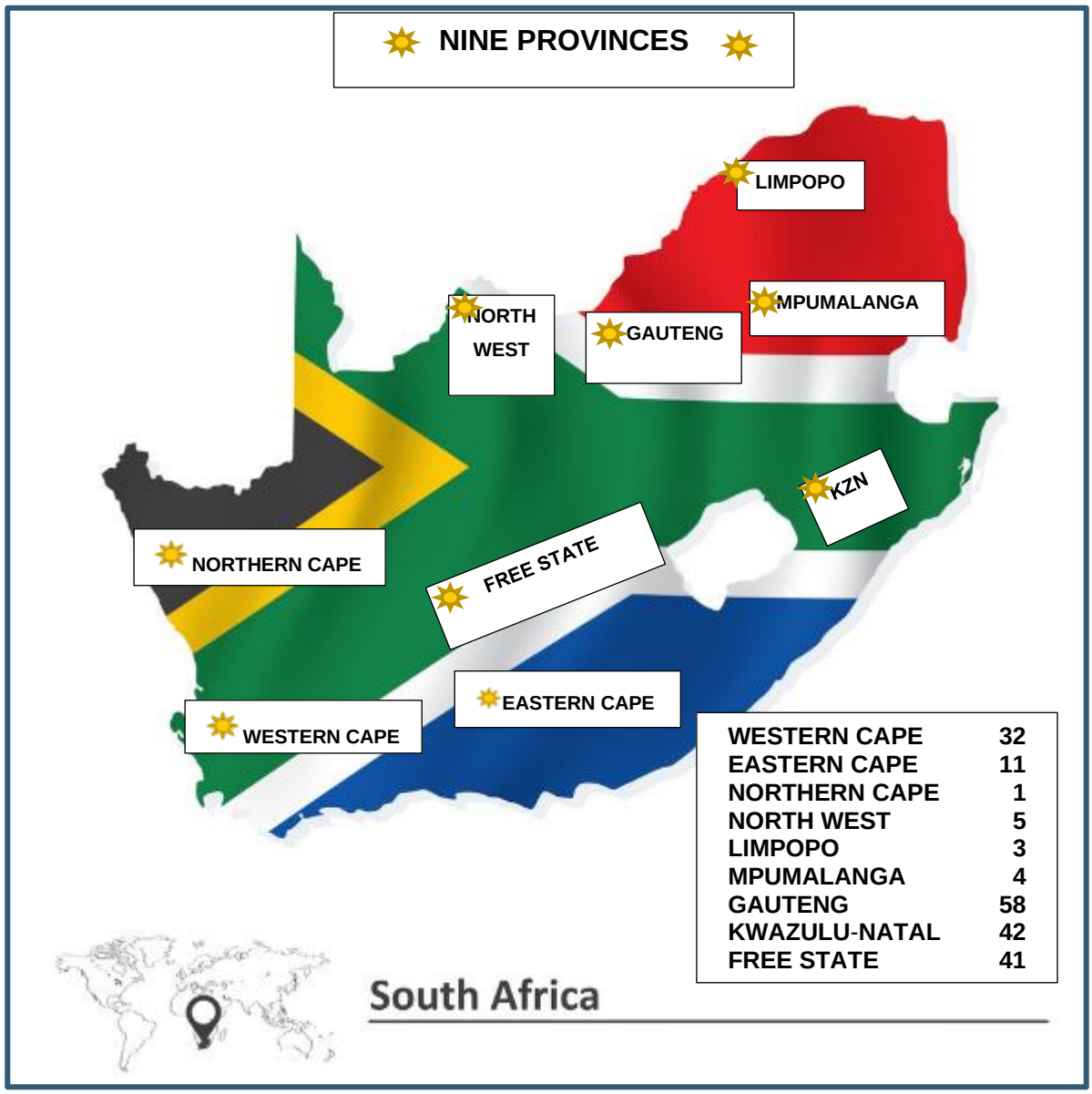

Figure 3.1: Location of participants

Source: (Vector Maps n.d.)

3.5.1 Inclusion criteria

- All qualified homoeopaths registered with the AHPCSA and working in South Africa.

3.5.2 Exclusion criteria

- Homoeopaths not registered with the AHPCSA.
- Homoeopaths that were excluded were those the researcher could not locate their email addresses.
- Student homoeopaths.

3.6 Data collection

- Primary data – online questionnaire.

3.6.1 Data collection instrument/tool

According to Brink, van der Walt and van Rensburg (2012), self-report techniques are the most effective way to gather factual information about participants' perceptions, knowledge levels and experiences. Questionnaires, scales and interviews form part of self-report techniques.

The questionnaire used in this study was adapted from an existing one used by Naidoo (2016), for which permission was obtained (Appendix A). To further validate the questionnaire, homoeopathic practitioners at DUT and in the field were consulted to ensure that the questionnaire was appropriately validated (Naidoo 2016). Finally, a pilot study was conducted to ensure that the questionnaire was fully validated before it was distributed to the whole population (Brink, van der Walt and van Rensburg 2012). The pilot study questionnaire was distributed to five homoeopaths who met the inclusion criteria of the research study. Two of the participants were from the educational institution of DUT, and three were registered homoeopathic practitioners in private practice in KwaZulu-Natal. These participants were excluded from the sample population. The purpose of a pilot study is to determine the viability of the study and to exclude unnecessary questions related to the study. The implementation of a pilot study lays a safe foundation for researcher by

excluding flaws from the study that could have a negative impact on valuable time, money and effort (Brink, van der Walt and van Rensburg 2012).

The self-administered questionnaire (Appendix C) had seven sections as follows:

- Section A: Questions pertaining to the participant's demographics;
- Section B: The participant's opinions and perceptions of CPD in general;
- Section C: CPD awareness;
- Section D: CPD participation;
- Section E: Challenges and barriers experienced by the participant in relation to CPD activities;
- Section F: Suggestions for improving CPD compliance; and
- Section G: Ethics.

The online questionnaire was created on *Survey Monkey*® which is an online survey site that allows surveys to be completed online by participants. This has become a common method in conducting surveys as it is paperless, efficient and improves participation due to its convenience considering that no paperwork needs to be printed, signed, and returned to the researcher (*Survey Monkey* 2009). Once the surveys were completed on *Survey Monkey*®, the researcher was able to access the completed surveys on the *Survey Monkey*® site, thus the entire process was online and electronic, and no surveys were printed.

An email was sent to all registered homoeopaths with email addresses containing the following: 1) letter of information, 2) information on how informed consent will be given *Survey Monkey*® (Appendix B).

Informed consent:

In the letter of information in the body of the e-mail sent to all registered homoeopaths with email addresses was a description of how they could give their consent to participate, which was by clicking on the first question. In doing so they would be deemed to have given their consent to partake in this study.

This was clearly explained in the e-mail and at the beginning of the survey on *Survey Monkey*® (Appendix C). The decision to not use hand signed consent forms that require printing signing, scanning and emailing on the part of the participant was taken in order to improve compliance in this study. This practice is in agreement with similar survey-based research (Medina 2012; Naidoo 2016).

Participant confidentiality:

An online survey conducted on *Survey Monkey*® does not require any personal information from the participant so there is no danger of jeopardising the participants' anonymity. Furthermore, the *Survey Monkey*® site does not link any information about participants' e-mail address to the survey they completed. Thus, there is no way of tracing the participants' identity or e-mail address from the completed surveys which are e-mailed to the researcher. In this way, participant anonymity is ensured (Finley 1999). *Survey Monkey*® has an option to make the responses anonymous and the completed questionnaire then have none of the participants' personal details or e-mail addresses, apart from age and gender which do not jeopardise participants at all. The questionnaire used in this study is an adaptation of an existing one used by Naidoo (2016), for which permission was obtained (Appendix A). To further validate the questionnaire, homoeopathic practitioners at DUT and in the field were consulted to ensure that the questionnaire was appropriately validated (Couchman and Brijnath 2016). Finally, a pilot study was conducted to ensure that the questionnaire was fully validated before it was distributed to the whole population. Those participants who answered the questionnaire become the sample population.

3.6.2 Distribution of online questionnaire

Distribution of online questionnaire was via e-mail.

3.7 Data analysis

Descriptive statistics were used to determine the frequency and means of the data. Lind, Marchall and Mason (2004) state that descriptive statistics are ways of organising and summarising quantitative data. Univariate and bivariate analysis (two variables at a time) is most appropriate for descriptive statistics. The most appropriate measure of central tendency for interval data, according to Lind *et al*. (2004), is the mean, and the most appropriate measure of dispersion for interval data is the standard deviation. Descriptive statistics is useful as they summaries results of an experiment, thereby also allowing for more constructive research after more detailed analysis. Descriptive data analysis aims to describe the data and also investigate the distribution of scores on each variable, by determining whether the scores on different variables are related. The study did not compare two groups and the statistical analysis techniques were modified as the study unfolded. The inferential statistics are correlations and Chi Square tests (Singh email communication 26 January 2017).

A Microsoft Excel spreadsheet was used for the data capturing as advised by the statistician (Singh personal communication 26 January 2017). The open-ended questions were analyzed using a coding system within the Excel spreadsheet according to schema. In this way general trends arising from the open-ended questions could be clarified, although this process was found to be time consuming. The reason for open questions was to make the instrument more approachable and to gain frankness from participants. The responses to the open ended questions were analysed by qualitative methods where common themes and concepts were explored and summarised.

3.8 Limitations

The questionnaire was based on homoeopaths' opinions and experiences so there is a possibility that they were not entirely honest. This was prevented, hopefully, by explaining in the Information Letter the importance of their opinions and the impact they could have on future CPD implementation, and ensuring them of confidentiality and anonymity. Another limitation could have been that

homoeopaths might not want to complete the questionnaire as they have busy working schedules. However, because it was an online survey, participants could complete the survey after working hours if they preferred. It is stated by Naidoo (2016) that the possibility exists that the respondents may not be representative of the target population in terms of rural and urban homoeopaths, but this could not be predicted or controlled for.

CHAPTER 4: RESULTS

4.1 Introduction

This chapter presents the results of the findings obtained from the questionnaires in this study. The data collected from the responses was analysed with SPSS version 25.0. The results are presented in the form of descriptive statistics including graphs, cross tabulations and other figures for the quantitative data that was collected. Inferential techniques include the use of correlations and chi square test values, which are interpreted using p-values, a $P < 0.05$ was considered statistically significant.

Only broad numbers will be presented in this chapter; there were a few significant correlations between age, gender and race and these will be specifically commented on.

4.2 The sample

Of the 396 questionnaires despatched, 208 were returned but only 187 were complete, meaning that there were 21 incomplete questionnaires. Thus, the response rate was 47%. This percentage was found to be slightly less than the 50% required to make it statistically significant, however 47% is still acceptable for this study. Figure 4.1 shows the process employed in gaining participants.

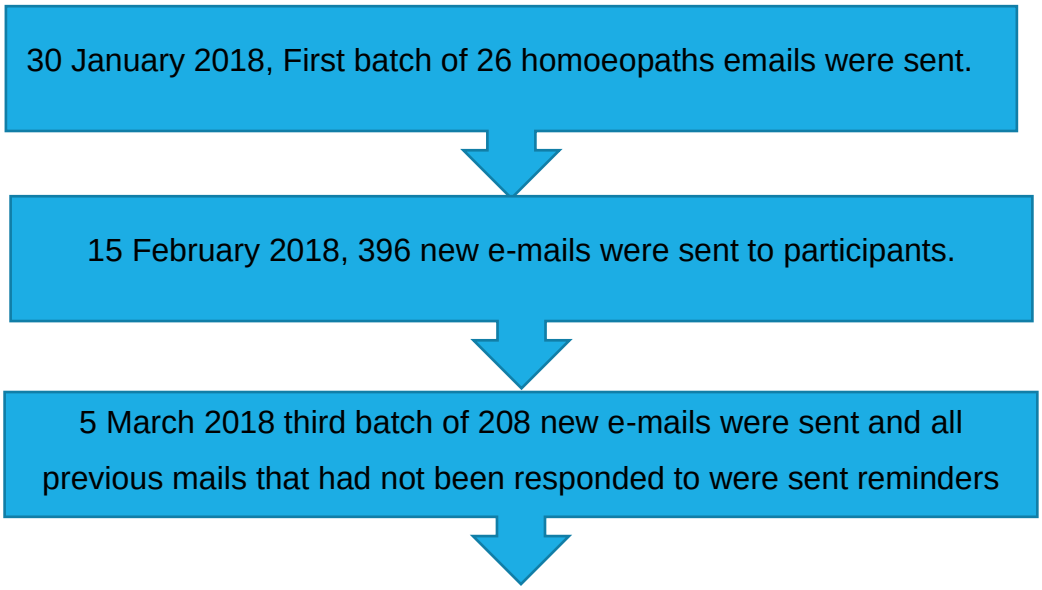

Figure 4.1: The process employed for gaining participants

The sampling process was time-consuming and strenuous. The researcher sieved through the list of registered homoeopaths on the AHPCSA website, sending emails to those homoeopaths with e-mail address. A total 630 emails were sent out with letters of information and requesting participation. More than half (424) did not reach their destination (incorrect addresses). Participants that opted out (could possibly be due to work commitments) were 21. A total of 206 completed the survey and after being persuaded two more questionnaires were received manually which made up a total of 208 completed questionnaires. While many telephone calls were made to ensure correctness of e-mail addresses this did not guarantee that the homoeopaths contacted would participate. Some practitioners were reminded telephonically, but it seemed that busy practices did not allow them to participate. There would have been a better response rate if all promises given were kept by homoeopaths that were communicated with.

4.3 The research instrument

The research instrument consisted of 31 items, with a level of measurement at a nominal or an ordinal level. The questionnaire was divided into seven sections which measured various themes as illustrated in Table 4.1.

Table 4.1: Themes

A	Biographical data
B	Opinions and perceptions of CPD in general
C	CPD awareness
D	CPD participation
E	Barriers to CPD
F	Are any of the following an obstruction to achieving CPD
G	Ethics

Reliability statistics

The two most important aspects of precision are reliability and validity. Reliability is computed by taking several measurements on the same subjects. A reliability coefficient of 0.60 or higher is considered as “acceptable” for a newly developed construct.

Table 4.2 reflects the Cronbach’s alpha score for all the items that constituted the questionnaire.

Table 4.2: Cronbach’s alpha score for the items on the questionnaire

	Section Name	N of Items	Cronbach's Alpha
B1	Opinions and perceptions of CPD in general 1	11	0.682
B2	Opinions and perceptions of CPD in general 2	2	0.421
C1	CPD awareness	10	0.853
D8	CPD participation	10	0.749
E1	Barriers to CPD 1	3	0.691
E2	Barriers to CPD 2	10	0.751
F1	Are any of the following an obstruction to achieving CPD	5	0.685
G1	Ethics	4	0.710

The reliability scores for all sections exceed or approximate the recommended Cronbach’s alpha value. This indicates a degree of acceptable, consistent scoring for these sections of the research.

Only section B2 had a lower value, the main reason being the minimum number of statements in the section.

Cross tabulations

The traditional approach to reporting a result requires a statement of statistical significance. A p-value is generated from a test statistic. A significant result is indicated with "$p < 0.05$".

A second Chi square test was performed to determine whether there was a statistically significant relationship between the variables (rows vs columns).

The null hypothesis states that there is no association between the two. The alternate hypothesis indicates that there is an association (Singh e-mail communication 26 January 2017).

4.4 Section A: Biographical data

This section summarises the biographical characteristics of the respondents. Table 4.3 describes the overall gender distribution by age group.

Table 4.3: The overall gender distribution by age

			Gender		Total
			Male	Female	
Age	20 - 29	Count	1	7	8
		% within Age	12.50%	87.50%	100.00%
		% within Gender	2.10%	5.30%	4.50%
		% of Total	0.60%	3.90%	4.50%
	30 - 39	Count	8	48	56
		% within Age	14.30%	85.70%	100.00%
		% within Gender	17.00%	36.40%	31.30%
		% of Total	4.50%	26.80%	31.30%
	40 - 49	Count	18	57	75
		% within Age	24.00%	76.00%	100.00%
		% within Gender	38.30%	43.20%	41.90%
		% of Total	10.10%	31.80%	41.90%
	50 - 59	Count	6	6	12
		% within Age	50.00%	50.00%	100.00%
		% within Gender	12.80%	4.50%	6.70%
		% of Total	3.40%	3.40%	6.70%
	60 - 69	Count	11	7	18
		% within Age	61.10%	38.90%	100.00%
		% within Gender	23.40%	5.30%	10.10%
		% of Total	6.10%	3.90%	10.10%
	70 - 79	Count	1	5	6
		% within Age	16.70%	83.30%	100.00%
		% within Gender	2.10%	3.80%	3.40%
		% of Total	0.60%	2.80%	3.40%
	80 - 89	Count	2	2	4
		% within Age	50.00%	50.00%	100.00%
		% within Gender	4.30%	1.50%	2.20%
		% of Total	1.10%	1.10%	2.20%
Total		Count	47	132	179
		% within Age	26.30%	73.70%	100.00%
		% within Gender	100.00%	100.00%	100.00%
		% of Total	26.30%	73.70%	100.00%

Overall, the ratio of males to females was approximately 1:3 (26.3%:73.7%). Within the age category of 30 to 39 years, 14.3% were male. Within the category of males, 17.0% were between the ages of 30 to 39 years, accounting for 4.5% of the total sample. Individually, there were significant differences in the distribution patterns of age and gender ($p < 0.001$).

Figure 4.2 indicates the racial composition of the sample. The majority of participants in this study were of White (81.71%) ethnicity followed by Asian (11.17%) and Black (7.26%) and Coloured (0.56%).

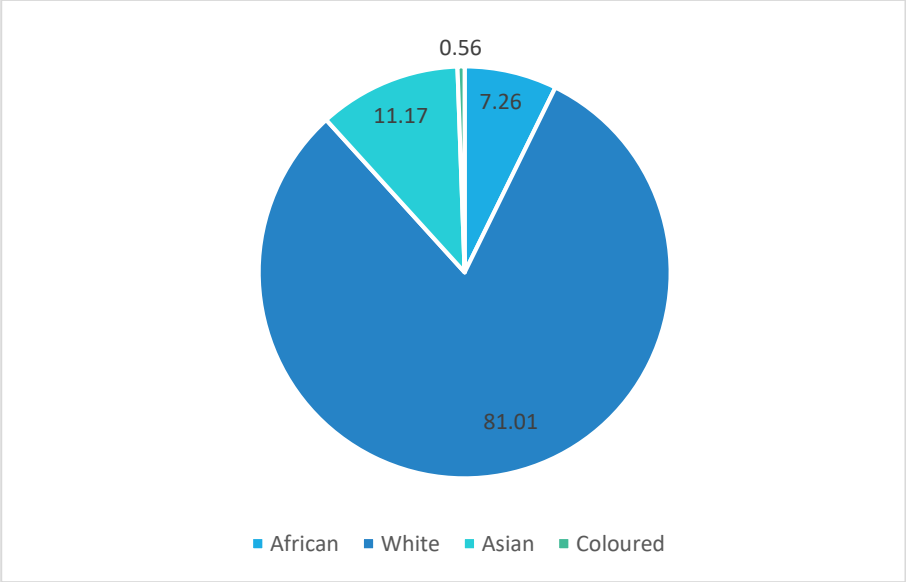

Figure 4.2: Racial composition of the sample

The pie chart in Figure 4.2 gives a general breakdown of the racial makeup of the sample. The difference that is noted in the proportions of racial groups can be explained by the awareness that homoeopathy is still a growing profession and developing among the various communities in South Africa.

The remainder of this chapter analyses the scoring patterns of the respondents per variable per section.

- The results are first presented using summarised percentages for the variables that constitute each section.
- Results are then further analysed according to any significance results (highlighted in yellow).

4.5 Section B: Opinions and perceptions of CPD in general

4.5.1 Question B1 – I think CPD

This section analyses the perceptions of CPD amongst participants. Table 4.4 and Figure 4.2 summarise the scoring patterns of Question B1. All the

differences between ‘Disagree’ and ‘Agree’ are significant because the p values are below 0.05. Raw data can be found in Appendix D.

Table 4.4: The scoring patterns of Question B1

B1 I think CPD:		Disagree		Neutral		Agree		Chi Square
		Count	Row N %	Count	Row N %	Count	Row N %	p-value
Is important	B1.1	3	1.7%	22	12.4%	153	86.0%	0.000
Improves professional competence	B1.2	7	3.9%	19	10.7%	152	85.4%	0.000
Improves your knowledge	B1.3	5	2.8%	12	6.7%	161	90.4%	0.000
Benefits the practitioner	B1.4	6	3.4%	26	14.7%	145	81.9%	0.000
Improves the quality of patient care	B1.5	6	3.4%	48	27.0%	124	69.7%	0.000
Improves patient safety	B1.6	14	8.0%	49	27.8%	113	64.2%	0.000
Is costly to the practitioner	B1.7	16	9.0%	39	22.0%	122	68.9%	0.000
Is a waste of time	B1.8	119	67.2%	46	26.0%	12	6.8%	0.000
Improves professional/ clinical practice/standards	B1.9	11	6.3%	43	24.4%	122	69.3%	0.000
Improves the effectiveness of service delivery	B1.10	22	12.4%	74	41.8%	81	45.8%	0.000
Has to be completed because it is a requirement by the AHPCSA	B1.11	13	7.3%	36	20.2%	129	72.5%	0.000

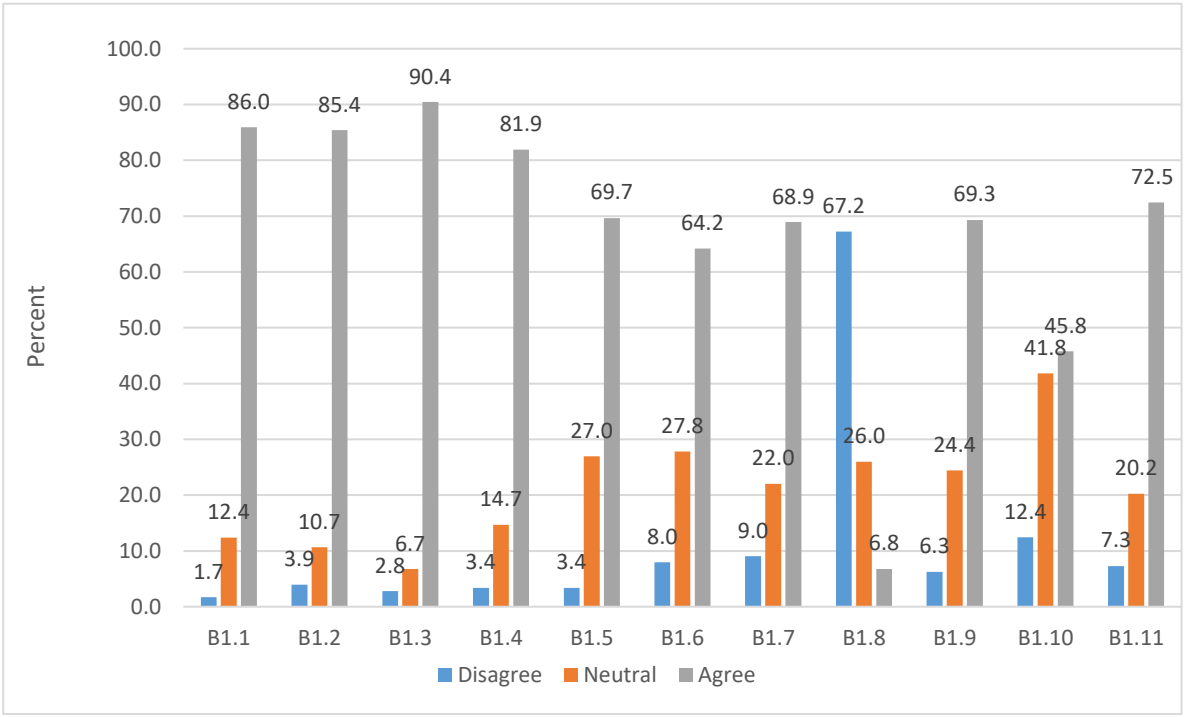

Figure 4.3: Responses (%) on opinions about CPD

From the above table and figure, it is evident that the participants mainly agreed with the statements, with the top two scores being 90.4% (B1.3) and 86.1% (B1.1). The top two 'Disagree' scores were 67.2% (B1.8) and 12.4% (B1.10). The highest 'Disagree' score for B1.8 was actually supportive of all the 'Agree' scores because it disagreed with the statement "I think that CPD is a waste of time".

There were only two statistical tests for this question which had significant results: the relationship between "I think CPD is important" and race, where p = 0.043 (Table 4.5 and Table 4.6), and the relationship between "I think CPD has to be completed because it is a requirement by the AHPCSA" and age, where p = 0.023 (Table 4.7 and Table 4.8).

Table 4.5: Cross-tabulation. Is important – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
Is important	Disagree	Count	0	2	1	0	3
		% within Is important	0.0%	66.7%	33.3%	0.0%	100.0%
		% within Race	0.0%	1.4%	5.0%	0.0%	1.7%
		% of Total	0.0%	1.1%	0.6%	0.0%	1.7%
	Neutral	Count	4	16	1	1	22
		% within Is important	18.2%	72.7%	4.5%	4.5%	100.0%
		% within Race	30.8%	11.1%	5.0%	100.0%	12.4%
		% of Total	2.2%	9.0%	0.6%	0.6%	12.4%
	Agree	Count	9	126	18	0	153
		% within Is important	5.9%	82.4%	11.8%	0.0%	100.0%
		% within Race	69.2%	87.5%	90.0%	0.0%	86.0%
		% of Total	5.1%	70.8%	10.1%	0.0%	86.0%
Total		Count	13	144	20	1	178
		% within Is important	7.3%	80.9%	11.2%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.3%	80.9%	11.2%	0.6%	100.0%

Table 4.6: Chi-Square. Is important – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	13.813[a]	6	0.032	0.055		
Likelihood Ratio	9.911	6	0.128	0.069		
Fisher's Exact Test	13.286			0.043		
Linear-by-Linear Association	.028[b]	1	0.866	1.000	0.522	0.163
N of Valid Cases	178					

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is 0.02.
b. The standardized statistic is 0.168.

Table 4.6 indicates that for Question B1.1 the race of the participant had a significant influence on their answer (p = 0.43).

Table 4.7: Cross-tabulation. Has to be completed because it is a requirement by AHPCSA – Age

Crosstab									
			Age						Total
			20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	
Has to be c	Disagree	Count	1	2	5	0	2	2	1	13
		% within Has to be completed bec	7.7%	15.4%	38.5%	0.0%	15.4%	15.4%	7.7%	100.0%
		% within Age	12.5%	3.6%	6.7%	0.0%	11.1%	33.3%	25.0%	7.3%
		% of Total	0.6%	1.1%	2.8%	0.0%	1.1%	1.1%	0.6%	7.3%
	Neutral	Count	2	9	11	4	7	1	2	36
		% within Has to be completed bec	5.6%	25.0%	30.6%	11.1%	19.4%	2.8%	5.6%	100.0%
		% within Age	25.0%	16.4%	14.7%	33.3%	38.9%	16.7%	50.0%	20.2%
		% of Total	1.1%	5.1%	6.2%	2.2%	3.9%	0.6%	1.1%	20.2%
	Agree	Count	5	44	59	8	9	3	1	129
		% within Has to be completed bec	3.9%	34.1%	45.7%	6.2%	7.0%	2.3%	0.8%	100.0%
		% within Age	62.5%	80.0%	78.7%	66.7%	50.0%	50.0%	25.0%	72.5%
		% of Total	2.8%	24.7%	33.1%	4.5%	5.1%	1.7%	0.6%	72.5%
Total		Count	8	55	75	12	18	6	4	178
		% within Has to be completed bec	4.5%	30.9%	42.1%	6.7%	10.1%	3.4%	2.2%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	4.5%	30.9%	42.1%	6.7%	10.1%	3.4%	2.2%	100.0%

Table 4.8: Chi-square. Has to be completed because it is a requirement by the AHPCSA – Age

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	21.326[a]	12	0.046	.[b]		
Likelihood Ratio	18.457	12	0.102	0.128		
Fisher's Exact Test	20.547			0.023		
Linear-by-Linear Association	9.567[c]	1	0.002	0.002	0.002	0.000
N of Valid Cases	178					

a. 13 cells (61.9%) have expected count less than 5. The minimum expected count is 0.29.
b. Cannot be computed because there is insufficient memory.
c. The standardized statistic is -3.093.

Table 4.8 indicates that for Question B1.11 the age of the participant had a significant influence on their answer (p = 0.23).

4.5.2 Question B2 – I think CPD should be

This section further analyses the perceptions of CPD amongst participants. Table 4.9 and Figure 4.3 summarise the scoring patterns of Question B2. Eight of the nine differences between “Yes” and “No” are significant because the p values are below 0.05.

Table 4.9: The scoring patterns of Question B2

B2 I think CPD should be:		**YES**	**NO**	**Chi Square p-value**
		Row N %	Row N %	
Compulsory	B2.1	59.2%	40.80%	0.015
Voluntary	B2.2	48.3%	51.70%	0.647
Only clinical skilled based	B2.3	20.3%	79.70%	0.000
Delivered by the experts in the higher education sector	B2.4	61.0%	39.00%	0.003
Provided through in house training, example practitioners in the area come together to discuss topics	B2.5	82.6%	17.40%	0.000
Linked to developmental needs	B2.6	90.9%	9.10%	0.000
Aligned with professional needs	B2.7	97.8%	2.20%	0.000
Conducted during working hours	B2.8	40.9%	59.10%	0.016
Conducted during weekends and after hours	B2.9	79.5%	20.50%	0.000

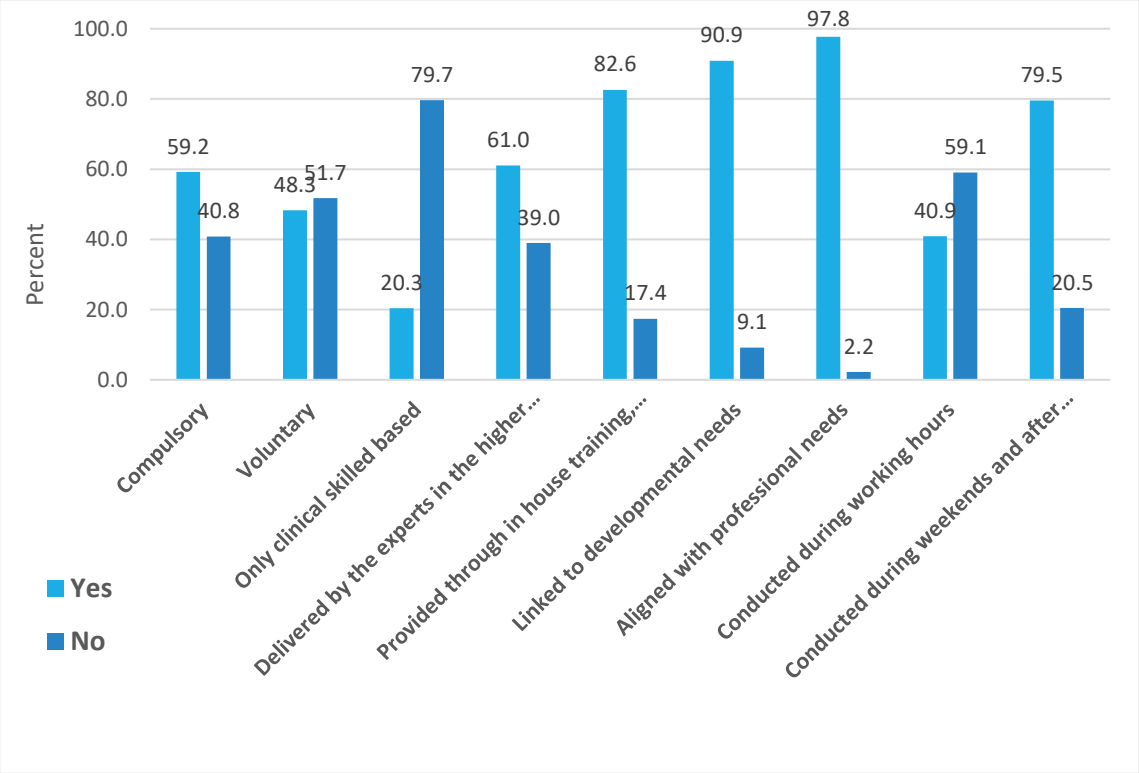

Figure 4.4: Opinion on the implementation of CPD

From the above table and figure it is evident that the top two "Yes" scores are 97.8% (B2.7) and 90.9% (B2.6). The top two "No" scores were 79.70% (B2.3) and 59.10% (B2.8). It is interesting to note that there was no significant difference between those participants who perceived that CPD should be

compulsory (“Yes” 48.3%) and those who perceived that it should not be compulsory (“No” 51.70%).

There were only two statistical tests for this question which had significant results: the relationship between “I think CPD should be aligned with professional needs” and age, where p = 0.034 (Table 4.10 and Table 4.11), and the relationship between “I think CPD should be conducted during working hours” and gender, where p = 0.038 (Table 4.12 and Table 4.13).

Table 4.10: Cross-tabulation. Aligned with professional needs – Age

			Age							Total
			20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	
Aligned with professional needs	Yes	Count	7	55	74	12	17	5	4	174
		% within Aligned with professional needs	4.0%	31.6%	42.5%	6.9%	9.8%	2.9%	2.3%	100.0%
		% within Age	87.5%	98.2%	100.0%	100.0%	94.4%	83.3%	100.0%	97.8%
		% of Total	3.9%	30.9%	41.6%	6.7%	9.6%	2.8%	2.2%	97.8%
	No	Count	1	1	0	0	1	1	0	4
		% within Aligned with professional needs	25.0%	25.0%	0.0%	0.0%	25.0%	25.0%	0.0%	100.0%
		% within Age	12.5%	1.8%	0.0%	0.0%	5.6%	16.7%	0.0%	2.2%
		% of Total	0.6%	0.6%	0.0%	0.0%	0.6%	0.6%	0.0%	2.2%
Total		Count	8	56	74	12	18	6	4	178
		% within Aligned with professional needs	4.5%	31.5%	41.6%	6.7%	10.1%	3.4%	2.2%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	4.5%	31.5%	41.6%	6.7%	10.1%	3.4%	2.2%	100.0%

Table 4.11: Chi-square. Aligned with professional needs – Age

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	12.528[a]	6	0.051	0.087		
Likelihood Ratio	9.081	6	0.169	0.077		
Fisher's Exact Test	11.558			0.034		
Linear-by-Linear Association	.493[b]	1	0.483	0.556	0.286	0.105
N of Valid Cases	178					

a. 8 cells (57.1%) have expected count less than 5. The minimum expected count is 0.09.
b. The standardized statistic is 0.702.

Table 4.11 indicates that for Question B2.7 the age of the participant had a significant influence on their answer (p = 0.34). The majority of participants in age group 30 to 39 (31.6) and 40 to 49 (42.5) answered “Yes".

Table 4.12: Cross-tabulation. Conducted during working hours – Gender

Crosstab					
			Gender		Total
			Male	Female	
Conducted during working hours	Yes	Count	13	59	72
		% within Conducted during working hours	18.1%	81.9%	100.0%
		% within Gender	27.7%	45.7%	40.9%
		% of Total	7.4%	33.5%	40.9%
	No	Count	34	70	104
		% within Conducted during working hours	32.7%	67.3%	100.0%
		% within Gender	72.3%	54.3%	59.1%
		% of Total	19.3%	39.8%	59.1%
Total		Count	47	129	176
		% within Conducted during working hours	26.7%	73.3%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	26.7%	73.3%	100.0%

Table 4.13: Chi-square. Conducted during working hours – Gender

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.657[a]	1	0.031	0.038	0.022	
Continuity Correction	3.939	1	0.047			
Likelihood Ratio	4.812	1	0.028	0.038	0.022	
Fisher's Exact Test				0.038	0.022	
Linear-by-Linear Association	4.630[c]	1	0.031	0.038	0.022	0.013
N of Valid Cases	176					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 19.23.
b. Computed only for a 2x2 table
c. The standardized statistic is -2.152.

Table 4.13 indicates that for Question B2.8 the gender of the participant had a significant influence on their answer (p = 0.038); 45.7% of female participants answered “Yes” and 27.7% male participant answered “Yes”.

4.5.3 Question B3 – Please state any other opinions or perceptions on CPD, i.e. what topics of interest need to be addressed

Question B3 was an open-ended question and therefore there was no cross tabulation for age, gender and race.

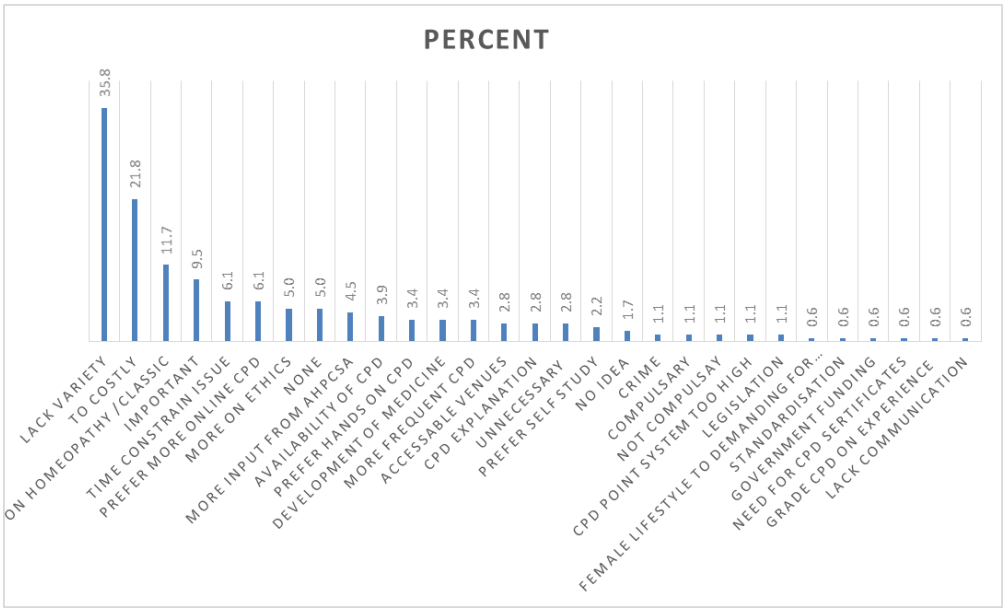

Figure 4.5: Opinions or perceptions on CPD

The answers to this question were grouped into themes, as illustrated in Figure 4.5. This figure shows that participants answered that they would like a variety in CPD topics as lack of variety was indicated by 64% of participants. Secondly, 39% found it to be too costly, followed by participants answering that they would like more on homoeopathic/classical related topics (21%). Topics of interest mentioned by participants are listed in Table 4.14.

Table 4.14: Topics of interest

• Hiv • TB • Cancer • Nutrition • Paediatrics • Psychology • Terminal care • Allergies • Autoimmune disorders • ICD 10 coding • Emergency response • Self-care for practitioners • Marketing trends and ways in which practitioners can market themselves, within the ambit of the laws governing advertising etc.	• Pathology and diagnostics • Complex vs simplex prescribing • International modality courses • laboratory and radiological studies • Dispensing and quality control • Financial management • Computer assisted case analysis • Ethics • Herb-drug interactions • Compounding and dispensing • Personal development of practitioners • Good dispensing practice and quality control • Linking personal development to business development • Computerisation in practice management and in case analysis

4.6 Section C: CPD awareness

4.6.1 Question C1 – Are you aware of

This section analyses the perceptions of CPD amongst participants. Table 4.15 and Figure 4.6 summarise the scoring patterns of Question C1. All the differences between "Yes" and "No" are significant because the p values are below 0.05, except for question C1.7. Raw data can be found in Appendix D.

Table 4.15: Analysis of data from Question C1

C1 Are you aware of:		Yes		No		Unsure		Chi Square
		Count	Row N %	Count	Row N %	Count	Row N %	p-value
CPD is mandatory?	C1.1	147	92.5%	3	1.9%	9	5.7%	0.000
That there are different levels of CPD?	C1.2	122	76.7%	20	12.6%	17	10.7%	0.000
The requirements for CPD compliance?	C1.3	101	63.1%	18	11.3%	41	25.6%	0.000
The importance of CPD?	C1.4	136	85.5%	10	6.3%	13	8.2%	0.000
The number of points required annually?	C1.5	110	69.2%	22	13.8%	27	17.0%	0.000
The auditing process?	C1.6	83	52.2%	36	22.6%	40	25.2%	0.000
How often auditing occurs?	C1.7	53	33.5%	54	34.2%	51	32.3%	0.957
Any penalties for non-compliance?	C1.8	65	40.9%	39	24.5%	55	34.6%	0.039
The available guidelines for CPD?	C1.9	92	57.9%	34	21.4%	33	20.8%	0.000
The importance of monitoring a CPD portfolio?	C1.10	93	58.9%	32	20.3%	33	20.9%	0.000

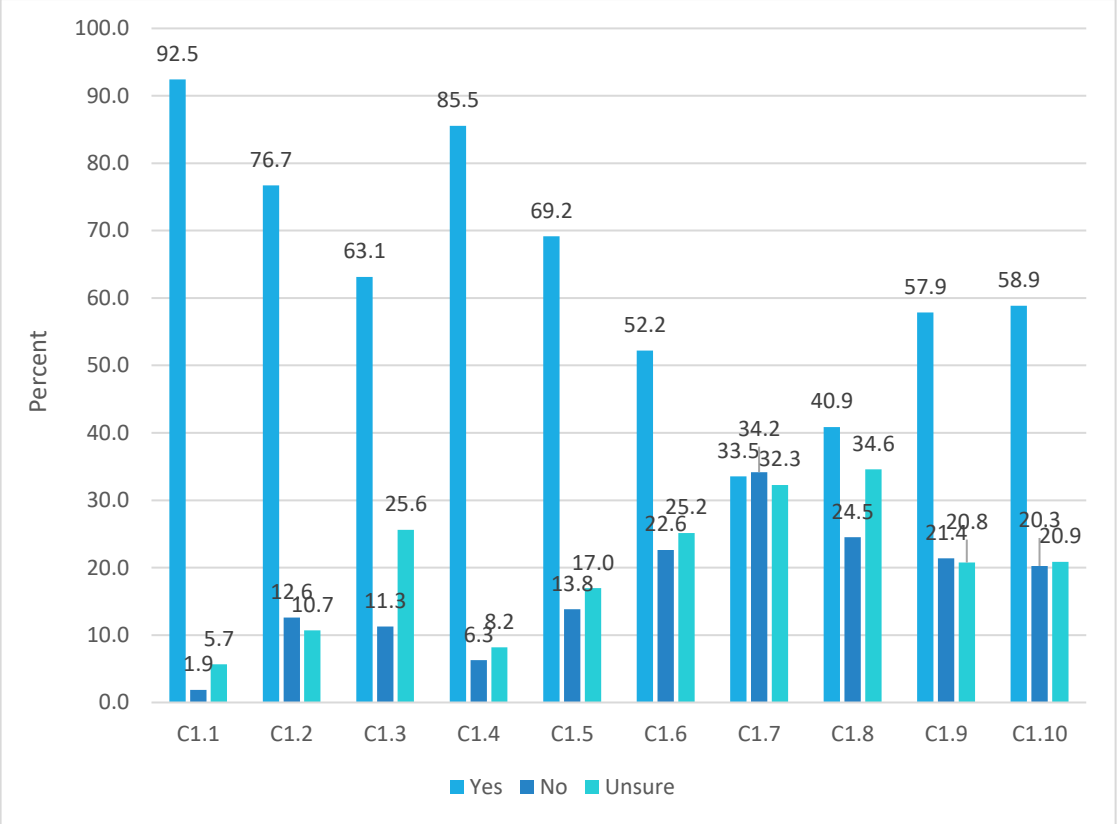

Figure 4.6: Awareness of CPD

From the above table and figure, it is evident that the participants mainly agreed with the statements, with the top two "Yes" scores being 92.5% (C1.1) and 85.5% (C1.4). The top two "No" scores were 34.2% (C1.7) and 24.5% (C1.8). The percentage of participants answering 'Unsure' on these questions was quite high. The top two were 34.6% (C1.8) and 32.3% (C1.7). It is interesting to note that the answers in C1.7 were similar in that there were no significant differences between them i.e. "Yes" 33.5%, "No" 34.2%, and "Unsure" 32.3%.

There were six statistical results for this question which were significant. These were the relationship between "Are you aware of the following" and:

- C1.1 "CPD is mandatory" and race, p = 0.002.
- C1.2 "That there are different levels of CPD" and race, p = 0.013
- C1.5 "The number of points required annually" and race, p = 0.002
- C1.6 "The auditing process" and race, p = 0.000
- C1.8 "Any penalties for non-compliance" and race, p = 0.036

- C1.10 “The importance of monitoring a CPD portfolio” and race, p = 0.005.

Tables 4.16 and 4.17 indicate that for Question C1.1 the race of the participant had a significant influence on their answer (p = 0.002).

Table 4.16: Cross-tabulation. CPD is mandatory – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
CPD is mandatory?	Yes	Count	8	121	18	0	147
		% within CPD is mandatory?	5.4%	82.3%	12.2%	0.0%	100.0%
		% within Race	66.7%	95.3%	94.7%	0.0%	92.5%
		% of Total	5.0%	76.1%	11.3%	0.0%	92.5%
	No	Count	2	1	0	0	3
		% within CPD is mandatory?	66.7%	33.3%	0.0%	0.0%	100.0%
		% within Race	16.7%	0.8%	0.0%	0.0%	1.9%
		% of Total	1.3%	0.6%	0.0%	0.0%	1.9%
	Unsure	Count	2	5	1	1	9
		% within CPD is mandatory?	22.2%	55.6%	11.1%	11.1%	100.0%
		% within Race	16.7%	3.9%	5.3%	100.0%	5.7%
		% of Total	1.3%	3.1%	0.6%	0.6%	5.7%
Total		Count	12	127	19	1	159
		% within CPD is mandatory?	7.5%	79.9%	11.9%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.5%	79.9%	11.9%	0.6%	100.0%

Table 4.17: Chi-square. CPD is mandatory – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	35.955[a]	6	0.000	0.020		
Likelihood Ratio	16.178	6	0.013	0.003		
Fisher's Exact Test	20.743			0.002		
Linear-by-Linear Association	.179[b]	1	0.673	0.724	0.429	0.171
N of Valid Cases	159					

a. 8 cells (66.7%) have expected count less than 5. The minimum expected count is 0.02.
b. The standardized statistic is -0.423.

As shown in Table 4.17 the Fisher's exact test result was 0.002 and therefore race had a significant impact on participants' answers on mandatory CPD.

Tables 4.18 and 4.19 indicate that for Question C1.2 the race of the participant had a significant influence on their answer (p = 0.013).

Table 4.18: Cross-tabulation. That there are different levels of CPD – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
That there are different levels of CPD?	Yes	Count	5	101	16	0	122
		% within That there are different levels of CPD?	4.1%	82.8%	13.1%	0.0%	100.0%
		% within Race	41.7%	79.5%	84.2%	0.0%	76.7%
		% of Total	3.1%	63.5%	10.1%	0.0%	76.7%
	No	Count	4	14	2	0	20
		% within That there are different levels of CPD?	20.0%	70.0%	10.0%	0.0%	100.0%
		% within Race	33.3%	11.0%	10.5%	0.0%	12.6%
		% of Total	2.5%	8.8%	1.3%	0.0%	12.6%
	Unsure	Count	3	12	1	1	17
		% within That there are different levels of CPD?	17.6%	70.6%	5.9%	5.9%	100.0%
		% within Race	25.0%	9.4%	5.3%	100.0%	10.7%
		% of Total	1.9%	7.5%	0.6%	0.6%	10.7%
Total		Count	12	127	19	1	159
		% within That there are different levels of CPD?	7.5%	79.9%	11.9%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.5%	79.9%	11.9%	0.6%	100.0%

Table 4.19: Chi-square. That there are different levels of CPD – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	17.966[a]	6	0.006	0.011		
Likelihood Ratio	12.679	6	0.048	0.042		
Fisher's Exact Test	14.148			0.013		
Linear-by-Linear Association	1.681[b]	1	0.195	0.203	0.120	0.045
N of Valid Cases	159					

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 0.11.
b. The standardized statistic is -1.297.

As shown in Table 4.19 the Fisher's exact test result was 0.013 and therefore race had a significant impact on participants' awareness that there are different levels of CPD.

Tables 4.20 and 4.21 indicate that for Question C1.5 the race of the participant had a significant influence on their answer (p = 0.002).

Table 4.20: Cross-tabulation. The number of points required annually? – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
The number of points required annually?	Yes	Count	3	95	12	0	110
		% within The number of points required annually?	2.7%	86.4%	10.9%	0.0%	100.0%
		% within Race	25.0%	74.8%	63.2%	0.0%	69.2%
		% of Total	1.9%	59.7%	7.5%	0.0%	69.2%
	No	Count	4	16	2	0	22
		% within The number of points required annually?	18.2%	72.7%	9.1%	0.0%	100.0%
		% within Race	33.3%	12.6%	10.5%	0.0%	13.8%
		% of Total	2.5%	10.1%	1.3%	0.0%	13.8%
	Unsure	Count	5	16	5	1	27
		% within The number of points required annually?	18.5%	59.3%	18.5%	3.7%	100.0%
		% within Race	41.7%	12.6%	26.3%	100.0%	17.0%
		% of Total	3.1%	10.1%	3.1%	0.6%	17.0%
Total		Count	12	127	19	1	159
		% within The number of points required annually?	7.5%	79.9%	11.9%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.5%	79.9%	11.9%	0.6%	100.0%

Table 4.21: Chi-square. The number of points annually? – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	19.260[a]	6	0.004	0.004		
Likelihood Ratio	16.838	6	0.010	0.007		
Fisher's Exact Test	18.045			0.002		
Linear-by-Linear Association	.259[b]	1	0.611	0.660	0.349	0.078
N of Valid Cases	159					

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 0.14.
b. The standardized statistic is -0.509

As shown in Table 4.21 the Fisher's exact test result was 0.002 and therefore race had a significant impact on participants' awareness of the number of points that are required annually.

Tables 4.22 and 4.23 indicate that for Question C1.6 the race of the participant had a significant influence on their answer (p = 0.000).

Table 4.22: Cross tabulation. The auditing process? – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
The auditing process?	Yes	Count	1	74	8	0	83
		% within The auditing process?	1.2%	89.2%	9.6%	0.0%	100.0%
		% within Race	8.3%	58.3%	42.1%	0.0%	52.2%
		% of Total	0.6%	46.5%	5.0%	0.0%	52.2%
	No	Count	10	23	3	0	36
		% within The auditing process?	27.8%	63.9%	8.3%	0.0%	100.0%
		% within Race	83.3%	18.1%	15.8%	0.0%	22.6%
		% of Total	6.3%	14.5%	1.9%	0.0%	22.6%
	Unsure	Count	1	30	8	1	40
		% within The auditing process?	2.5%	75.0%	20.0%	2.5%	100.0%
		% within Race	8.3%	23.6%	42.1%	100.0%	25.2%
		% of Total	0.6%	18.9%	5.0%	0.6%	25.2%
Total		Count	12	127	19	1	159
		% within The auditing process?	7.5%	79.9%	11.9%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.5%	79.9%	11.9%	0.6%	100.0%

Table 4.23: Chi square. The auditing process? – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	33.372[a]	6	0.000	0.000		
Likelihood Ratio	27.802	6	0.000	0.000		
Fisher's Exact Test	26.188			0.000		
Linear-by-Linear Association	.809[b]	1	0.369	0.419	0.213	0.054
N of Valid Cases	159					

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 0.23.
b. The standardized statistic is 0.899.

As shown in Table 4.23 the Fisher's exact test result was 0.000 and therefore race had a significant impact on participants' awareness of the auditing process.

Tables 4.24 and 4.25 indicate that for Question C1.8 the race of the participant had a significant influence on their answer (p = 0.036).

Table 4.24: Cross-tabulation. Any penalties for non-compliance? – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
Any penalties for non-compliance?	Yes	Count	2	55	8	0	65
		% within Any penalties for non-compliance?	3.1%	84.6%	12.3%	0.0%	100.0%
		% within Race	16.7%	43.3%	42.1%	0.0%	40.9%
		% of Total	1.3%	34.6%	5.0%	0.0%	40.9%
	No	Count	8	27	4	0	39
		% within Any penalties for non-compliance?	20.5%	69.2%	10.3%	0.0%	100.0%
		% within Race	66.7%	21.3%	21.1%	0.0%	24.5%
		% of Total	5.0%	17.0%	2.5%	0.0%	24.5%
	Unsure	Count	2	45	7	1	55
		% within Any penalties for non-compliance?	3.6%	81.8%	12.7%	1.8%	100.0%
		% within Race	16.7%	35.4%	36.8%	100.0%	34.6%
		% of Total	1.3%	28.3%	4.4%	0.6%	34.6%
Total		Count	12	127	19	1	159
		% within Any penalties for non-compliance?	7.5%	79.9%	11.9%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.5%	79.9%	11.9%	0.6%	100.0%

Table 4.25: Chi-square. Any penalties for non-compliance? – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	14.304[a]	6	0.026	0.014		
Likelihood Ratio	12.529	6	0.051	0.048		
Fisher's Exact Test	11.718			0.036		
Linear-by-Linear Association	.094[b]	1	0.759	0.771	0.418	0.074
N of Valid Cases	159					

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 0.25.
b. The standardized statistic is 0.307.

As shown in Table 4.25 the Fisher's exact test result was 0.036 and therefore race had a significant impact on participants' awareness of penalties for non-compliance.

Tables 4.26 and 4.27 indicate that for Question C1.10 the race of the participant had a significant influence on their answer (p = 005).

Table 4.26: Cross-tabulation. The importance of monitoring a CPD portfolio – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
The importance of monitoring a CPD portfolio?	Yes	Count	2	80	11	0	93
		% within The importance of monitoring a CPD portfolio?	2.2%	86.0%	11.8%	0.0%	100.0%
		% within Race	16.7%	63.5%	57.9%	0.0%	58.9%
		% of Total	1.3%	50.6%	7.0%	0.0%	58.9%
	No	Count	7	22	3	0	32
		% within The importance of monitoring a CPD portfolio?	21.9%	68.8%	9.4%	0.0%	100.0%
		% within Race	58.3%	17.5%	15.8%	0.0%	20.3%
		% of Total	4.4%	13.9%	1.9%	0.0%	20.3%
	Unsure	Count	3	24	5	1	33
		% within The importance of monitoring a CPD portfolio?	9.1%	72.7%	15.2%	3.0%	100.0%
		% within Race	25.0%	19.0%	26.3%	100.0%	20.9%
		% of Total	1.9%	15.2%	3.2%	0.6%	20.9%
Total		Count	12	126	19	1	158
		% within The importance of monitoring a CPD portfolio?	7.6%	79.7%	12.0%	0.6%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.6%	79.7%	12.0%	0.6%	100.0%

Table 4.27: Chi-square. The importance of monitoring a CPD portfolio – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	17.713[a]	6	0.007	0.004		
Likelihood Ratio	15.594	6	0.016	0.014		
Fisher's Exact Test	15.635			0.005		
Linear-by-Linear Association	.110[b]	1	0.740	0.755	0.413	0.079
N of Valid Cases	158					

a. 7 cells (58.3%) have expected count less than 5. The minimum expected count is 0.20.
b. The standardized statistic is -0.332.

Table 4.27 shows a Fisher's exact p value of 0.005 therefore race was indicated to play a significant role in the importance of monitoring a CPD portfolio.

4.6.2 Question C2 – Do you visit the AHPCSA website?

This section presents the results of a "Yes/No" question regarding whether participants visit the AHPCSA website. The differences between "Yes" and "No" are significant for age and gender because the p values are below 0.05. Raw data can be found in Appendix D.

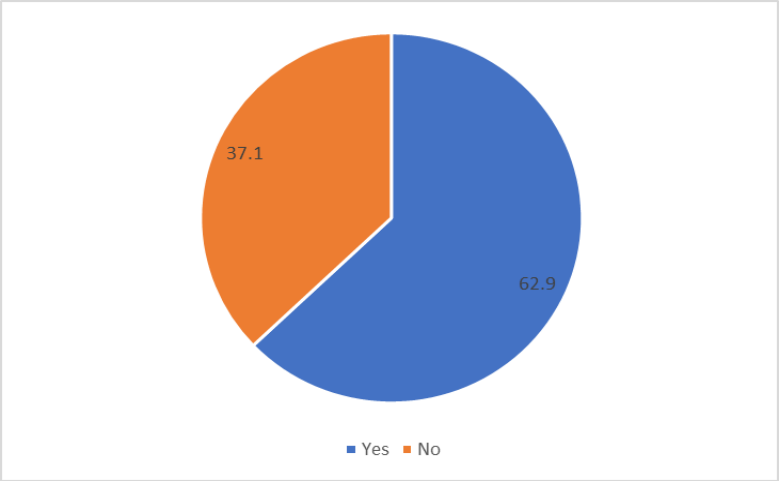

Figure 4.7: The rate of visiting the AHPCSA website

Table 4.28: Analysis of data from Question C2

Do you visit the AHPCSA website?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	100	55.9	62.9	62.9
	No	59	33.0	37.1	100.0
	Total	159	88.8	100.0	
Missing	System	20	11.2		
Total		179	100.0		

Tables 4.29 and 4.30 indicate that for Question C2 the age of the participant had a significant influence on their answer (p = 0.002).

Table 4.29: Cross-tabulation. Do you visit the AHPCSA website? – Age

Crosstab									
			Age						Total
			20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	
Do you visit the AHPCSA website?	Yes	Count	6	40	40	4	8	2	0	100
		% within Do you visit the AHPCSA website?	6.0%	40.0%	40.0%	4.0%	8.0%	2.0%	0.0%	100.0%
		% within Age	75.0%	81.6%	59.7%	33.3%	53.3%	33.3%	0.0%	62.9%
		% of Total	3.8%	25.2%	25.2%	2.5%	5.0%	1.3%	0.0%	62.9%
	No	Count	2	9	27	8	7	4	2	59
		% within Do you visit the AHPCSA web site?	3.4%	15.3%	45.8%	13.6%	11.9%	6.8%	3.4%	100.0%
		% within Age	25.0%	18.4%	40.3%	66.7%	46.7%	66.7%	100.0%	37.1%
		% of Total	1.3%	5.7%	17.0%	5.0%	4.4%	2.5%	1.3%	37.1%
Total		Count	8	49	67	12	15	6	2	159
		% within Do you visit the AHPCSA website?	5.0%	30.8%	42.1%	7.5%	9.4%	3.8%	1.3%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.0%	30.8%	42.1%	7.5%	9.4%	3.8%	1.3%	100.0%

Table 4.30: Cross-tabulation. Do you visit the AHPCSA website? – Age

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	18.885[a]	6	0.004	0.002		
Likelihood Ratio	20.007	6	0.003	0.004		
Fisher's Exact Test	18.559			0.002		
Linear-by-Linear Association	13.858[b]	1	0.000	0.000	0.000	0.000
N of Valid Cases	159					

a. 6 cells (42.9%) have expected count less than 5. The minimum expected count is 0.74.
b. The standardized statistic is 3.723.

As shown in Table 4.30, the Fisher's exact test result was 0.002 and therefore age had a significant impact on participant's visiting the AHPCSA web site.

Tables 4.29 and 4.30 show that for Question C2 the gender of the participant had a significant on their answer (p = 0.024).

Table 4.31: Cross-tabulation. Do you visit the AHPCSA web site? – Gender

Crosstab					
			Gender		Total
			Male	Female	
Do you visit the AHPCSA web site?	Yes	Count	19	81	100
		% within Do you visit the AHPCSA web site?	19.0%	81.0%	100.0%
		% within Gender	47.5%	68.1%	62.9%
		% of Total	11.9%	50.9%	62.9%
	No	Count	21	38	59
		% within Do you visit the AHPCSA web site?	35.6%	64.4%	100.0%
		% within Gender	52.5%	31.9%	37.1%
		% of Total	13.2%	23.9%	37.1%
Total		Count	40	119	159
		% within Do you visit the AHPCSA web site?	25.2%	74.8%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	25.2%	74.8%	100.0%

Table 4.32: Chi-square. Do you visit the AHPCSA website? – Gender

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.426[a]	1	0.020	0.024	0.017	
Continuity Correction	4.581	1	0.032			
Likelihood Ratio	5.302	1	0.021	0.024	0.017	
Fisher's Exact Test				0.024	0.017	
Linear-by-Linear Association	5.392[c]	1	0.020	0.024	0.017	0.011
N of Valid Cases	159					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.84.
b. Computed only for a 2x2 table
c. The standardized statistic is -2.322.

As shown in Table 4.32 the Fisher's exact test result was 0.024 and therefore gender had a significant impact on participants' visiting the AHPCSA website.

4.6.3 Question C3 – Which of the following CPD activities are you aware of?

Table 4.33: Frequency table of options selected for C3

Which of the following CPD activities are you aware of?	Count	Percent
3.1 Case study discussion	105	9.5%
3.2 Conference/ seminars	152	13.7%
3.3 Mentoring and supervision	46	4.2%
3.4 Interest group meetings less than six times a year	88	8.0%
3.5 Author or co-author of publications	69	6.2%
3.6 Presentations of posters, short courses	69	6.2%
3.7 Co-presenter of accredited short courses	59	5.3%
3.8 Formal departmental meetings	39	3.5%
3.9 Research	58	5.2%
3.10 Reviewer of an article	39	3.5%
3.11 Answering questionnaires	77	7.0%
3.12 Guest lecturer at an accredited institute	65	5.9%
3.13 Postgraduate qualifications	53	4.8%
3.14 Short courses minimum hours	61	5.5%
3.15 Learning portfolio	12	1.1%
3.16 Practice audit	11	1.0%
3.17 Practice guidelines updates	14	1.3%
3.18 Homeopathic refresher courses	58	5.2%
3.19 External examiner	25	2.3%
3.20 Are there any other you are aware of?	6	0.5%

According to statistical analysis the data could only be described in a frequency table (Table 4.33). The results show that participants are mostly aware of conferences and seminars (13.7%), and case study discussions (9.5%), and a small number are aware of the learning portfolios (1.1%) and practice audit (1.0%) (Figure 4.8).

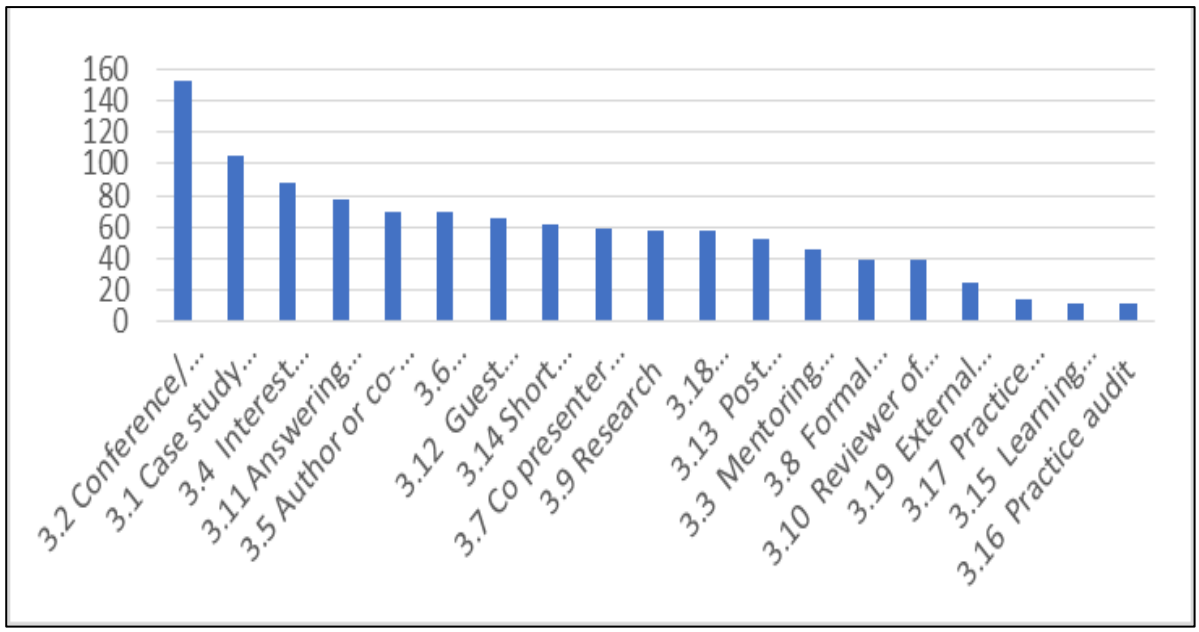

Figure 4.8: The level of awareness of the different CPD activities ranked according to preference

4.7 Section D: CPD participation

4.7.1 Question D1 – Do you participate in CPD?

This section analyses the participation rate of CPD within the profession of homoeopathy. Table 4.34 summaries the scoring patterns. It was found that the p values were all greater than > 0.05 cases which reflect no significance between "Yes" and "No" within the categories of gender, race or age. Raw data can be found in Appendix D.

Table 4.34: Summary of the participation rate in CPD activities

Do you participate in CPD?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	149	83.2	93.7	93.7
	No	10	5.6	6.3	100.0
	Total	159	88.8	100.0	
Missing	System	20	11.2		
Total		179	100.0		

In general, 93.7% said that they do participate in CPD while 6.3% do not.

4.7.2 Question D2 – How do you ensure that you are compliant?

This was an open question. Figure 4.9 shows that seminars are the most common method of ensuring compliance. The top two scores were through attendance (78%) and courses and seminars (36%) and the least popular CPD participation took place through auditing and collection of certificates and scored 2%.

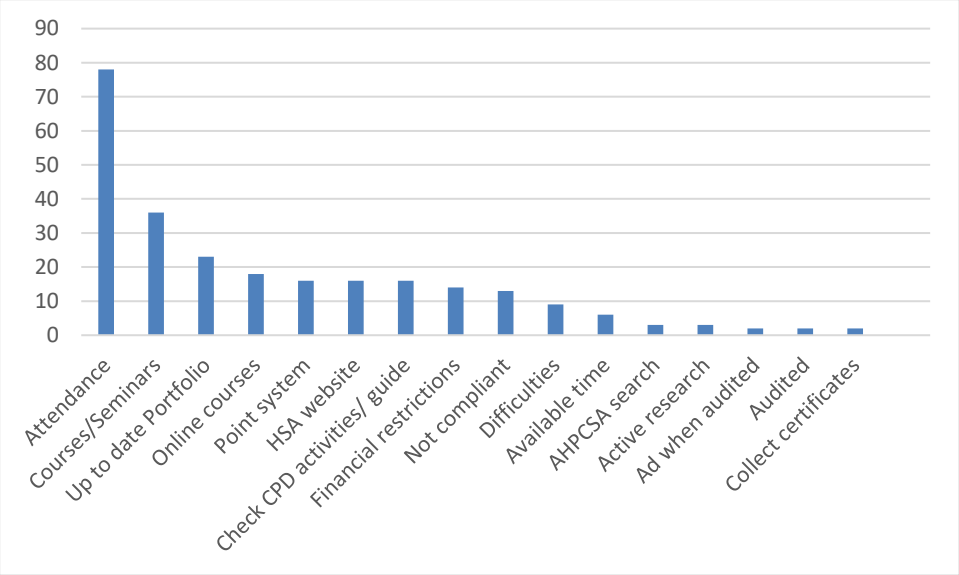

Figure 4.9: Ways of ensuring compliance

4.7.3 Question D3 – How often do you engage in CPD?

This was a frequency question.

Table 4.35: How often do you engage in CPD?

How often do you engage in CPD?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Weekly	7	3.9	4.4	4.4
	Monthly	31	17.3	19.6	24.1
	Annually	10	5.6	6.3	30.4
	Never	6	3.4	3.8	34.2
	When interested	22	12.3	13.9	48.1
	When CPD activity is available	82	45.8	51.9	100.0
	Total	158	88.3	100.0	
Missing	System	21	11.7		
Total		179	100.0		

Table 4.35 shows that the majority (51.9%) of participants prefer to engage in CPD activities when CPD activities become available, and the fewest, never (3.8%).

4.7.4 Question D4 – What are in your opinion the preferred methods of getting CPD points?

This was an open-ended question.

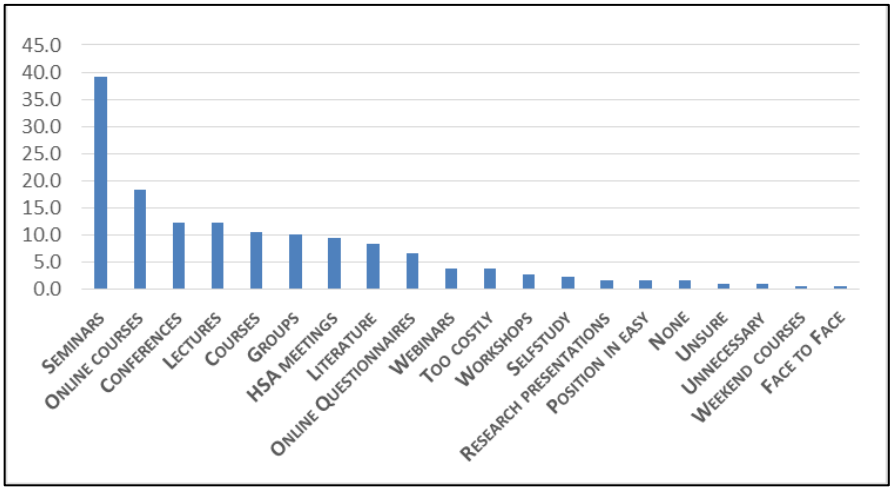

Figure 4.10: Opinions regarding the preferred methods for getting CPD points

As can be seen in Figure 4.10, the majority of participants prefer seminars (39.1%) followed by online courses (18.4%) over other methods of participation.

4.7.5 Question D5 – Drawbacks to CPD

This was a frequency question. Raw data can be found in Appendix D.

Table 4.36: What in your opinion are the drawbacks to CPD?

What in your opinion are the drawbacks to CPD?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Financial	67	37.4	42.9	42.9
	The time constraints	31	17.3	19.9	62.8
	Availability of courses	44	24.6	28.2	91.0
	Travel	14	7.8	9.0	100.0
	Total	156	87.2	100.0	
Missing	System	23	12.8		
Total		179	100.0		

Table 4.36 show that financial (42.9%) was the greatest drawback as perceived by the participants, with the least being travel (9.0%).

There was only one statistical test for this question which had a significant result: the relationship between “What in your opinion are the drawbacks to CPD?” and gender where p = 0.007 (Table 4.37 and Table 4.38).

Table 4.37: Cross tabulation. What in your opinion are the drawbacks to CPD? – Gender

Crosstab					
			Gender		Total
			Male	Female	
What in your opinion are the drawbacks to CPD?	Financial	Count	14	53	67
		% within What in your opinion are the drawbacks to CPD?	20.9%	79.1%	100.0%
		% within Gender	35.0%	45.7%	42.9%
		% of Total	9.0%	34.0%	42.9%
	The time constraints	Count	3	28	31
		% within What in your opinion are the drawbacks to CPD?	9.7%	90.3%	100.0%
		% within Gender	7.5%	24.1%	19.9%
		% of Total	1.9%	17.9%	19.9%
	Availability of courses	Count	19	25	44
		% within What in your opinion are the drawbacks to CPD?	43.2%	56.8%	100.0%
		% within Gender	47.5%	21.6%	28.2%
		% of Total	12.2%	16.0%	28.2%
	Travel	Count	4	10	14
		% within What in your opinion are the drawbacks to CPD?	28.6%	71.4%	100.0%
		% within Gender	10.0%	8.6%	9.0%
		% of Total	2.6%	6.4%	9.0%
Total		Count	40	116	156
		% within What in your opinion are the drawbacks to CPD?	25.6%	74.4%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	25.6%	74.4%	100.0%

Table 4.38: Chi-square. What in your opinion are the preferred methods of getting CPD points? – Gender

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	12.098[a]	3	0.007	0.007		
Likelihood Ratio	12.288	3	0.006	0.008		
Fisher's Exact Test	11.807			0.007		
Linear-by-Linear Association	4.289[b]	1	0.038	0.042	0.024	0.008
N of Valid Cases	156					

a. 1 cells (12.5%) have expected count less than 5. The minimum expected count is 3.59.
b. The standardized statistic is -2.071.

Table 4.38 show the Fishers exact test result of 0.007 therefore gender has a significant impact on participants' opinions regarding the drawbacks of CPD.

4.7.6 Question D6 – What methods do you commonly use to obtain points?

This was an open-ended question. Figure 4.11 shows commonly used methods used through participating in CPD activities.

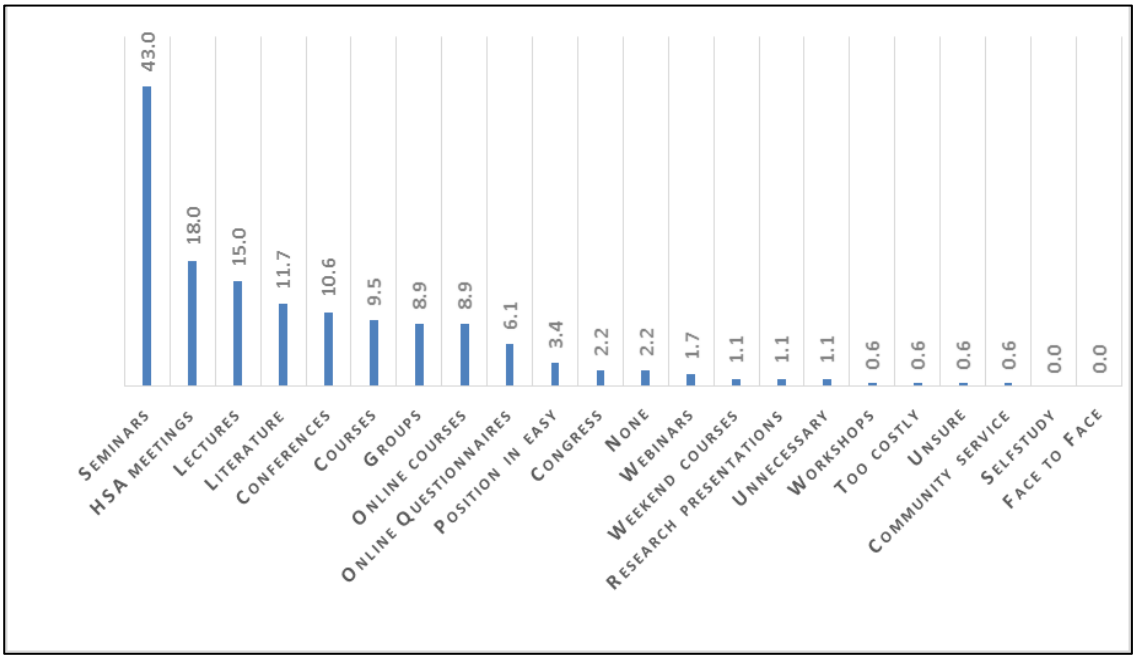

Figure 4.11: Commonly used methods to gain CPD points

As can be seen in Figure 4.11, the majority of participants prefer seminars (43.0%) followed by HSA meetings (18.0%) over other methods of participation.

4.7.7 Question D7 – How much are you willing to pay?

This question was a frequency question.

Table 4.39: How much are you willing to pay?

How much are you willing to pay?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	100 - 200	41	22.9	25.9	25.9
	300 - 500	61	34.1	38.6	64.6
	600 - 800	34	19.0	21.5	86.1
	900+	22	12.3	13.9	100.0
	Total	158	88.3	100.0	
Missing	System	21	11.7		
Total		179	100.0		

It is evident from Table 4.39 that the majority of participants were willing to pay between R300 and R500, followed by between R100 and R200.

4.7.8 Question D8 – Rank your preferred learning styles for engaging in CPD activities

This section analyses the preferred learning for engaging in CPD. Table 4.40 and Figure 4.11 summarise the scoring patterns on how participants ranked their preferred learning styles. All the differences between “Most preferred”, “Slightly preferred”, “Neutral”, “Somewhat preferred” and “Least preferred” were significant because the p values were all below 0.05, except for question D8.7. Raw data can be found in Appendix D

Table 4.40: Respondents ranking of preferred learning styles

LEARNING STYLE	RANK
Online activities	1
Attendance bases learning	2
Journal articles	3
Work-based learning	4
Academic studies	5
In service training	6
Reflective learning	7
On site supervision	8
Learning portfolio	9
Team assignment/projects	10

Table 4.41: Ranking of preferred learning styles for engaging in CPD activities

D8 Ranking of preferred styles:		Least preferred		Slightly preferred		Neutral		Somewhat preferred		Most preferred		Chi Square p-value
		Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	
Attendance based learning	D8.1	14	8.9 %	12	7.6%	29	18.5 %	40	25.5%	62	39.5%	0.000
Online activities	D8.2	17	10.8 %	14	8.9%	22	14.0 %	29	18.5%	75	47.8%	0.000
Reflective learning	D8.3	19	12.9 %	36	24.5%	51	34.7 %	25	17.0%	16	10.9%	0.000
Work based learning	D8.4	15	10.2 %	19	12.9%	36	24.5 %	40	27.2%	37	25.2%	0.001
Academic studies	D8.5	17	11.2 %	22	14.5%	43	28.3 %	36	23.7%	34	22.4%	0.005
Journal articles	D8.6	18	11.8 %	15	9.8%	40	26.1 %	37	24.2%	43	28.1%	0.000
Team assignment/projects	D8.7	74	50.7 %	28	19.2%	30	20.5 %	5	3.4%	9	6.2%	0.000
In service training	D8.8	31	20.8 %	25	16.8%	40	26.8 %	29	19.5%	24	16.1%	0.243
On site supervision	D8.9	53	36.3 %	27	18.5%	34	23.3 %	17	11.6%	15	10.3%	0.000
Learning portfolio	D8.10	43	29.9 %	36	25.0%	42	29.2 %	13	9.0%	10	6.9%	0.000

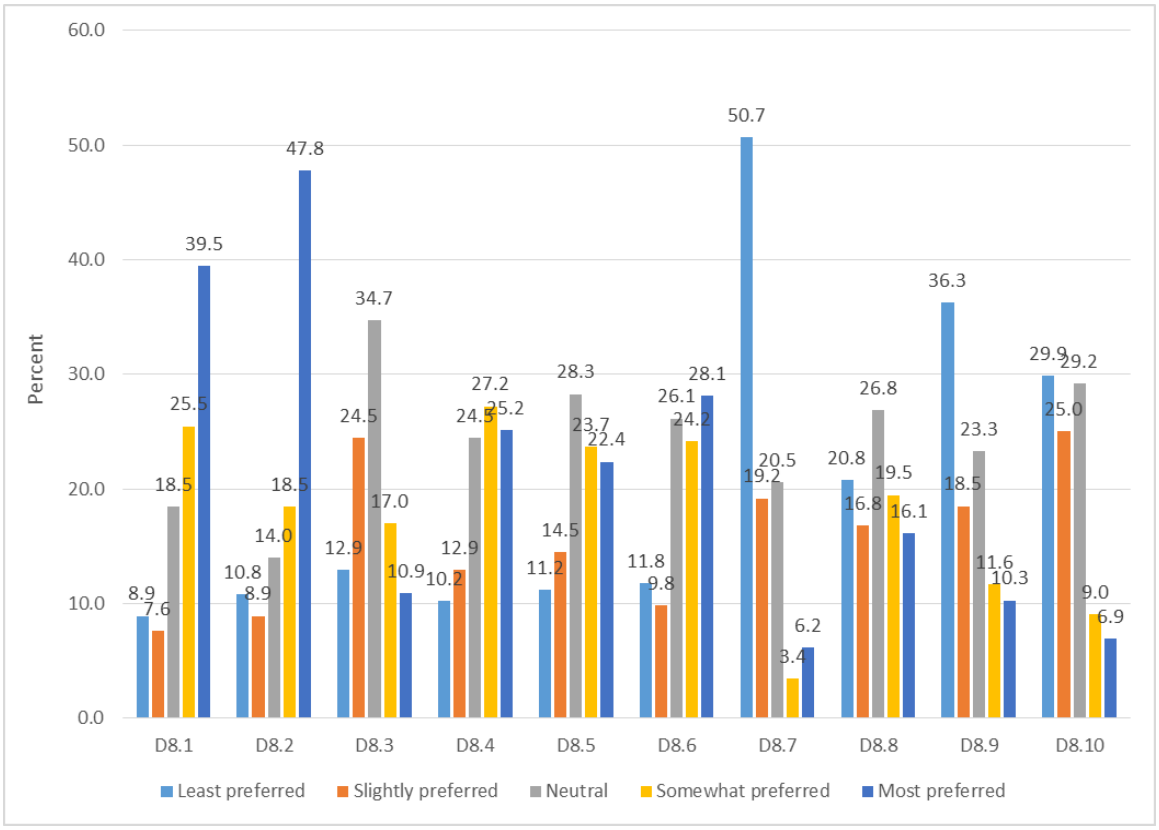

Figure 4.12: Preferred learning styles

There was only one statistical test for this question which had a significant result: the relationship between “Rank your preferred learning styles for engaging in CPD activities” online activities and gender, where p = 0.007 (Table 4.42 and Table 4.43).

Table 4.42: Cross-tabulation. Rank your preferred learning styles for engaging in CPD activities – Gender

Crosstab					
			Gender		Total
			Male	Female	
Online activities	Least preferred	Count	5	12	17
		% within Online activities	29.4%	70.6%	100.0%
		% within Gender	12.5%	10.3%	10.8%
		% of Total	3.2%	7.6%	10.8%
	Slightly preferred	Count	8	6	14
		% within Online activities	57.1%	42.9%	100.0%
		% within Gender	20.0%	5.1%	8.9%
		% of Total	5.1%	3.8%	8.9%
	Neutral	Count	9	13	22
		% within Online activities	40.9%	59.1%	100.0%
		% within Gender	22.5%	11.1%	14.0%
		% of Total	5.7%	8.3%	14.0%
	Somewhat preferred	Count	6	23	29
		% within Online activities	20.7%	79.3%	100.0%
		% within Gender	15.0%	19.7%	18.5%
		% of Total	3.8%	14.6%	18.5%
	Most preferred	Count	12	63	75
		% within Online activities	16.0%	84.0%	100.0%
		% within Gender	30.0%	53.8%	47.8%
		% of Total	7.6%	40.1%	47.8%
Total		Count	40	117	157
		% within Online activities	25.5%	74.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	25.5%	74.5%	100.0%

Table 4.43: Chi-square. Rank your preferred learning styles for engaging in CPD activities – Gender

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	14.190[a]	4	0.007	0.006		
Likelihood Ratio	13.197	4	0.010	0.015		
Fisher's Exact Test	13.427			0.007		
Linear-by-Linear Association	7.926[b]	1	0.005	0.005	0.004	0.001
N of Valid Cases	157					

a. 2 cells (20.0%) have expected count less than 5. The minimum expected count is 3.57.
b. The standardized statistic is 2.815.

Table 4.43 shows a Fishers exact test result of 0.007 and therefore gender has a significant relationship on what methods participants commonly use to obtain CPD points.

4.7.9 Question D9 – Have you ever been audited?

This section analysed compliance regarding CPD amongst participants. All the differences between "Yes" and "No" were found to have no significant relationship with age, gender or race as p values are > 0.05. Raw data can be found in Appendix D.

Table 4.44: Analysis of data from Question D9

Have you ever been audited?					
		Frequency	**Percent**	**Valid Percent**	**Cumulative Percent**
Valid	Yes	37	20.7	23.3	23.3
	No	122	68.2	76.7	100.0
	Total	159	88.8	100.0	
Missing	System	20	11.2		
Total		179	100.0		

As can be seen in Table 4.44, the results indicate that 23.3% had been audited and 76.7% had not been audited.

4.7.9.1 Question D9.1 – How did you know you were being audited?

Question D9.1 was an open-ended question. The answers were analysed and grouped in themes which are shown in Table 4.45.

Table 4.45 shows that the highest frequency was notification by e-mail (76%) and the least was “Request proof” (3%) and “Final demand online” (3%).

Table 4.45: Frequency table. How did you know you were being audited?

	Frequency	Percent
Notified by e-mail	28	76%
Submit Portfolio	4	11%
PBHNP (Board member)	3	8%
Request proof	1	3%
Final demand online	1	3%

4.7.9.2 Question D9.2 – Did you receive any notification after submission of your portfolio of evidence?

This section analysed if there was any feedback received after submission of a portfolio. All the differences between “Yes” and “No” were found to have no significance regarding age, gender or race as p values were > 0.05. Raw data can be found in Appendix D.

Table 4.46: Did you receive any notification after submission of your portfolio of evidence?

Did you receive any notification after submission of your portfolio of evidence?					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	16	8.9	35.6	35.6
	No	29	16.2	64.4	100.0
	Total	45	25.1	100.0	
Missing	System	134	74.9		
Total		179	100.0		

As indicated in Table 4.46, 16.2% of participants answering this question did not receive any notification after submission of their portfolio and answered “No” while 8.9% answered “Yes” that they did receive notification.

4.7.9.3 Question D9.2.1 – Please explain your answer to D9.2

Question D9.2.1 was an open-ended question. However, on reading the answers the researcher realised that the question was not appropriate. It would have been impossible for participants to explain why they did or did not receive

any notification. Therefore, the answers to this question have not been included in the analysis of the questionnaire.

4.7.9.4 Question D9.3 – What is your opinion on the audit process?

Question D9.3 was an open-ended question. The answers were analysed and grouped in themes which are shown in Table 4.47.

Table 4.47 shows that the top two frequencies were “Satisfied” (5.6%) and “Fair” (3.9%). The lowest frequencies were “Useless”, “Straight forward”, “Lack transparency”, “Lack”, “Unethical”, “Stressed”, all with 1%.

Table 4.47: What is your opinion on the audit process?

	Frequency	Percent
Satisfied	10	5.6
Fair	7	3.9
Unsure	4	2.2
Lack communication	4	2.2
Necessary	3	1.7
Unnecessary	2	1.1
Unsatisfied	2	1.1
Slow	2	1.1
Disorganized	2	1.1
Enforced	2	1.1
Others	2	1.1
Useless	1	0.6
Straight forward	1	0.6
Lack transparency	1	0.6
Lack	1	0.6
Unethical	1	0.6
Stressed	1	0.6

4.7.9.5 Question D9.4 – What is your opinion on the numbers of CPD required?

Question D9.4 was an open-ended question. The answers were analysed and grouped in themes which are shown in Table 4.48.

Table 4.48 shows that the highest frequency was “Fair” (48%) and the lowest was “Too high” (27%)

Table 4.48: What is your opinion on the numbers of CPD required?

	Frequency	Percent
Fair	62	48%
Too high	35	27%
Not sure	11	9%
Difficult	9	7%
Unimportant	4	3%
Too low	3	2%
Totally random	2	2%
20	1	1%
30	1	1%

4.7.9.6 Question D9.5 – If no, what did you do to ensure you were compliant?

Question D9.5 was an open-ended question. The answers were analysed and grouped in themes which are shown in Table 4.49.

Table 4.49 shows that the top two frequencies were “Attendance” (51%) and “Portfolio” (16%) and the lowest were “Too few relevant courses”, “Accessibility of venues”, “Acceptable modules”, “Ethic’s course”, all with 1%.

Table 4.49: If no, what did you do to ensure you were compliant?

	Frequency	Percent
Attendance	32	51%
Portfolio	10	16%
Irrelevant	5	8%
Negligence	4	6%
Online courses	3	5%
Informed on CPD	3	5%
Lack communication	2	3%
Too few relevant courses	1	2%
Accessibility of venues	1	2%
Acceptable modules	1	2%
Ethic’s course	1	2%

4.8 Section E: Barriers to CPD

4.8.1 Question E1 – Do you have access to the following

This section analyses the barriers to CPD as perceived by participants. Table 4.50 and Figure 4.13 summarise the scoring patterns of Question E1. All the differences between "Yes" and "No" are significant because the p values are below 0.05. Raw data can be found in Appendix D

Table 4.50: Analysis of data from Question E1

E1 Do you have access to:		Yes		No		Chi Square
		Count	Row N %	Count	Row N %	p-value
Internet	E1.1	147	98.0%	3	2.0%	0.000
Peer reviewed journals	E1.2	101	68.2%	47	31.8%	0.000
Opportunities to undertake CPD	E1.3	131	87.3%	19	12.7%	0.000
Transport to attend CPD activities	E1.4	134	89.3%	16	10.7%	0.000
Funds to attend CPD workshops/seminars	E1.5	101	68.2%	47	31.8%	0.000

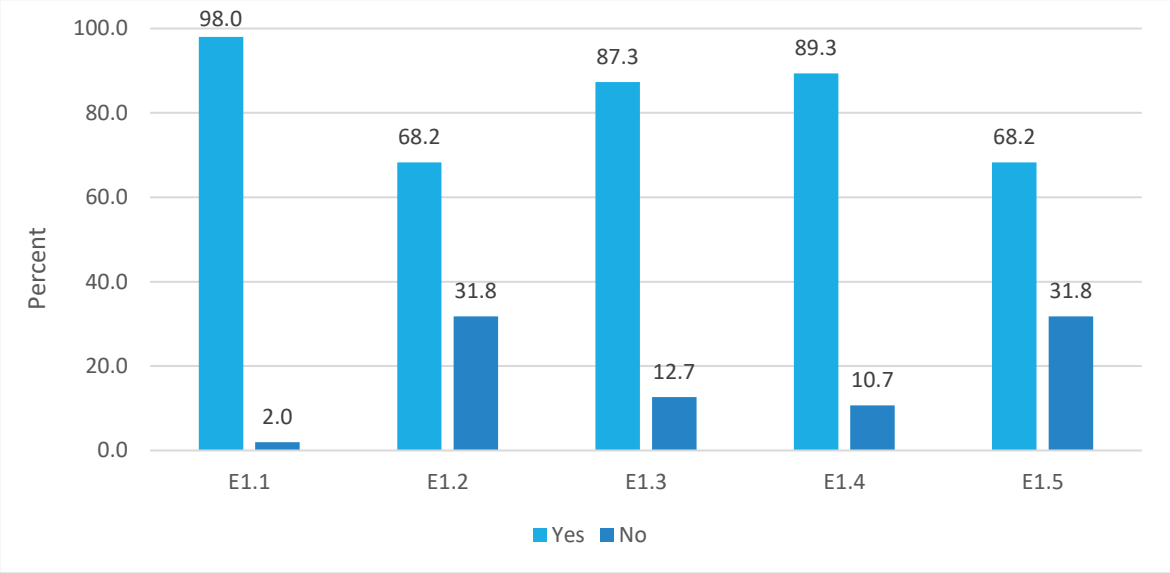

Figure 4.13: Access to CPD activities

From the above table and figure, it is evident that the participants mainly agreed with the statements, with the top two "Yes" scores being 98.0% (E1.1) and 89.3% (E1.4). The top two "No" scores were 31.8% (E1.2) and (E1.5).

4.8.2 Question E2 – Extent to which each of the following affect participation

Table 4.51 and Figure 4.13 summarise the scoring patterns of Question E2. All the differences between 'Not at all, Least extent, Some extent and Great extent' are all significant because the p values are below 0.05. Raw data can be found in Appendix D.

Table 4.51: Analysis of data from Question E2

E2 Extent to which each of the following affected participation		Not at all		Least extent		Some extent		Great extent		Chi Square
		Count	Row N %	Count	Row N %	Count	Row N %	Count	Row N %	p-value
Lack of time	E2.1	13	8.7%	18	12.0%	82	54.7%	37	24.7%	0.000
Lack of funding and financial support for CPD	E2.2	13	8.8%	26	17.6%	73	49.3%	36	24.3%	0.000
Inability to leave practice due to patient load	E2.3	22	14.8%	28	18.8%	66	44.3%	33	22.1%	0.000
Inability to leave practice due to financial loss	E2.4	19	12.8%	33	22.1%	63	42.3%	34	22.8%	0.000
Lack of understanding of what is required	E2.5	74	51.7%	39	27.3%	21	14.7%	9	6.3%	0.000
Inaccessibility of technological facilities	E2.6	104	72.7%	25	17.5%	8	5.6%	6	4.2%	0.000
Outside work commitments limit time for participation	E2.7	24	16.8%	30	21.0%	60	42.0%	29	20.3%	0.000
Difficulty keeping own records up to date	E2.8	48	33.6%	45	31.5%	34	23.8%	16	11.2%	0.001
No help from AHPCSA	E2.9	30	21.0%	43	30.1%	45	31.5%	25	17.5%	0.046
Lack of available opportunities such as workshops, seminars, etc.	E2.10	24	16.4%	23	15.8%	57	39.0%	42	28.8%	0.000

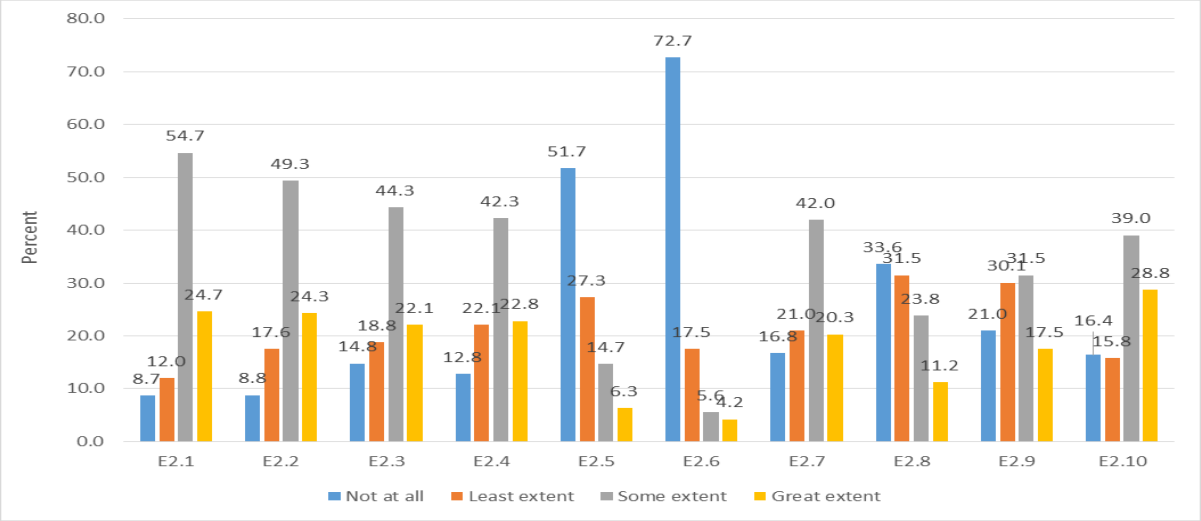

Figure 4.14: Extent to which participation was affected

From the Table 4.51 and Figure 4.14 it is evident that the top two “Some extent” scores were for E2.1 (54.7%) and E2.2 (49.3%. The top scores in “great extent” were E2.1 (24.7%) and E2.10 (28.8%) while the “least extent” top two scores were E2.8 (31.5%) and E2.9 (30.1). The top two highest scores for “Not at all” were E2.6 (72.7%) and E2.5 (51.7%).

There were two statistical tests for this question which had significant results. These were the relationship between “Are you aware of the following” and:

- E2.5 “Lack of understanding of what is required” and race ($p = 0.013$).
- E2.7 “Outside work commitments limit time for participation” and gender ($p = 0.033$).

Tables 4.52 and 4.53 indicate that for Question E2.2.5 the race of the participant had a significant influence on their answer ($p = 0.013$).

Table 4.52: Cross tabulation. Lack of understanding of what is required – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
Lack of understanding of what is required	Not at all	Count	6	60	8	0	74
		% within Lack of understanding of what is required	8.1%	81.1%	10.8%	0.0%	100.0%
		% within Race	60.0%	52.2%	47.1%	0.0%	51.7%
		% of Total	4.2%	42.0%	5.6%	0.0%	51.7%
	Least extent	Count	1	34	4	0	39
		% within Lack of understanding of what is required	2.6%	87.2%	10.3%	0.0%	100.0%
		% within Race	10.0%	29.6%	23.5%	0.0%	27.3%
		% of Total	0.7%	23.8%	2.8%	0.0%	27.3%
	Some extent	Count	0	16	5	0	21
		% within Lack of understanding of what is required	0.0%	76.2%	23.8%	0.0%	100.0%
		% within Race	0.0%	13.9%	29.4%	0.0%	14.7%
		% of Total	0.0%	11.2%	3.5%	0.0%	14.7%
	Great extent	Count	3	5	0	1	9
		% within Lack of understanding of what is required	33.3%	55.6%	0.0%	11.1%	100.0%
		% within Race	30.0%	4.3%	0.0%	100.0%	6.3%
		% of Total	2.1%	3.5%	0.0%	0.7%	6.3%
Total		Count	10	115	17	1	143
		% within Lack of understanding of what is required	7.0%	80.4%	11.9%	0.7%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.0%	80.4%	11.9%	0.7%	100.0%

Table 4.53: Chi-square. Lack of understanding of what is required – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	31.217[a]	9	0.000	0.001		
Likelihood Ratio	19.958	9	0.018	0.010		
Fisher's Exact Test	18.115			0.013		
Linear-by-Linear Association	.391[b]	1	0.532	0.560	0.297	0.063
N of Valid Cases	143					

a. 10 cells (62.5%) have expected count less than 5. The minimum expected count is 0.06.
b. The standardized statistic is 0.625.

Tables 4.54 and 4.55 indicate that for Question E2.7 the gender of the participant had a significant influence on their answer (p = 0.033).

Table 4.54: Cross tabulation Outside work commitments limit time for participation – Gender

Crosstab					
			Gender		Total
			Male	Female	
Outside work commitments limit time for participation	Not at all	Count	10	14	24
		% within Outside work commitments limit time for participation	41.7%	58.3%	100.0%
		% within Gender	26.3%	13.3%	16.8%
		% of Total	7.0%	9.8%	16.8%
	Least extent	Count	12	18	30
		% within Outside work commitments limit time for participation	40.0%	60.0%	100.0%
		% within Gender	31.6%	17.1%	21.0%
		% of Total	8.4%	12.6%	21.0%
	Some extent	Count	11	49	60
		% within Outside work commitments limit time for participation	18.3%	81.7%	100.0%
		% within Gender	28.9%	46.7%	42.0%
		% of Total	7.7%	34.3%	42.0%
	Great extent	Count	5	24	29
		% within Outside work commitments limit time for participation	17.2%	82.8%	100.0%
		% within Gender	13.2%	22.9%	20.3%
		% of Total	3.5%	16.8%	20.3%
Total		Count	38	105	143
		% within Outside work commitments limit time for participation	26.6%	73.4%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	26.6%	73.4%	100.0%

Table 4.55: Chi-square. Outside work commitments limit time for participation – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	8.956[a]	3	0.030	0.029		
Likelihood Ratio	8.772	3	0.032	0.037		
Fisher's Exact Test	8.705			0.033		
Linear-by-Linear Association	7.196[b]	1	0.007	0.009	0.005	0.002
N of Valid Cases	143					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 6.38.
b. The standardized statistic is 2.682.

4.8.3 Question E3 – Please state any other challenges or barriers that affect your participation in CPD

This was an open-ended question. The answers were analysed and grouped in themes which are shown in Figure 4.15. The top two highest barriers were costs (expensive), followed by too few CPD opportunities and time management.

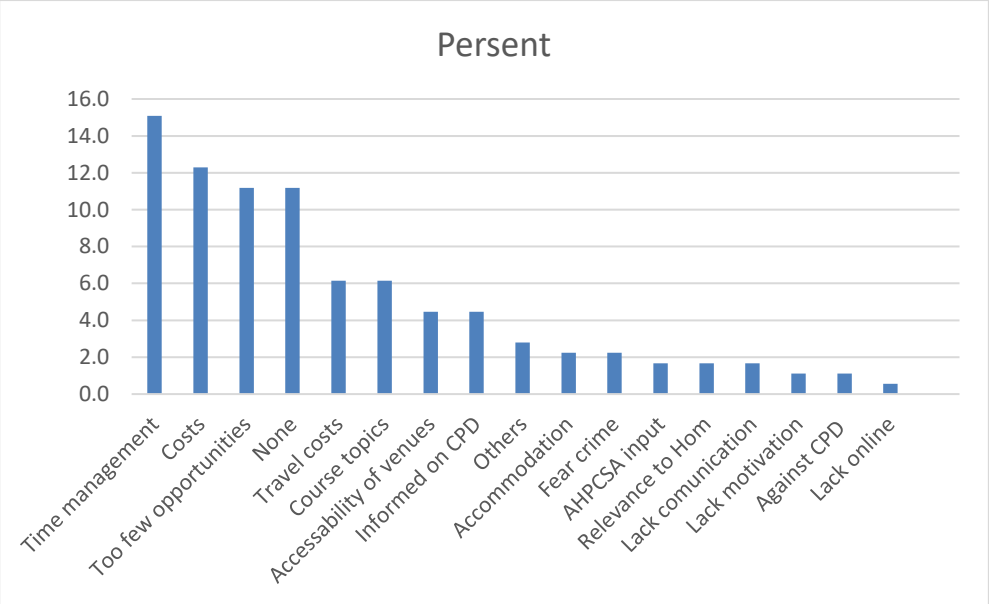

Figure 4.15: Barriers affecting CPD participation

4.9 Section F – Suggestions to facilitate the achievement of CPD

Various items were presented with Yes/No options.

4.9.1 Question F1 – Are any of the following an obstruction to achieving CPD.

Table 4.56 and Figure 4.16 summarise the scoring patterns. All the differences between “Yes” and “No” are significant because the p values are below 0.05, except for F1.1. Raw data can be found in Appendix D.

Table 4.56: Analysis of data from Question F

F Suggestions to facilitate CPD		Yes		No		Chi Square
		Count	Row N %	Count	Row N %	p-value
Employer (AHPCSA) should have formal policies to support CPD financial	F1.1	64	45.4%	77	54.6%	0.274
CPD update courses should be available	F1.2	119	82.1%	26	17.9%	0.000
There are not enough affordable and accessible workshops	F1.3	119	81.0%	28	19.0%	0.000
There are not enough affordable and accessible seminars	F1.4	124	84.4%	23	15.6%	0.000
There are not enough courses available online	F1.5	109	74.7%	37	25.3%	0.000

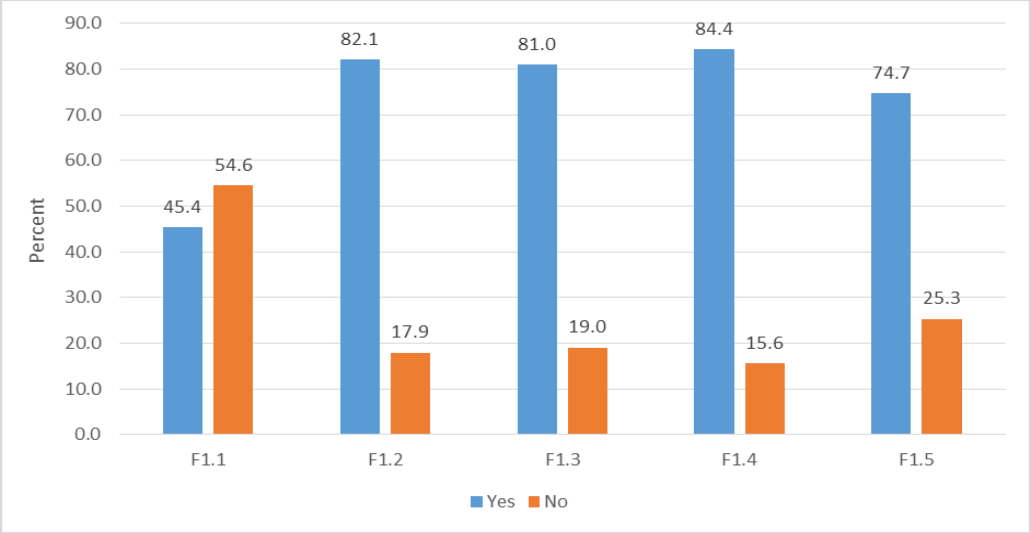

Figure 4.16: Difficulties in achieving CPD

Figure 4.16.shows that the top two “Yes” scores were F1.4 and F1.2 and the top two “No” scores were F1.1 and F1.5.

Tables 4.57 and 4.58 indicate that for Question F1.1 the age of the participant had a significant influence on their answer (p = 0.009).

Table 4.57: Cross tabulation. Employer should have formal policies to support CPD financial – Age

Crosstab									
			Age						Total
			20 - 29	30 - 39	40 - 49	50 - 59	60 - 69	70 - 79	80 - 89	
Employer should have formal policies to support CPD financial	Yes	Count	6	25	25	1	4	1	2	64
		% within Employer should have formal policies to support CPD financial	9.4%	39.1%	39.1%	1.6%	6.3%	1.6%	3.1%	100.0%
		% within Age	75.0%	58.1%	41.7%	9.1%	30.8%	25.0%	100.0%	45.4%
		% of Total	4.3%	17.7%	17.7%	0.7%	2.8%	0.7%	1.4%	45.4%
	No	Count	2	18	35	10	9	3	0	77
		% within Employer should have formal policies to support CPD financial	2.6%	23.4%	45.5%	13.0%	11.7%	3.9%	0.0%	100.0%
		% within Age	25.0%	41.9%	58.3%	90.9%	69.2%	75.0%	0.0%	54.6%
		% of Total	1.4%	12.8%	24.8%	7.1%	6.4%	2.1%	0.0%	54.6%
Total		Count	8	43	60	11	13	4	2	141
		% within Employer should have formal policies to support CPD financial	5.7%	30.5%	42.6%	7.8%	9.2%	2.8%	1.4%	100.0%
		% within Age	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	5.7%	30.5%	42.6%	7.8%	9.2%	2.8%	1.4%	100.0%

Table 4.58: Chi-square . Employer should have formal policies to support CPD financial – Age

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	16.031[a]	6	0.014	0.008		
Likelihood Ratio	18.052	6	0.006	0.010		
Fisher's Exact Test	15.563			0.009		
Linear-by-Linear Association	5.036[b]	1	0.025	0.025	0.014	0.004
N of Valid Cases	141					

a. 7 cells (50.0%) have expected count less than 5. The minimum expected count is 0.91.
b. The standardized statistic is 2.244.

Tables 4.59 and 4.60 indicate that for Question F1.1 the gender of the participant had a significant influence on their answer (p = 0.007).

Table 4.59: Cross tabulation. Employer should have formal policies to support CPD financial – Gender

Crosstab					
			Gender		Total
			Male	Female	
Employer should have formal policies to support CPD financial	Yes	Count	10	54	64
		% within Employer should have formal policies to support CPD financial	15.6%	84.4%	100.0%
		% within Gender	26.3%	52.4%	45.4%
		% of Total	7.1%	38.3%	45.4%
	No	Count	28	49	77
		% within Employer should have formal policies to support CPD financial	36.4%	63.6%	100.0%
		% within Gender	73.7%	47.6%	54.6%
		% of Total	19.9%	34.8%	54.6%
Total		Count	38	103	141
		% within Employer should have formal policies to support CPD financial	27.0%	73.0%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	27.0%	73.0%	100.0%

Table 4.60: Chi-square. Employer should have formal Policies to support CPD financial – Gender

Chi-Square Tests						
	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	7.635[a]	1	0.006	0.007	0.005	
Continuity Correction	6.618	1	0.010			
Likelihood Ratio	7.920	1	0.005	0.007	0.005	
Fisher's Exact Test				0.007	0.005	
Linear-by-Linear Association	7.581[c]	1	0.006	0.007	0.005	0.003
N of Valid Cases	141					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 17.25
b. Computed only for a 2x2 table
c. The standardized statistic is -2.753.

Tables 4.61 and 4.62 indicate that for Question F1.1 the race of the participant had a significant influence on their answer (p = 0.004).

Table 4.61: Cross tabulation. Employer should have formal policies to support CPD financial – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
Employer should have formal policies to support CPD financial	Yes	Count	8	44	12	0	64
		% within Employer should have formal policies to support CPD financial	12.5%	68.8%	18.8%	0.0%	100.0%
		% within Race	80.0%	38.9%	70.6%	0.0%	45.4%
		% of Total	5.7%	31.2%	8.5%	0.0%	45.4%
	No	Count	2	69	5	1	77
		% within Employer should have formal policies to support CPD financial	2.6%	89.6%	6.5%	1.3%	100.0%
		% within Race	20.0%	61.1%	29.4%	100.0%	54.6%
		% of Total	1.4%	48.9%	3.5%	0.7%	54.6%
Total		Count	10	113	17	1	141
		% within Employer should have formal policies to support CPD financial	7.1%	80.1%	12.1%	0.7%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.1%	80.1%	12.1%	0.7%	100.0%

Table 4.62: Chi-square. Employer should have formal policies to support CPD financial – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	11.916[a]	3	0.008	0.003		
Likelihood Ratio	12.588	3	0.006	0.005		
Fisher's Exact Test	11.613			0.004		
Linear-by-Linear Association	.001[b]	1	0.975	1.000	0.560	0.143
N of Valid Cases	141					

a. 3 cells (37.5%) have expected count less than 5. The minimum expected count is 0.45.

b. The standardized statistic is 0.031.

4.10 Section G: Ethics

4.10.1 Question G1

This section analyses the perceptions of participants obtaining ethics points. Table 4.63 and Figures 4.17 summarise the scoring patterns of Question G1. All the differences between “Yes” and “No” are significant because the p values are below 0.05. Raw data can be found in Appendix D.

Table 4.63: Analysis of data from Section G1

		Yes		No		Chi Square
		Count	Row N %	Count	Row N %	p-value
Are you aware of Ethics CPD accreditation?	G1.1	132	88.0%	18	12.0%	0.000
Do you find it hard to accumulate point on Ethics?	G1.2	102	69.4%	45	30.6%	0.000
Have you tried to get Ethics points?	G1.3	112	74.7%	38	25.3%	0.000
Did you try to make use of online resources to get Ethic points?	G1.4	55	36.9%	94	63.1%	0.001
Did you succeed in using online resources?	G1.5	47	32.9%	96	67.1%	0.000

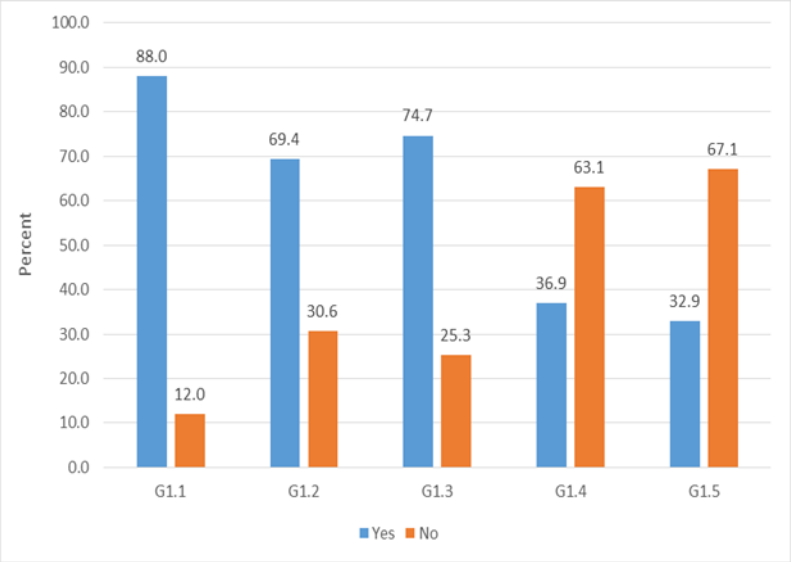

Figure 4.17: Ethics CPD requirements

From the above table and figures, it is evident that the top two "Yes" scores were G1.1 (88.0%) and G1.3 (74.4%). The top two "No" scores were G1.5 (67.1%) and B1.4 (63.1%).

There were four statistical tests for this question which had significant results. These were the relationship between:

- G1.1 "Are you aware of Ethics CPD accreditation?" and race (p = 0.006).
- G1.3 "Have you tried to get Ethics points? and race (p = 0.016).
- G1.4 "Did you try to make use of online resources to get Ethics points?" and gender (p = 0.035).

- G1.5 “Did you succeed in using online resources?” and Gender (p = 0.024).

Tables 4.64 and 4.65 indicate that for Question G1.1 the race of the participants had a significant influence on their answer (p = 0.006).

Table 4.64: Cross tabulation. Are you aware of ethics CPD accreditation? – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
Are you aware of ethics CPD accreditation?	Yes	Count	6	110	15	1	132
		% within Are you aware of ethics CPD accreditation?	4.5%	83.3%	11.4%	0.8%	100.0%
		% within Race	54.5%	91.7%	83.3%	100.0%	88.0%
		% of Total	4.0%	73.3%	10.0%	0.7%	88.0%
	No	Count	5	10	3	0	18
		% within Are you aware of ethics CPD accreditation?	27.8%	55.6%	16.7%	0.0%	100.0%
		% within Race	45.5%	8.3%	16.7%	0.0%	12.0%
		% of Total	3.3%	6.7%	2.0%	0.0%	12.0%
Total		Count	11	120	18	1	150
		% within Are you aware of ethics CPD accreditation?	7.3%	80.0%	12.0%	0.7%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.3%	80.0%	12.0%	0.7%	100.0%

Table 4.65: Chi-square. Are you aware of ethics CPD accreditation? – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	13.694[a]	3	0.003	0.007		
Likelihood Ratio	9.858	3	0.020	0.012		
Fisher's Exact Test	11.183			0.006		
Linear-by-Linear Association	2.749[b]	1	0.097	0.111	0.076	0.054
N of Valid Cases	150					

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 0.12.
b. The standardized statistic is -1.658.

Tables 4.66 and 4.67 indicate that for Question G1.3 the race of the participants had a significant influence on their answer (p = 0.016).

Table 4.66: Cross tabulation. Have you tried to get Ethics points? – Race

Crosstab							
			Race				Total
			African	White	Asian	Coloured	
Have you tried to get Ethics points?	Yes	Count	5	95	12	0	112
		% within Have you tried to get Ethics points?	4.5%	84.8%	10.7%	0.0%	100.0%
		% within Race	45.5%	79.2%	66.7%	0.0%	74.7%
		% of Total	3.3%	63.3%	8.0%	0.0%	74.7%
	No	Count	6	25	6	1	38
		% within Have you tried to get Ethics points?	15.8%	65.8%	15.8%	2.6%	100.0%
		% within Race	54.5%	20.8%	33.3%	100.0%	25.3%
		% of Total	4.0%	16.7%	4.0%	0.7%	25.3%
Total		Count	11	120	18	1	150
		% within Have you tried to get Ethics points?	7.3%	80.0%	12.0%	0.7%	100.0%
		% within Race	100.0%	100.0%	100.0%	100.0%	100.0%
		% of Total	7.3%	80.0%	12.0%	0.7%	100.0%

Table 4.67: Chi-square. Have you tried to get Ethics points? – Race

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	9.804[a]	3	0.020	0.016		
Likelihood Ratio	8.900	3	0.031	0.032		
Fisher's Exact Test	9.102			0.016		
Linear-by-Linear Association	.013[b]	1	0.910	1.000	0.539	0.159
N of Valid Cases	150					

a. 4 cells (50.0%) have expected count less than 5. The minimum expected count is 0.25.
b. The standardized statistic is -0.113.

Table 4.68 and 4.69 indicate that for Question G1.4 the gender of the participants had a significant influence on their answer (p = 0.035).

Table 4.68: Cross tabulation. Did you try to make use of online resources to get Ethic points? – Gender

Crosstab					
			Gender		Total
			Male	Female	
Did you try to make use of online resources to get Ethic points?	Yes	Count	9	46	55
		% within Did you try to make use of online resources to get Ethic points?	16.4%	83.6%	100.0%
		% within Gender	22.5%	42.2%	36.9%
		% of Total	6.0%	30.9%	36.9%
	No	Count	31	63	94
		% within Did you try to make use of online resources to get Ethic points?	33.0%	67.0%	100.0%
		% within Gender	77.5%	57.8%	63.1%
		% of Total	20.8%	42.3%	63.1%
Total		Count	40	109	149
		% within Did you try to make use of online resources to get Ethic points?	26.8%	73.2%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	26.8%	73.2%	100.0%

Table 4.69: Chi-square. Did you try to make use of online resources to get Ethic points? – Gender

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	4.877[a]	1	0.027	0.035	0.020	
Continuity Correction [b]	4.068	1	0.044			
Likelihood Ratio	5.133	1	0.023	0.035	0.020	
Fisher's Exact Test				0.035	0.020	
Linear-by-Linear Association	4.845[c]	1	0.028	0.035	0.020	0.013
N of Valid Cases	149					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 14.77.
b. Computed only for a 2x2 table
c. The standardized statistic is -2.201.

Table 4.70 and 4.71 indicate that for Question G1.5 the gender of the participants had a significant influence on their answer (p = 0.024).

Table 4.70: Cross tabulation. Did you succeed in using online resources? – Gender

Crosstab					
			Gender		Total
			Male	Female	
Did you succeed in using online resources?	Yes	Count	6	41	47
		% within Did you succeed in using online resources?	12.8%	87.2%	100.0%
		% within Gender	17.1%	38.0%	32.9%
		% of Total	4.2%	28.7%	32.9%
	No	Count	29	67	96
		% within Did you succeed in using online resources?	30.2%	69.8%	100.0%
		% within Gender	82.9%	62.0%	67.1%
		% of Total	20.3%	46.9%	67.1%
Total		Count	35	108	143
		% within Did you succeed in using online resources?	24.5%	75.5%	100.0%
		% within Gender	100.0%	100.0%	100.0%
		% of Total	24.5%	75.5%	100.0%

Table 4.71: Chi-square. Did you succeed in using online resources? – Gender

Chi-Square Tests						
	Value	d f	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)	Point Probability
Pearson Chi-Square	5.193[a]	1	0.023	0.024	0.017	
Continuity Correction [b]	4.292	1	0.038			
Likelihood Ratio	5.636	1	0.018	0.024	0.017	
Fisher's Exact Test				0.024	0.017	
Linear-by-Linear Association	5.157[c]	1	0.023	0.024	0.017	0.012
N of Valid Cases	143					

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 11.50.
b. Computed only for a 2x2 table
c. The standardized statistic is -2.271.

4.10.2 Question G2 How do you get ethics points?

This was an open ended-question. The answers were analysed and grouped into themes which are shown in Table 4.72 and illustrated in Figure 4.18

Table 4.72: How do you get ethics points?

	Frequency	Percent
Online	31	17.3
HSA	25	14.0
haven't	24	13.4
Seminars	23	12.8
Not sure	23	12.8
Others	14	7.8
Lectures	9	5.0
workshop	6	3.4
MPS ethics presentations	4	2.2
Talks	4	2.2
Courses	3	1.7
AHPCSA	3	1.7
Online Questionnaire	2	1.1
Literature	2	1.1
Difficult	1	0.6
Medical congress	1	0.6
Faculty	1	0.6
Cost	0	0.0

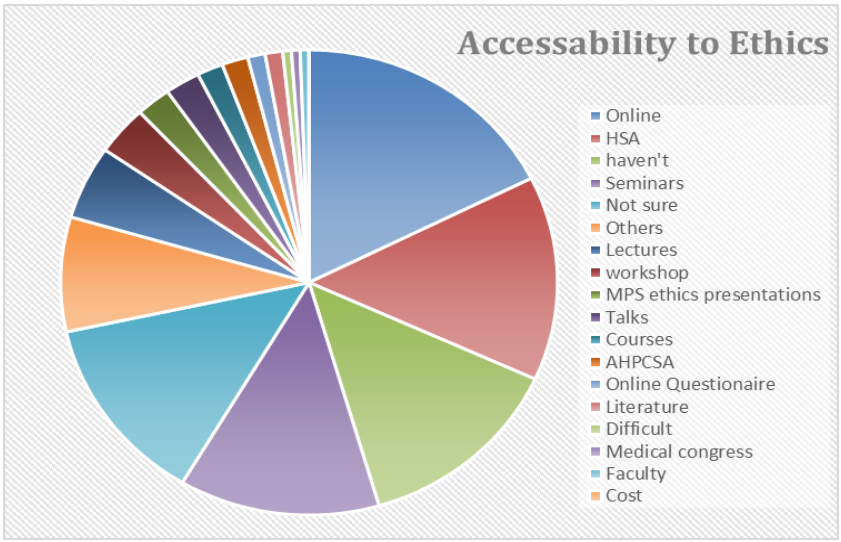

Figure 4.18: Pie chart – ethics activities

Table 4.72 shows that the top two scores were via online CPD (17.3%) and HSA (14%) and the lowest two scores were through AHPCSA (1.7%) and online questionnaires (1.1%).

4.10.3 Question G3 Please state your opinion on the above questions

This was an open-ended question. The answers were analysed and grouped into themes which are shown in Table 4.73.

Table 4.73: Opinions regarding ethics

	Frequency	Percent
Satisfied	46	25.7
Informative	18	10.1
Lack ethics	13	7.3
Lack knowledge	11	6.1
Confusion	11	6.1
Questioning	8	4.5
None	7	3.9
Cost of lectures	7	3.9
Unresponsive	7	3.9
Online courses	7	3.9
AHPCSA no correspondents	5	2.8
Irrelevant	5	2.8
Relevant	4	2.2
Interesting	3	1.7
Availability country wide	2	1.1
Business training	1	0.6
Success in practice	1	0.6
Fear crime	1	0.6
CPD only for financial gain	1	0.6
Own responsibilities	1	0.6
Clinical courses	1	0.6
CPD NB	1	0.6

Table 4.73 shows that the top two scores were to be satisfied (25.7%) and to be informed (14%).

CHAPTER 5: DISCUSSION

5.1 Introduction

This chapter will provide a detailed discussion of the data. It will be indicated how the objectives of the study were met, namely:

1. To assess the level of knowledge regarding CPD requirements and training amongst homoeopaths in South Africa by means of a questionnaire.
2. To assess the self-reported compliance and practises of CPD amongst homoeopaths by means of a questionnaire.
3. To assess the perceptions of CPD amongst homoeopaths by means of questionnaire.
4. To determine the challenges encountered by registered homoeopaths around compliance with CPD requirements set out by the AHPCSA by means of a questionnaire.

5.2 Study sample

5.3 Objectives

5.3.1 Objective 1: To assess the level of knowledge regarding CPD requirements and training amongst homoeopaths in South Africa

A questionnaire was structured to discover the level of knowledge registered homoeopaths have regarding CPD requirements and training. This objective was assessed by means of two closed questions and one open-ended question.

Results from Question B1 ("I think CPD ….") (Refer to Table 4.4) indicate that 90.4% of participants perceive that CPD improves knowledge and 86.0% perceive that it is important. However, 72.5% perceive that CPD only needs to be completed because it is a requirement by the AHPCSA.

Statistical analysis revealed that two questions had significant results: the relationship between "I think CPD is important" and race, where $p = 0.043$ (Table 4.5 and Table 4.6), and the relationship between "I think CPD has to be completed because it is a requirement by the AHPCSA" and age, where $p = 0.023$ (Table 4.7 and Table 4.8).

The demographics show the majority of participants were of white ethnicity; as previously mentioned, homoeopathy in South Africa is still a growing profession and developing amongst the various communities. However, it was found that all race groups agreed that CPD was important and all age groups agree that CPD had to be completed because it is a requirement of AHPCSA (Tables 4.5 and 4.7). In the past traditional medicine was the norm amongst the majority of the African population. This healing system was and is embedded in their culture and beliefs (Lamula 2010).

Answers to Question B2.1 regarding whether CPD should be compulsory or voluntary showed that 59.2% agreed that it should be compulsory, while 48.3% stated it should be voluntary (Table 4.9). Perhaps this is because the majority of participants may have perceived that if CPD was voluntary there would not be a high level of participation which would not then benefit themselves or the public that they serve. The literature study of other CPD programmes locally and internationally revealed that their CPD system were compulsory e.g. South African nurses (Arunachallam 2009), as well Australian social workers (Martin 2014) and New Zealand radiographers (Henwood and Flinton 2012).

Results of Question B2.7 "I think CPD should be aligned with professional needs" reflects that 97.8% say CPD should be while 2.20% said no. Question B2.8 reveals that 40.9% of participants want CPD to be conducted during working hours, while 59.10% did not. This could be as a result of practitioners' busy working schedules. However, the CPD system allows practitioners to plan ahead in terms of their work schedules, and reap the benefit of the learning activity (Maharaj 2013). Question B2.9 shows that 79.5% of participants wanted CPD to be conducted during weekends and after hours, while 20.50% did not. Possibly this relates to commitment to family responsibilities as observed by some of the statements written by the participants:

- *We have to sacrifice family time."* (Participant 60)
- *"It is extremely difficult to run a practice, attend CPD and still be there for her family i.e. after hours and weekends for mothers don't work. She needs to do all in office hours and still run a viable business and be the one who drives the children around, do homework, cook etc. It is a pity that so many females leave the profession and more strain is added to their schedule."* (Participant 40)
- *The patient load and lack of time.* (Participant 53)
- *At times you don't even receive the invitation email regarding such events or you receive the invitation email with the date that is during the week which makes it difficult to attend as you're mostly busy at your practice during the week and free on weekends.* (Participant 64)

Statistical analysis found that there are two significant results in the answers from Question B2: the relationship between “I think CPD should be aligned with professional needs” and age, where p = 0.034 (Table 4.10 and Table 4.11), and the relationship between “I think CPD should be conducted during working hours” and gender, where p = 0.038 (Table 4.12 and Table 4.13).

From the results of B2.7 it is evident that all the age groups had a high proportion of “Yes” answers to this question, ranging from 83.3% (70-79 years) to 100% (40-49 years; 50-59 years; 80-89 years). The results of B2.8 show a significant proportion of females (45.7%) compared to males (27.7%) wanted CPD to be conducted during working hours. This could be related to females not wanting CPD arrangements to interfere with domestic arrangements after working hours.

According to Brand (2006) CPD not only involves educational activities for enhancement of medical competence, but encompasses team building, professionalism, interpersonal communication, technology, teaching, team building and accountability as well as all the skills and techniques needed for good practice building.

5.3.1.1 CPD awareness amongst practitioners

Most homoeopathic practitioners in South Africa are aware that CPD is mandatory and important as can be seen in the results that are displayed in Table 4.15 which analyses data from Question C1. Table 4.17 Question C1.1 showed a p value of 0.002 and therefore race had a significant part to play in the awareness of CPD being mandatory. All race groups stated that they are aware that CPD is mandatory. Question C1.2 also had a significant p value (0.013) in respect of race regarding awareness of the different levels of CPD. Results showed that Whites and Asians had the highest percentage being 79.5% and 84.2% respectively. The lowest race percentage is that of Africans, at 41.7%. This could be due to the fact that homoeopathy is still a growing profession among Africans, as there were similar findings in question C1.5 (also significant for race p = 0002) on how aware participants were on the number of CPD points required (74.8% of White, 63.2% of Asian and 25% of African

participants). The system of CPD is mandatory because it allows for improving knowledge, skills and competency through working life (Lombard *et al.* 2010).

However, the current study reveals that there was a large percentage of participants (52%) who have a lack of awareness regarding the auditing process (Question C1.6, significant for race p = 0.000), and of how often auditing occurs (33.5%). More than half do not know of or are unsure of any penalties for non-compliance (C1.8, significant for race, p = 0.036). The small percentage of awareness on the availability of guidelines (57.9%) and regarding the importance of monitoring a CPD portfolio (58.9%) can be indicative of a lack of communication between practitioners and AHPCSA.

Despite information being available, participants seem to be uninformed and if they do visit the website, there could be a lack of understanding of the information available. The lack of knowledge regarding the auditing process could be from negligence or they fail to join as members and therefore do not belong to the HSA that serves as a platform where homoeopaths can voice their concerns.

Question C1.10 regarding awareness of the importance of monitoring a CPD portfolio was also significant for race, p = 0.005, with awareness greatest among the White (63.5%) and Asian respondents (57.9%). Awareness among African participants was 16.7%, perhaps because the majority of these participants did not know or were unsure (83.3%) (C1.6) of the auditing process (Table 4.22).

Participants were questioned (C2) regarding whether they visited the AHPCSA web site to improve their understanding regarding the CPD system. According to the frequency table (Table 4.28), 62.9% acknowledged that they do visit the AHPCSA web site and 37.1% stated that they do not make use of this facility. The reasoning for this needs to be further investigated.

It was further observed from the results of this question that age (p = 0.002) and gender (p = 0.024) significantly influence the way participants answered this question (Tables 4.29 to 4.32). From an age point of view, it was evident from

the age related results that the age groups 30 to 39 and 40 to 49 were joint top in answering “Yes” (40%) to this question, with the third group (60 to 69) (8%) being much lower down. It is surprising that only 6% of the 20 to 29 age group answered “Yes” to this question. It could be that this age group finds out about CPD requirements and events in other ways because they are more connected to other social media platforms than the older age groups. Regarding gender it was noted that females said “Yes” they (68.1%) do visit the AHPCSA web site compared to 47.5% of males. participant’s state that they do not visit the web site.

Question C3 embodies the whole range of CPD activities that can lead to improve performance in the delivery of healthcare. Participants could choose as many items as needed. When questioning regarding awareness level of CPD as shown in Table 4.33, most respondents indicated they were aware of different levels of CPD and showed interest in seminars and conferences (C3.2) as well as case study discussions (C3.1). Fewer participants showed awareness of learning portfolios (C3.15) and) and practice audits (C3.16) (Naidoo 2016).

5.3.2 Objective 2: To assess the self-reported compliance and practices of CPD amongst homoeopaths

5.3.2.1 CPD participation

Participants were questioned on their participation in CPD activities in Question D1 “Do you participate in CPD?” The results show that 93.7% of participants participate in CPD, while 6.3% indicated that they do not. A related study by Pillay (2011) on advanced life support workers shows similar findings, where the highest percentage (48.3%) of the respondents indicated that they participate CPD activities mainly for the updating of clinical skills and competence to ensure patient safety. A further observation from Table 4.7 and Table 4.8 is that participants between the ages of 30 to 39 and 40 to 49 are the most active participants in CPD ($p = 0.023$) because it is a requirement by AHPCSA. Possibly this is because practitioners in these age groups are likely to be more secure in their practices.

In order to assess how compliant participants were asked an open-ended question, Question D2 “How do you ensure that you are compliant? (Figure 4.2) The majority (78%) answered that they do so by attending CPD events, seminars and courses (36%) being the most popular activities. Participants also answered that the least common methods of CPD ensuring compliance were auditing and collection of certificates (2%). The following excerpts are from the answers to Question D2:

- *I sign in the HSA website for the event and sign the register for my presence during the event.* (Participant (205)
- *I haven't been able to keep my points up due to financial restrictions and the time required to attend available courses in distant locations.* (Participant 204)
- *Monthly practice meetings registered with council, conferences and others.* (Participant 19)
- *Check number of points and levels of CPD acquired. There are a shortage of opportunities to obtain CPD points in the Cape. Meaning increased cost due to travel and accommodation in other areas of the country.* (Participant 35)
- *I find it very difficult to remain compliant as I live in an outlying area. It is thus very difficult for me to attend meeting/seminars etc. due to the travelling, availability and costs involved. I have to constantly search for ways to remain compliant.* (Participant 87)

Table 4.35 is a frequency table for answers to Question D3 “How often do you engage in CPD?”, and shows that 51.9% stated that they participate in CPD activities when activities become available, and 17.3% indicating monthly. This reflects the reality that most members do not engage in CPD on a regular or routine basis, but only as available or as needed.

Question D4 was an open-ended question asking: “What are in your opinion the preferred methods of getting CPD points?” Figure 4.9 shows that the most preferred methods of getting CPD points seminars (39.1%) online courses (18.4%) and conferences (13%). This might be due to the fact that seminars

are predictable from a scheduling point of view, and may be more directly related to areas of homeopathic interest rather than general online questionnaires, for instance, which is 7%. These results are very similar to the results from Question D6 “What methods do you commonly use to obtain points?” Results of which indicate that the most preferred method was seminars (43.0%) (Figure 4.9). The second and third most common methods were HSA meetings (18.0%) and lectures (15%).

Question D7 was a frequency question: “How much are you willing to pay?” The majority of participants perceived that a price of R300 to R500 was an acceptable fee to pay for CPD events. Studies internationally (Agius and Baron 2008), and nationally (Brand 2006) found that financial challenges to be a burden for participants to part take in CPD. However no clear indication was given to the willingness of how much participants were prepared to pay.

Question D8 asked: “Rank your preferred learning styles for engaging in CPD activities” (Table 4.41). Participants ranked online activities (48.7%) as the most commonly preferred learning style followed by attendance-based learning (39.5%). The preference for online activities is similar to the results of a CPD study conducted by Arunachallam (2009) on South African nurses (55%). Gunn and Goding (2009) state that there are several advantages to online (web based) learning, in terms of saving time and money. The present study found that the least preferred learning styles was team assignments and projects with only 6.2% selecting this option as “Most preferred” while 50.7% selected this option as “Least preferred”. This could be because homoeopathic practitioners prefer to work as individuals because this is how they conduct their practices.

Question D9 asked the question: “Have you ever been audited?” There have been four CPD cycles since the introduction of CPD. from the results of this study indicate that 23.3% of participants had been audited. This is similar to findings from related research on rehabilitation therapists which found that 35% of participants were audited (Maharaj 2013). According to the AHPCSA guidelines AHPCSA (2015a), the CPD committee may conduct verification of practitioners once a cycle using a randomly selected sample. When

practitioners are selected for compliance verification, they must forward their individual activity records compiled during the CPD cycle to the Registrar for review within 21 days. Various health professional bodies internationally have an auditing system incorporated in their CPD system as a tool to measure compliance (Varetto and Costa 2014). Most individual practitioners in the health sector comply with the statutory requirements as determined by the council for assessment and submit portfolios as evidence for CPD compliance by random audit in order to renew their registration to the appropriate regulating authorities (Arunachallam 2009).

However it was found that some participants in this study respond by mentioning that the auditing process is time consuming and stressful, which is similar to findings amongst radiographers (Naidoo 2016).

Question 9.5 was an open question: "What did you do to ensure you were compliant?" The following is a selection of some of the responses:

- *"Well I was audited last year and that is the only reason I am aware of the process of CPD, I had to research the entire process and learn for myself all the requirements from my side. If I were not audited I would be clueless right now."* (Participant 188)
- *"I keep a personal record of what I have done and check it off the required points."* (Participant 181)
- *"I keep a file with all CPD certificates with an excel sheet record per annum."* (Participant 186)
- *"I pay a fortune to attend conferences in Johannesburg and Pretoria."* (Participant 197)
- *"The whole process is flawed because it's totally random and is not based on genuine practice needs. Points can be earned from expensive seminars that have nothing to do with homoeopathy. I have never received any guidelines or suggestions for recommended courses."* (Participant 125)

- *"Already stated that lack of compliance is due to finances and lack of guidance as to what's available and not enough available for homoeopaths."* (Participant 12)

5.3.3 Objective 3: To assess the perceptions of CPD amongst homoeopaths by means of a questionnaire

Participants were well aware of the mandatory nature of CPD (72.5%) and they acknowledged the importance of it (86.0%) (Table 4.4). They mostly agreed that they knew the requirements for CPD compliance (63.1%), however they did not seem to be aware of the auditing process (52.2%) and what it entails (Table 4.15).

According to the results from Question B1.7 more than half of the participant (68.9%) agree that CPD is costly to the practitioners (Table 4.4).

According to Table 4.9 it can be seen that in answer to Question B2.1 59.2% of participants answered "Yes" that CPD should be compulsory. This could be because they perceived that a continuous form of education regarding their profession would assure that they will stay clinically competent. There was a definite split whether CPD should be compulsory or voluntary, because in answer to Question B2.2 48.3% of participants said "Yes" that is should be voluntary, which could be because of the time and financial costs of maintaining their CPD portfolio.

Regarding Question C2, an interesting observation is that only 62.9% of participants had visited the AHPCSA website (Table 4.28). This means that a large proportion of participants may not be keeping up with the latest news and requirements from the AHPCSA. Age was had a significant influence on answers to this question ($p = 0.002$), with the 40% of participants in the age groups 20 to 39 and 31 to 49 having visited the website, but only 4% of 50 to 59 age group having done so (Table 4.29). Further observation from Table 4.28 is that the majority of participants (34.6%) perceived that that the number of CPD points required was fair and obtainable, and 19.6% perceived that it was too

high within the amount of time available. Participant 19's comment on the number of points required was: "thumb suck, who decided on that I wonder?"

As indicated in Table 4.5 with regards to voluntary and compulsory CPD, the majority of participants (59.2%) agreed that it should be compulsory. Compulsory CPD may be inconvenient for practitioners whereas voluntary CPD gives them the choice to participate when it is convenient and desirable for them to do so. The trend seems to be that compulsory CPD leads to practitioners sometimes attending activities that may not apply to their practice in order to obtain the set points laid down by controlling board, which can impact negatively on their time in practice time patient care. Regarding the compulsory nature of CPD, one participant expressed herself as follows:

- *It is interesting to note that over the years it is always the same practitioners who attend lectures, workshops, etc. These practitioners were interested in furthering their knowledge. Once there was a compulsory aspect to obtaining CPD points, then practitioners who had not been seen for many years suddenly appeared out of the woodwork! Sad that there needs to be a whip rather than a carrot to encourage practitioners to further their knowledge.* (Participant 169)

With the advancement in technology online courses can make CPD activities more available for practitioners living in rural areas. The benefits of online courses are that they can be done at any time and may be less costly than physical CPD events which also must include travel costs and sometimes accommodation costs. The following comments came up in an open-question where participants give their opinion on the preferred methods of getting CPD points:

- *Online in some way, as I don't practice near a major centre, and all meetings are mainly held in Cape Town, JHB or Durban*. (Participant 29)
- *Online courses as they are easily accessible and do not require large financial commitment Seminars and talks by experienced professionals in the field*. (Participant 29)

Due to the fact that there is no government funding and there are not enough opportunities for employment in private sector, new practitioners in the field of homoeopathy have an ongoing struggle to start their own practices (Majola 2015). Financial constrains prevent them from participating in CPD activities due to their cost. Boulos, Maramba and Wheeler (2006) observe that with the advancement in e-technology the notion of anytime, anyplace learning has become a reality with cheaper and better supported mobile and personal technology (Mpuntsha 2001). Internet CPD for homoeopaths still needs to be fully developed.

Question B3 was an open question which gave participants the opportunity to express their opinions or perceptions on CPD, including topics of interest. Figure 4.4 shows the range of responses. The most common perception mentioned by participants was lack of variety (64%), as expressed by Participant 33: "*Lack of available options the greatest challenge".* The least common issues were lack of communication, standardization, need for CPD certificates, the grading of CPD on experience and the lack of communication (all 1%). Another point raised by participants was cost, with 39% of participants finding CPD activities to be too costly to attend. It is important to note that not all practitioners that are registered are practising on a daily basis, or they could be employed in other positions. New graduates in particular may find it difficult to pay the costs of CPD. Participant 80 made the following general comment:

- *I think there is a need for both lecture-based events where topics are lectured on as well as a platform where practitioners can get together to discuss certain cases. It is also important for the industry to advertise that CPD applies and that practitioners are always improving themselves*.

5.3.4 Objective 4: Challenges experienced in the homoeopathic profession

Question E1 asked participant how accessible CPD activities was to determine any challenges regarding accessibility. As indicated from the results shown in Table 4.50 the majority of participants (98.0%) answered "Yes" to Question E1.1

that they have access to internet and 89.3% had transport to attend CPD activities (E1.4), and 31.8% answered “No” to peer reviewed journals and funds to attend CPD activities (E1.5) and (E1.2). Some of their comments appear below:

- *Practice management and continuous focus required to build one’s patient base takes up a lot of time and energy to the point where it is difficult to attend events that don't add a practical or valuable contribution to the practice.* (Participant 71)
- *Travel costs and time out of practice, as I don't live in a major city.* (Participant 29)
- *The patient load and lack of time.* (Participant 53)

Question E2 investigated the extent to which certain items affected participation. Question E2.7 asked about the extent to which outside work commitments limited time for participation. The results in Table 4.5 show that female participants were most affected, with 82.8% indicating that they were affected to a “Great extent”, while only 17.2% indicated that they were affected to a “Great extent”. This could be due to female participants carrying more family and domestic management responsibility than males.

An open question (E3) was formulated to determine whether there were any other challenges or barriers that affected participants regarding CPD participation. Figures 4.14 show the CPD challenges and barriers participants found to hinder CPD participation, namely: costs, time management, too few opportunities and accessibility of venues. Some participants commented as follows:

- *Currently this is extremely difficult because of lack of opportunities and cost*. (Participant 56)
- *Variety of topics is limited to the pharmaceutical companies wanting to apply for accreditation. Often it is the case that there is only the*

presentation of a CPD accredited course for financial gain to all parties concerned. (Participant 130)

- **Costs**

With the troubled global economy that we are currently facing, South Africa is experiencing a recession and this impacts hugely on its citizens at various levels (Whitfield 2018). Due to this economic state of affairs it is not surprising that costs regarding travel, accommodation and course fees are a major challenge (Table 4.13 and Figure 4.14). Participants expressed their opinions as follows:

- *I absolutely see the benefits of CPD however the availability of affordable courses, seminars and the likes makes it very difficult to comply, despite wanting to further ones knowledge. Homoeopaths generally don't earn large sums, especially when first opening up a practice.* (Participant 12)
- *I am not prepared to travel to venues at great cost and listen to arbitrary subjects just to gain CPD points.* (Participant 91)
- *CPD, while absolutely necessary and beneficial in most cases, are very costly. This forces a practitioner to select CPD options based perhaps on affordability as opposed to relevance.* (Participant 127)
- *Being based in the rural parts of South Africa - travel and accommodation costs have to be incurred.* (Participant 73)
- *More affordable lectures, next CPD convention costs nearly R8 000 per ticket for 4 days*. (Participant 146)
- *Cannot travel at night from Vanderbijlpark to Johannesburg. Very dangerous!* (Participant 81)
- *If I need 40 points that is R14 000 for travel hrs and R8 000 for the actual lectures. That is R22 000 just to comply (obviously excluding parking and petrol costs). Most people in Cape Town working an Eight to Five job don't even earn that much. Most CPD activities don't cost R200, the cost close to R3 000 so you can do the maths*. (Participant 161)

- **Time management**

The results shown in Table 4.14 15% participants stated that time management was one of the barriers affecting their attendance in CPD programmes. This is similar to the findings in other studies with dental practitioners in Hubli-Dharwad India (Nayak *et al.* 2016), and radiographers in the UK and various other studies

globally (Henwoon and Flinton 2012). One of the explanations for the lack of time could be that practitioners found it difficult to leave their practice due to patient load. Many homoeopaths are sole practitioners and their primary responsibility is to their practice so find it difficult to take time away from their practices to attend CPD activities. This is reflected in the following comments:

- *Practice management and continuous focus required to build ones patient base takes up a lot of time and energy to the point where it is difficult to attend events that don't add a practical or valuable contribution to the practice.* (Participant 71)
- *Travel costs and time out of practice, as I don't live in a major city."* (Participant 29)
- *The patient load and lack of time.* (Participant 53)

- **Too few opportunities**

The main drawback was the availability of CPD courses. Previous research conducted by van Vuuren and Nel (2013) indicate that allied health professionals in central South Africa, especially the Free State and Northern Cape, do not always have access to a range of CPD activities which then impacts negatively on their participation in these activities. The following comments are related to availability of CPD courses:

- *Very limited seminars or conferences available, especially ones they are specific to our field. (Participant 179)*
- *Cape Town needs more CPD activities and more online courses should be available and all courses should be emailed to each practitioner so that we are reminded of upcoming activities. Most activities are hosted in Durban and JHB. Participant 161*
- *Very few CPD events that are specific to homeopathy. (Participant 178)*

- **Accessibility of venues**

According to the findings from the open question E3, 25 participants indicated that the accessibility of venues was found to hinder their participation in CPD. This could possibly be due to the participants being spread over a wide

geographical area and most of the CPD activities taking place in major cities. Comments of participants regarding accessibility were as follow:

- *Location is one of the major challenges. CPD activities are usually away from my province therefore travelling and finances affects participation.* (Participant 122)
- *Venues must be accessible to everyone, because I use public transport and the time in the evening, and CPD point system explained more on how they are obtained" easily accessibility to the venue.* (Participant 3)
- *Living in an outlying area.* Participant 87
- *For practitioners living outside of main city areas it can be challenging and costly to accumulate CPD points. It is also difficult to justify the time and cost when many CPD events don't realistically add practical value to the quality of service provided by the practitioner.* (Participant 71)

Question F related to obstruction to achieving CPD. According to Table 4.56, 84.4% said that there were not enough affordable workshops (F1.3), and 82.1% said they wanted CPD update courses to be more available (F1.2). A high proportion of participants (45.4%) wanted the "employer to have formal policies to support CPD financially" (F1.1). The term "employer" here is confusing because all homeopaths are self-employed, but participants took this as referring to industry and the AHPCSA, as revealed in the following comments:

- *Should be sponsored by industry*. Participant 67
- *CPD should be affordable and should be supported by government funding!* (Participant 97)

Statistical analysis of the answers for Question F1.1 indicate the age of the participants significantly influenced their answer ($p = 0.009$) (Table 4.58). It is evident that the highest percentage of participants answering "Yes" in this question were in the age groups 20 to 29 and 30 to 39 with 75.0% and 58.1% respectively (Table 4.57). This could be because participants from the younger age groups are still struggling to get their practices off the ground. The lowest percentage "Yes" answer to this question was from the 50 to 59 age group, who are likely to have been practicing for many years already so have well

established and financially stable practices. The following comments support the desire for greater financial support:

- *I find the fees for CPD application very expensive, particularly as a new practitioner. I would like to hold a cell group regularly but cannot afford to. Application fees should be reduced.* (Participant 9)
- *Homeopaths generally don't earn large sums, especially when first opening up practice, so to outlay these extra funds is difficult*. (Participant 12)

Further observation were made in the findings as shown in Table 4.59 and Table 4.60. Gender played a significant role in that more than half of female participants (52.4%) stated that they wanted help and the "employer" should have formal policies to support CPD on a financial level, with only 26.3% of male participants feeling the same therefor more men (73.7%) said "No" when answering this question. The reason behind answering this question in this fashion is unclear and needs further investigation to clarify this finding. Race had a significant role to play (p = 0007); 80.0% of African participants and 70.6% of Asians felt they needed the support from "employer" in having formal policies in place to help financially towards CPD. However 61.1% of White participants said "No" in answering this question, implying that they were more financially stable.

Statistical values did not indicate any significance regarding the impact of age and gender on the awareness of CPD ethics accreditation, however race had a Fisher Exact Square value of 0,006 which is significant. The results show that awareness of ethics as a CPD requirement was high among the White (91.7%) and Asian (83.3%) participants, but relatively low among the African participants (45.5%) (Table 4.64). In reality CPD is still a newly implemented system and it takes time to adapt to it. In the African community's awareness on how to achieve ethic point were found to be of a concern as 45% have tried to get ethic points compare to 54.5% who said "No" (Table 4.64). This could be due to homoeopathy being a new field of study in the African community (Lamula

2010). Age and gender does not have a significant effect on how participants tried to get ethics points.

The following comments highlight the issue of ethics points:

- *Ethics points should be done every 2 years at the conference or an online course for ethics points should be set up for each block.* (Participant 29)
- *Ethics points just complicate the CPD system and add no additional value to the practitioner.* (Participant 71)
- *Ethics should be a standard part of the learning curriculum while studying towards one's formal qualification. It should not be a separate entity one needs to acquire for CPD points.* (Participant 70)
- *Ethics cannot be career specific (i.e. ethics for homoeopathy, physiotherapy, optometry is the same, thus should not be evaluated as "not career-orientated")* (Participant 41)
- *If ethics courses are compulsory then they should be made freely and frequently available online and at various venues to reach all the practitioners.* (Participant 131)
- *Ethics points are contentious, they are overpriced and difficult to find.* (Participant 172)
- *Ethics relating to homoeopathic practice. (*Participant 206)

Question G2 was an open-ended question which gave insight on how participants get their ethics points. From Table 4.72 it is evident that participants mostly make use of online CPD to get their ethics points and with some help from HSA. However, participants also feel they need more help from the AHPCSA since there is little exposure on ethics from council.

- *Fulfil requirements as laid down in the CPD guidelines as published and amended on the AHPCSA website*. (Participant 82)

Question G3 was an open-ended question which gave participants the opportunity to express their opinions on ethics. The majority of participants had a positive attitude towards ethics, and the more exposure they can get to ethics

the more competent they will be in this area as homoeopathic practitioners. The following statements were made by participants.

- *Ethics is a huge issue with CPD points because of the lack of available options. So these questions are extremely valid*. (Participant 22)
- *Ethics is the area that I struggle with the most*. (Participant 85)
- *Ethics points are the most time consuming to search for*. (Participant137)
- *Ethics points just complicate the CPD system and add no additional value to the practitioner*. (Participant 71)
- *Unsure of how to get Ethics points*. (Participant 76)
- *Valid questions. More ethics courses need to be offered*. (Participant 99)
- *I believe that the AHPCSA should play a more active role in presenting ethics courses as pertains to our profession*. (Participant 133)
- *Ethics should be a standard part of the learning curriculum whilst studying towards ones formal qualification. It should not be a separate entity one needs to acquire for CPD points*. (Participant 70)

POSITIVE:

"I think that CPD is important and any good practitioner would be happy to continue developing themselves in their field of interest and expertise." (Participant 72)

"It is my opinion that CPD is an important part of maintaining the standard within homoeopathy and assists in giving our field more credibility within the health sciences. It is a positive on personal knowledge and also helps solidify, create and maintain personal interactions with our colleagues within our field or others." (Participant 57)

NEGATIVE:

"I obviously would be interested in self-development, but I do resent that it is both compulsory and hugely expensive (course costs + travel costs + accommodation costs + time away from my work)." (Participant 72)

"There should be more options for CPD online, there should be more seminars, homeopathic groups etc. *Right now the options are limited. This makes CPD a chore and an expense at times."* (Participant 17)

"It is too costly and unnecessary." (Participant 32)

SUGGESTION:

"Practitioners should be able to complete activities online/remotely, to the point where any compulsory points are achievable FREE of personal cost. Perhaps practitioners could be awarded or prestigiously recognised for any efforts they make to develop themselves above-and-beyond." (Participant 72)

"Venues must be accessable to everyone, and CPD point system explained more on how they are obtained."

(Participant 3)

"I think that CPD points is important but should not be compulsory as some of the events are expensive and there are very few that are free or sponsored." (participant 26)

Figure 5.1: Comments from participants on CPD

CHAPTER 6: CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

The AHPCSA has a statutory obligation to regulate the professional standards and quality of health care and therefore CPD was introduced to improve the standards of clinical competence (Mpuntsha 2001).

The first objective of this study was to assess the level of knowledge regarding CPD requirements and training amongst homoeopaths in South Africa. It can be concluded that participants in general had a lack of understanding of the CPD system. There are comprehensive guidelines available to assist them, but some practitioners seem unaware of how to obtain this information. However, it is the responsibility of the individual practitioner to familiarise themselves with what is available. It is concluded that there is insufficient communication between practitioners and their professional body. Most homoeopathic practitioners in South Africa are aware that CPD is mandatory (92.5%) (Table 4.16) and important (85.5%) (Table 4.15). However more than half (52.2%) (Table 4.15) of the participants were unsure or do not know how often auditing process occurs. A large proportion of participants (40.9%) (Table 4.15) of participants are unsure of the penalties for non-compliance. Some comments given by participants indicate that they became aware of the CPD system only when audited.

Some practitioners feel that concentrating on one field of knowledge is insufficient, and a broader base of subjects is needed and is better than concentrating on one field only. Homoeopaths for instance should be able to study other fields because they have a broader interest within the medical profession and do not want to be confined to their field of study.

The data indicates that many participants did not visit the AHPCSA website to read the guidelines. It was found that various participants (as shown in Table 4.39) mentioned the struggle with funding and are not willing to pay R800 and

above for CPD activities. Another area of uncertainty was regarding ethics: it was found that homoeopaths are not sure where they can access these activities online. Further observation from this study seems to be that travel and availability of activities goes hand in hand. E-technology has the potential to close this gap, but it is not widely enough available yet.

The second objective was to assess the self-reported compliance and practises of CPD amongst homoeopaths. The study found that practitioners who are in general interested in furthering their knowledge will automatically seek to attend lectures or workshops. However, practitioners should be able to participate without having to pay for courses. In general practitioners that care about their profession should not be disqualified if they cannot pay. A quicker and easier way needs to be found to gain CPD points, otherwise it may only be practitioners that can afford to pay for these points who will survive as practitioners.

Homoeopaths' perceptions of CPD was the third objective that was looked at. The conclusion is that homoeopathy is still relatively new in this country and has not been introduced to the majority of communities which resulted in a low response rate to the survey by practitioners. The mandatory nature of CPD and its importance was acknowledged, but there are still some areas where assistance is needed if homoeopaths want to say that they are CPD compliant. There was great uncertainty regarding the auditing process.

The final objective was to determine the challenges encountered by registered homoeopaths regarding compliance with CPD requirements. The main findings were that the lack of funding and financial support as well as lack of time were the most challenging barriers to overcome regarding CPD attendance. The financial impact of the CPD system is not limited to the cost of the event, but also sometimes includes travel costs, accommodation costs, and the cost of not being in one's practice and losing income for those hours. The greatest impact is on newly qualified practitioners.

Participants expressed diverse opinions when asked for suggestions in this regard (see Figure 4.5 and Table 4.14). This study showed that there is a need

for more homoeopathic related CPD activities. The diversity of views means that it is a huge challenge for providers to address the needs and interests of practitioners. Some of the participants were of opinion that CPD is a money-making racket as it is hugely expensive and they would prefer self-study and research in their own time. This point of view is exemplified in the following comment:

- *Achieving CPD is much unsupported and I feel it has been made into an industry merely for financial gain and not to support the practitioner. The practitioner has earned their worth by completing their studies, and a good practitioner would want to maintain their standard of treatment and knowledge, and should be able to do so without having to pay for it if they so choose. It causes a divide as the commercial practitioner that practises to make a quick buck can 'buy' his/her CPD but doesn't necessarily use it to improve their patient management. And those that are truly invested in their patients' management and care are denied the same opportunities generally because of finances."* (Participant 87)

As stated by Ibrahim (2015), practitioners are obliged to improve their practice outcomes and be open to new knowledge and skills to build their professional competency. One way to achieve this goal is through the implementation of an effective CPD programme. The researcher is of the view that homoeopathy can only move forward on CPD if we as homoeopaths change our attitudes towards it. This is supported by the following quotation: "Knowledge is the foundation for clinical judgement, clinical reasoning and critical thinking" (Marzlin 2011, cited in Viljoen 2013).

6.2 Limitations

Lack of literature related to the topic of this study was a limiting factor that complicated the study to some degree. The available online register from AHPCSA did not deliver up to date information on the whereabouts of practitioners as some homoeopaths on the register were no longer active in the profession, and some had emigrated. For this study a questionnaire was used

as a research instrument and a large number of homoeopaths could be reached relatively easily and economically. Some limitations were highlighted during the process of data collecting as it was found that the numbering of questions was somewhat confusing. Participants found some questions to be repetitive which hindered them from answering effectively.

6.3 Recommendations

6.3.1 Recommendations to AHPCSA

Arising from this study it is recommended that the AHPCSA ensure that the auditing process is implemented on a regular basis as there was still some homoeopaths that are under the impression that the auditing process is not a legal system and therefore not much effort by them is given to the process.

Due to the lack of financial resources CPD should not be a legislated requirement at this stage. The general opinion in this survey is that if CPD is legislated, homoeopaths need help and support to make CPD activities freely available or that attendance fees should be eliminated or reduced. The majority of participants agreed that a reasonable price of a CPD event is between R300 and R500.

The ideal would be to have a functional online training system where one can do online courses and keep track of points accumulated in the year, and the auditing process could also be through online submission. This could be of particular benefit for practitioners working far away from the main centres.

If events are not well attended it is because CPD providers need to pay more attention to the expressed needs of homoeopathic practitioners, and then address these needs by making these events attractive and high quality to keep practitioners returning for more. The AHPCSA should provide support for professional development by making recordings of conferences and seminars available online and providing webinars that practitioners can participate in online.

6.3.2 Recommendations for homoeopaths

Homoeopaths should make a concrete effort to read through all CPD related documents that are received from council and the Homoeopathic Association of South Africa (HSA) and ensure that they provide their correct contact details to the AHPCSA and the HSA and notify them of any changes thereto. It is equally important to recommend that homoeopaths make use of the information provided on the websites as well as the support systems available where they can voice their concerns or make recommendations accordingly.

6.3.3 Recommendations for future research

While the use of open-ended survey questions in this study allowed a certain amount of insight, it did not allow the researcher to investigate the reasons underlying participants' responses. For this reason, qualitative research on the perceptions of homoeopaths regarding CPD should be conducted, because this will allow for probing questions to gain extra depth and richness of data. The researcher recommends the use of interview methods such as Skype or telephonic interviews in addition to face-to-face interviews for any qualitative research study that may occur in the future.

"Wisdom is not a product of schooling but of the lifelong attempt to acquire it."
— Albert Einstein. (Goodreads 2019)

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APPENDICES

Appendix A: Letter of permission from K Naidoo

Gmail miller adri <adrimllr@gmail.com>

CPD research
2 messages

miller adri <adrimllr@gmail.com> Tue, May 30, 2017 at 9:08 AM
To: "Naidoo, Kathleen" <Kathleenn@uj.ac.za>

Mrs K Naidoo

I'm Adri Miller currently doing my research on CPD Homoeopathy related. I manage to get hold of your dissertation and adapted the questionnaire to suit my purpose for the study, herewith I would like to ask for your permission to use it.

Kind regards
God bless

Adri Miller
DUT student Homoeopathy

Virus-free. www.avast.com

Naidoo, Kathleen <kathleenn@uj.ac.za> Tue, May 30, 2017 at 10:03 AM
To: miller adri <adrimllr@gmail.com>

Dear Adri,

Trust you are well.

I am glad you found the dissertation helpful. I have spoken to my supervisor and we are happy with granting you permission to use the questionnaire as long as you acknowledge me in your dissertation and any publications thereafter. Best wishes on your studies.

Kind regards,

Kathleen

From: miller adri [mailto:adrimllr@gmail.com]
Sent: 30 May 2017 09:09 AM
To: Naidoo, Kathleen
Subject: CPD research

[Quoted text hidden]

This email and all contents are subject to the following disclaimer:

Appendix B: Letter of Information

Hello

I'm Adri Miller currently doing my research on CPD Homoeopathy. I would kindly appreciate your participation in completing the questionnaire as it will greatly assist me in my research endeavours and add valuable knowledge to the field of Homoeopathy. Please read through the letter of information that follows as it provide information on this study and how you can participate.

Herewith I would like to express my gratitude for your time and effort.

Should you have any queries, please feel free to contact me or my supervisors, telephone numbers included in information letter.

Yours sincerely,

Adri Miller

LETTER OF INFORMATION

Title of the Research Study: Knowledge, perceptions, practices and challenges amongst homoeopaths in South Africa regarding the newly implemented Continuous Professional Development (CPD) accreditation system.

Principal Investigator/s/researcher: Adri Miller (B Tech: Homoeopathy)
Supervisor/s: Dr. Corne Hall (M Tech: Homoeopathy)
Co-supervisor: Dr. Madhu Maharaj (M Tech: Homoeopathy, HOD)

Brief Introduction and Purpose of the Study:

Dear Participant

Thank you for your interest in the research study and your willingness to invest your time in the study. This study is aimed at discovering the awareness and necessity of Continuous Professional Development laid down by the Professional Board of Homoeopathy in order to maintain registration for practice of Homoeopathy in South Africa. Trust that the outcome of this study will give insight into CPD awareness and understanding for future improvement.

Outline of the Procedures:
This study will be conducted using a quantitative, descriptive research approach by means of an online survey. The questionnaire will include questions on the perceptions, level of awareness, participation and challenges experienced by individual practitioners in homoeopathy with regard to CPD as well as suggestions for improvement.

NB: This questionnaire will occupy approximately 30 minutes of your time. Kindly take this time to give your most truthful opinions and or remarks where applicable.

Remuneration:
You will not receive any remuneration (financial or physical rewards) for the participation of this study.

Costs of the Study:
As a participant you will not be required to pay for your participation, this research study will be financed by Durban University of Technology.

Confidentiality:
Confidentiality will be maintained at all times. Your identity will be kept confidential seeing as the online survey site being Survey Monkey® ensures that none of personal details will be attached to your completed survey. This way the researcher has no way of tracking the identities of the participants from the completed surveys.

General:
- Participation is voluntarily
- Informed consent is given as soon as participant follow the online link provided in the e-mail.

Persons to Contact in the Event of Any Problems or Queries:
Researcher: Adri Miller – 083 2651757
Research supervisor: Dr Corne Hall - 031 373 2481(w) 082 9216149 (cell)
Co-supervisor: Dr Madhu Maharaj- 031 373 2481(w) 083 3882 688 (cell)

Institutional Research Ethics administrator - 031 373 2900
Complaints can be reported to the DVC: TIP, Prof F. Otieno - 031 373 2382 / dvctip@dut.ac.za.

If you have read the Letter of Information and happy to partake in this study, then please click on link below to complete the survey. Please note by clicking on the link to complete the online survey you will be giving your informed consent, no handwritten consent for this study is required.

ON LINE LINK: _____

Appendix C: Survey questionnaire

Copy of Continuous professional development

Dear Colleagues

The following questionnaire is designed to obtain information on CPD activities. This is part of my master's research study in homeopathy. I kindly request that you complete this questionnaire that addresses the perceptions, awareness, and other useful information concerning CPD compliance by homeopathic practitioners.

Please answer all questions from section A to section F. This questionnaire should not take more than 30 minutes of your time to complete. Your honest response is appreciated

1. **Section A (Demographics): Answer the following questions about yourself**

A 1 State your age category:

- ◯ 20
- ◯ 30
- ◯ 40
- ◯ 50
- ◯ 60
- ◯ 70
- ◯ 80

2. A 2 State gender

- ◯ Male
- ◯ Female

3. A 3 State your race

- ◯ Black
- ◯ White
- ◯ Asian
- ◯ Coloured

4. **Section B: Opinions and Perceptions of CPD in general**

5. B 1 I think CPD:

	Disagree	Neutral	Agree
1.1 Is important	◯	◯	◯
1.2 Improves professional competence	◯	◯	◯
1.3 Improves your knowledge	◯	◯	◯
1.4 Benefits the practitioner	◯	◯	◯
1.5 improves the quality of patient care	◯	◯	◯
1.5 Improves patient safety	◯	◯	◯
1.6 Is costly to the practitioner	◯	◯	◯
1.7 Is it a waste of time	◯	◯	◯
1.8 Improves professional/clinical practice/standards	◯	◯	◯
1.9 Improves the effectiveness of service delivery	◯	◯	◯
1.10 Has to be completed because it is a requirement by the AHPCSA	◯	◯	◯

6. B 2 I think CPD should be:

	YE	NO
2.1 Compulsory	◯	◯
2.2 Voluntary	◯	◯
2.3 Only clinical skilled based	◯	◯
2.4 Delivered by the experts in the higher education sector	◯	◯
2.5 Provided through in house training, example practitioners in the area come together to discuss topics	◯	◯
2.6 Linked to developmental needs	◯	◯
2.7 Aligned with professional needs	◯	◯
2.8 Conducted during working hours	◯	◯
2.9 Conducted during weekends and after hours	◯	◯

7. B 3 Please state any other opinions or perceptions on CPD, i.e. what topics of interest need to be addressed.

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INSTITUTIONAL RESEARCH ETHICS COMMITTEE

8. **Section C - CPD awareness**

C 1 Are you aware of the following:

	YES	NO	UNSURE
1.1 CPD is mandatory?	◯	◯	◯
1.2 That there are different levels of CPD?	◯	◯	◯
1.3 The requirements for CPD compliance?	◯	◯	◯
1.4 The importance of CPD?	◯	◯	◯
1.5 The number of points required annually?	◯	◯	◯
1.6 The auditing process?	◯	◯	◯
1.7 How often auditing occurs?	◯	◯	◯
1.8 Any penalties for non-compliance?	◯	◯	◯
1.9 The available guidelines for CPD?	◯	◯	◯
1.10 The importance of monitoring a CPD portfolio?	◯	◯	◯

8. C 2 Do you visit the AHPCSA web site?

◯ Yes

◯ No

9. C 3 Which of the following CPD activities are you aware of: (You may choose more than one option)

	ANSWER
3.1 Case study discussion	☐
3.2 Conference/ seminars	☐
3.3 Mentoring and supervision	☐
3.4 Interest group meetings less than six times a year	☐
3.5 Author or co-author of publications	☐
3.6 Presentations of posters, short courses	☐
3.7 Co presenter of accredited short courses	☐
3.8 Formal departmental meetings	☐
3.9 Research	☐
3.10 Reviewer of an article	☐
3.11 Answering questionnaires	☐
3.12 Guest lecturer at an accredited institute	☐
3.13 Post graduate qualifications	☐
3.14 Short courses minimum 25 hours	☐
3.15 Learning portfolio	☐
3.16 Practice audit	☐
3.17 Practice guidelines updates	☐
3.18 Homeopathic refresher courses	☐
3.19 External examiner	☐
3.20 Are there any other you are aware of	☐

10. **Section D - CPD participation**

D 1 Do You participate in CPD?

◯ Yes

◯ No

1.D 2 How do you ensure that you are?

12. D 3 How often do you engage in CPD?

◯ Weekly

◯ Monthly

- ◯ Annually
- ◯ Never
- ◯ When interested
- ◯ When CPD activity is available

13. D 4 What in your opinion are the preferred methods of getting CPD points?

14. D 5 What in your opinion are the drawbacks to CPD?

- ◯ Financial
- ◯ The time constraints
- ◯ Availability of courses
- ◯ Travel

1.D 6 What methods do you commonly use to

16. D 7 How much are you willing to pay?

- ◯ 100 - 200
- ◯ 300 - 500
- ◯ 600 - 800
- ◯ 900+

17. D 8 Using the list below, rank your preferred learning styles for engaging in CPD activities, from. 15, with ONE being the least preferred.

	1	2	3	4	5
8.1 Attendance based learning	◯	◯	◯	◯	◯
8.2 Online activities	◯	◯	◯	◯	◯
8.3 Reflective learning	◯	◯	◯	◯	◯
8.4 Work based learning	◯	◯	◯	◯	◯
8.5 Academic studies	◯	◯	◯	◯	◯
8.6 Journal articles	◯	◯	◯	◯	◯
8.7 Team assignment/projects	◯	◯	◯	◯	◯
8.8 In service training	◯	◯	◯	◯	◯
8.9 On site supervision	◯	◯	◯	◯	◯
8.10 Learning portfolio	◯	◯	◯	◯	◯

18. D9 Have you ever being audited?

◯ Yes

◯ No

19. If yes, answer questions 9.1 - 9.3
If no proceed to question 9.4

9. How did you know you were being audited?

20. 9.2 Did you receive any notification after submission of your portfolio of evidence?

◯ Yes

◯ No

2.9.2 Please explain your answer

2.9. What is your opinion on the audit process?

2.9. What is your opinion on the numbers of CPD required?

24. 9.5 If no, what did you do to ensure you were compliant?

Copy of Continuous professional development

25. **Section E Barriers to CPD**

E 1 Do you have access to the following:

	Yes	No
1.1 Internet	◯	◯
1.2 Peer reviewed journals	◯	◯
1.3 Opportunities to undertake CPD	◯	◯
1.4 Transport to attend CPD activities	◯	◯
1.5 Funds to attend CPD workshops/seminars	◯	◯

26. E 2 Indicate the extent to which each of the following has affected your participation in CPD these are the barriers

	Not at all	Least extent	Some extent	Great extent
2.1 Lack of time	◯	◯	◯	◯
2.2 Lack of funding and financial support for CPD	◯	◯	◯	◯
2.3 Inability to leave practice due to patient load.	◯	◯	◯	◯
2.4 Inability to leave practice due to financial loss.	◯	◯	◯	◯
2.5 Lack of understanding of what is required	◯	◯	◯	◯
2.6 Inaccessibility of technological facilities	◯	◯	◯	◯
2.7 Outside work commitments limit time for participation	◯	◯	◯	◯
2.8 Difficulty keeping own records up to date	◯	◯	◯	◯
2.9 No help from AHPCSA	◯	◯	◯	◯
2.10 Lack of available opportunities such as workshops, seminars, etc.	◯	◯	◯	◯

27. E 3 Please state any other challenges or barriers that affect your participation in CPD

28. **Section F Are any of the following an obstruction to achieving CPD**

	Yes	No
1.1 Employer should have formal policies to support CPD financial	◯	◯
1.2 CPD update courses should be available	◯	◯
1.3 There are not enough affordable and accessible workshops.	◯	◯
1.4 There are not enough affordable and accessible seminars.	◯	◯
1.5 There are not enough courses available online.	◯	◯

29. Section G Ethics

	Yes	No
1.1 Are you aware of Ethics CPD accreditation?	◯	◯
1.2 Do you find it hard to accumulate point on Ethics?	◯	◯
1.3 Have you tried to get Ethics points?	◯	◯
1.4 Did you try to make use of online resources to get Ethic points?	◯	◯
1.5 Did you succeed in using online resources?	◯	◯

30. G 2 How do you get ethics points?

3.G 3 Please state your opinion on